Date Due: Sept 30, 2020
DUE NO LATER THAN 11:00 A.M.
LOCAL TIME IN HOUSTON, TEXAS
Proposals received later than the above date and time will not be considered.

YES Prep Public Schools

REQUEST FOR PROPOSAL
Cover Sheet

REQUEST FOR PROPOSAL: FY21_3 YES Prep Safety & Security Construction

NOTE TO PROPOSERS!!! Carefully read all instructions, requirements, and specifications. Fill out all forms properly and completely. Submit your proposal with all appropriate supplements and/or samples and return as instructed in Special Requirements/Instructions.

RETURN PROPOSAL TO:
Cheris Kotalik
Construction Manager
5515 S Loop E, Suite B
Houston, Texas 77033

For additional information, contact Cheris Kotalik, cheris.kotalik@yesprep.org or 346-235-5776.

You must sign below in INK; failure to sign WILL disqualify the proposal. All prices must be typewritten or printed in ink.

Vendor Name: _____

Vendor Address: _____

City, State, Zip Code: _____

Taxpayer Identification Number (T.I.N.): _____

Telephone No.: _____ Fax No.: _____

Email: _____

Print Name: _____ Signature: _____

[Your signature attests to your proposal to provide the goods and/or services in this proposal according to the published provisions of this Request for Proposal unless modifications or alterations are clearly noted in your proposal submission.]

TABLE OF CONTENTS – REQUEST FOR PROPOSAL PACKAGE

The items below represent components which comprise this Request for Proposal (hereinafter "RFP") package. Suppliers are asked to review the package to be sure that all applicable parts are included. If any portion of the package is missing, please notify Cheris Kotalik, Construction Manager immediately at cheris.kotalik@yesprep.org or 346-235-5776.

It is the Vendor's responsibility to be thoroughly familiar with all Requirements and Specifications. Be sure you understand the following before you return your proposal packet.

1. **Cover Sheet**
   Your company name, address, and your signature (**IN INK**) should appear on this page.

2. **Table of Contents**
   This page is the Table of Contents.

3. **General Requirements**
   You should be familiar with all of the General Requirements.

4. **Special Requirements/Instructions**
   This section provides information you must know in order to make a complete and proper proposal.

5. **Specifications**
   This section contains the detailed description of the products/services sought.

6. **Attachments**
   A. Submittals 1 - 4
   B. Questionnaire
   C. Workers' Compensation Certification
   D. Insurance Coverage Requirements
   E. Proposed Exceptions, Alterations, Additions, or Modifications to RFP (if any)
   F. Scoring Rubric

INTRODUCTION

YES Prep Public Schools is a free, open-enrollment public school system that serves 15,000 students across nineteen (19) schools in the Houston area. YES Prep has been ranked as among the top 100 public high schools in the nation by Newsweek and U.S. News & World Report. Every year, 100 percent of YES Prep's graduating seniors have been accepted into four-year colleges, including Harvard, Yale, Columbia, Rice, and Stanford. YES Prep combines a highly successful 6th-12th grade model along with high standards for student achievement.

GENERAL REQUIREMENTS

Proposals will be accepted by Yes Prep Public Schools no later than 11:00 a.m. (local time), **Sept 30, 2020**. Every proposal must be enclosed in an envelope clearly marked "FY21_3 YES Prep Safety & Security Construction" and shall include one copy.

All questions, requests, responses, and proposals shall be submitted to:
Cheris Kotalik, Construction Manager
YES Prep Public Schools
5515 S Loop E, Suite B
Houston, TX 77033
Cheris.kotalik@yesprep.org

Questions and responses regarding this RFP will be posted to the YES Prep Public Schools web site during the RFP phase so all interested parties will have access to the same information. Web site is located at: *http://www.yesprep.org/notices*

The appropriate committee shall review all timely responses, and if necessary, the full Board of Trustees prior to acceptance/bid award. Responses may be hand delivered. Any response or proposal received after the above deadline shall be considered late, and will not be opened or considered.

Time Frame

The timeframe for all responses must be complete and in possession of YES Prep Public Schools by 11:00 a.m. (local time) on **Sept 30, 2020.** Each submission/proposal must be complete. Any incomplete responses may be rejected. All respondents will comply with this RFP as a basis for the award of the proposal.

All questions are due by 5:00 p.m. (local time) on Sept 24, 2020.

Approval

The actual acceptance of any proposal may be delayed. Therefore, all responses must remain valid for a period of no less than one hundred and twenty (120) days. It is intended that proposals will be recommended to the Board of Trustees at an upcoming board meeting. The Board of Trustees reserves the right to reject any and all proposals.

ACCESS TO RECORDS

Proposer (hereinafter "Vendor") may be required to allow duly authorized representatives of YES Prep Public Schools (hereinafter "YES"), and local, state, and federal governments, access to contracts, books, documents, and records necessary to verify the nature, extent, and cost of services provided by the Vendor.

AWARD
YES reserves the right to reject any and all proposals, and reserves the sole right at its discretion to accept any proposal(s) it considers most favorable to the interest of YES and waive any and all minor irregularities in any proposal(s). YES further reserves the right to reject any proposal(s) and seek new proposals through the issuance of a new or amended Request for Proposal (hereinafter "RFP") if such action is deemed in the best interest of YES.

OFFER COMPLETION
Fill out and return to Cheris Kotalik, Construction Manager, one complete proposal form, and two copies, as instructed under the Special Requirements section of this document. An authorized Vendor representative should sign the Cover Sheet. Completion of these forms is intended to verify that the Vendor has submitted the proposal, is familiar with its contents, and has submitted the material in accordance with all requirements.

The submission of a response shall be prima facie evidence that the Vendor has full knowledge of the scope, nature, quantity, and quality of work to be performed, the detailed requirements of the project, and the conditions under which the work is to be performed. All terms, conditions, specifications, stipulations, and Vendor requirements stated in the RFP, any attached Appendices to the RFP, and any and all Addenda issued shall become part of the contract entered into between YES and the Vendor.

OFFER RETURNS
Vendors must return all completed proposals to the office of Cheris Kotalik as indicated on the Cover Sheet of this package. Late proposals will not be accepted. It is the responsibility of the responding Vendor to assure that the response is received prior to the date and time indicated on the Cover Sheet of this package.

DIGITAL FORMAT
If Vendor obtained the proposal specifications in digital format in order to prepare a response, ***the proposal must be submitted in hard copy*** according to the instructions contained in this package. If, in its response, Vendor makes any changes whatsoever to the YES published RFP specifications, the RFP specifications ***as published*** by YES shall control. Furthermore, if an alteration of any kind to the RFP specifications as published is discovered after the contract is executed, the contract is subject to immediate cancellation at the sole option of YES.

DISQUALIFICATION OF VENDOR
Upon signing this RFP, Vendor certifies that the proposal has not violated the antitrust laws of this state codified in §15.01, *et seq*., Business & Commerce Code, or the federal antitrust laws, and has not communicated directly or indirectly the proposal made to any competitor or any other person engaged in such line of business. Any or all proposals may be rejected if YES believes that collusion exists among the Vendors. Proposals in which the prices are obviously unbalanced may be rejected.

EVALUATION
In evaluating the proposals submitted, YES will apply the "Best Value" process in selecting the Vendor to be awarded a contract for this project. **Purchase price is not the only criteria that will be used in the evaluation process**. The selection process will include, but not be limited to, the following considerations:

1. The quality and range of goods and/or services the Vendor proposes to provide;

2. The extent to which the goods and/or services meet YES needs;

3. The Vendor's overall experience, reputation, expertise, stability, and financial responsibility;

4. The Vendor's past relationship, if any, with YES;

5. The experience and qualifications of the Vendor staff (i.e. drivers, supervisors, dispatchers, mechanics, etc.) that will be assigned to service the YES account;

6. The ability to provide service in a safe, reliable, expedient, and efficient manner;

7. Facilities and business processes and practices (computerized information systems, access to industry facilities, quality and range of management reports, etc.) that will be used in servicing the YES account;

8. The Vendor's financial terms offered to YES;

9. The total long-term cost to YES to acquire the Vendor's goods or services; and/or

10. Any other relevant factor(s) specifically listed in the RFP.

YES reserves the right to contact references from the Vendor's client list, or any other persons considered relevant by YES. YES reserves the right to conduct personal interviews of any or all potential Vendors prior to selection.

YES will not be liable for any costs incurred by the Vendor in connection with such interviews or with the submission of any response.

DOCUMENT INTERPRETATION
In the event of any conflict of interpretation of any part of this overall document, the interpretation of YES shall govern.

GOVERNING LAW
Any agreements resulting from this RFP shall be governed by, construed, and enforced in accordance with the laws of the State of Texas applicable to contracts made and wholly performed within such state (without regard to the conflicts or choice of law principles thereof). The parties irrevocably consent to the jurisdiction of the State of Texas, and agree that any court of competent jurisdiction sitting in the County of Harris, State of Texas, shall be an appropriate and convenient place of venue, and shall be the sole and exclusive place of venue, to resolve any dispute with respect to any such agreements.

HOLD HARMLESS AGREEMENT
The successful Vendor(s) shall indemnify, hold harmless, and defend YES, its directors, officers, and employees (paid or volunteer) from and against any and all claims, demands, and causes of action of whatever kind or nature arising out of error, omission, misrepresentation, negligent act, conduct, or misconduct of the Vendor and its subcontractors, agents, and employees (paid or volunteer) in the provision of goods or the performance of services arising out of the preparation of this proposal and execution and performance of any contracts resulting therefrom. Such indemnification shall also include reasonable attorneys' fees, court costs, and expenses.

INSPECTIONS
YES reserves the right to inspect any item(s) or service location for compliance with specifications, requirements, and needs of YES. If a Vendor cannot furnish a sample of a proposed item, where applicable, for review, or fails to satisfactorily show an ability to perform, YES can reject the Vendor as inadequate.

TESTING
YES reserves the right to test equipment, supplies, materials, and goods proposed for quality, compliance with specifications, and ability to meet the needs of YES. Demonstration units must be available for review. Should the goods or services fail to meet requirements and/or be unavailable for evaluation, the proposal is subject to rejection.

INVOICES AND PAYMENTS
YES standard payment terms are Net 30 days after receipt of invoice.

Invoices should be provided to YES in a timely manner. Vendors are requested to invoice YES within 30 days of providing goods and/or services to YES. Vendors who continuously invoice YES in a manner that is outside of generally accepted business practices may affect their continuing relationship with YES.

In the event a Vendor presents YES with invoices, statements, reports, etc. that are incomplete or inaccurate, YES may be required to perform substantial research which could result in delay of payment. YES will not be responsible for any interest charges and/or late fees as a result of delayed payment due to time delays caused by inadequate, incomplete, or inaccurate information provided in invoices by Vendor.

PRICING
Prices for all goods and/or services shall be negotiated to a firm amount for the duration of this contract or as agreed to in terms of time frame and/or method of determining price escalations, if any, by Vendor. All prices and methods of determining prices must be written in ink or typewritten. Where unit pricing and extended pricing differ, unit pricing prevails.

SCANNED OR RE-TYPED RESPONSE
If in its response, Vendor either electronically scans, re-types, or in some way reproduces the YES-published RFP package, then in the event of any conflict between the terms and provisions of the published RFP package, or any portion thereof, and the terms and provisions of the response made by the Vendor, the RFP package ***as published*** by YES shall control. Furthermore, if an alteration of any kind to the YES-published RFP package is only discovered after the contract is executed, the contract is subject to immediate cancellation at the sole option of YES.

SEVERABILITY
If any section, subsection, paragraph, sentence, clause, phrase, or word of these requirements or the specifications shall be held invalid, such holding shall not affect the remaining portions of these requirements and the specifications, and it is hereby declared that such remaining portions would have been included in these requirements and the specifications as though the invalid portion had been omitted.

SUPPLEMENTAL MATERIALS
Vendors are responsible for including all pertinent product data in the returned offer package. Literature, brochures, data sheets, specification information, completed forms requested as part of the offer package, and any other facts which may affect the evaluation and subsequent contract award should be included. Materials such as legal documents and contractual agreements, which the Vendor wishes to include as a condition of the proposal, must also be in the returned proposal package. Failure to include all necessary and proper supplemental materials may be cause to reject the entire proposal.

TAXES
YES is exempt from federal, state, and local taxes. In the event that taxes are imposed on the goods or services purchased, YES will not be responsible for payment of the taxes. The Vendor shall absorb the taxes entirely. Texas Limited Sales Tax Exemption Certificates will be furnished to Vendors upon written request to YES.

TERM CONTRACTS
The successful Vendor, as determined by YES, shall be required to execute a contract to furnish all goods and/or services and other deliverables required for successful completion of the proposed project. No Vendor shall obtain any interest or right in any award until YES has executed a contract, and any such interest and rights shall be subject to the terms and conditions as contained in such contract.

The successful Vendor may not assign, sell, or otherwise transfer its interest in the contract award, or any part thereof, without prior written consent from the YES.

QUANTITY
There is no guaranteed amount of business, expressed or implied, to be purchased or contracted for by YES. However, the Vendor(s) awarded the contract shall furnish all required goods and/or services to YES at the stated price, when and if required.

CONTRACT TYPE
The preferred contract type to be awarded is a fixed fee contract. However, if a Vendor has reason to believe a better (more cost effective) method is practical, then the Vendor is encouraged to offer that better pricing option as an alternative in its submitted proposal. YES will consider that type of contract as it compares with other recommended contract options.

TERMINATION
YES reserves the right to terminate the contract without cause with 60 days prior written notice for convenience and with 30 days prior written notice for cause if Vendor breaches any of the terms therein, including warranties of Vendor or if the Vendor becomes insolvent or commits acts of bankruptcy. Such right of termination is in addition to and not in lieu of any other

remedies which YES may have in law or equity. Cause may be construed as, but not limited to, failure to deliver the proper goods and/or services within the proper amount of time, and/or to properly perform any and all services required to YES's satisfaction, and/or to meet all other obligations and requirements.

If the Vendor breaches any provision of the proposal stipulations, becomes insolvent, enters voluntary or involuntary bankruptcy, or receivership proceedings, or makes an assignment for the benefit of creditors, YES will have the right (without limiting any other rights or remedies that it may have in the contract or by law) to terminate any contract with 30 days prior written notice to the Vendor.

YES will then be relieved of all obligations, except to pay the reasonable value of the Vendor's prior performance (at a cost not exceeding the contract rate). The Vendor will be liable to YES for all costs exceeding the contract price that YES incurs in completing or procuring the service as described in the proposal. YES's right to require strict performance of any obligation in this contract will not be affected by any previous waiver, forbearance, or course of dealing.

FUNDING OUT OPTION
Any contract resulting from this RFP is contingent upon the continued availability of budget appropriations and is subject to cancellation, without penalty to YES, either in whole or in part, if funds are not appropriated by the YES Board of Directors or otherwise not made available to YES.

WARRANTIES
Vendors shall furnish all data pertinent to warranties or guarantees which may apply to items in the proposal. Vendors may not limit or exclude any implied warranties.

ASSOCIATION
Vendors may not use the YES official logo(s), or any phrase associated with YES, without written permission from YES.

DISCLOSURE
All information and documentation related to this RFP submitted by Vendors may be subject to public disclosure under the Texas Public Information Act (Texas Government Code Section 552.001, et seq.).

EXCEPTIONS, ALTERATIONS, ADDITIONS, and MODIFICATIONS
If any exceptions, alterations, additions, or modifications are submitted by Vendor to any portion of this RFP, the Vendor must clearly indicate the exceptions, alterations, additions, and modifications and include a full explanation as a separate attachment to the proposal. The failure to identify exceptions, alterations, additions, or modifications will constitute acceptance by the Vendor of the RFP as proposed by YES. YES reserves the right to reject a proposal containing exceptions, alterations, additions, or modifications.

PROPOSAL PREPARATION COSTS
All costs related to the preparation and submission of this proposal shall be paid by the Vendor. Issuance of this RFP does not commit YES, in any way, to pay any costs in the preparation and submission of the proposal, nor does the issuance of the RFP obligate YES to award a contract or purchase any goods and services stated in the RFP.

RETENTION OF PROPOSAL DOCUMENTATION
All proposal materials and supporting documentation that is submitted in response to this proposal becomes the permanent property of YES.

MODIFICATION/WITHDRAWL OF PROPOSAL
Proposals may be modified in writing at any time prior to the due date. Proposals may be withdrawn in writing, by facsimile written transmission or in person, before the response date.

PAYMENT TERMS
Invoices that are submitted by the awarded contractor are required to provide accurate and current addresses including any discounts for early payment. Payment of undisputed invoices will be paid monthly provided that the invoices are received by dates provided to the winning bid. Disputed portions of invoices will be held until the dispute is resolved.

PROPOSAL REQUIREMENTS

- Vendor is required to provide evidence of a valid State of Texas Business License
- Vendor is required to provide an insurance certificate with YES Prep named as an additional insured.

The entity legally responsible for fulfilling this agreement shall be identified in the proposal response.

Right to Seek a New Proposal
YES Prep Public Schools reserves the right to receive, accept, or reject any and all proposals for any or all reasons.
Proposals will be awarded to the best overall respondent as determined to be in the best interests of Yes Prep. In comparing the responses to this RFP and making awards, Yes Prep may consider such factors as quality and thoroughness of a proposal, the record of experience, the references of the respondents, and the integrity, performance and assurances in the proposal in addition to that of the proposal price.

It is the responsibility of the vendor to ensure that the equipment proposed is fully functional with existing two-way radio equipment: handheld radios, base stations and school bus radios.

Applicable Law
The successful Contractor(s) agrees that they shall comply with all local, state and federal laws, statutes, rules, and regulations including, but not limited to, the Rehabilitation Act of 1973 and the Americans with Disabilities Act. In the event that any claims should arise with regards to this contract, for a violation of any such local, state, or federal law, statues, rules, or regulations, the provider will indemnify and hold Huntington County Community School Corporation harmless for any damages, including court costs or attorney fees which might be incurred.

Dispute resolution
It is expected that any conflicts or disagreements can be settled through face-to-face meetings. Unresolved disputes will require mediation before filing litigation. Both parties will split the cost of mediation.

SPECIAL REQUIREMENTS/INSTRUCTIONS

EVALUATION AND AWARD
This RFP in no manner obligates YES to the eventual rental, lease, or purchase of any equipment or service described, implied, or which may be proposed, until confirmed by a written contract. Progress toward this end is solely at the discretion of YES and may be terminated at any time prior to the signing of the contract.

YES may initiate discussions with Vendor personnel authorized to contractually obligate the Vendor. Discussions will develop into negotiating sessions with the successful Vendor(s). If YES is unable to agree to contract terms, YES reserves the right to terminate contract negotiations with a Vendor and initiate negotiations with another Vendor. YES reserves the right to select services and products from any number of Vendors if, in its sole discretion, it is in the best interest of YES to do so.

Evaluation will consider the Vendor(s) best meeting the needs and requirements of YES and such evaluation and determination of best value shall be solely at the discretion of YES. **Purchase price is not the only criteria that will be used in the evaluation process.**

Submission of qualifications implies the Vendor's acceptance of the evaluation criteria and Vendor's recognition that subjective judgments can and will be made by those individuals evaluating qualifications.

References, site visits, and product inspections may be used to make judgments directly affecting the award of this contract.

NON-PERFORMANCE BY VENDOR
Performance, before and during the contract term, will be a major consideration of current contract award, renewals, and future award considerations. Failure to perform, in any sense relative to this contract, may result in the probation and/or termination of this agreement by YES on the basis of nonperformance. Non-performance shall be determined as follows:

1. Failure to meet and maintain all qualifications required in this RFQ/RFP;
2. Failure to meet required personnel standards and operating performance standards;
3. Failure to maintain appropriate and/or necessary personnel licenses and certifications;
4. Failure to meet all vehicle inspections and certifications which are needed to comply with federal, state, and/or local requirements;
5. Failure to keep and maintain all required insurance coverage; and/or
6. Failure to cure deficiencies within a reasonable amount of time as stated herein.

INSURANCE
All Vendors must provide evidence of insurance or insurability and a Workers' Compensation

Certificate (see Attachments C and D).

GOVERNMENT VIOLATIONS
Vendor shall notify YES of all health and safety violations, OSHA violations, wage and hour violations, or labor violations assessed by any city, state, or federal government department or agency.

NON-COMPLIANCE NOTIFICATION
In the event a Vendor is determined by YES to have failed to perform services in accordance with the requirements listed herein, YES will forward a written notification specifying the violation or the area of non-compliance to the Vendor. The Vendor in non-compliance shall immediately remedy all violations as determined by YES. Any violations not so remedied shall be grounds for termination of the contract, in whole or in part.

OWNERSHIP
YES shall retain ownership rights to all materials or any other product produced in conjunction with the work described herein.

SPECIAL CONDITIONS AND PROJECT INFORMATION

YES Prep Public Schools is a free, open-enrollment public school system that currently serves 15,000 students across nineteen (19) schools in the Houston area. In August 2020, YES Prep will open 2 new elementary schools in the Houston area. YES Prep has been ranked as among the top 100 public high schools in the nation by Newsweek and U.S. News & World Report. Every year, 100 percent of YES Prep's graduating seniors have been accepted into four-year colleges, including Harvard, Yale, Columbia, Rice, and Stanford. YES Prep combines a highly successful 6th-12th grade model along with high standards for student achievement.

One-time bid walk will be offered on Tues, Sept 29th starting at 8AM. Everyone will meet at the White Oak Campus to start. We will make our way around Houston to offer everyone a chance to see each campus. A mask or face covering will be required.

- All work on the interior, to be performed after-hours, weekends and during school holidays. All work on the exterior can be performed during school hours with coordination done in advance with the Construction Manager or Construction Project Manager.
- Contractor is responsible for all drawings included with this RFP.
- Questions are due by 5PM, Sept 24, 2020.
- YES Prep holds the right to not approve or more forward any single project in the overall RFP.

CONTRACTOR TO PROVIDE THE FOLLOWING:

- Contractor will be allowed to use staff restrooms on campus during after-hours work. Contractor will need to provide a temporary toilet or use offsite facility during school hours.
- Contractor will be responsible for workers remaining in appropriate areas while on campus. Anyone caught outside of approved work area will be removed from the campus and not allowed to return.
- All bids should be turn-key for interior and exterior work.
- Contractor is responsible for trash removal from the building and property.
- Contractor is responsible for protecting all existing finishes in the work area.

- Contractor is responsible to clean the work area each night to ensure the building is ready for school the next morning. This includes disinfecting door knobs touched, sweeping and mopping floors.
- Contractor will be required to coordinate with Owner contractor for data installation and pathways, as needed.

A schedule duration per campus MUST be included with RFP response.

Cost breakout as listed below is REQUIRED.

Project	Cost
Southeast-Interior	
Southeast-Exterior	
White Oak-Interior	
Brays Oaks-Exterior	
Brays Oaks-Interior	
West-Interior	
West-Exterior Base Bid	
West-Exterior Alternate	
North Forest-Interior	
North Forest-Exterior	
North Central-Interior Base Bid	
North Central-Interior Alternate	
Gulfton-Interior	
Hobby-Exterior	
Southwest-Exterior	
Southside-Interior	

REQUIRED SUBMITTALS
(Attachment A)

Submittal 1
Experience in Electrical
Vendor shall provide a statement of its qualifications to provide the specific materials and services requested herein.

Submittal 2
Staffing Plan
Vendor shall submit a staffing plan that provides the qualifications of your employees.

Submittal 3
References
Vendor shall supply a list of three (3) references for which Vendor has experience in the scope of work that the proposal is submitted for.

Submittal 4
Customer Feedback
Vendor shall provide a description of its formal customer feedback system, provide sample tools used to gather data, and describe how results were shared with customers and used to improve service.

All submittals must be included in the RFP package returned on Sept 30, 2020 by 11:00 AM. It is recommended that each submittal be typed on a separate sheet of paper with the heading "Response to Submittal #___ for YES RFP" at the top and the name of the Vendor underneath.

QUESTIONNAIRE
(Attachment B)

All Vendor must provide answers to the following questions, typed on 8 ½ x 11 inch paper, in the order below. Attachments to the questionnaire answers should reference the question number.

1. Provide the full name and address of your organization.

2. Provide contact person(s) for information concerning this offer: name, title, phone, fax, email address.

3. What form of business is your organization (e.g. proprietorship, partnership, corporation) and is your organization local only, statewide, or nationwide?

4. List all the names under which this Vendor has operated in the last ten (10) years in the State of Texas.

5. Provide a copy of your insurance coverage.

6. Multi-part question:
    a. Do you currently have any investigations pending by or on behalf of a government entity or other licensing entity?
    b. Have you had investigations by or on behalf of a government entity or other licensing entity in the past?
        1. If the answer to either question is yes, please provide copies of relevant paperwork.

7. Do you have any relevant experience or projects in the past with education institutions? If so, please provide a high-level overview of these projects.

WORKERS' COMPENSATION CERTIFICATE
(Attachment C)

YES requires Vendor to provide workers' compensation as per state law requirements. The Vendor shall sign and submit the following certificate with the written proposal:

- Minimum Workers' Compensation and Employer's Liability Limits
    - Each Accident $1,000,000
    - Disease – Each Employee $1,000,000
    - Disease – Policy Limit $1,000,000

_____
Vendor Name

_____
Signature of Authorized Agent

_____
Date Signed

Note: Vendor may attach current certificate of coverage with a signed statement that if awarded the contract, they will obtain said aforementioned coverage if the current coverage does not meet the stated minimum requirements.

INSURANCE COVERAGE REQUIREMENTS
(Attachment D)

General and Excess Liability Minimum Coverages

- General Liability: $2,000,000
- Umbrella Liability: $1,000,000

_____
Vendor Name

_____
Signature of Authorized Agent

_____
Date Signed

YES will be named as Additional Insured on the Certificate of Insurance if the Vendor is awarded a contract.

Proposed Exceptions, Alterations, Additions, or Modifications to RFP (Attachment E)

Vendor should submit as Attachment F, any and all proposed exceptions, alterations, additions, or modifications to the YES RFP for Safety & Security Construction.

SCORING RUBRIC
(ATTACHMENT F)

YES will utilize the following RFP Evaluation Rubric for evaluation of all YES Prep Safety & Security Construction.

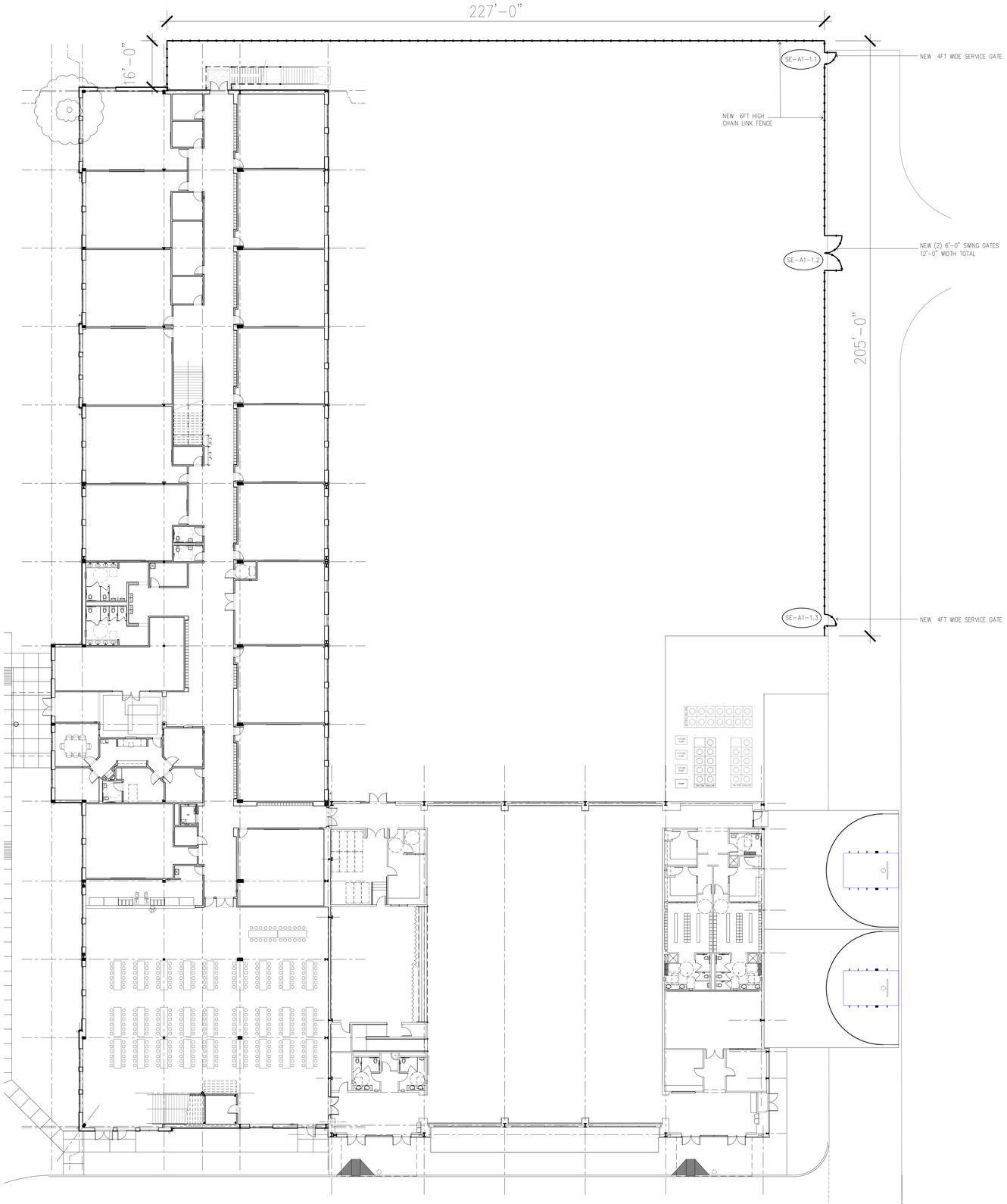
1. **Charges/Cost to YES PREP: 40 Points.**
    a. Favorable = 40 Points. Unfavorable = 0 points.
    b. Evaluate the Overall Value of proposed materials and services to be provided.

2. **Technical and Education Experience: 20 Points.**
    a. Favorable = 20 Points. Unfavorable = 0 points.
    b. Proposal demonstrates the Vendor's ability to deliver quality services to schools.
    c. Includes references, Vendor staff, and/or Vendor's or certifications, qualifications, experience, expertise, and resumes.

3. **Proposed Operational Delivery: 10 Points.**
    a. Favorable = 10 Points. Unfavorable = 0 points.
    b. Proposal defines services and scope in enough detail that YES can confidently determine that the proposed services will be met.

4. **Project Understanding and Methodology: 30 Points.**
    a. Favorable = 30 Points. Unfavorable = 0 points.
    b. Proposal addresses the project in terms of the scope of work and substantive issues essential to proper service and care of YES facilities. Proposal includes a detailed description of services to be provided and any constraints as to procedure, time, personnel, or equipment that needs to be communicated to YES for use during contract negotiations.

END OF YES RFP PACKAGE FOR Safety & Security Construction



SITE PLAN

SCALE: 1/16"=1'-0"

1

yesprep PUBLIC SCHOOLS

2007 Ea architects

No.	Description	Date

YES PREP SCHOOL

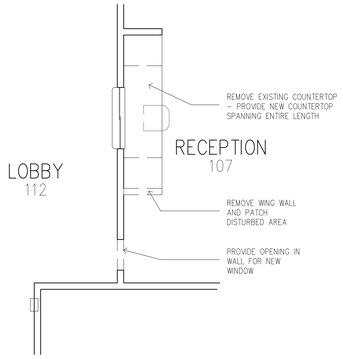
SECURITY IMPROVEMENTS

SOUTHEAST CAMPUS

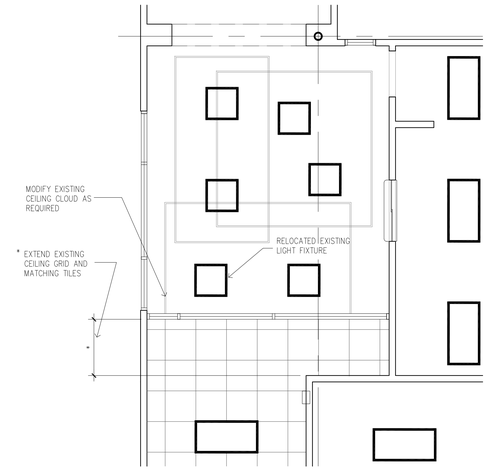
Project Number	20044
Date	09/18/20
Drawn By	
Checked By	

A1-1

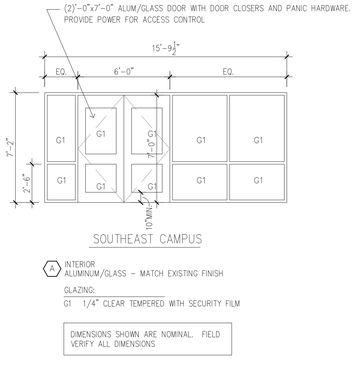
Scale



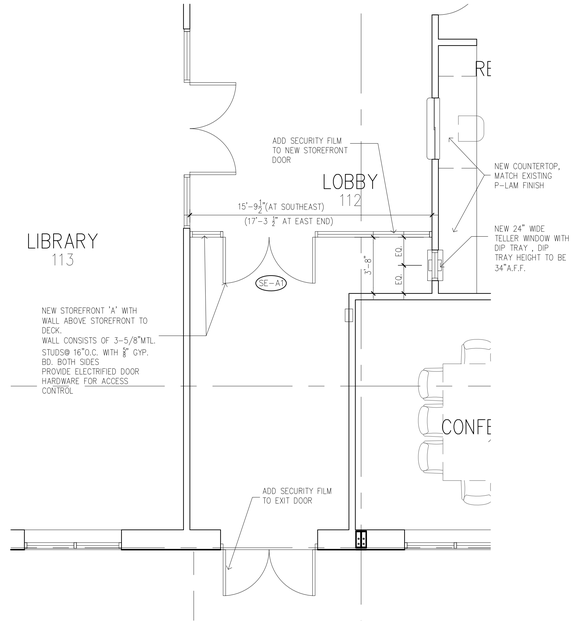
EXISTING – DEMOLITION PLAN SCALE: 1/4" = 1'-0" | 3



NEW REFLECTED CEILING PLAN SCALE: 1/4" = 1'-0" | 2



NEW STOREFRONT ELEVATION



ENLARGED PLAN SCALE: 1/4" = 1'-0" | 1

yesprep PUBLIC SCHOOLS

2007 Ea architects

No.	Description	Date

YES PREP SCHOOL

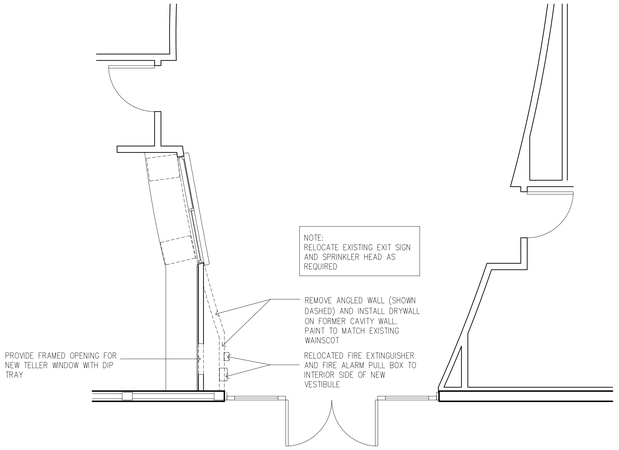
SECURITY IMPROVEMENTS

SOUTHEAST CAMPUS

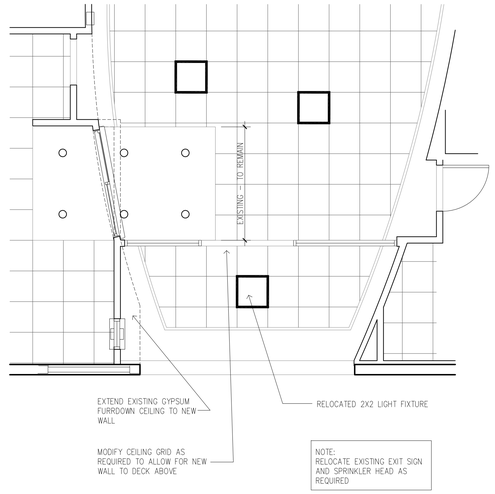
Project Number	20044
Date	09/18/20
Drawn By	
Checked By	

A1

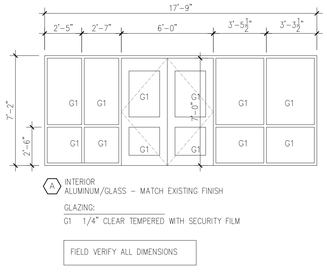
Scale



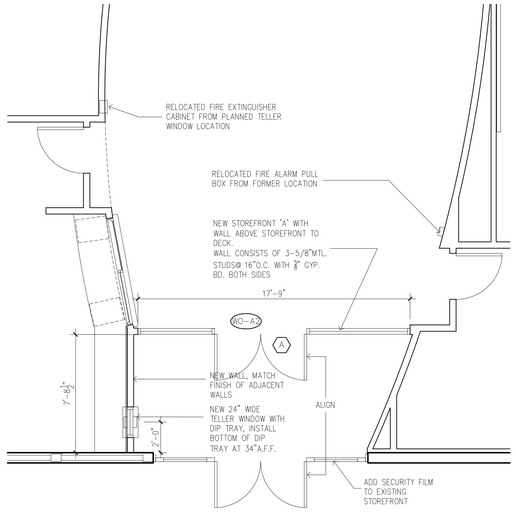
EXISTING – DEMOLITION FLOOR PLAN SCALE: 1/4" = 1'-0" | 3



NEW REFLECTED CEILING PLAN SCALE: 1/4" = 1'-0" | 2



NEW STOREFRONT ELEVATION



ENLARGED PLAN SCALE: 1/4" = 1'-0" | 1

yesprep PUBLIC SCHOOLS

2007 Ea architects

No.	Description	Date

YES PREP SCHOOL

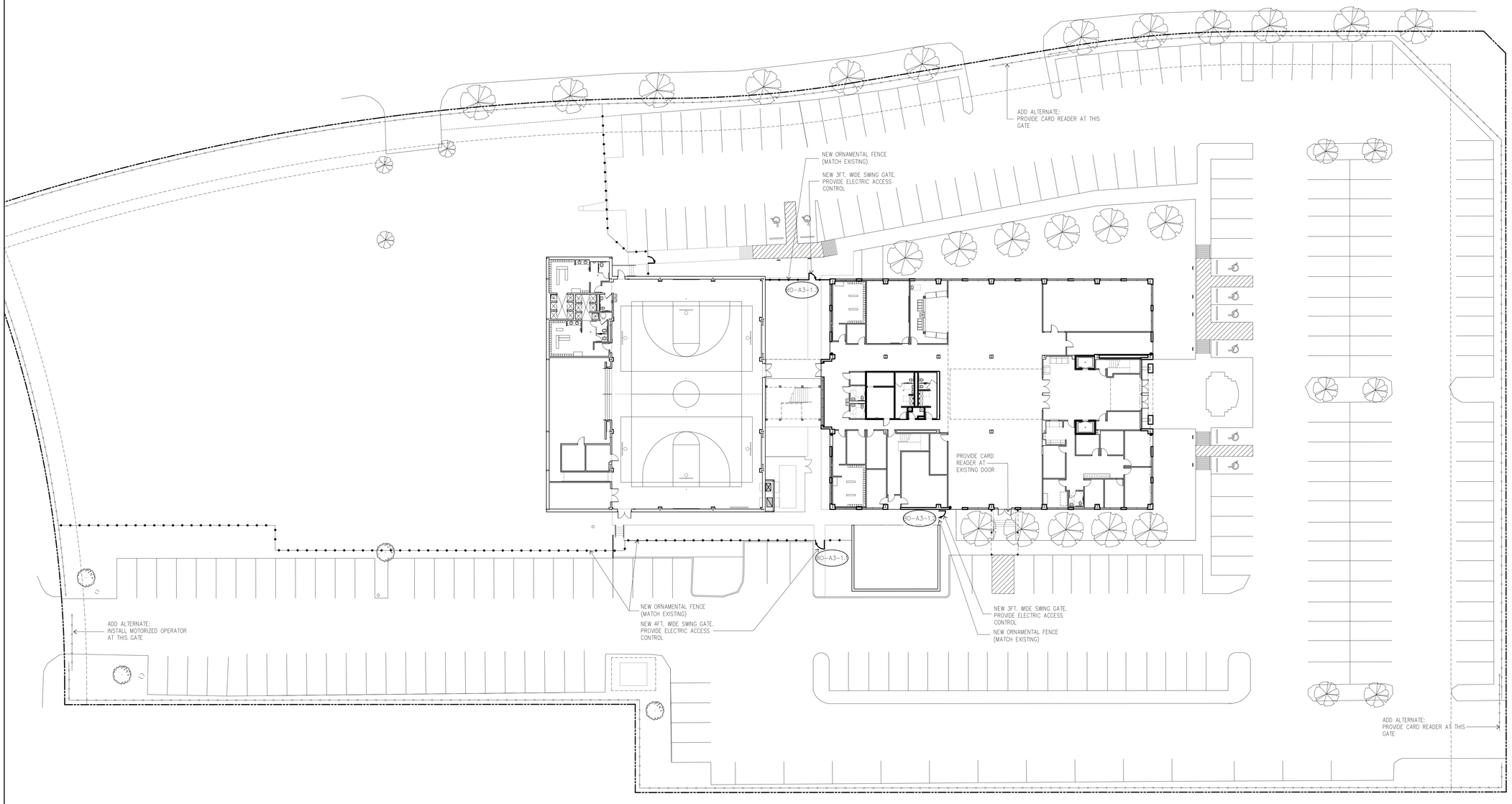
SECURITY IMPROVEMENTS

WHITE OAK CAMPUS

Project Number	20044
Date	09/18/20
Drawn By	
Checked By	

A2

Scale



SITE PLAN

SCALE: 1"=20'-0"

1

yesprep PUBLIC SCHOOLS

2007 Ea architects

No.	Description	Date

YES PREP SCHOOL

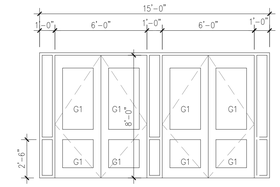
SECURITY IMPROVEMENTS

BRAYS OAKS CAMPUS

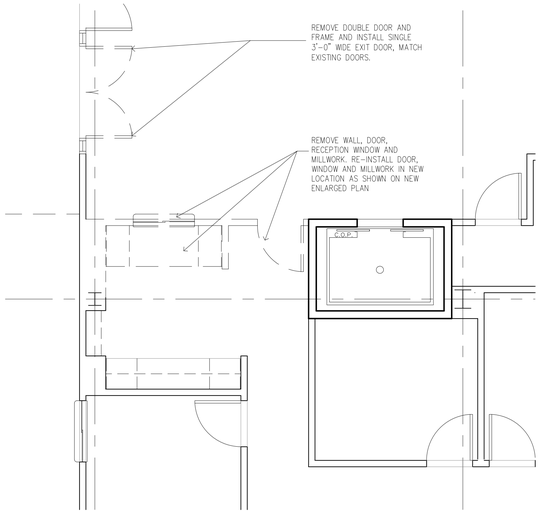
Project Number	20044
Date	09/18/20
Drawn By	
Checked By	

A3-1

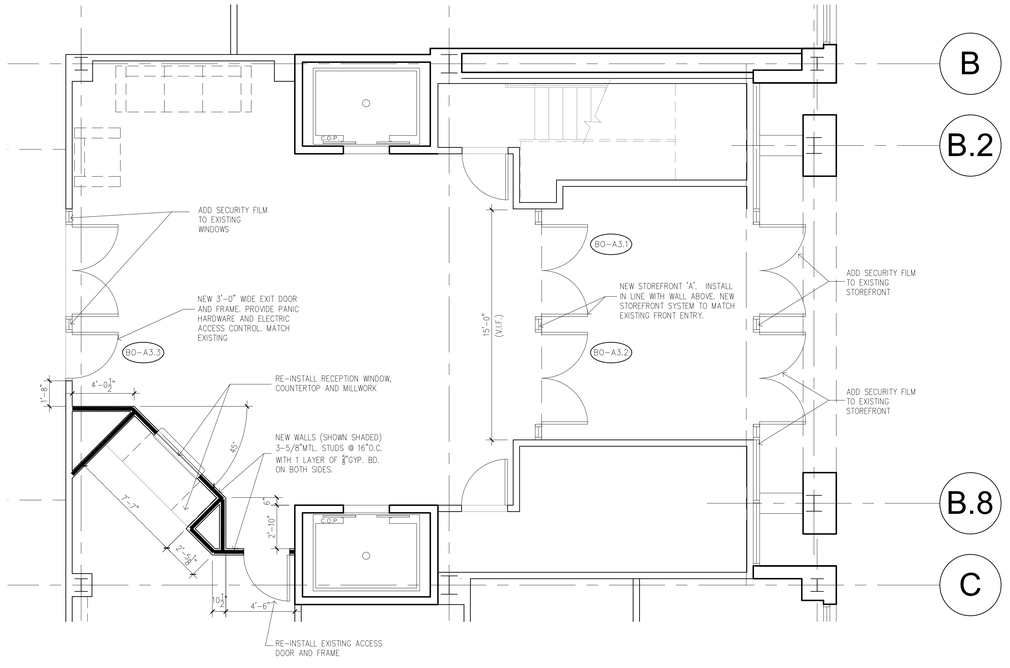
Scale



NEW STOREFRONT ELEVATION



ENLARGED PLAN – EXISTING – DEMOLITION SCALE: 1/4" = 1'-0" | 2



ENLARGED PLAN – NEW PROPOSED SCALE: 1/4" = 1'-0" | 1

yes prep PUBLIC SCHOOLS

2007 Ea architects

No.	Description	Date

YES PREP SCHOOL

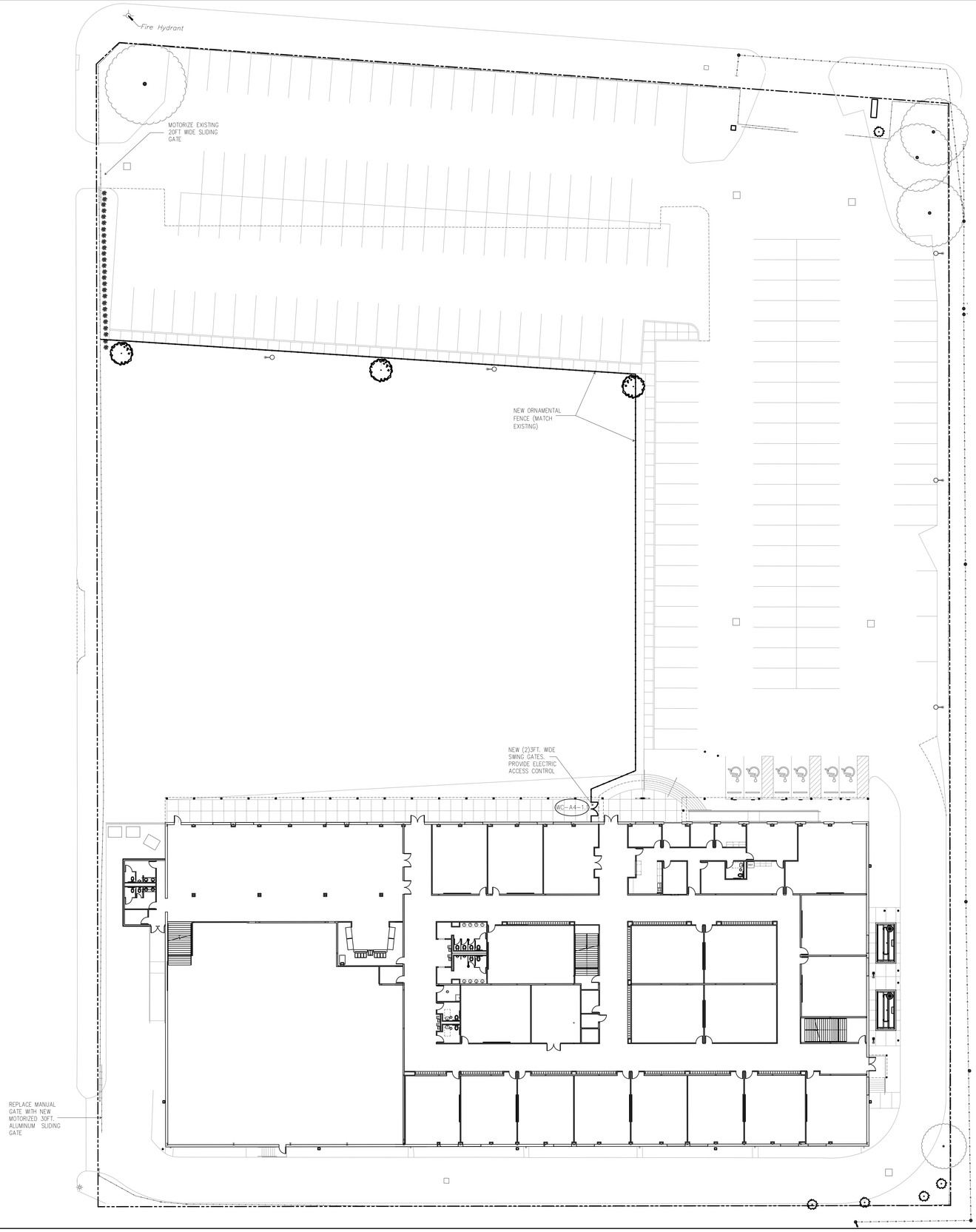
SECURITY IMPROVEMENTS

BRAYS OAKS CAMPUS

Project Number	20044
Date	09/18/20
Drawn By	
Checked By	

A3

Scale



SITE PLAN

SCALE: 1"=20'-0"

1

yesprep PUBLIC SCHOOLS

2007 Ea architects

No.	Description	Date

YES PREP SCHOOL

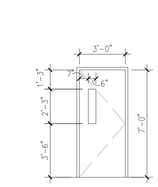
SECURITY IMPROVEMENTS

WEST CAMPUS

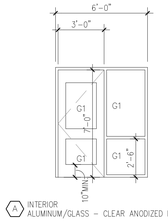
Project Number	20044
Date	09/18/20
Drawn By	
Checked By	

A4-1

Scale



E INTERIOR
NARROW LITE DOOR – P-LAM FINISH
WILSONART WHITE TIGRIS #4783-60

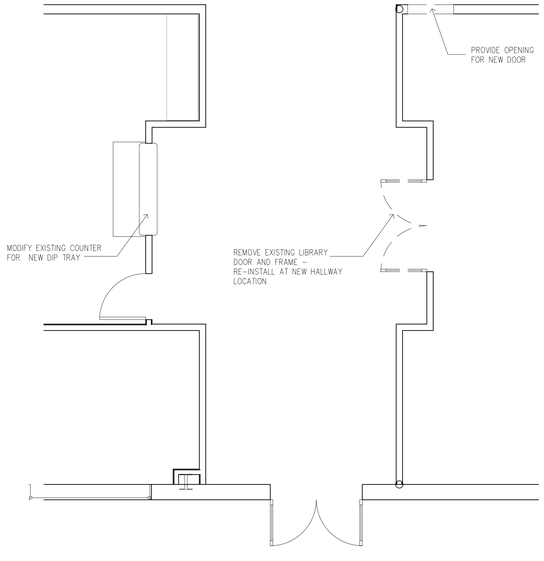


A INTERIOR
ALUMINUM/GLASS – CLEAR ANODIZED FINISH

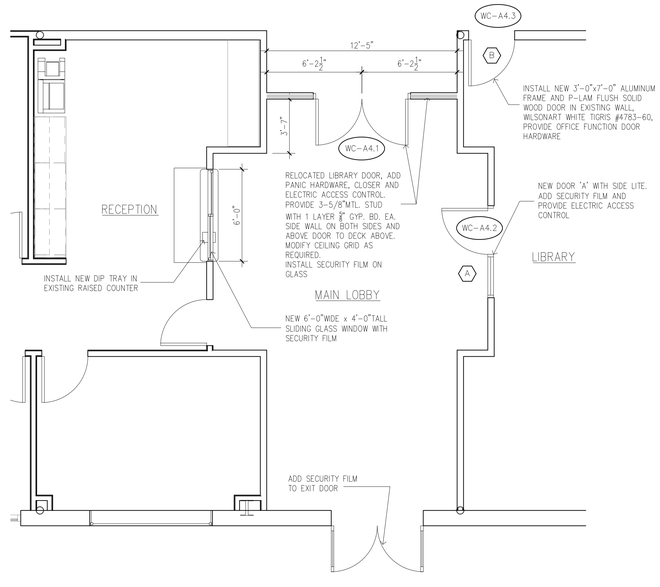
GLAZING:
G1 1/4" CLEAR TEMPERED WITH SECURITY FILM

FIELD VERIFY ALL DIMENSIONS

NEW STOREFRONT ELEVATION



EXISTING ENLARGED PLAN – DEMOLITION SCALE: 1/4" = 1'-0" | 2



NEW ENLARGED PLAN SCALE: 1/4" = 1'-0" | 1

yesprep PUBLIC SCHOOLS

2007 Ea architects

No.	Description	Date

YES PREP SCHOOL

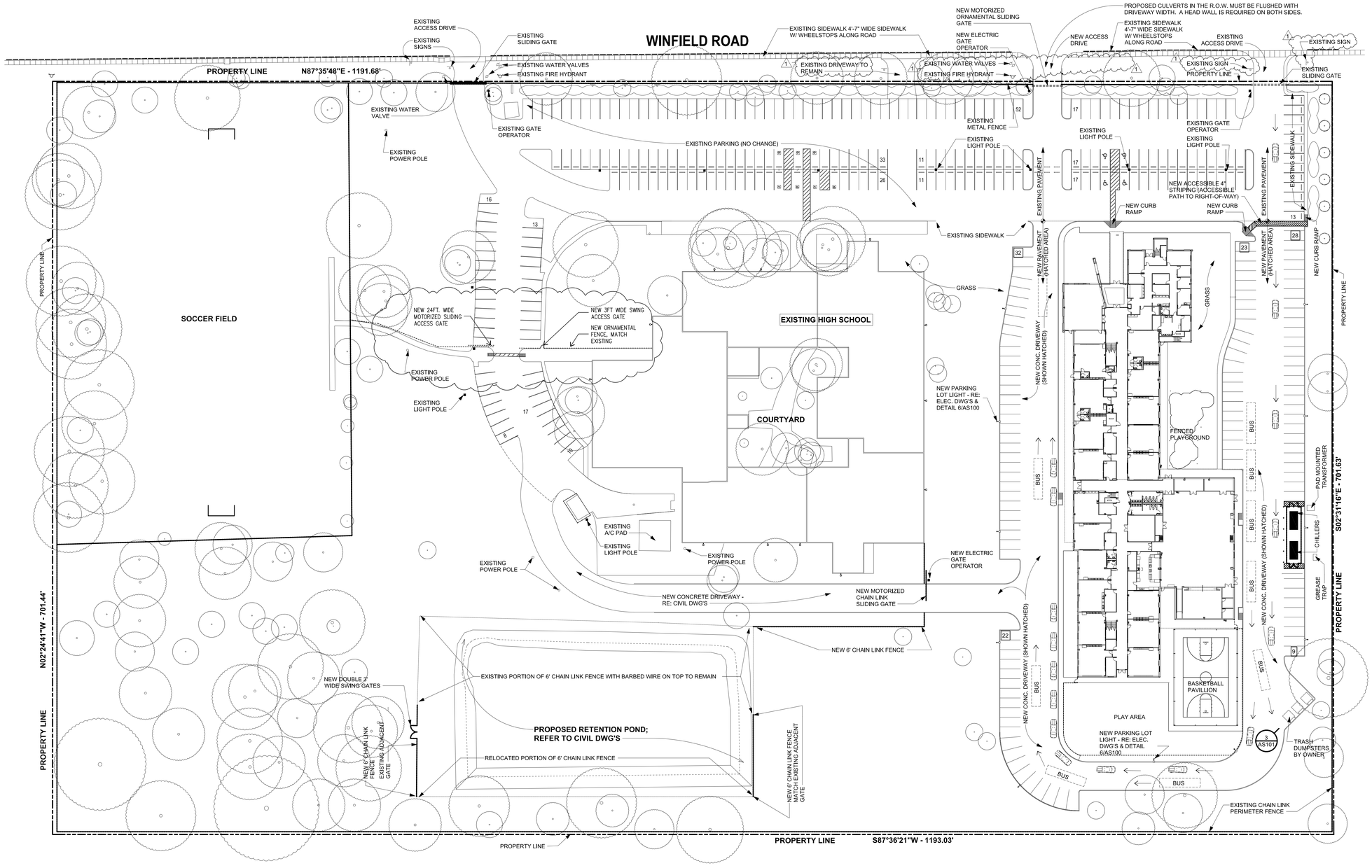
SECURITY IMPROVEMENTS

WEST CAMPUS

Project Number	20044
Date	09/18/20
Drawn By	
Checked By	

A4

Scale



SITE PLAN SCALE: 1"= 40'-0" | 1

yesprep PUBLIC SCHOOLS

2007 Ea architects

No.	Description	Date

YES PREP SCHOOL

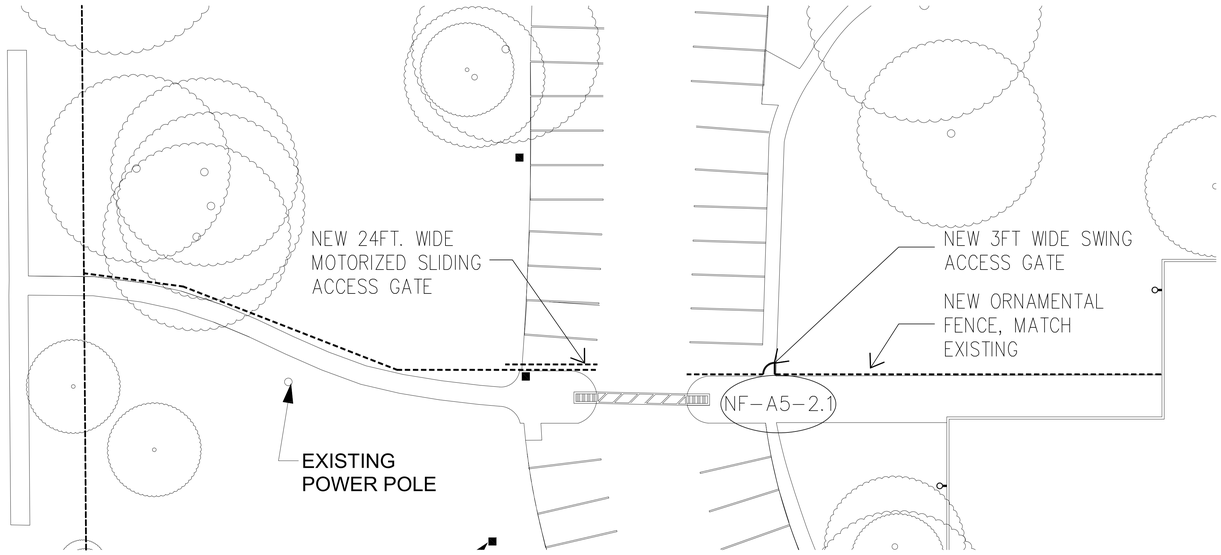
SECURITY IMPROVEMENTS

NORTH FOREST CAMPUS

Project Number	20044
Date	09/18/20
Drawn By	
Checked By	

A5-1

Scale



SITE PLAN SCALE: 1"= 40'-0"

1

yesprep
PUBLIC SCHOOLS

2007 Ea architects

No.	Description	Date

YES PREP SCHOOL

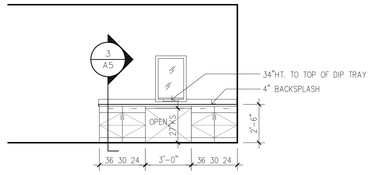
SECURITY IMPROVEMENTS

NORTH FOREST CAMPUS

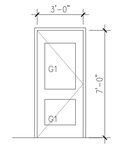
Project Number	20044
Date	09/18/20
Drawn By	
Checked By	

A5-2

Scale



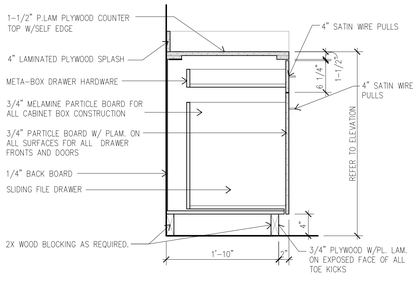
MILLWORK ELEVATION SCALE: 1/4" = 1'-0" | 2



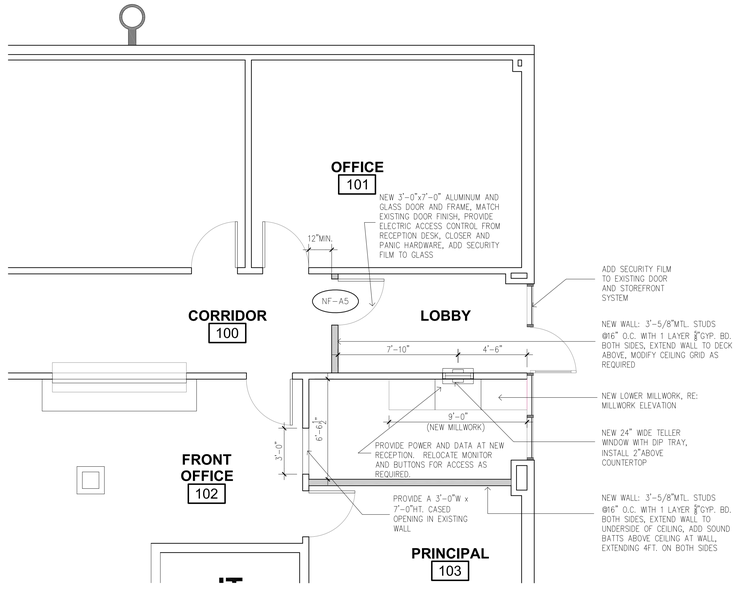
INTERIOR
ALUMINUM/GLASS – MATCH EXISTING FINISH

GLAZING:
G1 1/4" CLEAR TEMPERED WITH SECURITY FILM

NEW DOOR



MILLWORK SECTION SCALE: 1" = 1'-0" | 3



ENLARGED PLAN SCALE: 1/4" = 1'-0" | 1

yes prep PUBLIC SCHOOLS

2007 Ea architects

No.	Description	Date

YES PREP SCHOOL

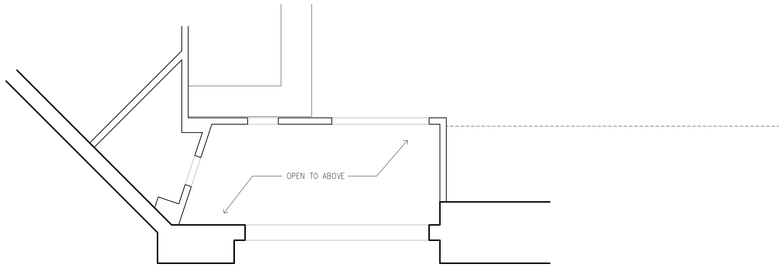
SECURITY IMPROVEMENTS

NORTH FOREST CAMPUS

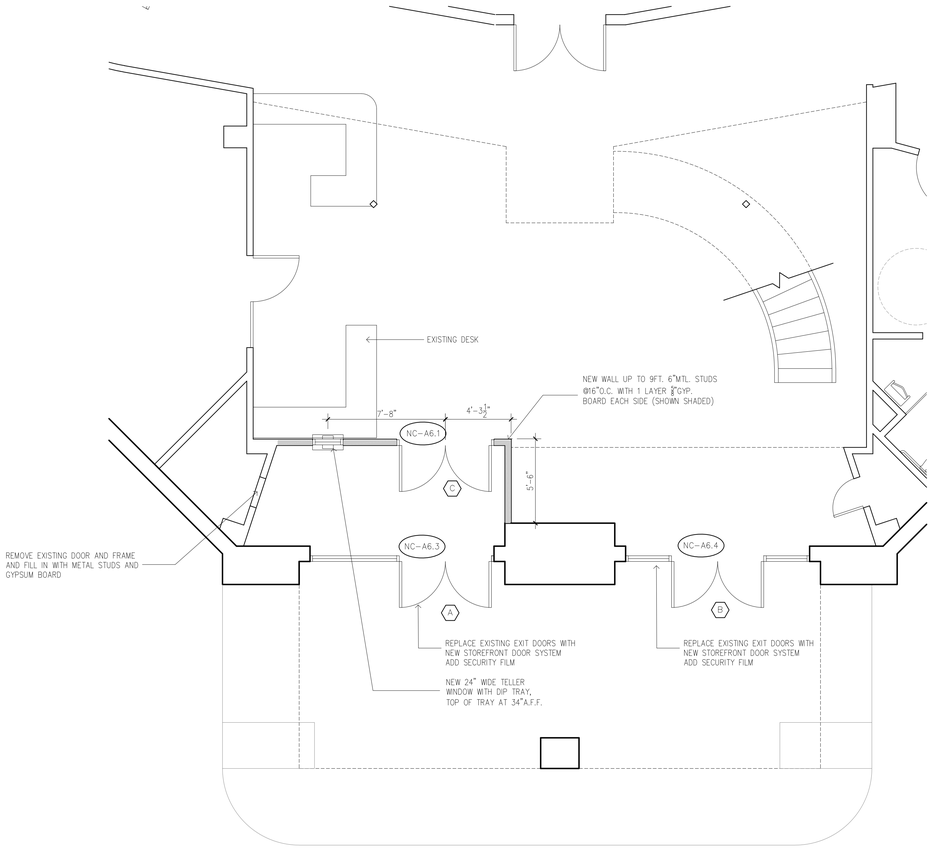
Project Number	20044
Date	09/18/20
Drawn By	
Checked By	

A5

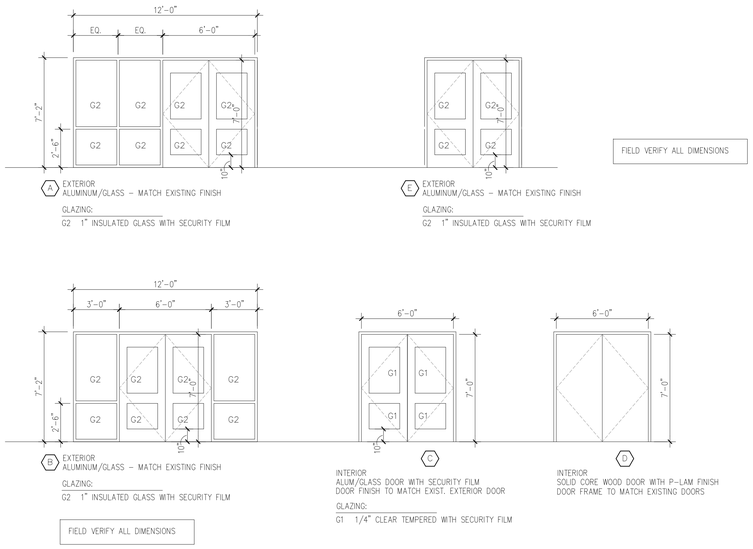
Scale



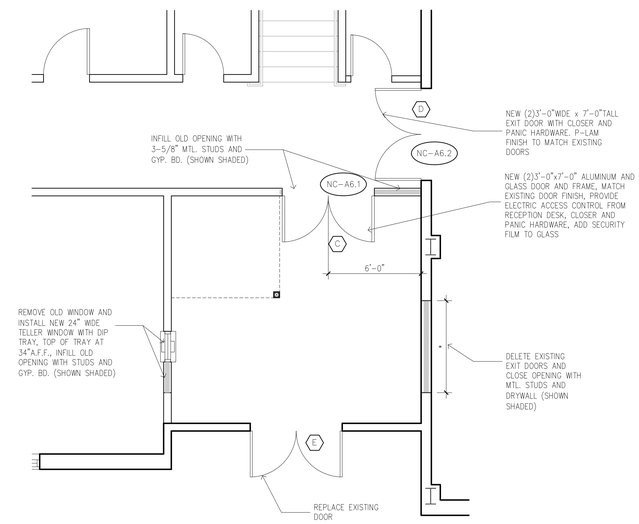
REFLECTED CEILING PLAN SCALE: 1/4" = 1'-0" | 3



ENLARGED PLAN (ALTERNATE) SCALE: 1/4" = 1'-0" | 2



DOOR SCHEDULE



ENLARGED PLAN SCALE: 1/4" = 1'-0" | 1

yes prep PUBLIC SCHOOLS

2007 Ea architects

No.	Description	Date

YES PREP SCHOOL

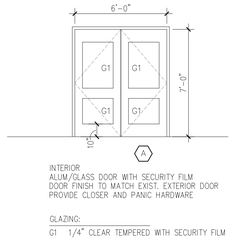
SECURITY IMPROVEMENTS

NORTH CENTRAL CAMPUS

Project Number	20044
Date	09/18/20
Drawn By	
Checked By	

A6

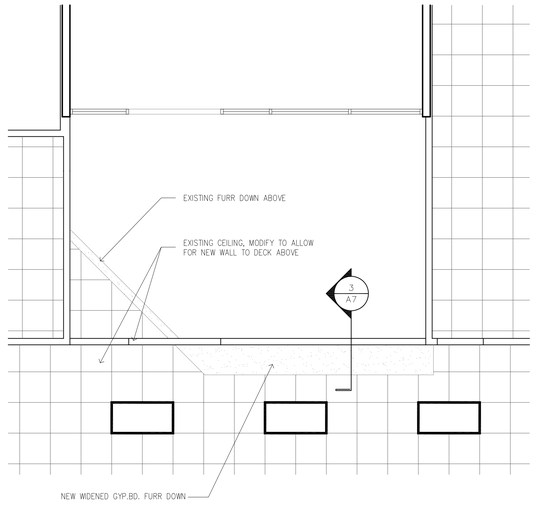
Scale



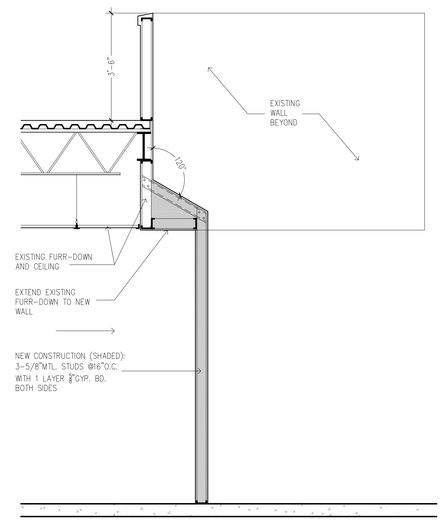
INTERIOR
ALUM/GLASS DOOR WITH SECURITY FILM
DOOR FINISH TO MATCH EXIST. EXTERIOR DOOR
PROVIDE CLOSER AND PANIC HARDWARE

GLAZING:
G1 1/4" CLEAR TEMPERED WITH SECURITY FILM

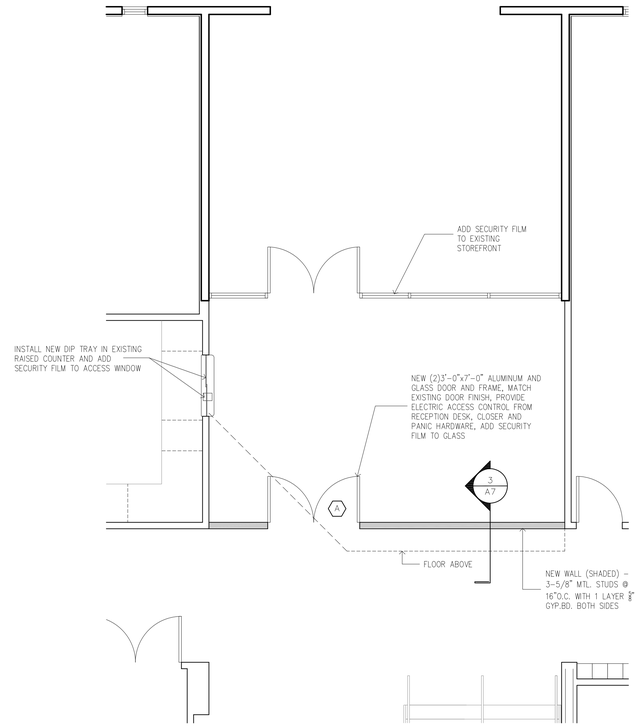
DOOR SCHEDULE



REFLECTED CEILING PLAN SCALE: 1/4" = 1'-0" 2



WALL SECTION SCALE: 1/2" = 1'-0" 3



ENLARGED PLAN SCALE: 1/4" = 1'-0" 1

yesprep PUBLIC SCHOOLS

2007 Ea architects

No.	Description	Date

YES PREP SCHOOL

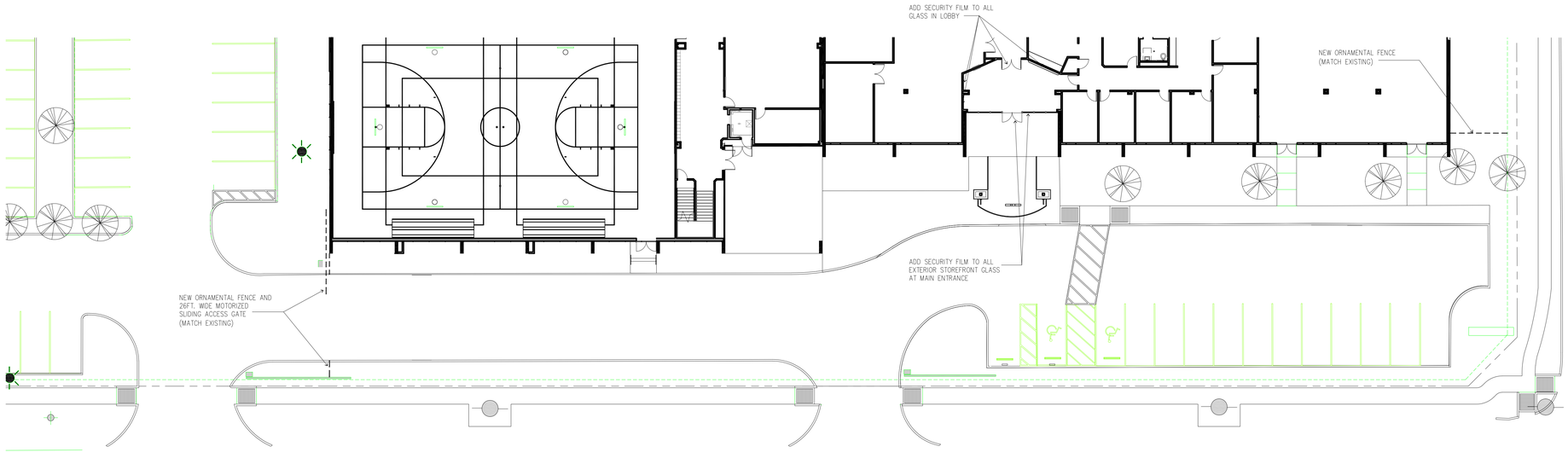
SECURITY IMPROVEMENTS

GULFTON CAMPUS

Project Number	20044
Date	09/18/20
Drawn By	
Checked By	

A7

Scale



SITE PLAN

SCALE: 1/16"=1'-0"

1

yes prep
PUBLIC SCHOOLS

2007 Ea architects

No.	Description	Date

YES PREP SCHOOL

SECURITY IMPROVEMENTS

HOBBY CAMPUS

Project Number	20044
Date	09/18/20
Drawn By	
Checked By	

A8

Scale

NEW ORNAMENTAL FENCE (MATCH EXISTING)

8'-0"

NEW 28 FT. WIDE MOTORIZED SLIDING ACCESS GATE (MATCH EXISTING)

NEW 3FT. WIDE SWING GATE

NEW ORNAMENTAL FENCE (MATCH EXISTING)

NEW 3FT. WIDE SWING GATE, EXIT ONLY

SW-A9.5

SW-A9.6

SW-A9.7

NEW ORNAMENTAL FENCE (MATCH EXISTING)

NEW ORNAMENTAL FENCE (MATCH EXISTING)

NEW (2)3FT. WIDE SWING GATE. PROVIDE ELECTRIC ACCESS CONTROL

SW-A9.4

NEW ORNAMENTAL FENCE (MATCH EXISTING)

SW-A9.3

SW-A9.1

SW-A9.2

NEW 3FT. WIDE SWING GATE

NEW 3FT. WIDE SWING GATE

NEW 24 FT. WIDE MOTORIZED SLIDING ACCESS GATE (MATCH EXISTING)

SITE PLAN

SCALE: 1/16"=1'-0"

1

yes prep PUBLIC SCHOOLS

2007 Ea architects

No.	Description	Date

YES PREP SCHOOL

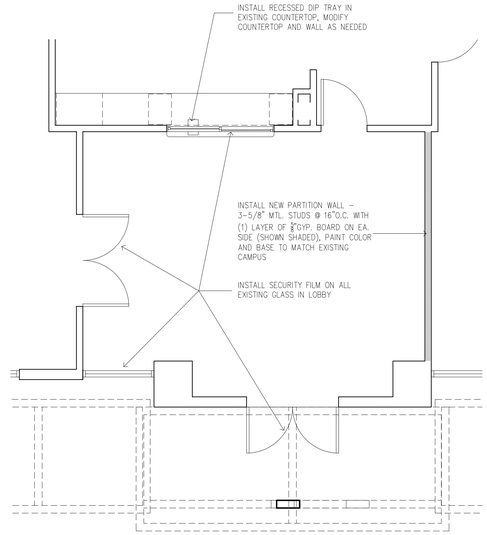
SECURITY IMPROVEMENTS

SOUTHWEST CAMPUS

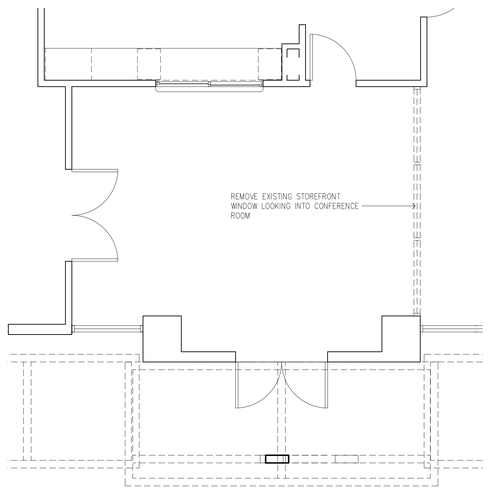
Project Number	20044
Date	09/18/20
Drawn By	
Checked By	

A9

Scale



NEW LOBBY PLAN SCALE: 1/4" = 1'-0" 2



EXISTING LOBBY PLAN – DEMOLITION SCALE: 1/4" = 1'-0" 1

yes prep PUBLIC SCHOOLS

2007 Ea architects

No.	Description	Date

YES PREP SCHOOL

SECURITY IMPROVEMENTS

SOUTHSIDE CAMPUS

Project Number	20044
Date	09/18/20
Drawn By	
Checked By	

A12

Scale

SECTION 08 71 00

DOOR HARDWARE

PART 1 - GENERAL

1.1 SUMMARY:

A. Section Includes: Finish Hardware for door openings, except as otherwise specified herein.

1. Door hardware for steel (hollow metal) doors.
2. Door hardware for aluminum doors.
3. Door hardware for wood doors.
4. Door hardware for other doors indicated.
5. Keyed cylinders as indicated.

B. Related Sections:

1. Division 6: Rough Carpentry.
2. Division 8: Aluminum Doors and Frames
3. Division 8: Hollow Metal Doors and Frames.
4. Division 8: Wood Doors.
5. Division 26 Electrical
6. Division 28: Electronic Security

C. References: Comply with applicable requirements of the following standards. Where these standards conflict with other specific requirements, the most restrictive shall govern.

1. Builders Hardware Manufacturing Association (BHMA)
2. NFPA 101 Life Safety Code
3. NFPA 80 -Fire Doors and Windows
4. ANSI-A156.xx- Various Performance Standards for Finish Hardware
5. UL10C – Positive Pressure Fire Test of Door Assemblies
6. ANSI-A117.1 – Accessible and Usable Buildings and Facilities
7. DHI /ANSI A115.IG – Installation Guide for Doors and Hardware
8. ICC – International Building Code

D. Intent of Hardware Groups

1. Should items of hardware not definitely specified be required for completion of the Work, furnish such items of type and quality comparable to adjacent hardware and appropriate for service required.
2. Where items of hardware aren't definitely or correctly specified, are required for completion of the Work, a written statement of such omission, error, or other discrepancy to be submitted to Architect, prior to date specified for receipt of bids for clarification by addendum; or, furnish such items in the type and quality established by this specification, and appropriate to the service intended.

E. Allowances

1. Refer to Division 1 for allowance amount and procedures.

F. Alternates

1. Refer to Division 1 for Alternates and procedures.

1.2 SUBSTITUTIONS:

A. Comply with Division 1.

1.3 SUBMITTALS:

A. Comply with Division 1.

B. Special Submittal Requirements: Combine submittals of this Section with Sections listed below to ensure the "design intent" of the system/assembly is understood and can be reviewed together.

C. Product Data: Manufacturer's specifications and technical data including the following:

1. Detailed specification of construction and fabrication.
2. Manufacturer's installation instructions.
3. Wiring diagrams for each electric product specified. Coordinate voltage with electrical before submitting.
4. Submit 6 copies of catalog cuts with hardware schedule.
5. Provide 9001-Quality Management and 14001-Environmental Management for products listed in Materials Section 2.2

D. Shop Drawings - Hardware Schedule: Submit 6 complete reproducible copy of detailed hardware schedule in a vertical format.

1. List groups and suffixes in proper sequence.
2. Completely describe door and list architectural door number.
3. Manufacturer, product name, and catalog number.
4. Function, type, and style.
5. Size and finish of each item.
6. Mounting heights.
7. Explanation of abbreviations and symbols used within schedule.
8. Detailed wiring diagrams, specially developed for each opening, indicating all electric hardware, security equipment and access control equipment, and door and frame rough-ins required for specific opening.

E. Templates: Submit templates and "reviewed Hardware Schedule" to door and frame supplier and others as applicable to enable proper and accurate sizing and locations of cutouts and reinforcing.

1. Templates, wiring diagrams and "reviewed Hardware Schedule" of electrical terms to electrical for coordination and verification of voltages and locations.

F. Samples: (If requested by the Architect)

1. 1 sample of Lever and Rose/Escutcheon design, (pair).
2. 3 samples of metal finishes

G. Contract Closeout Submittals: Comply with Division 1 including specific requirements indicated.

1. Operating and maintenance manuals: Submit 3 sets containing the following.

a. Complete information in care, maintenance, and adjustment, and data on repair and replacement parts, and information on preservation of finishes.
b. Catalog pages for each product.
c. Name, address, and phone number of local representative for each manufacturer.
d. Parts list for each product.

2. Copy of final hardware schedule, edited to reflect, "As installed".
3. Copy of final keying schedule
4. As installed “Wiring Diagrams” for each piece of hardware connected to power, both low voltage and 110 volts.
5. One set of special tools required for maintenance and adjustment of hardware, including changing of cylinders.

1.4 QUALITY ASSURANCE

A. Comply with Division 1.

1. Statement of qualification for distributor and installers.
2. Statement of compliance with regulatory requirements and single source responsibility.
3. Distributor's Qualifications: Firm with 3 years experience in the distribution of commercial hardware.

a. Distributor to employ full time Architectural Hardware Consultants (AHC) for the purpose of scheduling and coordinating hardware and establishing keying schedule.
b. Hardware Schedule shall be prepared and signed by an AHC.

4. Installer's Qualifications: Firm with 3 years experienced in installation of similar hardware to that required for this Project, including specific requirements indicated.
5. Regulatory Label Requirements: Provide testing agency label or stamp on hardware for labeled openings.

a. Provide UL listed hardware for labeled and 20 minute openings in conformance with requirements for class of opening scheduled.
b. Underwriters Laboratories requirements have precedence over this specification where conflict exists.

6. Single Source Responsibility: Except where specified in hardware schedule, furnish products of only one manufacturer for each type of hardware.

B. Review Project for extent of finish hardware required to complete the Work. Where there is a conflict between these Specifications and the existing hardware, notify the Architect in writing and furnish hardware in compliance with the Specification unless otherwise directed in writing by the Architect.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Packing and Shipping: Comply with Division 1.

1. Deliver products in original unopened packaging with legible manufacturer's identification.
2. Package hardware to prevent damage during transit and storage.
3. Mark hardware to correspond with "reviewed hardware schedule".
4. Deliver hardware to door and frame manufacturer upon request.

B. Storage and Protection: Comply with manufacturer's recommendations.

1.6 PROJECT CONDITIONS:

A. Coordinate hardware with other work. Furnish hardware items of proper design for use on doors and frames of the thickness, profile, swing, security and similar requirements indicated, as necessary for the proper installation and function, regardless of omissions or conflicts in the information on the Contract Documents.

B. Review Shop Drawings for doors and entrances to confirm that adequate provisions will be made for the proper installation of hardware.

1.7 WARRANTY:

A. Refer to Conditions of the Contract

B. Manufacturer’s Warranty:

1. Closers: Ten years
2. Exit Devices: Five Years
3. Locksets & Cylinders: Three years
4. All other Hardware: Two years.

1.8 OWNER'S INSTRUCTION:

A. Instruct Owner's personnel in operation and maintenance of hardware units.

1.9 MAINTENANCE:

A. Extra Service Materials: Deliver to Owner extra materials from same production run as products installed. Package products with protective covering and identify with descriptive labels. Comply with Division 1 Closeout Submittals Section.

1. Special Tools: Installer provide special wrenches and tools applicable to each different or special hardware component.
2. Maintenance Tools: Installer to provide maintenance tools and accessories supplied by hardware component manufacturer.
3. Delivery, Storage and Protection: Comply with Owner's requirements for delivery, storage and protection of extra service materials.

B. Maintenance Service: Submit for Owner's consideration maintenance service agreement for electronic products installed.

PART 2 - PRODUCTS

2.1 MANUFACTURERS:

A. The following manufacturers are approved subject to compliance with requirements of the Contract Documents. Approval of manufacturers other than those listed shall be in accordance with Division 1.

Item:	Manufacturer:	Approved:
Hinges	McKinney	Hager,Bommer
Continuous Hinges	Pemko	ABH,Select,Roton
Locksets	Best	No Subsitution
Cylinders	Best	No Subsitution
Exit Devices	Sargent	Von Duprin,Dorma
Closers	Sargent 351	Norton 7500,Dorma 8900
Push/Pull Plates	Rockwood	Burns, Trimco
Push/Pull Bars	Rockwood	Burns, Trimco
Protection Plates	Rockwood	Burns, Trimco
Overhead Stops	Rixson	ABH,GJ,Dorma
Door Stops	Rockwood	Burns, Trimco
Flush Bolts	Rockwood	Burns, Trimco
Coordinator & Brackets	Rockwood	Burns, Trimco
Threshold & Gasketing	Pemko	Reese, NGP

2.2 MATERIALS:

A. Hinges: Shall be Five Knuckle Ball bearing hinges

1. Template screw hole locations
2. Bearings are to be fully hardened.
3. Bearing shell is to be consistent shape with barrel.
4. Minimum of 2 permanently lubricated non-detachable bearings on standard weight hinge and 4 permanently lubricated bearing on heavy weight hinges.
5. Equip with easily seated, non-rising pins.
6. Non Removable Pin screws shall be slotted stainless steel screws.
7. Hinges shall be full polished, front, back and barrel.
8. Hinge pin is to be fully plated.
9. Bearing assembly is to be installed after plating.
10. Sufficient size to allow 180-degree swing of door
11. Furnish five knuckles with flush ball bearings
12. Provide hinge type as listed in schedule.
13. Furnish 3 hinges per leaf to 7 foot 6 inch height. Add one for each additional 30 inches in height or fraction thereof.
14. Tested and approved by BHMA for all applicable ANSI Standards for type, size, function and finish
15. UL10C listed for Fire rated doors.

B. Geared Continuous Hinges:

1. Tested and approved by BHMA for ANSI A156.26-1996 Grade 1
2. Anti-spinning through fastener
3. UL10C listed for 3 hour Fire rating
4. Non-handed
5. Lifetime warranty
6. Provide Fire Pins for 3-hour fire ratings
7. Sufficient size to permit door to swing 180 degrees

C. Cylindrical Type Locks and Latchsets:

1. Tested and approved by BHMA for ANSI A156.2, Series 4000, Operational Grade 1, Extra-Heavy Duty, and be UL10C listed.
2. Provide 9001-Quality Management and 14001-Environmental Management.
3. Fit modified ANSI A115.2 door preparation.
4. Locksets and cores to be of the same manufacturer to maintain complete lockset warranty
5. Locksets to have anti-rotational studs that are thru-bolted
6. Keyed lever shall not have exposed “keeper” hole
7. Each lever to have independent spring mechanism controlling it
8. 2-3/4 inch (70 mm) backset
9. 9/16 inch (14 mm) throw latchbolt
10. Provide sufficient curved strike lip to protect door trim
11. Outside lever sleeve to be seamless, of one-piece construction made of a hardened steel alloy
12. Keyed lever to be removable only after core is removed, by authorized control key
13. Provide locksets with 7-pin removable and interchangeable core cylinders

14. Hub, side plate, shrouded rose, locking pin to be a one-piece casting with a shrouded locking lug.
15. Locksets outside locked lever must withstand minimum 1400 inch pounds of torque. In excess of that, a replaceable part will shear. Key from outside and inside lever will still operate lockset.
16. Core face must be the same finish as the lockset.
17. Functions and design as indicated in the hardware groups.

D. Exit Devices:

1. Exit devices to meet or exceed BHMA for ANSI 156.3, Grade 1.
2. Exit devices to be tested and certified by UL or by a recognized independent laboratory for mechanical operational testing to 10 million cycles minimum with inspection confirming Grade 1 Loaded Forces have been maintained.
3. Exit devices chassis to be investment cast steel, zinc dichromate.
4. Exit devices to have stainless steel deadlocking ¾" through latch bolt.
5. Exit devices to be equipped with sound dampening on touchbar.
6. Non-fire rated exit devices to have cylinder dogging.
7. Non-fire rated exit devices to have ¼" minimum turn hex key dogging.
8. Touchpad to be "T" style constructed of architectural metal with matching metal end caps.
9. Touchbar assembly on wide style exit devices to have a ¼" clearance to allow for vision frames.
10. All exposed exit device components to be of architectural metals and "true" architectural finishes.
11. Provide strikes as required by application.
12. Fire exit hardware to conform to UL10C and UBC 7-2. UL tested for Accident Hazard.
13. The strike is to be black powder coated finish.
14. Exit devices to have field reversible handing.
15. Provide heavy duty vandal resistant lever trim with heavy duty investment cast stainless steel components and extra strength shock absorbing overload springs. Lever shall not require resetting. Lever design to match locksets and latchsets.
16. Provide 9001-Quality Management and 14001-Environmental Management.
17. Vertical Latch Assemblies to have gravity operation, no springs.
18. Approved Manufacturers
    a. The following manufacturers will be approved contingent on meeting or exceeding the above performance criteria:
        1) Sargent Manufactured by Sargent Manufacturing

E. Cylinders:

1. Provide the necessary cylinder housings, collars, rings & springs as recommended by the manufacturer for proper installation.
2. Provide the proper cylinder cams or tail piece as required to operate all locksets and other keyed hardware items listed in the hardware sets.
3. Coordinate and provide as required for related sections.

F. Door Closers shall:

1. Tested and approved by BHMA for ANSI 156.4, Grade 1
2. UL10C certified
3. Provide 9001-Quality Management and 14001-Environmental Management.
4. Closer shall have extra-duty arms and knuckles
5. Conform to ANSI 117.1

6. Maximum 2 7/16 inch case projection with non-ferrous cover
7. Separate adjusting valves for closing and latching speed, and backcheck
8. Provide adapter plates, shim spacers and blade stop spacers as required by frame and door conditions
9. Full rack and pinion type closer with 1½“ minimum bore
10. Mount closers on non-public side of door, unless otherwise noted in specification
11. Closers shall be non-handed, non-sized and multi-sized.

G. Push Plates: Provide with four beveled edges ANSI J301, .050 thickness, size as indicated in hardware set. Furnish oval-head countersunk screws to match finish.

H. Pulls with plates: Provide with four beveled edges ANSI J301, .050 thickness Plate s with ANSI J401 Pull as listed in hardware set. Provide proper fasteners for door construction.

I. Push Pull Bars: Provide ANSI J504, .1” Dia. Pull and push bar model and series as listed in hardware set. Provide proper fasteners for door construction.

J. Door Bolts: Flush bolts for wood or metal doors.

1. Provide a set of Automatic bolts, Certified ANSI/BHMA 156.3 Type 25 for hollow metal label doors.
2. Provide a set of Automatic bolts, Certified ANSI/BHMA 156.3 Type 27 at wood label doors.
3. Manual flush bolts, Certified ANSI/BHMA 156.16 at openings where allowed local authority.
4. Provide Dust Proof Strike, Certified ANSI/BHMA 156.346 Ct doors with flush bolts without thresholds.

K. Coordinator and Brackets: Provide a surface mounted coordinator when automatic bolts are used in the hardware set.

1. Coordinator, Certified ANSI/BHMA A1156.3 Type 21A for full width of the opening.
2. Provide mounting brackets for soffit applied hardware.
3. Provide hardware preparation (cutouts) for latches as necessary.

L. Seals: All seals shall be finished to match adjacent frame color. Seals shall be furnished as listed in schedule. Material shall be UL listed for labeled openings.

M. Weatherstripping: Provide at head and jambs only those units where resilient or flexible seal strip is easily replaceable. Where bar-type weatherstrip is used with parallel arm mounted closers install weatherstrip first.

1. Weatherstrip shall be resilient seal of (Neoprene, Polyurethane, Vinyl, Pile, Nylon Brush, Silicone)
2. UL10C Positive Pressure rated seal set when required.

N. Door Bottoms/Sweeps: Surface mounted or concealed door bottom where listed in the hardware sets.

1. Door seal shall be resilient seal of (Neoprene, Polyurethane, Nylon Brush, Silicone)
2. UL10C Positive Pressure rated seal set when required.

O. Thresholds: Thresholds shall be aluminum beveled type with maximum height of ½" for conformance with ADA requirements. Furnish as specified and per details. Provide fasteners and screws suitable for floor conditions.

P. Provide one wall mounted Telkee, Lund or MMF series key cabinet complete with hooks, index and tags to accommodate 50% expansion. Coordinate mounting location with architect.

Q. Silencers: Furnish silencers on all interior frames, 3 for single doors, 2 for pairs. Omit where any type of seals occur.

R. Door Stops and Holders: Provide wall or floors stops as required, unless swing or construction Obstructions occur then provide overhead stops (Rixson 10 series interior and 1ADJ series exterior)

2.3 FINISH:

A. Designations used in Schedule of Finish Hardware - 3.05, and elsewhere to indicate hardware finishes are those listed in ANSI/BHMA A156.18 including coordination with traditional U.S. finishes shown by certain manufacturers for their products

B. Powder coat door closers to match other hardware, unless otherwise noted.

C. Aluminum items shall be finished to match predominant adjacent material. Seals to coordinate with frame color.

2.4 KEYS AND KEYING:

A. Provide keyed brass construction cores and keys during the construction period. Construction control and operating keys and core shall not be part of the Owner's permanent keying system or furnished in the same keyway (or key section) as the Owner's permanent keying system. Permanent cores and keys (prepared according to the accepted keying schedule)will be furnished to the Owner.

B. Cylinders, removable and interchangeable core system: Best CORMAX™ Patented 7-pin.

C. Permanent keys and cores: Stamped with the applicable key mark for identification. These visual key control marks or codes will not include the actual key cuts. Permanent keys will also be stamped "Do Not Duplicate."

D. Transmit Grand Masterkeys, Masterkeys and other Security keys to Owner by Registered Mail, return receipt requested.

E. Furnish keys in the following quantities:

1. 1 each Grand Masterkeys
2. 4 each Masterkeys
3. 2 each Change keys each keyed core
4. 15 each Construction masterkeys
5. 1 each Control keys

F. The Owner, or the Owner's agent, will install permanent cores and return the construction cores to the Hardware Supplier. Construction cores and keys remain the property of the Hardware Supplier.

G. Keying Schedule: Arrange for a keying meeting, and programming meeting with Architect Owner and hardware supplier, and other involved parties to ensure locksets and locking hardware, are functionally correct and keying and programming complies with project requirements. Furnish 3 typed copies of keying and programming schedule to Architect.

H. Key Control Cabinet: Provide a key control system including envelopes, labels and tags with Self-locking key clips, receipt forms, 3-way visible card index, temporary markers, permanent Markers, and standard metal cabinet. Key control cabinet shall have expansion capacity of 50% of the number of locks required for the project.

1. Manufacturers:

a. Lund Equipment
b. MMF Industries
c. Telkey

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verification of conditions: Examine doors, frames, related items and conditions under which Work is to be performed and identify conditions detrimental to proper and or timely completion.

1. Do not proceed until unsatisfactory conditions have been corrected.

3.2 HARDWARE LOCATIONS:

A. Mount hardware units at heights indicated in the following publications except as specifically indicated or required to comply with the governing regulations.

1. Recommended Locations for Builder’s Hardware for Standard Steel Doors and Frames, by the Door and Hardware Institute (DHI).

2. Recommended locations for Architectural Hardware for flush wood doors (DHI).

3. WDMA Industry Standard I.S.-1A-04, Industry Standard for Architectural wood flush doors.

3.3 INSTALLATION:

A. Install each hardware item per manufacturer's instructions and recommendations. Do not install surface mounted items until finishes have been completed on the substrate. Set units level, plumb and true to line and location. Adjust and reinforce the attachment substrate as necessary for proper installation and operation.

B. Conform to local governing agency security ordinance.

C. Install Conforming to ICC/ANSI A117.1 Accessible and Usable Building and Facilities.

1. Adjust door closer sweep periods so that from the open position of 70 degrees, the door will take at least 3 seconds to move to a point 3 inches from the latch, measured to the landing side of the door.

D. Installed hardware using the manufacturers fasteners provided. Drill and tap all screw holes located in metallic materials. Do not use “Riv-Nuts” or similar products.

3.4 FIELD QUALITY CONTROL AND FINAL ADJUSTMENT

A. Contractor/Installers, Field Services: After installation is complete, contractor shall inspect the completed door openings on site to verify installation of hardware is complete and properly adjusted, in accordance with both the Contract Documents and final shop drawings.

1. Check and adjust closers to ensure proper operation.

2. Check latchset, lockset, and exit devices are properly installed and adjusted to ensure proper operation.

a. Verify levers are free from binding.
b. Ensure latchbolts and dead bolts are engaged into strike and hardware is functioning.

3. Report findings, in writing, to architect indicating that all hardware is installed and functioning properly. Include recommendations outlining corrective actions for improperly functioning hardware if required.

3.5 SCHEDULE OF FINISH HARDWARE:

Manufacturer List

Code	Name
AD	Adams Rite
BE	Best Access Systems
HE	HES
MC	McKinney
PE	Pemko
SA	Sargent
RO	Rockwood
YA	Yale Commercial

SET #001 – Exterior AL Pair – Card Access

Openings: NC-A6.3

2 Continuous Hinges	CFM SLF HD1 PT	628	PE
2 Power Transfer	EL-CEPT	689	SN
1 Removable Mullion	L980A	628	SA
1 Mortise Cylinder	1E-74 PATD x RP3 x C208	626	BE
1 Exit Device	19 43 55 56 LC 8804 862	630	SA
1 Exit Device	19 43 55 8810 862	630	SA
1 Rim Cylinder	1ESPL-7-A5994 PATD	626	BE
2 Door Closer	351 P10 x 581-2 x 351-D	689	SA
2 Overhead Stops	1ADJ-XXX Series	630	RX
1 Rain Drip	346 C	628	PE
2 Door Sweep	3452 AV	628	PE
1 Threshold	2005 AT x MSES10	628	PE
2 Wiring Harness	QC-C1500P		MC
2 Wiring Harness	QC-C206P		MC
1 Seals	By Door/Frame Manufacturer		
2 Door Position Switch	By Security Contractor		
1 Power Supply	By Security Contractor		
1 Card Reader	By Security Contractor		

Operational Description: Ingress by authorized Credentials unlocks door allowing entry. Activation of fire alarm of loss of power results in locked door. Free Egress at all times.

SET #001.01 – Exterior AL Pair – No Card Access

Openings: NC-A6.4

2 Continuous Hinges	CFM SLF HD1	628	PE
2 Power Transfer	EL-CEPT	689	SN
1 Removable Mullion	L980A	628	SA
1 Mortise Cylinder	1E-74 PATD x RP3 x C208	626	BE
2 Exit Device	19 43 8810	630	SA
2 Door Closer	351 P10 x 581-2 x 351-D	689	SA
2 Overhead Stops	1ADJ-XXX Series	630	RX
1 Rain Drip	346 C	628	PE
2 Door Sweep	3452 AV	628	PE
1 Threshold	2005 AT x MSES10	628	PE
1 Seals	By Door/Frame Manufacturer		

SET #003 – Interior AL Pair – Card Access

Openings: WO-A2,BO-A3.1,WC-A4.1,NC-A6.1,

2 Continuous Hinges	CFM SLF HD1 PT	628	PE
2 Power Transfer	EL-CEPT	689	SN
1 Removable Mullion	L980A	628	SA
1 Mortise Cylinder	1E-74 PATD x RP3 x C208	626	BE
1 Exit Device	19 43 55 56 LC 8804 862	630	SA
1 Exit Device	19 43 55 8810 862	630	SA
1 Rim Cylinder	1ESPL-7-A5994 PATD	626	BE
2 Door Closer	351 P10 x 581-2 x 351-D	689	SA
2 Overhead Stops	1ADJ-XXX Series	630	RX
2 Wiring Harness	QC-C1500P		MC
2 Wiring Harness	QC-C206P		MC
1 Seals	By Door/Frame Manufacturer		
2 Door Position Switch	By Security Contractor		
1 Power Supply	By Security Contractor		
1 Card Reader	By Security Contractor		

Operational Description: Ingress by authorized Credentials unlocks door allowing entry. Activation of fire alarm of loss of power results in locked door. Free Egress at all times.

SET #003.01 – Interior AL Pair – Card Access

Openings: SE-A1

2 Continuous Hinges	CFM SLF HD1 PT	628	PE
2 Power Transfer	EL-CEPT	689	SN
1 Removable Mullion	L980A	628	SA
1 Mortise Cylinder	1E-74 PATD x RP3 x C208	626	BE
1 Exit Device	19 43 55 56 LC 8804 862	630	SA
1 Exit Device	19 43 55 8810 862	630	SA
1 Rim Cylinder	1ESPL-7-A5994 PATD	626	BE
2 Door Closer	351 P10 x 581-2 x 351-D	689	SA
2 Overhead Stops	1ADJ-XXX Series	630	RX
2 Wiring Harness	QC-C3000P		MC
2 Wiring Harness	QC-C206P		MC
1 Seals	By Door/Frame Manufacturer		
2 Door Position Switch	By Security Contractor		
1 Power Supply	By Security Contractor		
1 Card Reader	By Security Contractor		

Operational Description: Ingress by authorized Credentials unlocks door allowing entry. Activation of fire alarm of loss of power results in locked door. Free Egress at all times.

SET #004 – Interior AL Pair – No Card Access

Openings: BO-A3.2

2 Continuous Hinges	CFM SLF HD1	628	PE
1 Removable Mullion	L980A	628	SA
1 Mortise Cylinder	1E-74 PATD x RP3 x C208	626	BE
1 Exit Device	19 43 LC 8804 862	630	SA
1 Exit Device	19 43 8810 862	630	SA
1 Rim Cylinder	1ESPL-7-A5994 PATD	626	BE
2 Door Closer	351 P10 x 581-2 x 351-D	689	SA
2 Overhead Stops	1ADJ-XXX Series	630	RX
1 Seals	By Door/Frame Manufacturer		

SET #005 – Interior AL Single – Card Access

Openings: BO-A3.3,WC-A4.2,NF-A5

1 Continuous Hinges	CFM SLF HD1 PT	628	PE
1 Power Transfer	EL-CEPT	689	SN
1 Exit Device	19 43 55 56 LC 8804 862	630	SA
1 Rim Cylinder	1ESPL-7-A5994 PATD	626	BE
1 Door Closer	351 P10 x 581-2 x 351-D	689	SA
1 Overhead Stops	1ADJ-XXX Series	630	RX
1 Wiring Harness	QC-C1500P		MC
1 Wiring Harness	QC-C206P		MC
1 Seals	By Door/Frame Manufacturer		
1 Door Position Switch	By Security Contractor		
1 Power Supply	By Security Contractor		
1 Card Reader	By Security Contractor		

Operational Description: Ingress by authorized Credentials unlocks door allowing entry. Activation of fire alarm of loss of power results in locked door. Free Egress at all times.

SET #008 – Interior Pair – Corridor/Entry

Openings: NC-A6.2

2 Continuous Hinges	CFM HD1	628	PE
1 Removable Mullion	L980A	628	SA
1 Mortise Cylinder	1E-74 PATD x RP3 x C208	626	SA
2 Exit Device	19 43 LC 8843 ETL	630	SA
2 Mortise Cylinder	1E-74 PATD x R814 x C208	626	BE
2 Door Closer	351 P10 x TB	689	SA
2 Stops	409/441H As required	626	RO
1 Mullion Seal	5110		PE
1 Seals	By Door/Frame Manufacturer		

SET #015 – Interior Single – Corridor/Admin Entry

Openings: WC-A4.3

3 Hinges	TA2714 4.5 x 4.5 NRP	652	MC
1 Office	9K3-7AB15D S3 PATD	626	BE
1 Closer	351 O/P9 TB	689	SA
1 Stops	409/441H as required	626	RO
1 Seals	By Door/Frame Manufacturer		

SET #030 – Exterior Gate Single – No Card Access

Openings: SE-A1-1.1,SE-A1-1.3,BO-A3-1.2,SW-A9.1,SW-A9.2,SW-A9.3,SW-A9.5, SW-A9.6,SW-A9.7

1 Exit Device	19 43 CPC LC WH 8813 ETL	630	SA
1 Mortise Cylinder	1E-74 PATD x R814 x C208	626	BE

SET #031 – Exterior Gate Pair – No Card Access

Openings: SE-A1-1.2

1 Exit Device	19 43 CPC LC WH 8813 ETL	630	SA
1 Exit Device	19 43 CPC LC WH 8810	630	SA
1 Mortise Cylinder	1E-74 PATD x R814 x C208	626	BE

SET #032 – Exterior Gate Single – Card Access

Openings: BO-A3-1.1,BO-A3-1.3,NF-A5-2.1

1 Exit Device	19 43 56 55 CPC LC WH 8804 ETL	630	SA
1 Rim Cylinder	1ESPL-7-A5994 PATD	626	BE
1 Wiring Harness	QC-C1500P		MC
1 Wiring Harness	QC-C400P		MC
1 Power Supply	By Security Contractor		
1 Card Reader	By Security Contractor		

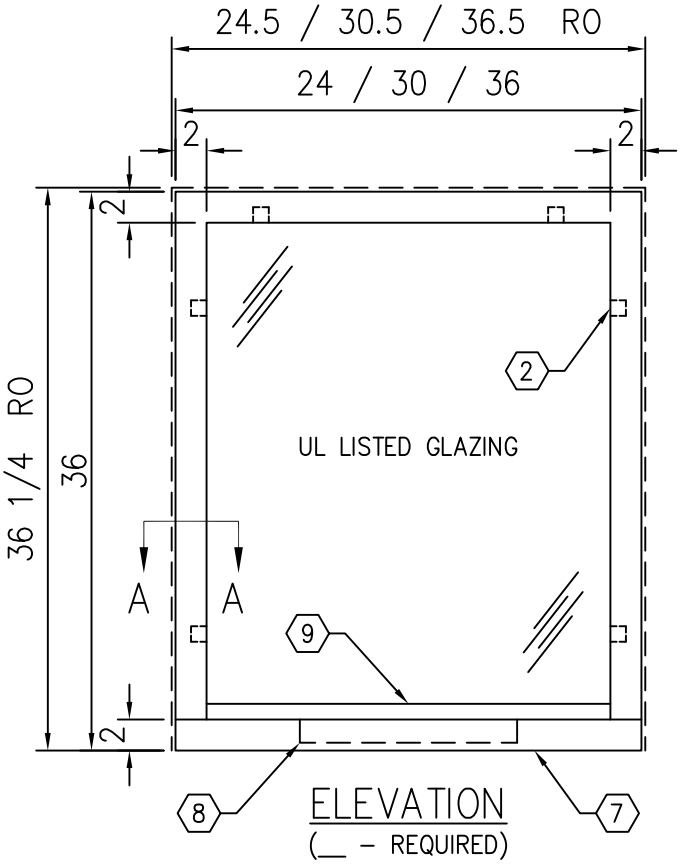
SET #033 – Exterior Gate Pair – Card Access

Openings: WC-A4-1.1,SW-A9.4

1 Exit Device	19 43 56 55 CPC LC WH 8804 ETL	630	SA
1 Exit Device	19 43 55 CPC WH 8810	630	SA
1 Rim Cylinder	1ESPL-7-A5994 PATD	626	BE
2 Wiring Harness	QC-C1500P		MC
2 Wiring Harness	QC-C400P		MC
1 Power Supply	By Security Contractor		
1 Card Reader	By Security Contractor		

NOTES:

1. UL LISTED BULLET RESISTANT COMPOSITES
2. NATURAL VOICE SPACERS
3. 16 GA. PRIME PAINTED STEEL FRAME (STAINLESS STEEL OPTIONAL)
4. UL LISTED BULLET RESISTANT GLAZING
5. REMOVABLE STOP 1" x 1"
6. ANCHOR HOLES AS REQUIRED (ANCHORS, BY OTHERS)
7. HIGH PRESSURE LAMINATED BLACK PLASTIC SHELF (STAINLESS STEEL OPTIONAL)
8. 16 GA. STAINLESS STEEL DIP TRAY (MODEL RMDT-1016)
9. STAINLESS STEEL CAP



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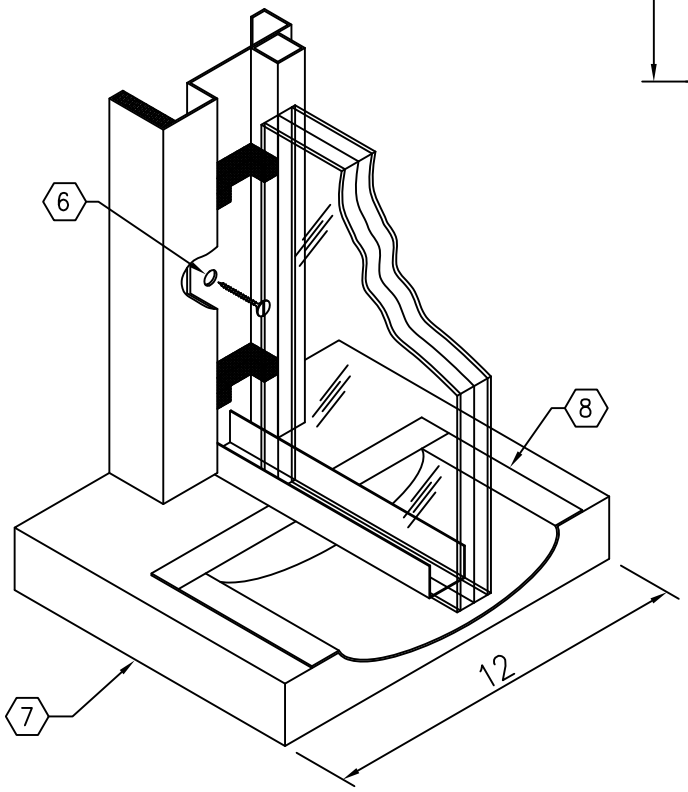

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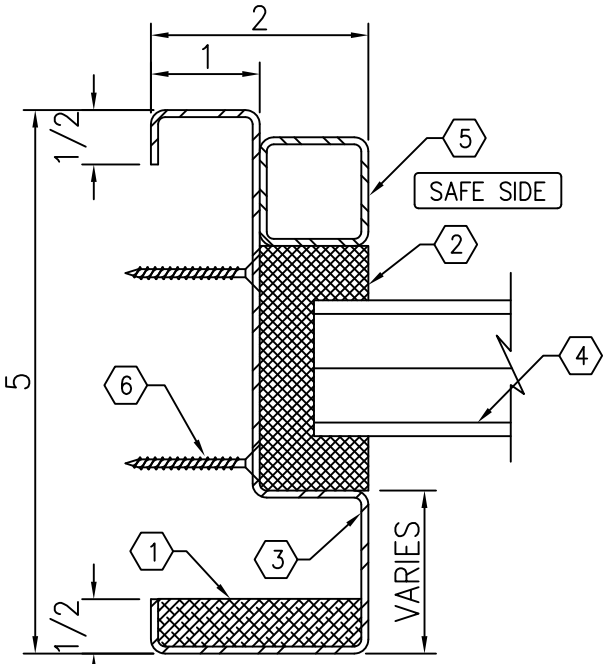

SECTION A-A THREAT SIDE

"ALL GLAZING PRODUCTS SHOULD BE CLEANED ONLY WITH WARM SOAPY WATER, RINSED WITH CLEAR WATER AND DRIED WITH A SOFT NON-ABRASIVE CLOTH"

REVISIONS			INTERBANK EQUIPMENT			BALLISTIC LEVEL	
No.	DESCRIPTION	DATE				DRN.BY: T. WILSON	DATE: 00-00-00
			TITLE: THREE SIDED NATURAL VOICE WINDOW	PROJECT NAME:		CHKD.BY:	DATE:
			UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES	SCALE: NONE	PROJECT No.	DRAWING No.	SHEET: 1 OF 1

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DIV 210000 FIRE PROTECTION

1. EXISTING BUILDING IS SPRINKLERED. RELOCATE AND/OR ADD ADDITIONAL SPRINKLER HEADS TO MATCH EXISTING, INCLUDING PIPE, FITTINGS, HANGERS, ACCESSORIES AS REQUIRED TO PROVIDE COMPLETE AUTOMATIC SPRINKLER PROTECTION AND COVERAGE REQUIRED BY LOCAL JURISDICTION, NFPA, FIRE CODES, AND THE BUILDING STANDARD SPECIFICATIONS FOR NEW TENANT SPACE AND SPACES IMMEDIATELY OUTSIDE OF TENANT SPACE. COORDINATE EXACT LOCATIONS OF NEW SPRINKLER HEADS AND EXISTING PIPING WITH ARCHITECT.
2. PENETRATIONS THROUGH WALLS AND FLOORS WHERE FIRE RATING IS REQUIRED SHALL BE PROVIDED WITH U.L. LISTED, LOCAL JURISDICTION APPROVED SYSTEM.
3. ALL WORK ASSOCIATED WITH AND DONE TO THE BUILDING FIRE PROTECTION SYSTEM SHALL BE PERFORMED BY A STATE OF TEXAS LICENSED FIRE SPRINKLER CONTRACTOR.
4. CONTRACTOR SHALL SUBMIT SPRINKLER SHOP DRAWINGS TO LANDLORD FOR APPROVAL PRIOR TO CONSTRUCTION.

ELECTRICAL SYMBOLS

SYMBOL	DESCRIPTION
$OS	OCCUPANCY SENSOR SWITCH
$	SINGLE POLE SWITCH
$3	THREE WAY SWITCH
$M	MANUAL MOTOR STARTER
	NEMA 5-20R DUPLEX RECEPTACLE
44"	NEMA 5-20R DUPLEX RECEPTACLE (ABOVE COUNTER)
GFI	NEMA 5-20R GFI RECEPTACLE
	NEMA 5-20R QUADRAPLEX RECEPTACLE
FLR	FLUSH FLOOR RECEPTACLE
	PEDESTAL MOUNTED NEMA 5-15R DUPLEX RECEPTACLE
	DATA OUTLET 1" CONDUIT TO ABOVE CEILING
	VOICE OUTLET
	COMBINATION DATA/VOICE OUTLET
	FLUSH FLOOR DATA OUTLET
	CIRCUIT HOMERUN-ARROWHEADS INDICATE QUANTITY OF CIRCUITS
	CONCEALED CONDUIT
	EXTERIOR CONDUIT BELOW GRADE
	CONCEALED CONDUIT BELOW SLAB
	MOTOR
TV	TV CABLE OUTLET
	EXIT LIGHT
F	POLE-MOUNTED SITE LAMP
J	JUNCTION BOX
S	SMOKE DETECTOR
F	FIRE ALARM - HORN/STROBE
	EMERGENCY LIGHT - WALL PACK
	DISCONNECT

TYPICAL MOUNTING HEIGHTS

THE CONTRACTOR SHALL COORDINATE THE MOUNTING HEIGHTS OF ALL FIXTURES, DEVICES, AND OUTLETS WITH ARCHITECTURAL PLANS AND ELEVATIONS. SPECIAL MOUNTING HEIGHTS ARE SHOWN ON THE PLANS SHALL TAKE PRECEDENCE OVER THOSE GIVEN BELOW. ALL MOUNTING HEIGHTS ARE FROM FINISHED FLOOR TO CENTERLINE OF DEVICE, UNLESS NOTED OTHERWISE.

LIGHT FIXTURES, INTERIOR	WALL MOUNTED, SCONCE	6'-6"
	WALL MOUNTED, ABOVE MIRROR	0'-8" ABOVE TOP OF COUNTER
	WALL MOUNTED, ABOVE DOOR	CENTER BETWEEN FRAME & CEILING
	WALL MOUNTED, ABOVE STAIR LANDING IN SOFFIT	7'-0" (SEE ARCH DETAIL)
LIGHT FIXTURES, EXTERIOR	WALL MOUNTED, BESIDE DOOR	6'-0" (SEE ARCH DETAIL)
	STEP MOUNTED	6'-0" (SEE ARCH DETAIL)
	WALL MOUNTED, NEAR GRADE	6'-0" (SEE ARCH DETAIL)
	WALL MOUNTED, NEAR ROOF	2'-6" BELOW PARAPET
SWITCHES	WALL SWITCHES AND DIMMERS	3'-10"
	MANUAL MOTOR STARTERS	3'-10"
RECEPTACLES	WALL	1'-6"
	ABOVE COUNTER WITHOUT BACKSPLASH	0'-8" ABOVE TOP OF COUNTER
	ABOVE COUNTER WITH BACKSPLASH	0'-4" ABOVE TOP OF BACKSPLASH
	WALL HUNG SINKS (GFCI)	3'-6"
	CLOCK	1'-0" BELOW CEILING
TELEPHONE	DESK/TABLE	1'-6"
	WALL TELEPHONE	3'-10"
	ABOVE COUNTER WITHOUT BACKSPLASH	0'-8" ABOVE TOP OF COUNTER
	ABOVE COUNTER WITH BACKSPLASH	0'-4" ABOVE TOP OF BACKSPLASH
DATA	WALL	1'-6"
	ABOVE COUNTER WITHOUT BACKSPLASH	0'-8" ABOVE TOP OF COUNTER
	ABOVE COUNTER WITH BACKSPLASH	0'-4" ABOVE TOP OF BACKSPLASH
ELECTRICAL EQUIPMENT	SAFETY SWITCH	6'-6" TO TOP OF ENCLOSURE
	MOTOR STARTER	6'-6" TO TOP OF ENCLOSURE
	PANEL BOARD	6'-6" TO TOP OF ENCLOSURE
	COMMUNICATIONS CABINET	6'-6" TO TOP OF ENCLOSURE

DIVISION 26 - ELECTRICAL

260000 ELECTRICAL BASIC REQUIREMENTS

A. MINIMUM STANDARDS FOR ALL WORK SHALL BE CITY OF HOUSTON AMENDMENTS TO THE 2017 NATIONAL ELECTRICAL CODE, 2015 INTERNATIONAL ENERGY CONSERVATION CODE, AND 2012 INTERNATIONAL BUILDING CODE.
B. REFERENCES: THE STANDARDS MENTIONED HEREIN WILL BE REFERRED TO IN THE DESIGN OF ELECTRICAL SYSTEMS. THE ENGINEER WILL SELECT APPROPRIATE SECTIONS OF THE STANDARD TO BE APPLIED IN ACCORDANCE WITH ESTABLISHED ENGINEERING PRINCIPLES AND PRACTICES.
   1. APPLICABLE SECTIONS OF NFPA
   2. AMERICANS WITH DISABILITIES ACT (ADA)
   3. TEXAS ACCESSIBILITY STANDARDS (TAS)
C. CONTRACTOR SHALL VISIT THE SITE PRIOR TO BID DATE AND THOROUGHLY FAMILIARIZE HIMSELF WITH ALL EXISTING INSTALLATIONS. DETERMINE THE EXTENT OF THE NEW WORK TO PERFORM THIS CONTRACT. NO ALLOWANCES WILL BE MADE FOR FAILURE TO COMPLY WITH THIS REQUIREMENT OR LACK OF FAMILIARIZATION WITH EXISTING INSTALLATIONS.
D. THE CONTRACTOR IS RESPONSIBLE FOR ALL WORK, MATERIALS, AND LABOR TO SATISFY A COMPLETE WORKING SYSTEM WHETHER SPECIFIED OR IMPLIED.
E. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH ALL OTHER TRADES INCLUDING ARCHITECTURAL, STRUCTURAL, CIVIL, MECHANICAL, AND PLUMBING.
F. DO NOT SCALE FROM THE ENGINEERED DRAWINGS. REFER TO THE DIMENSIONED DRAWINGS OF THE ARCHITECT FOR EXACT LOCATIONS OF FIXTURES, EQUIPMENT, ETC.
G. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND INSPECTIONS REQUIRED FOR THE INSTALLATION OF WORK AND PAY ALL INCIDENTAL CHARGES.
H. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PERFORMING ALL TESTS NECESSARY TO PREVENT CONCEALMENT OF DEFECTIVE OR IMPROPER WORK. UPON COMPLETION OF WORK, TEST INSTALLATION THOROUGHLY AND RENDER IT FROM MALFUNCTIONS, SAFETY ISSUES, AND IMPROPER CONNECTIONS.
I. PROTECT EQUIPMENT AND WORK FROM DAMAGE DURING HANDLING AND INSTALLATION UNTIL COMPLETION OF CONSTRUCTION. REMOVE ALL EXCESS DEBRIS AND CLEAN ALL EQUIPMENT UPON COMPLETION OF WORK. TOUCH UP WITH PAINT WHERE REQUIRED.
J. ALL MATERIAL SHALL BE NEW, UNDAMAGED, AND UNBLEMISHED AND UL LISTED EXACT AS NOTED.
K. ALL WORK SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM THE TIME OF OWNER ACCEPTANCE. WORK OR EQUIPMENT FOUND TO BE SUB-STANDARD OR FAULTY SHALL BE CORRECTED DURING THESE PERIODS AT NO COST TO OWNER.
L. PROVIDE TEMPORARY SERVICE AS REQUIRED FOR CONSTRUCTION POWER AND REMOVE SUCH TEMPORARY SERVICE WHEN WORK IS COMPLETE.
M. ELECTRICAL CONTRACTOR TO PROVIDE A COMPLETE F.A. SYSTEM TO MEET LOCAL FIRE MARSHALL REQUIREMENTS AND OBTAIN ALL LOCAL PERMITS. RELOCATE AND MATCH EXISTING FIRE ALARM EQUIPMENT AS REQUIRED.

260519 LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

A. ALL WIRE SHALL BE COPPER COMPLYING WITH ASTM B3 FOR BARE ANNEALED TYPE AND ASTM B8 FOR STRANDED CONDUCTORS. MINIMUM SIZE NO. 12 AWG TYPE THHN OR SIMILAR.
B. ALL WIRING SHALL BE LISTED AND LABELED AS DEFINED IN NFPA (NEC) 70, BY A QUALIFIED TESTING AGENCY, AND MARKED FOR INTENDED LOCATION AND USE.
C. NO WIRE SMALLER THAN #12 FEEDER WIRE SHALL BE THW OR THWN INSULATED.
D. FIXTURE WIRE SHALL BE TYPE PF.
E. CONDUCTOR INSULATION:
   1. TYPE NM: COMPLY WITH UL 83 AND UL 719.
   2. TYPES RHH AND RHW-2: COMPLY WITH UL 44.
   3. TYPES USE-2 AND SE: COMPLY WITH UL 854.
   4. TYPES THHN AND THWN-2: COMPLY WITH UL 83.
   5. TYPES THW AND THW-2: COMPLY WITH NEMA WC-70/ICEA S-95-658 AND UL 83.
   6. TYPE XHHW-2: COMPLY WITH UL 44.
F. CONNECTORS AND SPLICES: FACTORY-FABRICATED CONNECTORS, SPLICES AND LUGS OF SIZE, AMPACITY RATING, MATERIAL, TYPE, AND CLASS FOR APPLICATION AND SERVICE INDICATED. LISTED AND LABELED AS DEFINED IN NFPA (NEC) 70, BY A QUALIFIED TESTING AGENCY, AND MARKED FOR INTENDED LOCATION AND USE.
G. JACKETED CABLE CONNECTORS: FOR STEEL AND ALUMINUM JACKETED CABLES, ZINC DIE-CAST WITH SET SCREWS, DESIGNED TO CONNECT CONDUCTORS SPECIFIED IN THIS SECTION.
H. LUGS: ONE PIECE, SEAMLESS, COPPER, DESIGNED TO TERMINATE CONDUCTORS SPECIFIED IN THIS SECTION.
I. FEEDERS AND BRANCH CIRCUITS: SOLID FOR NO. 10 AWG AND SMALLER; STRANDED FOR NO. 8 AWG AND LARGER.
J. SERVICE ENTRANCE: TYPE THHN/THWN-2, SINGLE CONDUCTORS IN RACEWAY; TYPE XHHW-2, SINGLE CONDUCTORS IN RACEWAY; TYPE USE, SINGLE CONDUCTOR IN RACEWAY; TYPE SE, MULTICONDUCTOR CABLE.
K. EXPOSED FEEDERS: TYPE THHN/THWN-2, SINGLE CONDUCTORS IN RACEWAY; TYPE XHHW-2, SINGLE CONDUCTORS IN RACEWAY; TYPE AC, ARMORED CABLE; TYPE MC, METAL-CLAD CABLE; TYPE NM, NONMETALLIC-SHEATHED CABLE.
L. FEEDERS CONCEALED IN CEILINGS, WALLS, AND PARTITIONS: TYPE THHN/THWN-2, SINGLE CONDUCTORS IN RACEWAY; TYPE AC, ARMORED CABLE; TYPE MC, METAL-CLAD CABLE; TYPE NM, NONMETALLIC-SHEATHED CABLE.
M. EXPOSED BRANCH CIRCUITS: REFER TO "FEEDERS CONCEALED IN CEILINGS, WALLS, AND PARTITIONS."
N. BRANCH CIRCUITS CONCEALED IN CEILINGS, WALLS, AND PARTITIONS: REFER TO "FEEDERS CONCEALED IN CEILINGS, WALLS, AND PARTITIONS."
O. CORD DROPS AND PORTABLE APPLIANCE CONNECTIONS: TYPE SO, HARD SERVICE CORD WITH STAINLESS-STEEL, WIRE MESH, STRAIN RELIEF DEVICE AT TERMINATIONS TO SUIT APPLICATION.
P. PERFORM TESTING IN ACCORDANCE WITH APPLICABLE NATIONAL ELECTRICAL TESTING ASSOCIATION STANDARDS TO ENSURE A SAFE INSTALLATION THAT OPERATES AS DESIGNED.

260526 GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

A. ALL WORK SHALL BE GROUNDED TO COMPLY WITHOUT EXCEPTION WITH ALL PROVISIONS OF ARTICLE 250 OF THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE. ALL CIRCUITS SHALL CONTAIN INSULATED GROUNDING CONDUCTOR. ALL RECEPTACLES SHALL HAVE AN INSULATED GREEN GROUNDING CONDUCTOR TERMINATED ON THE DEVICE GROUND SCREW.
B. COMPLY WITH IEEE C2 GROUNDING REQUIREMENTS FOR UNDERGROUND DISTRIBUTION SYSTEM COMPONENTS.
C. COMPLY WITH UL 467 FOR GROUNDING AND BONDING MATERIALS AND EQUIPMENT.
D. INSULATED CONDUCTORS: COPPER WIRE OR CABLE INSULATED FOR 600 V UNLESS OTHERWISE REQUIRED BY APPLICABLE CODE OR AUTHORITIES HAVING JURISDICTION.
E. BARE COPPER CONDUCTORS:
   1. SOLID CONDUCTORS: ASTM B3.
   2. STRANDED CONDUCTORS: ASTM B8.
   3. TINNED CONDUCTORS: ASTM B33.
   4. BONDING CABLE: 28 KCMIL, 14 STRANDS OF NO. 17 AWG CONDUCTOR, 1-1/4" IN DIAMETER.
   5. BONDING CONDUCTOR: NO. 4 OR NO. 6 AWG, STRANDED CONDUCTOR.
   6. BONDING JUMPER: COPPER TAPE, BRAIDED CONDUCTORS TERMINATED WITH COPPER FERRULES; 1-5/8" WIDE AND 1/16" THICK.
   7. TINNED BONDING JUMPER: TINNED-COPPER TAPE, BRAIDED CONDUCTORS TERMINATED WITH COPPER FERRULES; 1-5/8" WIDE AND 1/16" THICK.
E. CONNECTORS: LISTED AND LABELED BY A NATIONALLY-RECOGNIZED TESTING LABORATORY AND IN COMPLIANCE WITH THE FOLLOWING:
   1. BOLTED CONNECTORS (CONDUCTORS AND PIPES): COPPER OR COPPER ALLOY.
   2. WELDED CONNECTORS: EXOTHERMIC-WELDING KITS OF TYPES RECOMMENDED BY KIT MANUFACTURER FOR MATERIALS BEING JOINED AND INSTALLATION CONDITIONS.
   3. BUS-BAR CONNECTORS: MECHANICAL TYPE, CAST SILICON BRONZE, SOLDERLESS COMPRESSION TYPE WIRE TERMINALS, AND LONG-BARREL, TWO-BOLT CONNECTION TO GROUND BUS BAR.
F. GROUNDING ELECTRODES: COPPER-CLAD STEEL RODS, 3/4" X 10'.
G. GROUNDING AND BONDING FOR PIPING:
   1. METAL WATER SERVICE PIPE: INSTALL INSULATED COPPER GROUNDING CONDUCTORS, IN CONDUIT, FROM BUILDING'S MAIN SERVICE EQUIPMENT, OR GROUNDING BUS, TO MAIN METAL WATER SERVICE ENTRANCES TO BUILDING. CONNECT GROUNDING CONDUCTORS TO MAIN METAL WATER SERVICE PIPES; USE A BOLTED CLAMP CONNECTOR OR BOLT A LUG-TYPE CONNECTOR TO A PIPE FLANGE BY USING ONE OF THE LUG BOLTS OF THE FLANGE. WHERE A DIELECTRIC MAIN WATER FITTING IS INSTALLED, CONNECT GROUNDING CONDUCTOR ON STREET SIDE OF FITTING. BOND METAL GROUNDING CONDUCTOR CONDUIT OR SLEEVE TO CONDUCTOR AT EACH END.
   2. WATER METER PIPING: USE BRAIDED-TYPE BONDING JUMPERS TO ELECTRICALLY BYPASS WATER METERS. CONNECT TO PIPE WITH A BOLTED CONNECTOR.
   3. BOND EACH ABOVE GROUND PORTION OF GAS PIPING SYSTEM DOWNSTREAM FROM EQUIPMENT SHUTOFF VALVE.
   4. PERFORM TESTS AND INSPECTIONS. INSPECT PHYSICAL AND MECHANICAL CONDITION. VERIFY TIGHTNESS OF ACCESSIBLE, BOLTED, ELECTRICAL CONNECTIONS WITH A CALIBRATED TORQUE WRENCH ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.

260529 HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS

A. STEEL SLOTTED SUPPORT SYSTEMS: COMPLY WITH MFMA-4 FACTORY-FABRICATED COMPONENTS FOR FIELD ASSEMBLY.
B. CONDUIT AND CABLE SUPPORT DEVICES: STEEL HANGERS, CLAMPS, AND ASSOCIATED FITTINGS, DESIGNED FOR TYPES AND SIZES OF RACEWAY OR CABLE TO BE SUPPORTED.
C. SUPPORT FOR CONDUCTORS IN VERTICAL CONDUIT: FACTORY-FABRICATED ASSEMBLY CONSISTING OF THREADED BODY AND INSULATING WEDGING PLUGS OR PLUGS FOR NONARMORED ELECTRICAL CONDUCTORS OR CABLES IN RISER CONDUITS. PLUGS SHALL HAVE NUMBER, SIZE, AND SHAPE OF CONDUCTOR GRIPPING PIECES AS REQUIRED TO SUIT INDIVIDUAL CONDUCTORS OR CABLES SUPPORTED. BODY SHALL BE MADE OF MALLEABLE IRON.
D. STRUCTURAL STEEL FOR FABRICATED SUPPORTS AND RESTRAINTS: ASTM A36/A36M STEEL PLATES, SHAPES, AND BARS; BLACK AND GALVANIZED.
E. MOUNTING, ANCHORING, AND ATTACHMENT COMPONENTS: ITEMS FOR FASTENING ELECTRICAL ITEMS OR THEIR SUPPORTS TO BUILDING SURFACES INCLUDE THE FOLLOWING:
   1. POWDER-ACTUATED FASTENERS: THREADED-STEEL STUD, FOR USE IN HARDENED PORTLAND CEMENT CONCRETE, STEEL, OR WOOD, WITH TENSION, SHEAR, AND PULLOUT CAPACITIES APPROPRIATE FOR SUPPORTED LOADS AND BUILDING MATERIALS WHERE USED.
   2. MECHANICAL EXPANSION ANCHORS: INSERT-WEDGE-TYPE, STAINLESS STEEL, FOR USE IN HARDENED PORTLAND CEMENT CONCRETE, WITH TENSION, SHEAR, AND PULLOUT CAPACITIES APPROPRIATE FOR SUPPORTED LOADS AND BUILDING MATERIALS WHERE USED.
   3. CONCRETE INSERTS: STEEL OR MALLEABLE IRON, SLOTTED SUPPORT SYSTEM UNITS ARE SIMILAR TO MSS TYPE 18 UNITS AND COMPLY WITH MFMA-4 OR MSS SP-58.
   4. CLAMPS FOR ATTACHMENT TO STEEL STRUCTURAL ELEMENTS: MSS SP-58 UNITS ARE SUITABLE FOR ATTACHED STRUCTURAL ELEMENT.
   5. THROUGH BOLTS: STRUCTURAL TYPE, HEX HEAD, AND HIGH STRENGTH. COMPLY WITH ASTM A325.
   6. TOGGLE BOLTS: STAINLESS STEEL SPRINGHEAD TYPE.
   7. HANGER RODS: THREADED STEEL.
F. FABRICATED METAL EQUIPMENT SUPPORT ASSEMBLIES: WELDED OR BOLTED STRUCTURAL STEEL SHAPES, SHOP OR FIELD FABRICATED TO FIT DIMENSIONS OF SUPPORTED EQUIPMENT. COMPLY WITH INDUSTRY-ACCEPTED STANDARDS FOR STEEL SHAPES AND PLATES.

260533 RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS

A. METAL CONDUITS, TUBING, AND FITTINGS SHALL BE LISTED AND LABELED AS DEFINED IN NFPA (NEC) 70, BY A QUALIFIED TESTING AGENCY, AND MARKED FOR INTENDED LOCATION AND APPLICATION.
B. APPLY RACEWAY PRODUCTS (MINIMUM 3/4" TRADE SIZE) AS SPECIFIED BELOW U.O.N.
   1. OUTDOORS
   1.1. EXPOSED: RNC, EPC-80-PVC.
   1.2. CONCEALED ABOVEGROUND: EPC-80-PVC.
   1.3. UNDERGROUND: RNC, EPC-80-PVC, DIRECT BURIED.
   1.4. CONNECTION TO VIBRATING EQUIPMENT (INCLUDING TRANSFORMERS AND HYDRAULIC, PNEUMATIC, SOLENOID, OR MOTOR-DRIVEN EQUIPMENT): LFMC.
   1.5. BOXES AND ENCLOSURES, ABOVEGROUND: NEMA 250, TYPE 3R.
   2. INDOORS:
   2.1. EXPOSED, NOT SUBJECT TO DAMAGE: EMT.
   2.2. EXPOSED, SUBJECT TO DAMAGE: GRC.
   2.3. CONCEALED IN CEILINGS, WALLS, AND PARTITIONS: EMT OR MC.
   2.4. CONNECTION TO VIBRATING EQUIPMENT (INCLUDING TRANSFORMERS AND HYDRAULIC, PNEUMATIC, SOLENOID, OR MOTOR-DRIVEN EQUIPMENT): FMC, EXCEPT USE LFMC IN DAMP OR WET LOCATIONS.
C. IN ADDITION TO NFPA (NEC) 70 COMPLIANCE, COMPLY WITH NECA 1 AND NECA 101 FOR INSTALLATION REQUIREMENTS.
D. SEAL ALL CONDUIT PENETRATIONS THROUGH WALLS WITH UL LISTED FIRE RETARDANT SEALANT.
E. KEEP RACEWAYS AT LEAST 6" AWAY FROM PARALLEL RUNS OF HOT-WATER PIPES. INSTALL HORIZONTAL RACEWAY RUNS ABOVE WATER PIPING.
F. BOXES, ENCLOSURES, AND CABINETS INSTALLED IN WET LOCATIONS SHALL BE LISTED FOR USE IN WET LOCATIONS.
G. SHEET METAL OUTLET AND DEVICE BOXES: COMPLY WITH NEMA OS1 AND UL 514A.
H. CAST-METAL OUTLET AND DEVICE BOXES: COMPLY WITH NEMA FB1, FERROUS ALLOY, TYPE FD, WITH GASKETED COVER.
I. NONMETALLIC OUTLET AND DEVICE BOXES: COMPLY WITH NEMA OS2 AND UL 514C.
J. METAL FLOOR BOXES: CAST METAL, FULLY ADJUSTABLE, LISTED AND LABELED AS DEFINED IN NFPA (NEC) 70.
K. NONMETALLIC FLOOR BOXES: NONADJUSTABLE, ROUND, LISTED AND LABELED AS DEFINED IN NFPA (NEC) 70.
L. LUMINAIRE OUTLET BOXES: NONADJUSTABLE, DESIGNED FOR ATTACHMENT OF LUMINAIRE WEIGHING 50 LB. OUTLET BOXES DESIGNED FOR ATTACHMENT OF LUMINAIRES WEIGHING MORE THAN 50 LB. SHALL BE LISTED AND MARKED FOR THE MAXIMUM ALLOWABLE WEIGHT.
M. PADDLE FAN OUTLET BOXES: NONADJUSTABLE, DESIGNED FOR ATTACHMENT OF PADDLE FAN WEIGHING 70 LB, LISTED AND LABELED AS DEFINED IN NFPA (NEC) 70.
N. SMALL SHEET METAL PULL AND JUNCTION BOXES: COMPLY WITH NEMA OS1.
O. CAST-METAL, ACCESS, PULL, AND JUNCTION BOXES: COMPLY WITH NEMA FB1 AND UL 1773, GALVANIZED, CAST IRON WITH GASKETED COVER.
P. HINGED-COVER ENCLOSURES: COMPLY WITH UL 50 AND NEMA 250, TYPE 1 OR TYPE 3R WITH CONTINUOUS HINGE COVER WITH FLUSH LATCH U.O.N.
Q. CABINETS:
   1. NEMA 250, TYPE 1 OR TYPE 3R, GALVANIZED STEEL BOX WITH REMOVABLE INTERIOR PANEL AND REMOVABLE FRONT, FINISHED INSIDE AND OUT WITH MANUFACTURER'S STANDARD ENAMEL.
   2. HINGED DOOR IN FRONT COVER WITH FLUSH LATCH AND CONCEALED HINGE.
   3. KEY LATCH TO MATCH PANELBOARDS.
   4. METAL BARRIERS TO SEPARATE WIRING OF DIFFERENT SYSTEMS AND VOLTAGE.
   5. ACCESSORY FEET WHERE REQUIRED FOR FREESTANDING EQUIPMENT.
   6. NONMETALLIC CABINETS SHALL BE LISTED AND LABELED AS DEFINED IN NFPA (NEC) 70, BY A QUALIFIED TESTING AGENCY, AND MARKED FOR INTENDED LOCATION AND APPLICATION.

260544 SLEEVES AND SLEEVE SEALS FOR ELECTRICAL RACEWAYS AND CABLING

A. PROVIDE U.L. LISTED FIRESTOP SEALING SYSTEMS AT ALL ELECTRICAL PENETRATIONS OF RATED FLOORS AND WALLS.
B. WALL SLEEVES SHALL COMPLY WITH THE FOLLOWING:
   1. STEEL PIPE SLEEVES SHALL COMPLY WITH ASTM A53/A53M, TYPE E, GRADE B, SCH. 40, ZINC COATED, PLAIN ENDS.
   2. CAST-IRON PIPE SLEEVES SHALL BE CAST OR FABRICATED "WALL PIPE," EQUIVALENT TO DUCTILE-IRON PRESSURE PIPE, WITH PLAIN ENDS AND INTEGRAL WATERSTOP U.O.N.

260553 IDENTIFICATION FOR ELECTRICAL SYSTEMS

A. COMPLY WITH ASME A13.1, IEEE C2, NFPA (NEC) 70, 29 CFR 1910.144, 29 CFR 1910.145, ANSI Z535.4 (SAFETY SIGNS AND LABELS).
B. ADHESIVE-ATTACHED LABELING MATERIALS, INCLUDING LABEL STOCKS, LAMINATING ADHESIVES, AND INKS USED BY LABEL PRINTERS, SHALL COMPLY WITH UL 969.
C. ACCESSIBLE RACEWAYS AND METAL-CLAD CABLES, 600 V OR LESS, FOR SERVICE, FEEDER, AND BRANCH CIRCUITS, MORE THAN 30 A AND 120 V TO GROUND: IDENTIFY WITH SELF-ADHESIVE VINYL LABELS AT 30' MAXIMUM INTERVALS.
D. ACCESSIBLE RACEWAYS AND CABLES WITHIN BUILDINGS: IDENTIFY THE COVERS OF EACH JUNCTION AND PULL BOX WITH SELF-ADHESIVE VINYL LABELS CONTAINING THE WORD "POWER" AND SYSTEM VOLTAGE.
E. POWER-CIRCUIT CONDUCTOR IDENTIFICATION, 600 V OR LESS: WITHIN VAULTS, PULL AND JUNCTION BOXES, MANHOLES, AND HANDHOLES, USE COLOR-CODING CONDUCTOR TAPE TO IDENTIFY THE PHASE. USE INDUSTRY STANDARD COLORS FOR UNGROUNDED SERVICE FEEDER AND BRANCH-CIRCUIT CONDUCTORS.
F. CONTROL-CIRCUIT CONDUCTOR IDENTIFICATION: FOR CONDUCTORS AND CABLES IN PULL AND JUNCTION BOXES, MANHOLES, AND HANDHOLES, USE WRITE-ON TAGS WITH THE CONDUCTOR OR CABLE DESIGNATION, ORIGIN, AND DESTINATION.
G. CONTROL-CIRCUIT CONDUCTOR TERMINATION IDENTIFICATION: PROVIDE HEAT-SHRINK PREPRINTED TUBES WITH THE CONDUCTOR DESIGNATION.
H. CONDUCTORS TO BE EXTENDED IN THE FUTURE: ATTACH WRITE-ON TAGS MARKER TAPE TO CONDUCTORS AND LIST SOURCE.
I. AUXILIARY ELECTRICAL SYSTEMS CONDUCTOR IDENTIFICATION: IDENTIFY FIELD-INSTALLED ALARM, CONTROL, AND SIGNAL CONNECTIONS.
J. LOCATIONS OF UNDERGROUND LINES: IDENTIFY WITH UNDERGROUND-LINE WARNING TAPE FOR POWER, LIGHTING, COMMUNICATION, CONTROL WIRING, AND OPTICAL-FIBER CABLE.
K. WORKSPACE INDICATION: INSTALL FLOOR MARKING TAPE TO SHOW WORKING CLEARANCES IN THE DIRECTION OF ACCESS TO LIVE PARTS. WORKSPACE SHALL COMPLY WITH NFPA (NEC) 70 AND 29 CFR 1926.403 U.O.N.
L. WARNING LABELS FOR INDOOR CABINETS, BOXES, AND ENCLOSURES FOR POWER AND LIGHTING: SELF-ADHESIVE WARNING LABELS.
M. ARC FLASH WARNING LABELING: SELF-ADHESIVE THERMAL TRANSFER VINYL LABELS. COMPLY WITH NFPA 70E AND ANSI Z535.4.
N. OPERATING INSTRUCTION SIGNS: INSTALL INSTRUCTION SIGNS TO FACILITATE PROPER OPERATION AND MAINTENANCE OF ELECTRICAL SYSTEMS AND ITEMS TO WHICH THEY CONNECT.
O. EMERGENCY OPERATING INSTRUCTION SIGNS: INSTALL INSTRUCTION SIGNS WITH WHITE LEGEND ON A RED BACKGROUND WITH MINIMUM 3/8" HIGH LETTERS FOR EMERGENCY INSTRUCTIONS AT EQUIPMENT USED FOR POWER TRANSFER.
P. EQUIPMENT IDENTIFICATION LABEL: ON EACH UNIT OF EQUIPMENT, INSTALL A UNIQUE DESIGNATION LABEL THAT IS CONSISTENT WITH WIRING DIAGRAMS, SCHEDULES, AND OPERATION AND MAINTENANCE MANUAL.

262416 PANELBOARDS

A. ELECTRICAL COMPONENTS, DEVICES, AND ACCESSORIES: LISTED AND LABELED AS DEFINED IN NFPA (NEC) 70, BY A QUALIFIED TESTING AGENCY, AND MARKED FOR INTENDED LOCATION AND APPLICATION.
B. COMPLY WITH NEMA PB1 AND NFPA (NEC) 70.
C. ENCLOSURES: FLUSH AND SURFACE-MOUNTED, DEAD-FRONT CABINETS.
   1. INDOOR DRY, CLEAN LOCATIONS: NEMA 250, TYPE 1.
   2. OUTDOOR LOCATIONS: NEMA 250, TYPE 3R.
   3. KITCHEN AREAS: NEMA 250, TYPE 4X, STAINLESS STEEL.
   4. OTHER WET AND DAMP INDOOR LOCATIONS: NEMA 250, TYPE 4X.
   5. INDOOR LOCATIONS SUBJECT TO DUST, FALLING DIRT, AND DRIPPING NONCORROSIVE LIQUIDS: NEMA 250, TYPE 5.
D. CONDUCTOR CONNECTORS AND PHASE, NEUTRAL, AND GROUND BUSES: HARD-DRAWN COPPER, 98% CONDUCTIVITY.
E. POWER PANELBOARDS:
   1. DISTRIBUTION TYPE, CIRCUIT BREAKER MAINS, BOLT-ON CIRCUIT BREAKERS FOR BRANCH OVERCURRENT PROTECTIVE DEVICES.
   1.1. ALL BREAKERS SERVING HVACR EQUIPMENT SHALL BE HACR TYPE.
   2. FUSED SWITCHES FOR BRANCH OVERCURRENT PROTECTIVE DEVICES.
   3. CONTACTORS IN MAIN BUS: NEMA ICS 2, CLASS A, MECHANICALLY HELD, GENERAL-PURPOSE CONTROLLER, WITH SAME SHORT-CIRCUIT INTERRUPTING RATING AS PANELBOARD.
   3.1. EXTERNAL CONTROL POWER SOURCE: 120 V BRANCH CIRCUIT.
F. LIGHTING AND APPLIANCE BRANCH-CIRCUIT PANELBOARDS:
   1. LIGHTING AND APPLIANCE BRANCH-CIRCUIT TYPE, LUG MAINS, BOLT-ON CIRCUIT BREAKERS FOR BRANCH OVERCURRENT PROTECTIVE DEVICES (REPLACEABLE WITHOUT DISTURBING ADJACENT UNITS).
   1.1. ALL BREAKERS SERVING HVACR EQUIPMENT SHALL BE HACR TYPE.
   2. CONTACTORS IN MAIN BUS: NEMA ICS 2, CLASS A, MECHANICALLY HELD, GENERAL-PURPOSE CONTROLLER, WITH SAME SHORT-CIRCUIT INTERRUPTING RATING AS PANELBOARD.
   2.1. EXTERNAL CONTROL POWER SOURCE: 120 V BRANCH CIRCUIT.
   3. COLUMN-TYPE PANELBOARDS: SINGLE ROW OF OVERCURRENT DEVICES WITH NARROW GUTTER EXTENSION AND OVERHEAD JUNCTION BOX EQUIPPED WITH GROUND AND NEUTRAL TERMINAL BUSES.
   4. DOORS: CONCEALED HINGES, SECURED WITH FLUSH LATCH WITH TUMBLER LOCK; KEYED ALIKE.

262813 FUSES

A. ELECTRICAL COMPONENTS, DEVICES, AND ACCESSORIES: LISTED AND LABELED AS DEFINED IN NFPA (NEC) 70, BY A QUALIFIED TESTING AGENCY, AND MARKED FOR INTENDED LOCATION AND APPLICATION.
B. COMPLY WITH NFPA (NEC) 70.
C. COORDINATE FUSE RATINGS WITH UTILIZATION EQUIPMENT NAMEPLATE LIMITATIONS OF MAXIMUM FUSE SIZE AND WITH SYSTEM SHORT-CIRCUIT CURRENT LEVELS.
D. NEMA FU 1, CURRENT-LIMITING, NONRENEWABLE CARTRIDGE FUSES WITH VOLTAGE RATINGS CONSISTENT WITH CIRCUIT VOLTAGES.
   1. TYPE RK-1: 250V OR 600V, 0-600A RATING, 200 KAIC TIME DELAY.
   2. TYPE RK-5: 250V OR 600V, 0-600A RATING, 200 KAIC TIME DELAY.
   3. TYPE CC: 600V, 0-30A RATING, 200 KAIC, FAST ACTING.
   4. TYPE CD: 600V, 31-60A RATING, 200 KAIC, FAST ACTING.
   5. TYPE J: 600V, 0-600A RATING, 200KAIC TIME DELAY.
   6. TYPE L: 600V, 601-6000A RATING, 200KAIC, TIME DELAY.
   7. TYPE T: 250V, 0-1200A RATING, 200KAIC, TIME DELAY.
   8. TYPE T: 600V, 0-800A RATING, 200KAIC, TIME DELAY.

262816 ENCLOSED SWITCHES AND CIRCUIT BREAKERS

A. FUSIBLE SWITCHES
   1. TYPE GD, GENERAL DUTY, SINGLE THROW, 800A AND SMALLER: UL 98 AND NEMA KS 1, HORSEPOWER RATED, WITH CARTRIDGE FUSE INTERIORS TO ACCOMMODATE INDICATED FUSES, LOCKABLE HANDLE WITH CAPABILITY TO ACCEPT TWO PADLOCKS, AND INTERLOCKED WITH COVER IN CLOSED POSITION.

yes prep
PUBLIC SCHOOLS

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STATE OF TEXAS — SHERIE E. HENSLEY — 91827 — LICENSED PROFESSIONAL ENGINEER
09.18.20
F-16795
DIV 21,22,23

STATE OF TEXAS — BRAD B. BOYER — 68704 — LICENSED PROFESSIONAL ENGINEER
09.18.20
F-16795
DIV 26,28

No.	Description	Date
	ISSUE FOR CONSTRUCTION	SEP 17, 20

YES PREP SCHOOL

SECURITY IMPROVEMENTS

ELECTRICAL SPECS

Project Number	20044
Date	09/10/20
Drawn By	DKS
Checked By	BBB/SEH

MEP0-0

Scale	AS NOTED

GENERAL NOTES

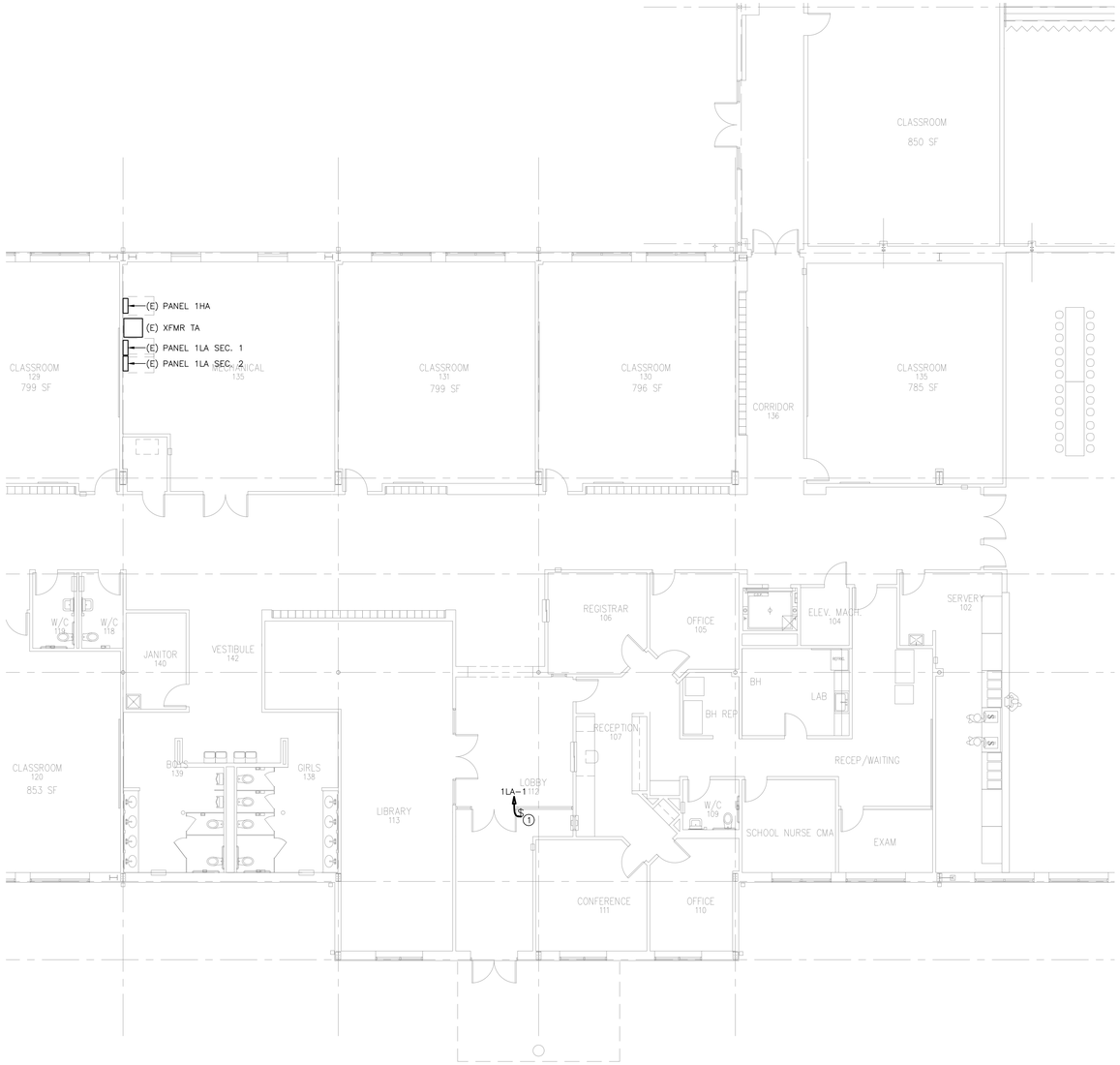
1. FIELD VERIFY ALL EXISTING CONDITIONS.
2. ALL RECEPTACLES SHALL BE 20 AMP UNLESS NOTED OTHERWISE. PLUG AS INDICATED IN SCHEDULE OR AS PROVIDED BY MANUFACTURER.
3. ROUTE ALL CONDUIT AND ACCESSORIES IN AREAS WITH NO CEILING ORGANIZED AND PARALLEL TO WALLS.
4. RELOCATE EXISTING LIGHT FIXTURES, LIGHTING CONTROLS AND EXIT SIGNS AS NECESSARY. COORDINATE EXACT LOCATION WITH ARCHITECT AND BUILDING OWNER.
5. CONNECT ALL EXIT AND EMERGENCY LIGHTS TO NEAREST LIGHTING CIRCUITS.
6. COORDINATE LOCATIONS OF ALL LIGHT SWITCHES WITH ARCHITECT.
7. ROUTE ALL LIGHTING, CONDUIT, AND ACCESSORIES IN AREAS WITH NO CEILING ORGANIZED AND PARALLEL TO WALLS.

KEY NOTES

1. PROVIDE ELECTRIFIED DOOR CONNECTION. COORDINATE WITH HARDWARE AND SECURITY VENDOR. MAG LOCK TO BE TIED TO FIRE ALARM. PROVIDE MOTION DETECTOR, PUSH BUTTON RELEASE BUTTON, KEYPAD, ETC AS REQUIRED. PROVIDE J-BOX AND 3/4"C WITH PULL STRING STUBBED TO ACCESSIBLE CEILNG FOR CARD READER AND PUSH BUTTON RELEASE BUTTON.

FIRE SPRINKLER GENERAL NOTES

1. MODIFY FIRE SPRINKLERS AS NEEDED TO MAINTAIN COVERAGE.



1 MEP 1ST FLOOR
1/8" = 1'-0"

yesprep PUBLIC SCHOOLS

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09.18.20
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DIV 26,28

No.	Description	Date
	ISSUE FOR CONSTRUCTION	SEP 17, 20

YES PREP SCHOOL

SECURITY IMPROVEMENTS

SOUTHEAST CAMPUS

Project Number	20044
Date	09/10/20
Drawn By	DKS
Checked By	BBB/SEH

MEP1-1

Scale: AS NOTED

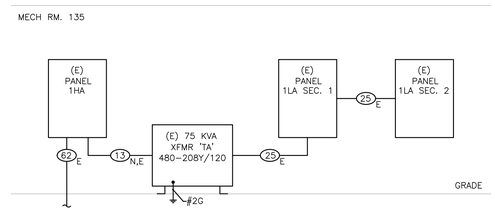
3 PHASE COPPER FEEDER SCHEDULE

NUMBER	CONDUCTORS	COND	W/O NEUTRAL	NUMBER	CONDUCTORS	COND	W/O NEUTRAL
02	4#12, 1#12 GND	3/4"	3/4"	38	4#500 KCMIL, 1#3 GND	3 1/2"	3"
03	4#10, 1#10 GND	3/4"	3/4"	42	4#600 KCMIL, 1#2 GND	4"	3 1/2"
05	4#8, 1#10 GND	1"	3/4"	46	(2 SETS) 4#4/0, 1#2 GND	2 1/2"	2"
06	4#6, 1#8 GND	1 1/4"	1"	51	(2 SETS) 4#250 KCMIL, 1#2 GND	3"	2 1/2"
08	4#4, 1#8 GND	1 1/4"	1 1/4"	62	(2 SETS) 4#350 KCMIL, 1#1 GND	3"	3"
10	4#3, 1#8 GND	1 1/4"	1 1/4"	76	(2 SETS) 4#500 KCMIL, 1#1/0 GND	3 1/2"	3 1/2"
11	4#2, 1#6 GND	1 1/2"	1 1/4"	85	(3 SETS) 4#300 KCMIL, 1#1/0 GND	3 1/2"	3"
13	4#1, 1#6 GND	2"	1 1/2"	93	(3 SETS) 4#350 KCMIL, 1#2/0 GND	3"	3"
15	4#1/0, 1#6 GND	2"	1 1/2"	100	(3 SETS) 4#400 KCMIL, 1#2/0 GND	3 1/2"	3"
17	4#2/0, 1#6 GND	2"	2"	126	(3 SETS) 4#600 KCMIL, 1#3/0 GND	4"	3 1/2"
20	4#3/0, 1#6 GND	2-1/2"	2"	138	(3 SETS) 4#700 KCMIL, 1#3/0 GND	5"	4"
23	4#4/0, 1#4 GND	2-1/2"	2"	168	(4 SETS) 4#600 KCMIL, 1#4/0 GND	4"	3 1/2"
25	4#250 KCMIL, 1#4 GND	3"	2 1/2"	210	(5 SETS) 4#600 KCMIL, 1#250 KCMIL GND	4"	3 1/2"
28	4#300 KCMIL, 1#4 GND	3"	2 1/2"	20$_w$	3#3/0, 1#6 GND	3"	3"
31	4#350 KCMIL, 1#3 GND	3"	3"	30$_w$	3#250 KCMIL, 1#2 GND	3"	3"
33	4#400 KCMIL, 1#3 GND	3"	3"	40$_w$	(2 SETS) 3#3/0, 1#6 GND	3"	3"

NOTES
1. WHERE THE FEEDER SYMBOL IS SHOWN WITH SUBSCRIPT
   MV = MEDIUM VOLTAGE COPPER CONDUCTOR
   N = NO NEUTRAL CONDUCTOR
   G = NO EQUIPMENT GROUNDING CONDUCTOR
   E = EXISTING CONDUCTORS
2. 5KV MEDIUM VOLTAGE CABLE CALCULATED IN SCHEDULE 40 PVC. ALL OTHERS IN RMC.
3. ALL CONDUIT CALCULATIONS BASED ON THHN COPPER CONDUCTORS.
4. AMPACITIES BASED ON 75°C TEMPERATURE RATING OF CONDUCTORS.

ELECTRICAL LOAD ANALYSIS

LOAD			VA
EXISTING LOAD	338953 X 125%	=	423691
NEW LOAD	500 X 100%	=	500
	TOTAL	=	424191
AT 480V, 3ø = 510 AMPS			
EXISTING PANEL CAPACITY IS 600 AMPS			



ALL GROUNDING AND BONDING AS PER NEC, ART 250

NOTE: ALL ELECTRICAL EQUIPMENT IS EXISTING TO REMAIN, SHOWN FOR REFERENCE ONLY.

② ELECTRICAL RISER DIAGRAM
NO SCALE

MLO AMPS 225	PANEL 1LA SEC. 2	NOTES
AMP BUS RATING: 225	NEMA 1	1. AIC RATING REFER TO SCHEDULE
VOLTS 120/208		2. BALANCE ALL LOADS
PHASE 3 WIRE 4		3. LABEL ALL CIRCUITS

CIRCUIT DESCRIPTION	*	WATT LOAD	WIRE	BRKR	CIRCUIT NUMBER										BRKR	WIRE	WATT LOAD	*	CIRCUIT DESCRIPTION
EXISTING LOAD	2	500		20/1	43	500			A	1800			44		30/1		1800	2	EXISTING LOAD
EXISTING LOAD	2	500		20/1	45		500		B		1800		46		30/1		1800	2	EXISTING LOAD
EXISTING LOAD	2	500		20/1	47			500	C			500	48		20/1		500	2	EXISTING LOAD
EXISTING LOAD	2	500		20/1	49	500			A	500			50		20/1		500	2	EXISTING LOAD
EXISTING LOAD	2	500		20/1	51		500		B		500		52		20/1		500	2	EXISTING LOAD
EXISTING LOAD	2	500		20/1	53			500	C			500	54		20/1		500	2	EXISTING LOAD
EXISTING LOAD	2	500		20/1	55	500			A	500			56		20/1		500	2	EXISTING LOAD
EXISTING LOAD	2	500		20/1	57		500		B		500		58		20/1		500	2	EXISTING LOAD
EXISTING LOAD	2	500		20/1	59			500	C			500	60		20/1		500	2	EXISTING LOAD
EXISTING LOAD	2	500		20/1	61	500			A	500			62		20/1		500	2	EXISTING LOAD
EXISTING LOAD	2	500		20/1	63		500		B		500		64		20/1		500	2	EXISTING LOAD
EXISTING LOAD	2	500		20/1	65			500	C			500	66		20/1		500	2	EXISTING LOAD
EXISTING LOAD	2	500		20/1	67	500			A	500			68		20/1		500	2	EXISTING LOAD
EXISTING LOAD	2	500		20/1	69		500		B		500		70		20/1		500	2	EXISTING LOAD
EXISTING LOAD	2	3000		50/2	71			3000	C			500	72		20/1		500	2	EXISTING LOAD
	2	3000			73	3000			A	1200			74		20/2		1200	2	EXISTING LOAD
EXISTING LOAD	2	3000		50/2	75		3000		B		1200		76				1200	2	
	2	3000			77			3000	C			500	78		20/1		500	2	EXISTING LOAD
EXISTING LOAD	2	1800		30/1	79	1800			A	500			80		20/1		500	2	EXISTING LOAD
EXISTING LOAD	2	1200		20/2	81		1200		B		500		82		20/1		500	2	EXISTING LOAD
	2	1200			83			1200	C			500	84		20/1		500	2	EXISTING LOAD

	CONNECTED		DEMAND
NON-CONTINUOUS *1	0	100%	0
CONTINUOUS *2	37700	125%	47125
KITCHEN EQUIPMENT *3	0	65%	0
RECEPTACLE *4	0	NEC 220.44	0

TOTAL	LOAD (VA)	A PH (AMP)	B PH (AMP)	C PH (AMP)
	47125	133.33	127.08	132.3

MCB AMPS 225 W/ FTL TO 1LA SEC. 2	PANEL 1LA SEC. 1	NOTES
AMP BUS RATING: 225	NEMA 1	1. AIC RATING REFER TO SCHEDULE
VOLTS 120/208		2. BALANCE ALL LOADS
PHASE 3 WIRE 4		3. LABEL ALL CIRCUITS

CIRCUIT DESCRIPTION	*	WATT LOAD	WIRE	BRKR	CIRCUIT NUMBER										BRKR	WIRE	WATT LOAD	*	CIRCUIT DESCRIPTION
SECURITY DOOR PWR	**1**	**500**	**#12**	**20/1**	**1**	**500**			A	500			2		20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	3		500		B		500		4		20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	5			500	C			500	6		20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	7	500			A	500			8		20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	9		500		B		500		10		20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	11			500	C			500	12		20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	13	500			A	500			14		20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	15		500		B		500		16		20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	17			500	C			500	18		20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	19	500			A	500			20		20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	21		500		B		500		22		20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	23			500	C			500	24		20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	25	500			A	500			26		20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	27		500		B		500		28		20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	29			500	C			500	30		20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	31	500			A	500			32		20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	33		500		B		500		34		20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	35			500	C			500	36		20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	1800	#10	30/1	37	1800			A	500			38		20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	1800	#10	30/1	39		1800		B		500		40		20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	41			500	C			500	42		20/1	#12	500	2	EXISTING LOAD

	CONNECTED		DEMAND
NON-CONTINUOUS *1	500	100%	500
EXISTING *2	23100	125%	28875
KITCHEN EQUIPMENT *3	0	65%	0
RECEPTACLE *4	0	NEC 220.44	0

TOTAL	LOAD (VA)	A PH (AMP)	B PH (AMP)	C PH (AMP)
	76500	218.75	213.54	205.2

MLO AMPS 600	PANEL 1HA	NOTES
AMP BUS RATING: 600	NEMA 1	1. AIC RATING REFER TO SCHEDULE
VOLTS 277/480		2. BALANCE ALL LOADS
PHASE 3 WIRE 4		3. LABEL ALL CIRCUITS

CIRCUIT DESCRIPTION	*	WATT LOAD	WIRE	BRKR	CIRCUIT NUMBER										BRKR	WIRE	WATT LOAD	*	CIRCUIT DESCRIPTION
EXISTING LOAD	2	500	#12	20/1	1	500			A	500			2		20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	3		500		B		500		4		20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	5			500	C			500	6		20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	7	500			A	500			8		20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	9		500		B		500		10		20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	11			500	C			500	12		20/1	#12	500	2	EXISTING LOAD
	2	11080	#3		13	11080			A	3463			14			#10	3462.5	2	
EXISTING LOAD	2	11080	#3	80/3	15		11080		B		3463		16	25/3		#10	3462.5	2	EXISTING LOAD
	2	11080	#3		17			11080	C			3463	18			#10	3462.5	2	
	2	12465	#2		19	12465			A	5540			20			#8	5540	2	
EXISTING LOAD	2	12465	#2	90/3	21		12465		B		5540		22	40/3		#8	5540	2	EXISTING LOAD
	2	12465	#2		23			12465	C			5540	24			#8	5540	2	
	2	8310	#4		25	8310			A	8310			26			#4	8310	2	
EXISTING LOAD	2	8310	#4	60/3	27		8310		B		8310		28	60/3		#4	8310	2	EXISTING LOAD
	2	8310	#4		29			8310	C			8310	30			#4	8310	2	
	2	8310	#4		31	8310			A	8310			32			#4	8310	2	
EXISTING LOAD	2	8310	#4	60/3	33		8310		B		8310		34	60/3		#4	8310	2	EXISTING LOAD
	2	8310	#4		35			8310	C			8310	36			#4	8310	2	
	2	9695	#4		37	9695			A	15235			38			#1	15235	2	
EXISTING LOAD	2	9695	#4	70/3	39		9695		B		15235		40	110/3		#1	15235	2	EXISTING LOAD
	2	9695	#4		41			9695	C			15235	42			#1	15235	2	

	CONNECTED		DEMAND
NON-CONTINUOUS *1	0	100%	0
CONTINUOUS *2	278153	125%	347691
KITCHEN EQUIPMENT *3	0	65%	0
RECEPTACLE *4	0	NEC 220.44	0

TOTAL	LOAD (VA)	A PH (AMP)	B PH (AMP)	C PH (AMP)
	424316	513.62	510.91	507.3

yesprep PUBLIC SCHOOLS

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09.18.20
F-16795
DIV 26,28

No.	Description	Date
	ISSUE FOR CONSTRUCTION	SEP 17, 20

YES PREP SCHOOL

SECURITY IMPROVEMENTS

SOUTHEAST CAMPUS

Project Number	20044
Date	09/10/20
Drawn By	DKS
Checked By	BBB/SEH

MEP1-2

Scale: AS NOTED

GENERAL NOTES

1. FIELD VERIFY ALL EXISTING CONDITIONS.
2. ALL RECEPTACLES SHALL BE 20 AMP UNLESS NOTED OTHERWISE. PLUG AS INDICATED IN SCHEDULE OR AS PROVIDED BY MANUFACTURER.
3. ROUTE ALL CONDUIT AND ACCESSORIES IN AREAS WITH NO CEILING ORGANIZED AND PARALLEL TO WALLS.
4. RELOCATE EXISTING LIGHT FIXTURES, LIGHTING CONTROLS AND EXIT SIGNS AS NECESSARY. COORDINATE EXACT LOCATION WITH ARCHITECT AND BUILDING OWNER.
5. CONNECT ALL EXIT AND EMERGENCY LIGHTS TO NEAREST LIGHTING CIRCUITS.
6. COORDINATE LOCATIONS OF ALL LIGHT SWITCHES WITH ARCHITECT.
7. ROUTE ALL LIGHTING, CONDUIT, AND ACCESSORIES IN AREAS WITH NO CEILING ORGANIZED AND PARALLEL TO WALLS.

FIRE SPRINKLER GENERAL NOTES

1. MODIFY FIRE SPRINKLERS AS NEEDED TO MAINTAIN COVERAGE.

KEY NOTES

1. PROVIDE ELECTRIFIED DOOR CONNECTION. COORDINATE WITH HARDWARE AND SECURITY VENDOR. MAG LOCK TO BE TIED TO FIRE ALARM. PROVIDE MOTION DETECTOR, PUSH BUTTON RELEASE BUTTON, KEYPAD, ETC AS REQUIRED. PROVIDE J-BOX AND 3/4"c WITH PULL STRING STUBBED TO ACCESSIBLE CEILNG FOR CARD READER AND PUSH BUTTON RELEASE BUTTON.
2. CEILING IS FLOATING IN THIS LOCATION. ROUTE CONDUIT TO KEEP IT CONCEALED. COORDINATE EXACT ROUTING WITH BUILDING OWNER.

1 MEP 1ST FLOOR
1/8" = 1'-0"

yes prep PUBLIC SCHOOLS

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F-16795
DIV 26,28

No.	Description	Date
	ISSUE FOR CONSTRUCTION	SEP 17, 20

YES PREP SCHOOL

SECURITY IMPROVEMENTS

WHITE OAK CAMPUS

Project Number	20044
Date	09/10/20
Drawn By	DKS
Checked By	BBB/SEH

MEP2-1

Scale: AS NOTED

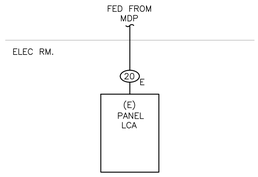
3 PHASE COPPER FEEDER SCHEDULE

NUMBER	CONDUCTORS	COND	W/O NEUTRAL	NUMBER	CONDUCTORS	COND	W/O NEUTRAL
02	4#12, 1#12 GND	3/4"	3/4"	38	4#500 KCMIL, 1#3 GND	3 1/2"	3"
03	4#10, 1#10 GND	3/4"	3/4"	42	4#600 KCMIL, 1#2 GND	4"	3 1/2"
05	4#8, 1#10 GND	1"	3/4"	46	(2 SETS) 4#4/0, 1#2 GND	2 1/2"	2"
06	4#6, 1#8 GND	1 1/4"	1"	51	(2 SETS) 4#250 KCMIL, 1#2 GND	3"	2 1/2"
08	4#4, 1#8 GND	1 1/4"	1 1/4"	62	(2 SETS) 4#350 KCMIL, 1#1 GND	3"	3"
10	4#3, 1#8 GND	1 1/4"	1 1/4"	76	(2 SETS) 4#500 KCMIL, 1#1/0 GND	3 1/2"	3 1/2"
11	4#2, 1#6 GND	1 1/2"	1 1/4"	85	(3 SETS) 4#300 KCMIL, 1#1/0 GND	3 1/2"	3"
13	4#1, 1#6 GND	2"	1 1/2"	93	(3 SETS) 4#350 KCMIL, 1#2/0 GND	3"	3"
15	4#1/0, 1#6 GND	2"	1 1/2"	100	(3 SETS) 4#400 KCMIL, 1#2/0 GND	3 1/2"	3"
17	4#2/0, 1#6 GND	2"	2"	126	(3 SETS) 4#600 KCMIL, 1#3/0 GND	4"	3 1/2"
20	4#3/0, 1#6 GND	2-1/2"	2"	138	(3 SETS) 4#700 KCMIL, 1#3/0 GND	5"	4"
23	4#4/0, 1#4 GND	2-1/2"	2"	168	(4 SETS) 4#600 KCMIL, 1#4/0 GND	4"	3 1/2"
25	4#250 KCMIL, 1#4 GND	3"	2 1/2"	210	(5 SETS) 4#600 KCMIL, 1#250 KCMIL GND	4"	3 1/2"
28	4#300 KCMIL, 1#4 GND	3"	2 1/2"	20w	3#3/0, 1#6 GND	3"	3"
31	4#350 KCMIL, 1#3 GND	3"	3"	30w	3#250 KCMIL, 1#2 GND	3"	3"
33	4#400 KCMIL, 1#3 GND	3"	3"	40w	(2 SETS) 3#3/0, 1#6 GND	3"	3"

NOTES
1. WHERE THE FEEDER SYMBOL IS SHOWN WITH SUBSCRIPT
   MV = MEDIUM VOLTAGE COPPER CONDUCTOR
   N = NO NEUTRAL CONDUCTOR
   G = NO EQUIPMENT GROUNDING CONDUCTOR
   E = EXISTING CONDUCTORS
2. 5KV MEDIUM VOLTAGE CABLE CALCULATED IN SCHEDULE 40 PVC. ALL OTHERS IN RMC.
3. ALL CONDUIT CALCULATIONS BASED ON THHN COPPER CONDUCTORS.
4. AMPACITIES BASED ON 75°C TEMPERATURE RATING OF CONDUCTORS.

ELECTRICAL LOAD ANALYSIS

LOAD			VA
EXISTING LOAD	45100 X 125%	=	56375
NEW LOAD	500 X 100%	=	500
	TOTAL	=	56875
AT 208V, 3ø = 157 AMPS			
EXISTING PANEL CAPACITY IS 200 AMPS			



ALL GROUNDING AND BONDING AS PER NEC, ART 250

NOTE: ALL ELECTRICAL EQUIPMENT IS EXISTING TO REMAIN. SHOWN FOR REFERENCE ONLY.

② ELECTRICAL RISER DIAGRAM
NO SCALE

MLO AMPS 200	**PANEL LCA**	NOTES
AMP BUS RATING: 250	**NEMA 1**	1. AIC RATING REFER TO SCHEDULE
VOLTS 120/208		2. BALANCE ALL LOADS
PHASE 3 WIRE 4		3. LABEL ALL CIRCUITS

CIRCUIT DESCRIPTION	-	WATT LOAD	WIRE	BRKR	CIRCUIT NUMBER								BRKR	WIRE	WATT LOAD	-	CIRCUIT DESCRIPTION
EXISTING LOAD	2	500	#12	20/1	1	500			A	500			2	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	3		500		B		500		4	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	5			500	C			500	6	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	7	500			A	500			8	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	9		500		B		500		10	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	11			500	C			500	12	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	13	500			A	500			14	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	15		500		B		1200		16	20/2	#12	1200	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	17			500	C			1200	18		#12	1200	2	
EXISTING LOAD	2	500	#12	20/1	19	500			A	500			20	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	21		500		B		0		22			0		SPACE
EXISTING LOAD	2	500	#12	20/1	23			500	C			1200	24	20/2	#12	1200	2	EXISTING LOAD
SECURITY DOOR POWER	**1**	**500**	**#12**	**20/1**	**25**	**500**			A	1200			26		#12	1200	2	
EXISTING LOAD	2	500	#12	20/1	27		500		B		500		28	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	29			500	C			3000	30	50/2	#6	3000	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	31	500			A	3000			32		#6	3000	2	
EXISTING LOAD	2	500	#12	20/1	33		500		B		1800		34	30/2	#10	1800	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	35			500	C			1800	36		#10	1800	2	
EXISTING LOAD	2	500	#12	20/1	37	500			A	5400			38		#2	5400	2	
EXISTING LOAD	2	500	#12	20/1	39		500		B		5400		40	90/3	#2	5400	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	41			500	C			5400	42		#2	5400	2	

	CONNECTED		DEMAND
NON-CONTINUOUS *1	500	100%	500
EXISTING *2	45100	125%	56375
KITCHEN EQUIPMENT *3	0	65%	0
RECEPTACLE *4	0	NEC 220.44	0

TOTAL	LOAD (VA)	A PH (AMP)	B PH (AMP)	C PH (AMP)
	56875	156.25	139.58	178.1

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F-16795
DIV 26,28

No.	Description	Date
	ISSUE FOR CONSTRUCTION	SEP 17, 20

YES PREP SCHOOL

SECURITY IMPROVEMENTS

WHITE OAK CAMPUS

Project Number	20044
Date	09/10/20
Drawn By	DKS
Checked By	BBB/SEH

MEP2-2

Scale: AS NOTED

GENERAL NOTES

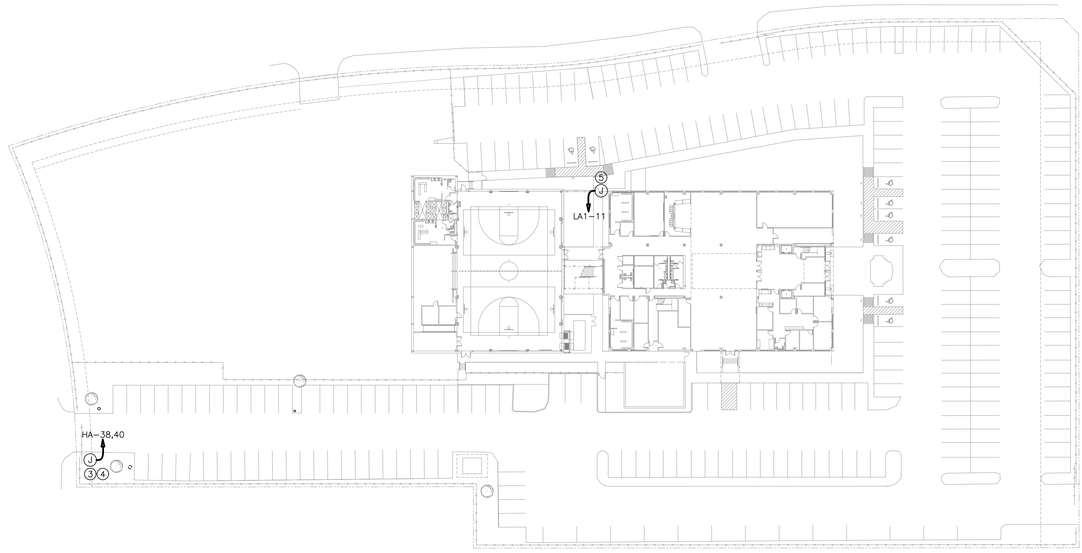
1. FIELD VERIFY ALL EXISTING CONDITIONS.
2. ALL RECEPTACLES SHALL BE 20 AMP UNLESS NOTED OTHERWISE. PLUG AS INDICATED IN SCHEDULE OR AS PROVIDED BY MANUFACTURER.
3. ROUTE ALL CONDUIT AND ACCESSORIES IN AREAS WITH NO CEILING ORGANIZED AND PARALLEL TO WALLS.
4. RELOCATE EXISTING LIGHT FIXTURES, LIGHTING CONTROLS AND EXIT SIGNS AS NECESSARY. COORDINATE EXACT LOCATION WITH ARCHITECT AND BUILDING OWNER.
5. CONNECT ALL EXIT AND EMERGENCY LIGHTS TO NEAREST LIGHTING CIRCUITS.
6. COORDINATE LOCATIONS OF ALL LIGHT SWITCHES WITH ARCHITECT.
7. ROUTE ALL LIGHTING, CONDUIT, AND ACCESSORIES IN AREAS WITH NO CEILING ORGANIZED AND PARALLEL TO WALLS.

FIRE SPRINKLER GENERAL NOTES

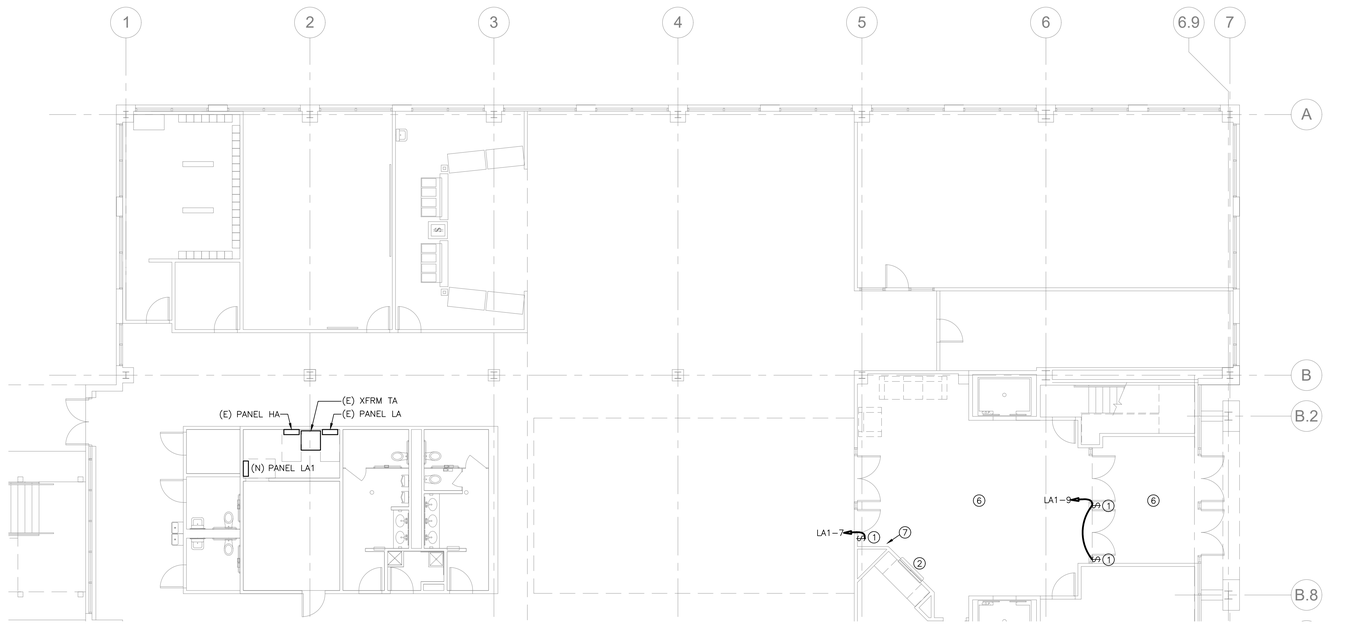
1. MODIFY FIRE SPRINKLERS AS NEEDED TO MAINTAIN COVERAGE.

KEY NOTES

1. PROVIDE ELECTRIFIED DOOR CONNECTION. COORDINATE WITH HARDWARE AND SECURITY VENDOR. MAG LOCK TO BE TIED TO FIRE ALARM. PROVIDE MOTION DETECTOR, PUSH BUTTON RELEASE BUTTON, KEYPAD, ETC AS REQUIRED. PROVIDE J-BOX AND 3/4"C WITH PULL STRING STUBBED TO ACCESSIBLE CEILNG FOR CARD READER AND PUSH BUTTON RELEASE BUTTON.
2. COORDINATE RELOCATION OF ELECTRICAL IN THIS LOCATION FROM EXISTING TO NEW WALL LOCATION. EXTEND CONDUIT AND FEEDERS AS NECESSARY FOR COMPLETE AND OPERATING SYSTEM.
3. ENTRY GATE. PROVIDE 1KVA TRANSFORMER 480/120V FOR GATE OPENER MOUNTED ON POST WITH DISCONNECT. PROVIDE 120/24V TRANSFORMER FOR ACCESS CONTROL DEVICE. COORDINATE EXACT REQUIREMENTS WITH GATE VENDOR.
4. PROVIDE (1) 1-1/2"C EMPTY CONDUIT WITH PULL STRING ADJACENT TO POWER. COORDINATE EXACT ROUTING AND REQUIREMENTS INSIDE BUILDING WITH BUILDING OWNER.
5. PROVIDE 120V POWER FOR PERSONNEL SWING GATE. COORDINATE EXACT ROUTING OF CONDUIT WITH OWNER. COORDINATE EXACT REQUIREMENTS WITH SECURITY VENDOR.
6. MODIFY OR ADD RETURN AIR DEVICE TO PROVIDE RETURN AIR PATH FROM LOBBY AND ADJACENT AREAS.
7. RELOCATE EXISTING THERMOSTAT FROM EXISTING WALL TO NEW WALL LOCATION.



2 MEP SITE PLAN
1" = 40'-0"



1 MEP 1ST FLOOR
1/8" = 1'-0"

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No.	Description	Date
	ISSUE FOR CONSTRUCTION	SEP 17, 20

YES PREP SCHOOL

SECURITY IMPROVEMENTS

BRAYS OAKS CAMPUS

Project Number	20044
Date	09/10/20
Drawn By	DKS
Checked By	BBB/SEH

MEP3-1

Scale AS NOTED

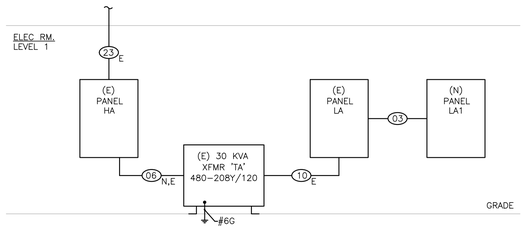
3 PHASE COPPER FEEDER SCHEDULE

NUMBER	CONDUCTORS	COND	W/O NEUTRAL	NUMBER	CONDUCTORS	COND	W/O NEUTRAL
02	4#12, 1#12 GND	3/4"	3/4"	38	4#500 KCMIL, 1#3 GND	3 1/2"	3"
03	4#10, 1#10 GND	3/4"	3/4"	42	4#600 KCMIL, 1#2 GND	4"	3 1/2"
05	4#8, 1#10 GND	1"	3/4"	46	(2 SETS) 4#4/0, 1#2 GND	2 1/2"	2"
06	4#6, 1#8 GND	1 1/4"	1"	51	(2 SETS) 4#250 KCMIL, 1#2 GND	3"	2 1/2"
08	4#4, 1#8 GND	1 1/4"	1 1/4"	62	(2 SETS) 4#350 KCMIL, 1#1 GND	3"	3'
10	4#3, 1#8 GND	1 1/4"	1 1/4"	76	(2 SETS) 4#500 KCMIL, 1#1/0 GND	3 1/2"	3 1/2"
11	4#2, 1#6 GND	1 1/2"	1 1/4"	85	(3 SETS) 4#300 KCMIL, 1#1/0 GND	3 1/2"	3"
13	4#1, 1#6 GND	2"	1 1/2"	93	(3 SETS) 4#350 KCMIL, 1#2/0 GND	3"	3"
15	4#1/0, 1#6 GND	2"	1 1/2"	100	(3 SETS) 4#400 KCMIL, 1#2/0 GND	3 1/2"	3"
17	4#2/0, 1#6 GND	2"	2"	126	(3 SETS) 4#600 KCMIL, 1#3/0 GND	4"	3 1/2"
20	4#3/0, 1#6 GND	2-1/2"	2"	138	(3 SETS) 4#700 KCMIL, 1#3/0 GND	5"	4"
23	4#4/0, 1#4 GND	2-1/2"	2"	168	(4 SETS) 4#600 KCMIL, 1#4/0 GND	4"	3 1/2"
25	4#250 KCMIL, 1#4 GND	3"	2 1/2"	210	(5 SETS) 4#600 KCMIL, 1#250 KCMIL GND	4"	3 1/2"
28	4#300 KCMIL, 1#4 GND	3"	2 1/2"	20w	3#3/0, 1#6 GND	3"	3"
31	4#350 KCMIL, 1#3 GND	3"	3"	30w	3#250 KCMIL, 1#2 GND	3"	3"
33	4#400 KCMIL, 1#3 GND	3"	3"	40w	(2 SETS) 3#3/0, 1#6 GND	3"	3"

NOTES
1. WHERE THE FEEDER SYMBOL IS SHOWN WITH SUBSCRIPT
   MV = MEDIUM VOLTAGE COPPER CONDUCTOR
   N = NO NEUTRAL CONDUCTOR
   G = NO EQUIPMENT GROUNDING CONDUCTOR
   E = EXISTING CONDUCTORS
2. 5KV MEDIUM VOLTAGE CABLE CALCULATED IN SCHEDULE 40 PVC. ALL OTHERS IN RMC.
3. ALL CONDUIT CALCULATIONS BASED ON THHN COPPER CONDUCTORS.
4. AMPACITIES BASED ON 75°C TEMPERATURE RATING OF CONDUCTORS.

ELECTRICAL LOAD ANALYSIS

LOAD			VA
EXISTING LOAD	139530 X 125%	=	174413
NEW LOAD	2500 X 100%	=	2500
	TOTAL	=	176913
AT 480V, 3ø = 213 AMPS			
EXISTING PANEL CAPACITY IS 225 AMPS			



1 ELECTRICAL RISER DIAGRAM
NO SCALE

MLO AMPS 30	**PANEL LA1**	NOTES
AMP BUS RATING: 30		1. AIC RATING REFER TO SCHEDULE
VOLTS 120/208	**NEMA 1**	2. BALANCE ALL LOADS
PHASE 3 WIRE 4		3. LABEL ALL CIRCUITS

CIRCUIT DESCRIPTION	*	WATT LOAD	WIRE	BRKR	CIRCUIT NUMBER								BRKR	WIRE	WATT LOAD	*	CIRCUIT DESCRIPTION
EXISTING (RELCOATE FROM LA-38)	2	500	#12	20/1	1	500			A	0			2			0	SPACE
EXISTING (RELCOATE FROM LA-40)	2	500	#12	20/1	3		500		B		0		4			0	SPACE
EXISTING (RELCOATE FROM LA-42)	2	500	#12	20/1	5			500	C			0	6			0	SPACE
SECURITY DOOR POWER	**1**	**500**	**#12**	**20/1**	**7**	**500**			A	0			8			0	SPACE
SECURITY DOOR POWER	**1**	**500**	**#12**	**20/1**	**9**		**500**		B		0		10			0	SPACE
PERSONNEL GATE	**1**	**500**	**#12**	**20/1**	**11**			**500**	C			0	12			0	SPACE

	CONNECTED		DEMAND
NON-CONTINUOUS *1	1500	100%	1500
EXISTING *2	1500	125%	1875
KITCHEN EQUIPMENT *3	0	65%	0
RECEPTACLE *4	0	NEC 220.44	0

TOTAL	LOAD (VA)	A PH (AMP)	B PH (AMP)	C PH (AMP)
	3375	9.375	9.375	9.375

MCB AMPS 100	**PANEL LA**	NOTES
AMP BUS RATING: 100		1. AIC RATING REFER TO SCHEDULE
VOLTS 120/208	**NEMA 1**	2. BALANCE ALL LOADS
PHASE 3 WIRE 4		3. LABEL ALL CIRCUITS

CIRCUIT DESCRIPTION	*	WATT LOAD	WIRE	BRKR	CIRCUIT NUMBER								BRKR	WIRE	WATT LOAD	*	CIRCUIT DESCRIPTION
EXISTING LOAD	2	500	#12	20/1	1	500			A	500			2	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	3		500		B		500		4	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	5			500	C			500	6	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	7	500			A	500			8	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	9		500		B		500		10	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	11			500	C			500	12	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	13	500			A	500			14	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	15		500		B		500		16	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	17			500	C			500	18	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	19	500			A	500			20	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	21		500		B		500		22	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#10	30/1	23			500	C			500	24	30/1	#10	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	25	500			A	500			26	30/1	#10	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	27		500		B		500		28	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	29			500	C			500	30	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#10	30/1	31	500			A	500			32	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#10	30/1	33		500		B		500		34	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	35			500	C			500	36	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	37	500			A	1125			38			**1125**	
EXISTING LOAD	2	500	#12	20/1	39		500		B		1125		40	**30/3**		**1125**	**SUBFEED PANEL LA1**
EXISTING LOAD	2	500	#12	20/1	41			500	C			1125	42			**1125**	
EXISTING LOAD	2	500	#12	20/1	43	500			A	0			44			0	
EXISTING LOAD	2	500	#12	20/1	45		500		B		0		46	100/3		0	MAIN
EXISTING LOAD	2	500	#10	30/1	47			500	C			0	48			0	

	CONNECTED		DEMAND
NON-CONTINUOUS *1	0	100%	0
EXISTING *2	21000	125%	26250
KITCHEN EQUIPMENT *3	0	65%	0
RECEPTACLE *4	0	NEC 220.44	0

TOTAL	LOAD (VA)	A PH (AMP)	B PH (AMP)	C PH (AMP)
	29625	92.292	92.292	92.29

MLO AMPS 225	**PANEL HA**	NOTES
AMP BUS RATING: 225		1. AIC RATING REFER TO SCHEDULE
VOLTS 277/480	**NEMA 1**	2. BALANCE ALL LOADS
PHASE 3 WIRE 4		3. LABEL ALL CIRCUITS

CIRCUIT DESCRIPTION	*	WATT LOAD	WIRE	BRKR	CIRCUIT NUMBER								BRKR	WIRE	WATT LOAD	*	CIRCUIT DESCRIPTION
EXISTING LOAD	2	500	#12	20/1	1	500			A	500			2	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	3		500		B		500		4	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	5			500	C			500	6	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	7	500			A	500			8	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	9		500		B		500		10	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	11			500	C			500	12	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	13	500			A	500			14	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	15		500		B		500		16	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	17			500	C			500	18	20/1	#12	500	2 EXISTING LOAD
	2	5540			19	5540			A	5540			20			5540	2
EXISTING LOAD	2	5540		50/3	21		5540		B		5540		22	50/3		5540	2 EXISTING LOAD
	2	5540			23			5540	C			5540	24			5540	2
	2	5540			25	5540			A	5540			26			5540	2
EXISTING LOAD	2	5540		40/3	27		5540		B		5540		28	50/3		5540	2 EXISTING LOAD
	2	5540			29			5540	C			5540	30			5540	2
	2	2770			31	2770			A	2770			32			2770	2
EXISTING LOAD	2	2770		20/3	33		2770		B		2770		34	20/3		2770	2 EXISTING LOAD
	2	2770			35			2770	C			2770	36			2770	2
	2	8310			37	8310			A	**500**			**38**	**20/2**	**#12**	**500**	**1 VEHICLE GATE**
EXISTING LOAD	2	8310		60/3	39		8310		B		**500**		**40**		**#12**	**500**	**1**
	2	8310			41			0	C			42	20/1			0	SPARE
SPACE		0			43	0			A	0			44			0	SPACE

	CONNECTED		DEMAND
NON-CONTINUOUS *1	1000	100%	1000
EXISTING *2	117030	125%	146288
KITCHEN EQUIPMENT *3	0	65%	0
RECEPTACLE *4	0	NEC 220.44	0

TOTAL	LOAD (VA)	A PH (AMP)	B PH (AMP)	C PH (AMP)
	176913	213.49	213.49	211.7

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09.18.20
F-16795
DIV 26,28

No.	Description	Date
	ISSUE FOR CONSTRUCTION	SEP 17, 20

YES PREP SCHOOL

SECURITY IMPROVEMENTS

BRAYS OAKS CAMPUS

Project Number	20044
Date	09/10/20
Drawn By	DKS
Checked By	BBB/SEH

MEP3-2

Scale: AS NOTED

GENERAL NOTES

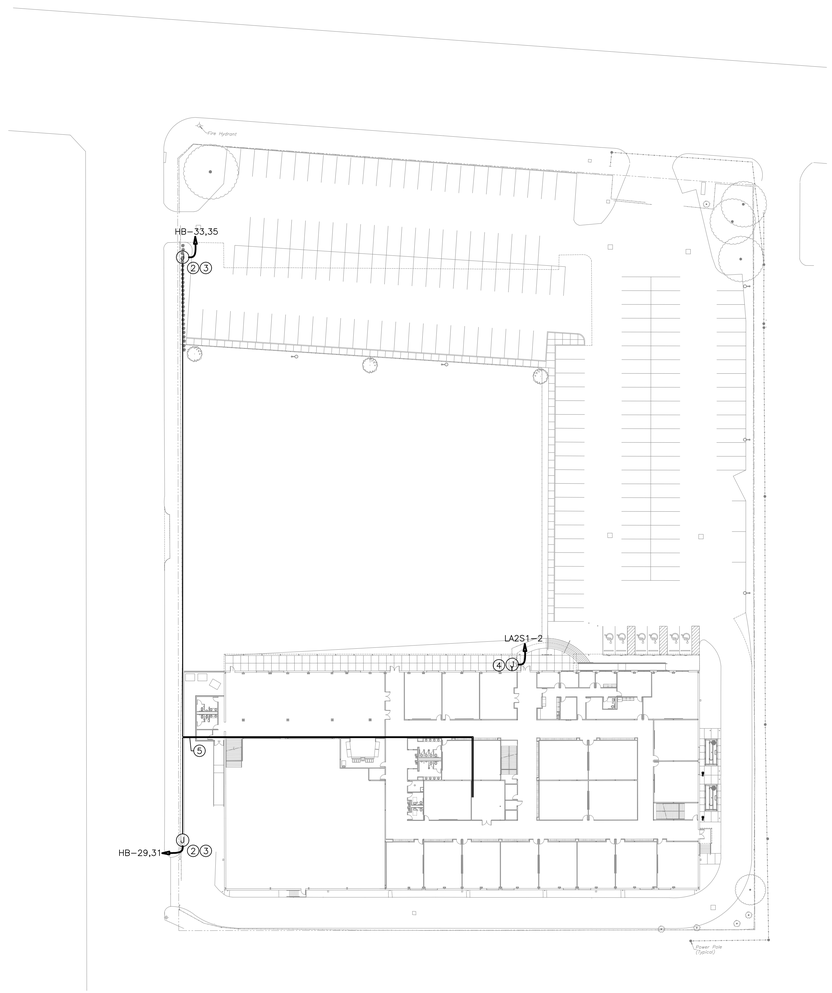
1. FIELD VERIFY ALL EXISTING CONDITIONS.
2. ALL RECEPTACLES SHALL BE 20 AMP UNLESS NOTED OTHERWISE. PLUG AS INDICATED IN SCHEDULE OR AS PROVIDED BY MANUFACTURER.
3. ROUTE ALL CONDUIT AND ACCESSORIES IN AREAS WITH NO CEILING ORGANIZED AND PARALLEL TO WALLS.
4. RELOCATE EXISTING LIGHT FIXTURES, LIGHTING CONTROLS AND EXIT SIGNS AS NECESSARY. COORDINATE EXACT LOCATION WITH ARCHITECT AND BUILDING OWNER.
5. CONNECT ALL EXIT AND EMERGENCY LIGHTS TO NEAREST LIGHTING CIRCUITS.
6. COORDINATE LOCATIONS OF ALL LIGHT SWITCHES WITH ARCHITECT.
7. ROUTE ALL LIGHTING, CONDUIT, AND ACCESSORIES IN AREAS WITH NO CEILING ORGANIZED AND PARALLEL TO WALLS.

FIRE SPRINKLER GENERAL NOTES

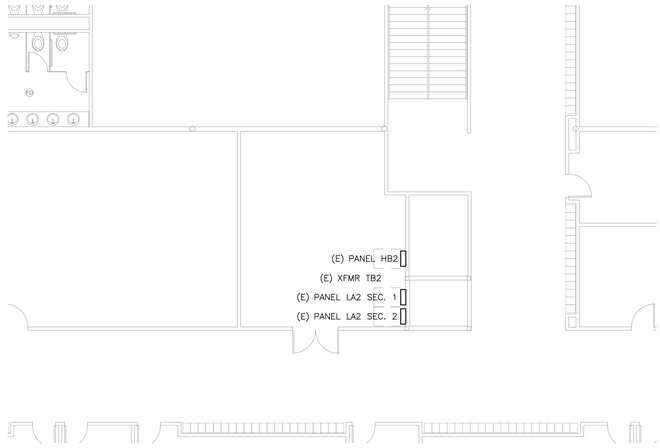
1. MODIFY FIRE SPRINKLERS AS NEEDED TO MAINTAIN COVERAGE.

KEY NOTES

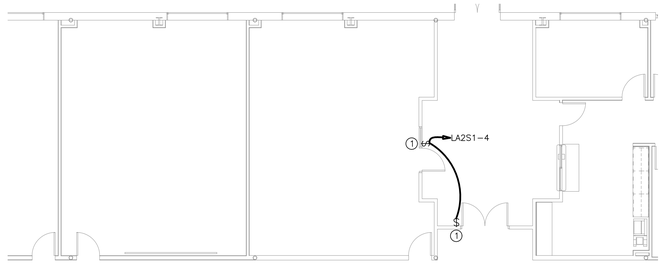
1. PROVIDE ELECTRIFIED DOOR CONNECTION. COORDINATE WITH HARDWARE AND SECURITY VENDOR. MAG LOCK TO BE TIED TO FIRE ALARM. PROVIDE MOTION DETECTOR, PUSH BUTTON RELEASE BUTTON, KEYPAD, ETC AS REQUIRED. PROVIDE J-BOX AND 3/4"C WITH PULL STRING STUBBED TO ACCESSIBLE CEILING FOR CARD READER AND PUSH BUTTON RELEASE BUTTON.
2. ENTRY GATE. PROVIDE 1KVA TRANSFORMER 480/120V FOR GATE OPENER MOUNTED ON POST WITH DISCONNECT. PROVIDE 120/24V TRANSFORMER FOR ACCESS CONTROL DEVICE. COORDINATE EXACT REQUIREMENTS WITH GATE VENDOR.
3. PROVIDE (1) 1-1/2"C EMPTY CONDUIT WITH PULL STRING ADJACENT TO POWER. COORDINATE EXACT ROUTING AND REQUIREMENTS INSIDE BUILDING WITH BUILDING OWNER.
4. PROVIDE 120V POWER FOR PERSONNEL SWING GATE. COORDINATE EXACT ROUTING OF CONDUIT WITH OWNER. COORDINATE EXACT REQUIREMENTS WITH SECURITY VENDOR.
5. ROUTE CONDUIT AS SHOWN TO MINIMIZE EXTERIOR SAW CUT. COORDINATE EXACT REQUIREMENTS WITH BUILDING OWNER.
6. CONDUIT ROUTED OUTSIDE TO EXTERIOR VEHICLE GATES. COORDINATE EXACT ROUTING WITH BUILDING OWNER.

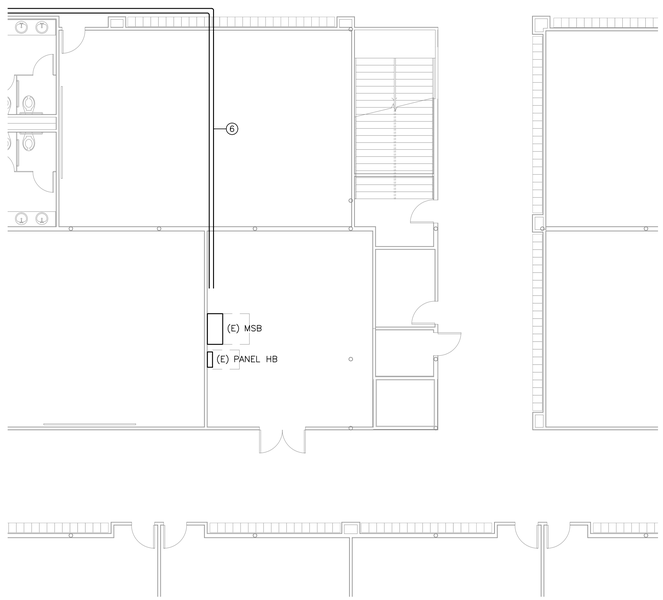


2 MEP SITE PLAN
1" = 40'-0"



3 MEP 2ND FLOOR
1/8" = 1'-0"





1 MEP 1ST FLOOR
1/8" = 1'-0"

yesprep PUBLIC SCHOOLS

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09.18.20
F-16795
DIV 26,28

No.	Description	Date
	ISSUE FOR CONSTRUCTION	SEP 17, 20

YES PREP SCHOOL

SECURITY IMPROVEMENTS

WEST CAMPUS

Project Number	20044
Date	09/10/20
Drawn By	DKS
Checked By	BBB/SEH

MEP4-1

Scale: AS NOTED

MLO AMPS 200	**PANEL LA2 SEC. 2**	NOTES
AMP BUS RATING: 225		1. AIC RATING REFER TO SCHEDULE
VOLTS 120/208	**NEMA 1**	2. BALANCE ALL LOADS
PHASE 3 WIRE 4		3. LABEL ALL CIRCUITS

CIRCUIT DESCRIPTION	*	WATT LOAD	WIRE	BRKR	CIRCUIT NUMBER									BRKR	WIRE	WATT LOAD	*	CIRCUIT DESCRIPTION
EXISTING LOAD	2	500	#12	20/1	43	500			A	500			44	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	45		500		B		500		46	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	47			500	C			500	48	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	49	500			A	500			50	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	51		500		B		500		52	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	53			500	C			500	54	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	55	500			A	500			56	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	57		500		B		500		58	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	59			500	C			500	60	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	61	500			A	500			62	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	63		500		B		500		64	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	65			500	C			500	66	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	67	500			A	500			68	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	69		500		B		500		70	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	71			500	C			500	72	20/1	#12	500	2	EXISTING LOAD
SPARE	2	0			73	0			A	1200			74	20/2	#12	1200	2	EXISTING LOAD
EXISTING LOAD	2	1200	#12	20/2	75		1200		B		1200		76		#12	1200	2	
	2	1200	#12		77			1200	C			500	78	20/1	#12	500	2	EXISTING LOAD
SPARE	2	0			79	0			A	500			80	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	1200	#12	20/2	81		1200		B		1200		82	20/2	#12	1200	2	EXISTING LOAD
	2	1200	#12		83			1200	C			1200	84		#12	1200	2	

	CONNECTED		DEMAND
NON-CONTINUOUS *1	0	100%	0
EXISTING *2	25600	125%	32000
KITCHEN EQUIPMENT *3	0	65%	0
RECEPTACLE *4	0	NEC 220.44	0

TOTAL	LOAD (VA)	A PH (AMP)	B PH (AMP)	C PH (AMP)
	32000	69.792	102.08	94.79

MCB AMPS 200 W/ FTL TO PANEL LA2 SEC. 2	**PANEL LA2 SEC. 1**	NOTES
AMP BUS RATING: 225		1. AIC RATING REFER TO SCHEDULE
VOLTS 120/208	**NEMA 1**	2. BALANCE ALL LOADS
PHASE 3 WIRE 4		3. LABEL ALL CIRCUITS

CIRCUIT DESCRIPTION	*	WATT LOAD	WIRE	BRKR	CIRCUIT NUMBER									BRKR	WIRE	WATT LOAD	*	CIRCUIT DESCRIPTION
EXISTING LOAD	2	500	#12	20/1	1	500			A	500			**2**	**20/1**	**#12**	**500**		**PERSONNEL GATE**
EXISTING LOAD	2	500	#12	20/1	3		500		B		500		**4**	**20/1**	**#12**	**500**		**SECURITY DOOR POWER**
EXISTING LOAD	2	500	#12	20/1	5			500	C			0	6			0		SPARE
EXISTING LOAD	2	500	#12	20/1	7	500			A	0			8			0		SPARE
EXISTING LOAD	2	500	#12	20/1	9		500		B		0		10			0		SPARE
EXISTING LOAD	2	500	#12	20/1	11			500	C			0	12			0		SPARE
EXISTING LOAD	2	500	#12	20/1	13	500			A	0			14			0		SPARE
EXISTING LOAD	2	500	#12	20/1	15		500		B		0		16			0		SPARE
EXISTING LOAD	2	500	#12	20/1	17			500	C			0	18			0		SPARE
EXISTING LOAD	2	500	#12	20/1	19	500			A	0			20			0		SPARE
EXISTING LOAD	2	500	#12	20/1	21		500		B		0		22			0		SPARE
EXISTING LOAD	2	500	#12	20/1	23			500	C			0	24			0		SPARE
EXISTING LOAD	2	500	#12	20/1	25	500			A	0			26			0		SPARE
EXISTING LOAD	2	500	#12	20/1	27		500		B		0		28			0		SPARE
EXISTING LOAD	2	500	#12	20/1	29			500	C			0	30			0		SPARE
EXISTING LOAD	2	500	#12	20/1	31	500			A	0			32			0		SPARE
EXISTING LOAD	2	500	#12	20/1	33		500		B		500		34	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	35			500	C			500	36	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	37	500			A	500			38	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	39		500		B		500		40	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	41			500	C			500	42	20/1	#12	500	2	EXISTING LOAD

	CONNECTED		DEMAND
NON-CONTINUOUS *1	0	100%	0
EXISTING *2	13000	125%	16250
KITCHEN EQUIPMENT *3	0	65%	0
RECEPTACLE *4	0	NEC 220.44	0

TOTAL	LOAD (VA)	A PH (AMP)	B PH (AMP)	C PH (AMP)
	48250	111.46	148.96	141.7

MCB AMPS 225	**PANEL HB2**	NOTES
AMP BUS RATING: 225		1. AIC RATING REFER TO SCHEDULE
VOLTS 277/480	**NEMA 1**	2. BALANCE ALL LOADS
PHASE 3 WIRE 4		3. LABEL ALL CIRCUITS

CIRCUIT DESCRIPTION	*	WATT LOAD	WIRE	BRKR	CIRCUIT NUMBER									BRKR	WIRE	WATT LOAD	*	CIRCUIT DESCRIPTION
EXISTING LOAD	2	1000	#12	20/1	1	1000			A	1000			2	20/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	3		1000		B		1000		4	20/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	5			1000	C			1000	6	20/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	7	1000			A	1000			8	20/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	9		1000		B		1000		10	20/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	11			1000	C			1000	12	20/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	13	1000			A	1000			14	20/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	15		1000		B		1000		16	20/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	17			1000	C			1000	18	20/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	19	1000			A	1000			20	20/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	21		1000		B		1000		22	20/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	23			1000	C			1000	24	20/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	25	1000			A	1000			26	20/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	27		1000		B		1000		28	20/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	29			1000	C			1000	30	20/1	#12	1000	2	EXISTING LOAD
SPACE		0			31	0			A	0			32			0		SPACE
SPACE		0			33		0		B		0		34			0		SPACE
SPACE		0			35			0	C			0	36			0		SPACE
SPACE		0			37	0			A	13375			38			13375		
SPACE		0			39		0		B		17875		40	125/3		17875		XFMR FEED TB2
SPACE		0			41			0	C			17000	42			17000		

	CONNECTED		DEMAND
NON-CONTINUOUS *1	0	100%	0
EXISTING *2	30000	125%	37500
KITCHEN EQUIPMENT *3	0	65%	0
RECEPTACLE *4	0	NEC 220.44	0

TOTAL	LOAD (VA)	A PH (AMP)	B PH (AMP)	C PH (AMP)
	85750	93.412	109.66	106.5

MCB AMPS 225	**PANEL HB**	NOTES
AMP BUS RATING: 225		1. AIC RATING REFER TO SCHEDULE
VOLTS 277/480	**NEMA 1**	2. BALANCE ALL LOADS
PHASE 3 WIRE 4		3. LABEL ALL CIRCUITS

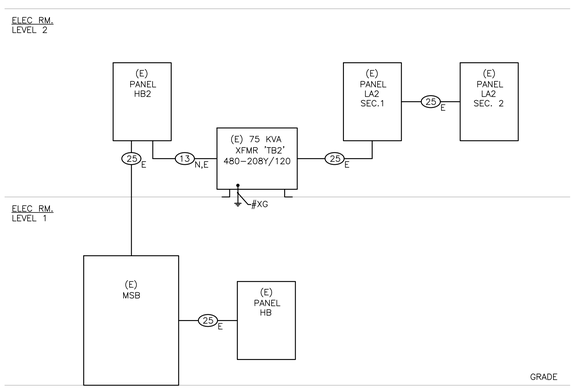
CIRCUIT DESCRIPTION	*	WATT LOAD	WIRE	BRKR	CIRCUIT NUMBER									BRKR	WIRE	WATT LOAD	*	CIRCUIT DESCRIPTION
EXISTING LOAD	2	1000	#12	20/1	1	1000			A	1000			2	20/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	3		1000		B		1000		4	20/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	5			1000	C			1000	6	20/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	7	1000			A	1000			8	20/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	9		1000		B		1000		10	20/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	11			1000	C			1000	12	20/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	13	1000			A	1000			14	20/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	15		1000		B		1000		16	20/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	17			1000	C			1000	18	20/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	19	1000			A	1000			20	20/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	21		1000		B		0		22			0		SPACE
EXISTING LOAD	2	1000	#12	20/1	23			1000	C			0	24			0		SPACE
EXISTING LOAD	2	1000	#12	20/1	25	1000			A	1000			26	20/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	27		1000		B		0		28			0		SPACE
VEHICLE GATE	**1**	**500**	**#12**	**20/2**	**29**			**500**	C			0	30			0		SPACE
	1	**500**	**#12**		**31**	**500**			A	0			32			0		SPACE
VEHICLE GATE	**1**	**500**	**#12**	**20/2**	**33**		**500**		B		0		34			0		SPACE
	1	**500**	**#12**		**35**			**500**	C			0	36			0		SPACE
SPACE		0			37	0			A	34625			38			34625	2	
SPACE		0			39		0		B		34625		40	125/3		34625	2	EXISTING LOAD
SPACE		0			41			0	C			34625	42			34625	2	

	CONNECTED		DEMAND
NON-CONTINUOUS *1	2000	100%	2000
EXISTING *2	128875	125%	161094
KITCHEN EQUIPMENT *3	0	65%	0
RECEPTACLE *4	0	NEC 220.44	0

TOTAL	LOAD (VA)	A PH (AMP)	B PH (AMP)	C PH (AMP)
	163094	203.18	194.16	191.4

ELECTRICAL LOAD ANALYSIS

LOAD			VA
EXISTING LOAD	1070025 X 125%	=	1337532
NEW LOAD	2000 X 100%	=	2000
	TOTAL	=	1357532
AT 480V, 3ø = 1612 AMPS			
EXISTING PANEL CAPACITY IS 2000 AMPS			



ALL GROUNDING AND BONDING AS PER NEC, ART 250

NOTE: ALL ELECTRICAL EQUIPMENT IS EXISTING TO REMAIN. SHOWN FOR REFERENCE ONLY.

1 ELECTRICAL RISER DIAGRAM
NO SCALE

3 PHASE COPPER FEEDER SCHEDULE

NUMBER	CONDUCTORS	COND	W/O NEUTRAL	NUMBER	CONDUCTORS	COND	W/O NEUTRAL
02	4#12, 1#12 GND	3/4"	3/4"	38	4#500 KCMIL, 1#3 GND	3 1/2"	3"
03	4#10, 1#10 GND	3/4"	3/4"	42	4#600 KCMIL, 1#2 GND	4"	3 1/2"
05	4#8, 1#10 GND	1"	3/4"	46	(2 SETS) 4#4/0, 1#2 GND	2 1/2"	2"
06	4#6, 1#8 GND	1 1/4"	1"	51	(2 SETS) 4#250 KCMIL, 1#2 GND	3"	2 1/2"
08	4#4, 1#8 GND	1 1/4"	1 1/4"	62	(2 SETS) 4#350 KCMIL, 1#1 GND	3"	3'
10	4#3, 1#8 GND	1 1/4"	1 1/4"	76	(2 SETS) 4#500 KCMIL, 1#1/0 GND	3 1/2"	3 1/2"
11	4#2, 1#6 GND	1 1/2"	1 1/4"	85	(3 SETS) 4#300 KCMIL, 1#1/0 GND	3 1/2"	3"
13	4#1, 1#6 GND	2"	1 1/2"	93	(3 SETS) 4#350 KCMIL, 1#2/0 GND	3"	3"
15	4#1/0, 1#6 GND	2"	1 1/2"	100	(3 SETS) 4#400 KCMIL, 1#2/0 GND	3 1/2"	3"
17	4#2/0, 1#6 GND	2"	2"	126	(3 SETS) 4#600 KCMIL, 1#3/0 GND	4"	3 1/2"
20	4#3/0, 1#6 GND	2-1/2"	2"	138	(3 SETS) 4#700 KCMIL, 1#3/0 GND	5"	4"
23	4#4/0, 1#4 GND	2-1/2"	2"	168	(4 SETS) 4#600 KCMIL, 1#4/0 GND	4"	3 1/2"
25	4#250 KCMIL, 1#4 GND	3"	2 1/2"	210	(5 SETS) 4#600 KCMIL, 1#250 KCMIL GND	4"	3 1/2"
28	4#300 KCMIL, 1#4 GND	3"	2 1/2"	20w	3#3/0, 1#6 GND	3"	3"
31	4#350 KCMIL, 1#3 GND	3"	3"	30w	3#250 KCMIL, 1#2 GND	3"	3"
33	4#400 KCMIL, 1#3 GND	3"	3"	40w	(2 SETS) 3#3/0, 1#6 GND	3"	3"

NOTES
1. WHERE THE FEEDER SYMBOL IS SHOWN WITH SUBSCRIPT
   MV = MEDIUM VOLTAGE COPPER CONDUCTOR
   N = NO NEUTRAL CONDUCTOR
   G = NO EQUIPMENT GROUNDING CONDUCTOR
   E = EXISTING CONDUCTORS
2. 5KV MEDIUM VOLTAGE CABLE CALCULATED IN SCHEDULE 40 PVC. ALL OTHERS IN RMC.
3. ALL CONDUIT CALCULATIONS BASED ON THHN COPPER CONDUCTORS.
4. AMPACITIES BASED ON 75°C TEMPERATURE RATING OF CONDUCTORS.

MLO AMPS 2000	**PANEL MSB**	NOTES
AMP BUS RATING: 2000		1. AIC RATING REFER TO SCHEDULE
VOLTS 277/480	**NEMA 1**	2. BALANCE ALL LOADS
PHASE 3 WIRE 4		3. LABEL ALL CIRCUITS

CIRCUIT DESCRIPTION	*	WATT LOAD	WIRE	BRKR	CIRCUIT NUMBER									BRKR	WIRE	WATT LOAD	*	CIRCUIT DESCRIPTION
SPACE		0			1	0			A	0			2			0		SPACE
SPACE		0			3		0		B		0		4			0		SPACE
SPACE		0			5			0	C			0	6			0		SPACE
SPACE		0			7	0			A	0			8			0		SPACE
	2	0			9		0		B		0		10			0		SPACE
	2	83100			11			83100	C			0	12			0		SPACE
EXISTING LOAD	2	83100		600/3	13	83100			A	0			14			0		SPACE
	2	83100			15		83100		B		0		16			0		SPACE
	2	0			17			0	C			0	18			0		SPACE
SPACE		0			19	0			A	0			20			0		SPACE
SPACE		0			21		0		B		0		22			0		SPACE
SPACE		0			23			0	C			0	24			0		SPACE
SPACE		0			25	0			A	0			26			0		SPACE
SPACE		0			27		0		B		0		28			0		SPACE
	2	0			29			0	C			0	30			0		SPACE
	2	83100			31	83100			A	0			32			0		SPACE
EXISTING LOAD	2	83100		600/3	33		83100		B		0		34			0		SPACE
	2	83100			35			83100	C			0	36			0		SPACE
	2	0			37	0			A	34625			38			34625	2	
	2	0			39		0		B		34625		40	250/3		34625	2	EXISTING LOAD
	2	55400			41			55400	C			34625	42			34625	2	
EXISTING LOAD	2	55400		400/3	43	55400			A	34625			44			34625	2	
	2	55400			45		55400		B		34625		46	250/3		34625	2	EXISTING LOAD
	2	0			47			0	C			34625	48			34625	2	

	CONNECTED		DEMAND
NON-CONTINUOUS *1	0	100%	0
EXISTING *2	872550	125%	1090688
KITCHEN EQUIPMENT *3	0	65%	0
RECEPTACLE *4	0	NEC 220.44	0

TOTAL	LOAD (VA)	A PH (AMP)	B PH (AMP)	C PH (AMP)
	######	1609.1	1616.3	1610

yesprep PUBLIC SCHOOLS

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09.18.20
F-16795
DIV 26,28

No.	Description	Date
	ISSUE FOR CONSTRUCTION	SEP 17, 20

YES PREP SCHOOL

SECURITY IMPROVEMENTS

WEST CAMPUS

Project Number	20044
Date	09/10/20
Drawn By	DKS
Checked By	BBB/SEH

MEP4-2

Scale: AS NOTED

\\H4-dc-01\h4\Engineers\Projects\2020\2020425 Yes Prep Security Upgrade\E\2020425 MEP41 West.dwg, 9/18/2020 1:17:37 PM, DakotaS

GENERAL NOTES

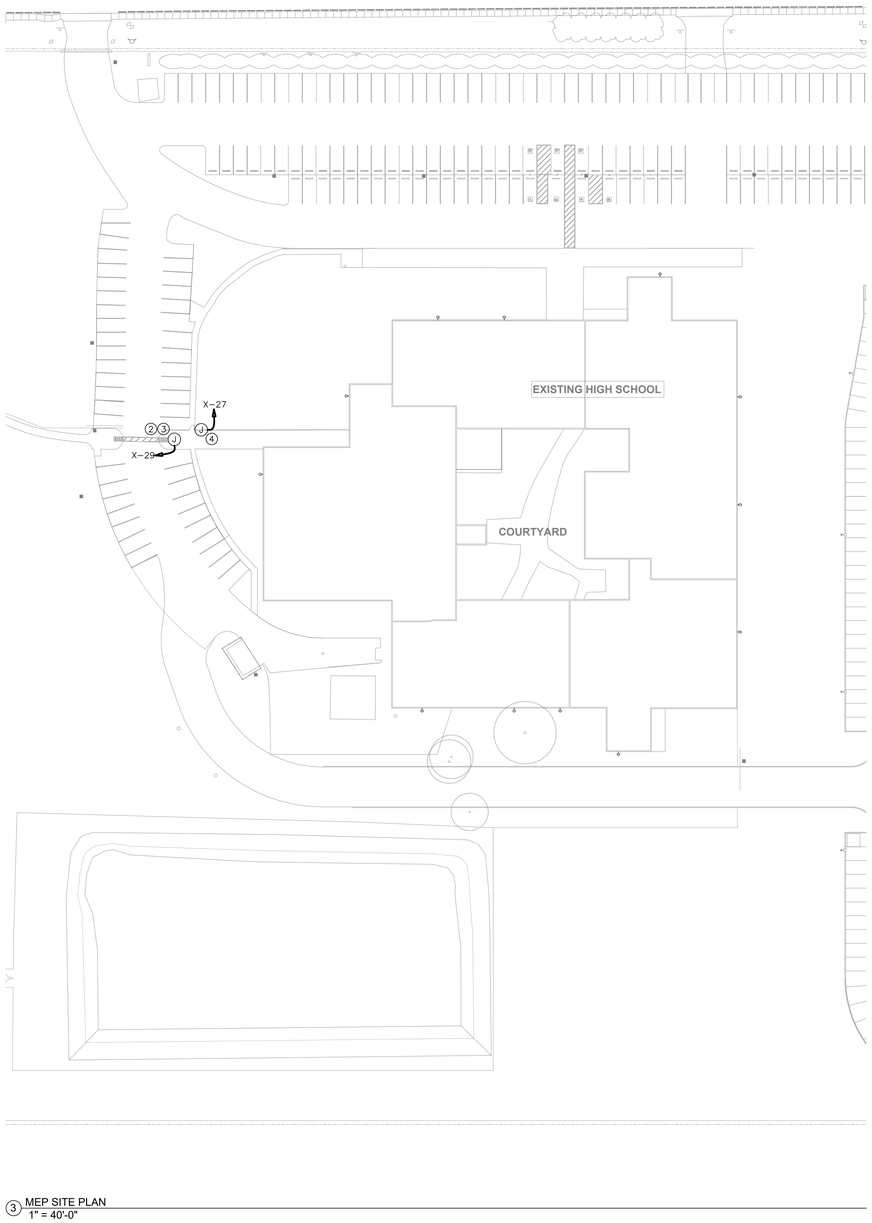
1. FIELD VERIFY ALL EXISTING CONDITIONS.
2. ALL RECEPTACLES SHALL BE 20 AMP UNLESS NOTED OTHERWISE. PLUG AS INDICATED IN SCHEDULE OR AS PROVIDED BY MANUFACTURER.
3. ROUTE ALL CONDUIT AND ACCESSORIES IN AREAS WITH NO CEILING ORGANIZED AND PARALLEL TO WALLS.
4. RELOCATE EXISTING LIGHT FIXTURES, LIGHTING CONTROLS AND EXIT SIGNS AS NECESSARY. COORDINATE EXACT LOCATION WITH ARCHITECT AND BUILDING OWNER.
5. CONNECT ALL EXIT AND EMERGENCY LIGHTS TO NEAREST LIGHTING CIRCUITS.
6. COORDINATE LOCATIONS OF ALL LIGHT SWITCHES WITH ARCHITECT.
7. ROUTE ALL LIGHTING, CONDUIT, AND ACCESSORIES IN AREAS WITH NO CEILING ORGANIZED AND PARALLEL TO WALLS.

FIRE SPRINKLER GENERAL NOTES

1. MODIFY FIRE SPRINKLERS AS NEEDED TO MAINTAIN COVERAGE.

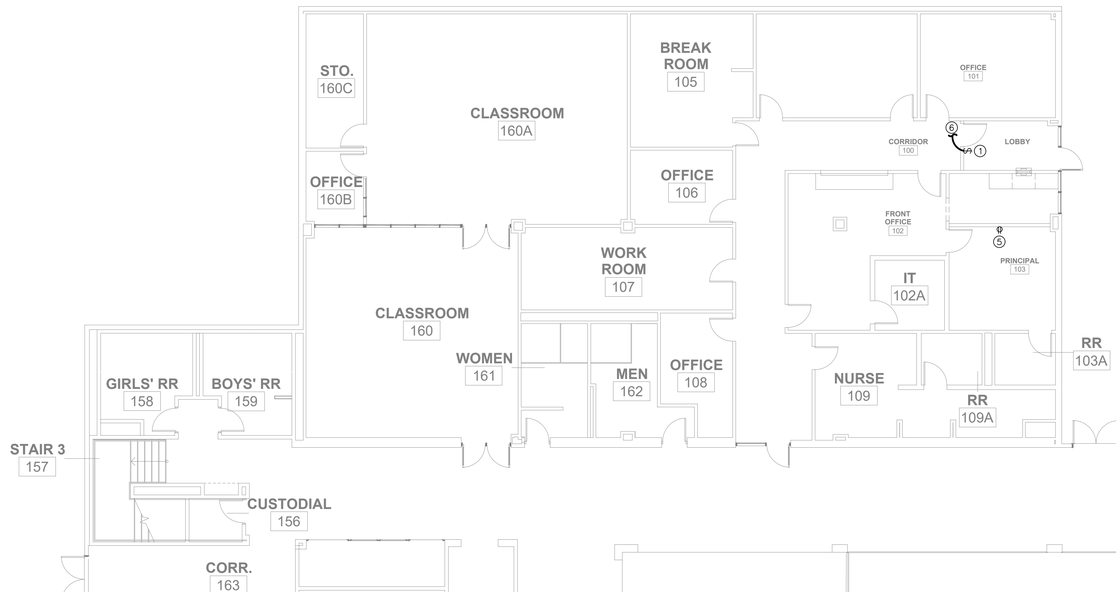
KEY NOTES

1. PROVIDE ELECTRIFIED DOOR CONNECTION. COORDINATE WITH HARDWARE AND SECURITY VENDOR. MAG LOCK TO BE TIED TO FIRE ALARM. PROVIDE MOTION DETECTOR, PUSH BUTTON RELEASE BUTTON, KEYPAD, ETC AS REQUIRED. PROVIDE J-BOX AND 3/4"C WITH PULL STRING STUBBED TO ACCESSIBLE CEILNG FOR CARD READER AND PUSH BUTTON RELEASE BUTTON.
2. PROVIDE 120V POWER FOR VEHICLE ENTRY GATE. COORDINATE EXACT REQUIREMENTS WITH OWNER AND SECURITY VENDOR.
3. PROVIDE (1) 1-1/2"C EMPTY CONDUIT WITH PULL STRING ADJACENT TO POWER. COORDINATE EXACT ROUTING AND REQUIREMENTS INSIDE BUILDING WITH BUILDING OWNER.
4. PROVIDE 120V POWER FOR PERSONNEL SWING GATE. COORDINATE EXACT ROUTING OF CONDUIT WITH OWNER. COORDINATE EXACT REQUIREMENTS WITH SECURITY VENDOR.
5. DEMO HUBBELL 15A RECEPTACLE. REUSE RECEPTACLE CIRCUIT TO POWER NEW SECURITY DOOR. COORDINATE EXACT RECEPTACLE AND REQUIREMENTS WITH OWNER.
6. CONNECT TO DEMO RECEPTACLE CIRCUIT. DO NOT EXCEED 16 AMPS ON ANY 20A/1P CIRCUIT.



3 MEP SITE PLAN
1" = 40'-0"

2 MEP 2ND FLOOR
1/8" = 1'-0"



1 MEP 1ST FLOOR
1/8" = 1'-0"

yesprep PUBLIC SCHOOLS

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STATE OF TEXAS
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STATE OF TEXAS
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LICENSED PROFESSIONAL ENGINEER
09.18.20
F-16795
DIV 26,28

No.	Description	Date
	ISSUE FOR CONSTRUCTION	SEP 17, 20

YES PREP SCHOOL

SECURITY IMPROVEMENTS

NORTH FOREST CAMPUS

Project Number	20044
Date	09/10/20
Drawn By	DKS
Checked By	BBB/SEH

MEP5-1

Scale: AS NOTED

MCB AMPS 100	**PANEL X**	NOTES
AMP BUS RATING: 225		1. AIC RATING REFER TO SCHEDULE
VOLTS 120/208	**NEMA 1**	2. BALANCE ALL LOADS
PHASE 3 WIRE 4		3. LABEL ALL CIRCUITS

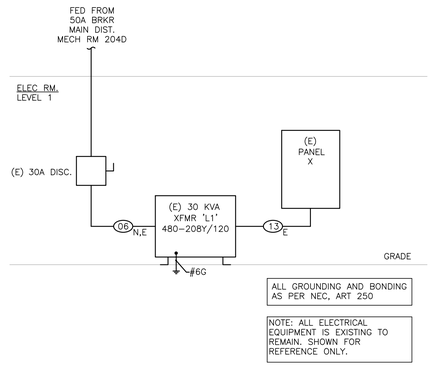
CIRCUIT DESCRIPTION	*	WATT LOAD	WIRE	BRKR	CIRCUIT NUMBER								BRKR	WIRE	WATT LOAD	*	CIRCUIT DESCRIPTION
EXISTING LOAD	2	500	#12	20/1	1	500			A	500			2	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	3		500		B		500		4	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	5			500	C			500	6	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	7	500			A	500			8	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	9		500		B		500		10	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	11			500	C			500	12	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	13	500			A	500			14	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	15		500		B		500		16	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	17			500	C			1200	18		#12	1200	2
EXISTING LOAD	2	500	#12	20/1	19	500			A	1200			20	20/3	#12	1200	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	21		500		B		1200		22		#12	1200	2
EXISTING LOAD	2	1200	#12	20/2	23			1200	C			0	24			0	SPACE
	2	1200	#12		25	1200			A	0			26			**0**	
PERSONNEL GATE	**1**	**500**	**#12**	**20/1**	**27**		**500**		B		0		28	**100/3**		**0**	**MAIN**
VEHICLE GATE	**1**	**500**	**#12**	**20/1**	**29**			**500**	C			0	30			**0**	

	CONNECTED		DEMAND
NON-CONTINUOUS *1	1000	100%	1000
EXISTING *2	15500	125%	19375
KITCHEN EQUIPMENT *3	0	65%	0
RECEPTACLE *4	0	NEC 220.44	0

TOTAL	LOAD (VA)	A PH (AMP)	B PH (AMP)	C PH (AMP)
	20375	61.458	53.125	55.21

ELECTRICAL LOAD ANALYSIS

LOAD			VA
EXISTING LOAD	15500 X 125%	=	19375
NEW LOAD	1000 X 100%	=	1000
TOTAL		=	20375
AT 208V, 3ø = 57 AMPS			
EXISTING PANEL CAPACITY IS 100 AMPS			



1 ELECTRICAL RISER DIAGRAM
NO SCALE

3 PHASE COPPER FEEDER SCHEDULE

NUMBER	CONDUCTORS	COND	W/O NEUTRAL	NUMBER	CONDUCTORS	COND	W/O NEUTRAL
02	4#12, 1#12 GND	3/4"	3/4"	38	4#500 KCMIL, 1#3 GND	3 1/2"	3"
03	4#10, 1#10 GND	3/4"	3/4"	42	4#600 KCMIL, 1#2 GND	4"	3 1/2"
05	4#8, 1#10 GND	1"	3/4"	46	(2 SETS) 4#4/0, 1#2 GND	2 1/2"	2"
06	4#6, 1#8 GND	1 1/4"	1"	51	(2 SETS) 4#250 KCMIL, 1#2 GND	3"	2 1/2"
08	4#4, 1#8 GND	1 1/4"	1 1/4"	62	(2 SETS) 4#350 KCMIL, 1#1 GND	3"	3'
10	4#3, 1#8 GND	1 1/4"	1 1/4"	76	(2 SETS) 4#500 KCMIL, 1#1/0 GND	3 1/2"	3 1/2"
11	4#2, 1#6 GND	1 1/2"	1 1/4"	85	(3 SETS) 4#300 KCMIL, 1#1/0 GND	3 1/2"	3"
13	4#1, 1#6 GND	2"	1 1/2"	93	(3 SETS) 4#350 KCMIL, 1#2/0 GND	3"	3"
15	4#1/0, 1#6 GND	2"	1 1/2"	100	(3 SETS) 4#400 KCMIL, 1#2/0 GND	3 1/2"	3"
17	4#2/0, 1#6 GND	2"	2"	126	(3 SETS) 4#600 KCMIL, 1#3/0 GND	4"	3 1/2"
20	4#3/0, 1#6 GND	2-1/2"	2"	138	(3 SETS) 4#700 KCMIL, 1#3/0 GND	5"	4"
23	4#4/0, 1#4 GND	2-1/2"	2"	168	(4 SETS) 4#600 KCMIL, 1#4/0 GND	4"	3 1/2"
25	4#250 KCMIL, 1#4 GND	3"	2 1/2"	210	(5 SETS) 4#600 KCMIL, 1#250 KCMIL GND	4"	3 1/2"
28	4#300 KCMIL, 1#4 GND	3"	2 1/2"	20w	3#3/0, 1#6 GND	3"	3"
31	4#350 KCMIL, 1#3 GND	3"	3"	30w	3#250 KCMIL, 1#2 GND	3"	3"
33	4#400 KCMIL, 1#3 GND	3"	3"	40w	(2 SETS) 3#3/0, 1#6 GND	3"	3"

NOTES
1. WHERE THE FEEDER SYMBOL IS SHOWN WITH SUBSCRIPT
   MV = MEDIUM VOLTAGE COPPER CONDUCTOR
   N = NO NEUTRAL CONDUCTOR
   G = NO EQUIPMENT GROUNDING CONDUCTOR
   E = EXISTING CONDUCTORS
2. 5KV MEDIUM VOLTAGE CABLE CALCULATED IN SCHEDULE 40 PVC. ALL OTHERS IN RMC.
3. ALL CONDUIT CALCULATIONS BASED ON THHN COPPER CONDUCTORS.
4. AMPACITIES BASED ON 75°C TEMPERATURE RATING OF CONDUCTORS.

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09.18.20
F-16795
DIV 26,28

No.	Description	Date
	ISSUE FOR CONSTRUCTION	SEP 17, 20

YES PREP SCHOOL

SECURITY IMPROVEMENTS

NORTH FOREST CAMPUS

Project Number	20044
Date	09/10/20
Drawn By	DKS
Checked By	BBB/SEH

MEP5-2

Scale: AS NOTED

GENERAL NOTES

1. FIELD VERIFY ALL EXISTING CONDITIONS.
2. ALL RECEPTACLES SHALL BE 20 AMP UNLESS NOTED OTHERWISE. PLUG AS INDICATED IN SCHEDULE OR AS PROVIDED BY MANUFACTURER.
3. ROUTE ALL CONDUIT AND ACCESSORIES IN AREAS WITH NO CEILING ORGANIZED AND PARALLEL TO WALLS.
4. RELOCATE EXISTING LIGHT FIXTURES, LIGHTING CONTROLS AND EXIT SIGNS AS NECESSARY. COORDINATE EXACT LOCATION WITH ARCHITECT AND BUILDING OWNER.
5. CONNECT ALL EXIT AND EMERGENCY LIGHTS TO NEAREST LIGHTING CIRCUITS.
6. COORDINATE LOCATIONS OF ALL LIGHT SWITCHES WITH ARCHITECT.
7. ROUTE ALL LIGHTING, CONDUIT, AND ACCESSORIES IN AREAS WITH NO CEILING ORGANIZED AND PARALLEL TO WALLS.

KEY NOTES

1. PROVIDE ELECTRIFIED DOOR CONNECTION. COORDINATE WITH HARDWARE AND SECURITY VENDOR. MAG LOCK TO BE TIED TO FIRE ALARM. PROVIDE MOTION DETECTOR, PUSH BUTTON RELEASE BUTTON, KEYPAD, ETC AS REQUIRED. PROVIDE J-BOX AND 3/4"C WITH PULL STRING STUBBED TO ACCESSIBLE CEILNG FOR CARD READER AND PUSH BUTTON RELEASE BUTTON.

FIRE SPRINKLER GENERAL NOTES

1. MODIFY FIRE SPRINKLERS AS NEEDED TO MAINTAIN COVERAGE.

MLO AMPS 100	**PANEL KP2**	NOTES
AMP BUS RATING: 125		1. A/C RATING REFER TO SCHEDULE
VOLTS 120/208	**NEMA 1**	2. BALANCE ALL LOADS
PHASE 3 WIRE 4		3. LABEL ALL CIRCUITS

CIRCUIT DESCRIPTION	*	WATT LOAD	WIRE	BRKR	CIRCUIT NUMBER									BRKR	WIRE	WATT LOAD	*	CIRCUIT DESCRIPTION
EXISTING LOAD	2	1800	#10	30/2	1	1800				A	500			2	20/1	#12	500	2	EXISTING LOAD
	2	1800	#10		3		1800			B		500		4	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	5			500		C			500	6	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	7	500				A	500			8	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	9		500			B		500		10	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	11			500		C			500	12	20/1	#12	500	2	EXISTING LOAD
SPARE		0	#12	20/1	13	0				A	500			14	20/1	#12	500	2	EXISTING LOAD
SPARE		0	#12	20/1	15		0			B		0		16	20/1	#12	0		SPARE
SPARE		0	#12	20/1	17			0		C			0	18	20/1	#12	0		SPARE
EXISTING LOAD	2	500	#12	20/1	19	500				A	0			20	20/1	#12	0		SPARE
EXISTING LOAD	2	500	#12	20/1	21		500			B		500		22	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	1200	#12	20/2	23			1200		C			500	24	20/1	#12	500	2	EXISTING LOAD
	2	1200	#12		25	1200				A	1200			26	20/2	#12	1200	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	27		500			B		1200		28		#12	1200	2	
SECURITY DOOR POWER	**1**	**500**	**#12**	**20/1**	**29**			**500**		C			500	30	20/1	#12	500	2	EXISTING LOAD

	CONNECTED		DEMAND
NON-CONTINUOUS *1	500	100%	500
EXISTING *2	16900	125%	21125
KITCHEN EQUIPMENT *3	0	65%	0
RECEPTACLE *4	0	NEC 220.44	0

TOTAL	LOAD (VA)	A PH (AMP)	B PH (AMP)	C PH (AMP)
	21625	69.792	62.5	47.92

ELECTRICAL LOAD ANALYSIS

LOAD			VA
EXISTING LOAD	16900 X 125%	=	21125
NEW LOAD	500 X 100%	=	500
	TOTAL	=	21625
AT 208V, 3ø = 61 AMPS			
EXISTING PANEL CAPACITY IS 100 AMPS			

3 PHASE COPPER FEEDER SCHEDULE

NUMBER	CONDUCTORS	COND	W/O NEUTRAL	NUMBER	CONDUCTORS	COND	W/O NEUTRAL
02	4#12, 1#12 GND	3/4"	3/4"	38	4#500 KCMIL, 1#3 GND	3 1/2"	3"
03	4#10, 1#10 GND	3/4"	3/4"	42	4#600 KCMIL, 1#2 GND	4"	3 1/2"
05	4#8, 1#10 GND	1"	3/4"	46	(2 SETS) 4#4/0, 1#2 GND	2 1/2"	2"
06	4#6, 1#8 GND	1 1/4"	1"	51	(2 SETS) 4#250 KCMIL, 1#2 GND	3"	2 1/2"
08	4#4, 1#8 GND	1 1/4"	1 1/4"	62	(2 SETS) 4#350 KCMIL, 1#1 GND	3"	3'
10	4#3, 1#8 GND	1 1/4"	1 1/4"	76	(2 SETS) 4#500 KCMIL, 1#1/0 GND	3 1/2"	3 1/2"
11	4#2, 1#6 GND	1 1/2"	1 1/4"	85	(3 SETS) 4#300 KCMIL, 1#1/0 GND	3 1/2"	3"
13	4#1, 1#6 GND	2"	1 1/2"	93	(3 SETS) 4#350 KCMIL, 1#2/0 GND	3"	3"
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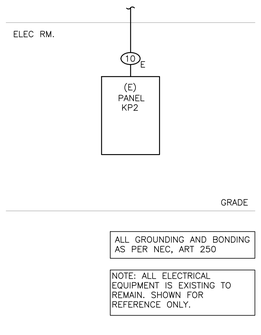
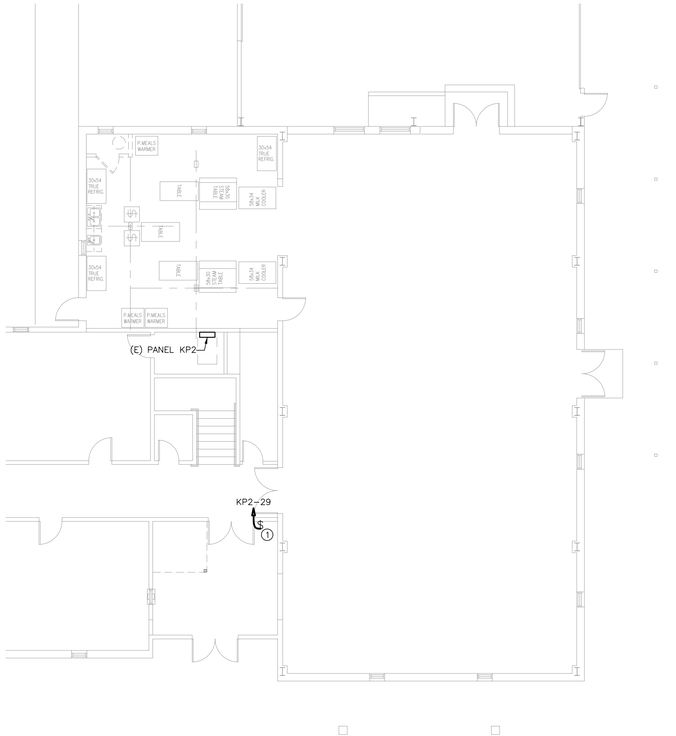
20	4#3/0, 1#6 GND	2-1/2"	2"	138	(3 SETS) 4#700 KCMIL, 1#3/0 GND	5"	4"
23	4#4/0, 1#4 GND	2-1/2"	2"	168	(4 SETS) 4#600 KCMIL, 1#4/0 GND	4"	3 1/2"
25	4#250 KCMIL, 1#4 GND	3"	2 1/2"	210	(5 SETS) 4#600 KCMIL, 1#250 KCMIL GND	4"	3 1/2"
28	4#300 KCMIL, 1#4 GND	3"	2 1/2"	20_w	3#3/0, 1#6 GND	3"	3"
31	4#350 KCMIL, 1#3 GND	3"	3"	30_w	3#250 KCMIL, 1#2 GND	3"	3"
33	4#400 KCMIL, 1#3 GND	3"	3"	40_w	(2 SETS) 3#3/0, 1#6 GND	3"	3"

NOTES
1. WHERE THE FEEDER SYMBOL IS SHOWN WITH SUBSCRIPT
   MV = MEDIUM VOLTAGE COPPER CONDUCTOR
   N = NO NEUTRAL CONDUCTOR
   G = NO EQUIPMENT GROUNDING CONDUCTOR
   E = EXISTING CONDUCTORS
2. 5KV MEDIUM VOLTAGE CABLE CALCULATED IN SCHEDULE 40 PVC. ALL OTHERS IN RMC.
3. ALL CONDUIT CALCULATIONS BASED ON THHN COPPER CONDUCTORS.
4. AMPACITIES BASED ON 75°C TEMPERATURE RATING OF CONDUCTORS.



2 ELECTRICAL RISER DIAGRAM
NO SCALE



1 MEP 1ST FLOOR
1/8" = 1'-0"

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09.18.20
F-16795
DIV 26,28

No.	Description	Date
	ISSUE FOR CONSTRUCTION	SEP 17, 20

YES PREP SCHOOL

SECURITY IMPROVEMENTS

NORTH CENTRAL CAMPUS

Project Number	20044
Date	09/10/20
Drawn By	DKS
Checked By	BBB/SEH

MEP6-1

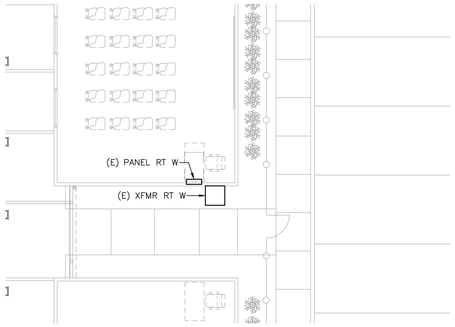
Scale	AS NOTED

POWER GENERAL NOTES

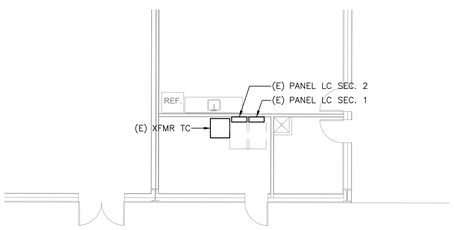
1. FIELD VERIFY ALL EXISTING CONDITIONS.
2. ALL RECEPTACLES SHALL BE 20 AMP UNLESS NOTED OTHERWISE. PLUG AS INDICATED IN SCHEDULE OR AS PROVIDED BY MANUFACTURER.
3. ROUTE ALL CONDUIT AND ACCESSORIES IN AREAS WITH NO CEILING ORGANIZED AND PARALLEL TO WALLS.

KEY NOTES

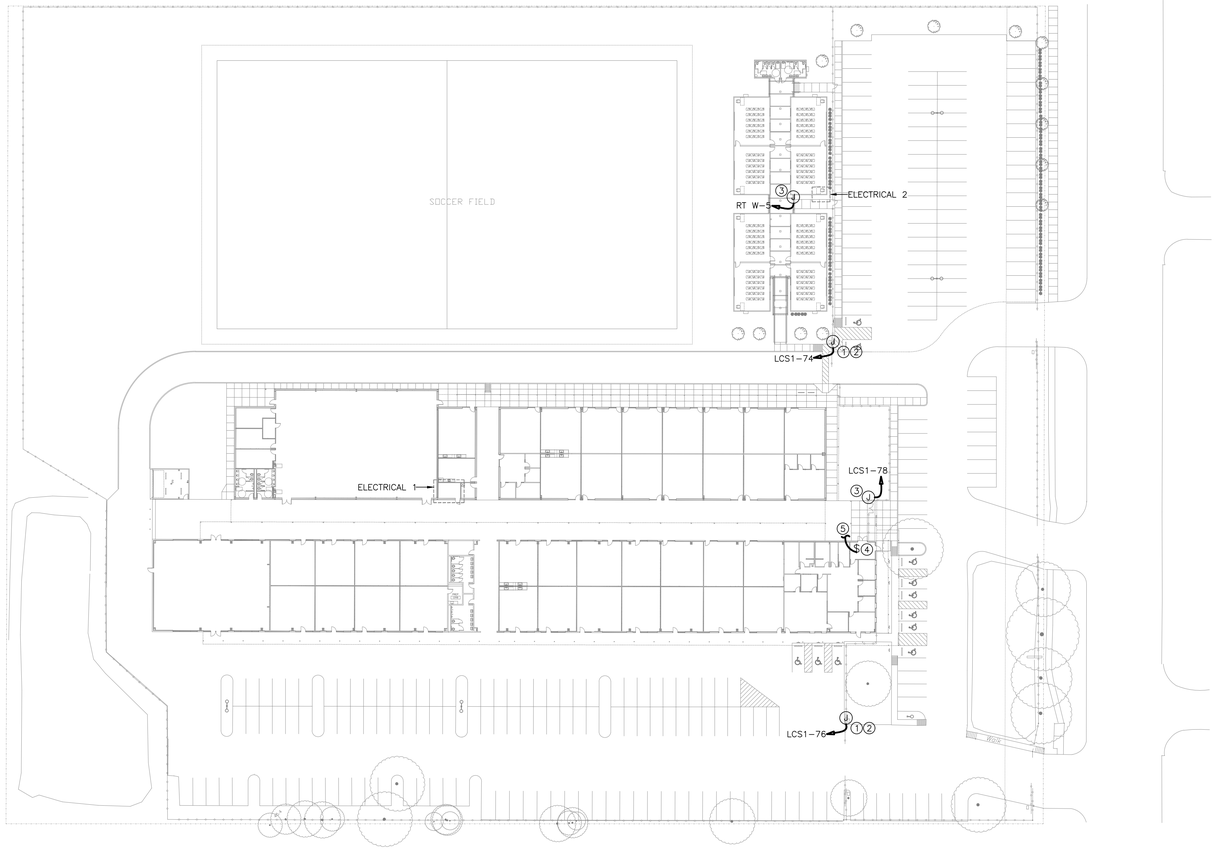
1. PROVIDE 120V POWER FOR VEHICLE ENTRY GATE. COORDINATE EXACT REQUIREMENTS WITH OWNER AND SECURITY VENDOR.
2. PROVIDE (1) 1-1/2"C EMPTY CONDUIT WITH PULL STRING ADJACENT TO POWER. COORDINATE EXACT ROUTING AND REQUIREMENTS INSIDE BUILDING WITH BUILDING OWNER.
3. PROVIDE 120V POWER FOR PERSONNEL SWING GATE. COORDINATE EXACT ROUTING OF CONDUIT WITH OWNER. COORDINATE EXACT REQUIREMENTS WITH SECURITY VENDOR.
4. PROVIDE ELECTRIFIED DOOR CONNECTION. COORDINATE WITH HARDWARE AND SECURITY VENDOR. MAG LOCK TO BE TIED TO FIRE ALARM. PROVIDE MOTION DETECTOR, PUSH BUTTON RELEASE BUTTON, KEYPAD, ETC AS REQUIRED. PROVIDE J-BOX AND 3/4"C WITH PULL STRING STUBBED TO ACCESSIBLE CEILNG FOR CARD READER AND PUSH BUTTON RELEASE BUTTON.
5. CONFIRM EXACT LOCATION OF LOBBY DOOR WITH BUILDING OWNER. CIRCUIT TO PANEL LC SEC. 1. PROVIDE AS NECESSARY FOR A COMPLETE AND OPERATING SYSTEM.



3 ELEC. RM. 2
1/8" = 1'-0"



2 ELEC. RM. 1
1/8" = 1'-0"



1 MEP SITE PLAN
1" = 40'-0"

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DIV 26,28

No.	Description	Date
	ISSUE FOR CONSTRUCTION	SEP 17, 20

YES PREP SCHOOL

SECURITY IMPROVEMENTS

NORTHSIDE CAMPUS

Project Number	20044
Date	09/10/20
Drawn By	DKS
Checked By	BBB/SEH

MEP7-1

Scale	AS NOTED

1 PHASE COPPER FEEDER SCHEDULE

NUMBER	CONDUCTORS	COND	W/O NEUTRAL	NUMBER	CONDUCTORS	COND	W/O NEUTRAL
02	3#12, 1#12 GND	3/4"	3/4"	38	3#500 KCMIL, 1#3 GND	3 1/2"	3"
03	3#10, 1#10 GND	3/4"	3/4"	42	3#600 KCMIL, 1#2 GND	4"	3 1/2"
05	3#8, 1#10 GND	1"	3/4"	46	(2 SETS) 3#4/0, 1#2 GND	2 1/2"	2"
06	3#6, 1#8 GND	1 1/4"	1"	51	(2 SETS) 3#250 KCMIL, 1#2 GND	3"	2 1/2"
08	3#4, 1#8 GND	1 1/4"	1 1/4"	62	(2 SETS) 3#350 KCMIL, 1#1 GND	3"	3"
10	3#3, 1#8 GND	1 1/4"	1 1/4"	76	(2 SETS) 3#500 KCMIL, 1#1/0 GND	3 1/2"	3 1/2"
11	3#2, 1#6 GND	1 1/2"	1 1/4"	85	(3 SETS) 3#300 KCMIL, 1#1/0 GND	3 1/2"	3"
13	3#1, 1#6 GND	2"	1 1/2"	93	(3 SETS) 3#350 KCMIL, 1#2/0 GND	3"	3"
15	3#1/0, 1#6 GND	2"	1 1/2"	100	(3 SETS) 3#400 KCMIL, 1#2/0 GND	3 1/2"	3"
17	3#2/0, 1#6 GND	2"	2"	126	(3 SETS) 3#600 KCMIL, 1#3/0 GND	4"	3 1/2"
20	3#3/0, 1#6 GND	2 1/2"	2"	138	(3 SETS) 3#700 KCMIL, 1#3/0 GND	5"	4"
23	3#4/0, 1#4 GND	2 1/2"	2"	168	(4 SETS) 3#600 KCMIL, 1#4/0 GND	4"	3 1/2"
25	3#250 KCMIL, 1#4 GND	3"	2 1/2"	210	(5 SETS) 3#600 KCMIL, 1#250 KCMIL GND	4"	3 1/2"
28	3#300 KCMIL, 1#4 GND	3"	2 1/2"	20w	3#3/0, 1#6 GND	3"	3"
31	3#350 KCMIL, 1#3 GND	3"	3"	30w	3#250 KCMIL, 1#2 GND	3"	3"
33	3#400 KCMIL, 1#3 GND	3"	3"	40w	(2 SETS) 3#3/0, 1#6 GND	3"	3"

NOTES
1. WHERE THE FEEDER SYMBOL IS SHOWN WITH SUBSCRIPT
   MV = MEDIUM VOLTAGE COPPER CONDUCTOR
   N = NO NEUTRAL CONDUCTOR
   G = NO EQUIPMENT GROUNDING CONDUCTOR
   E = EXISTING CONDUCTORS
2. 5KV MEDIUM VOLTAGE CABLE CALCULATED IN SCHEDULE 40 PVC. ALL OTHERS IN RMC.
3. ALL CONDUIT CALCULATIONS BASED ON THHN COPPER CONDUCTORS.
4. AMPACITIES BASED ON 75°C TEMPERATURE RATING OF CONDUCTORS.

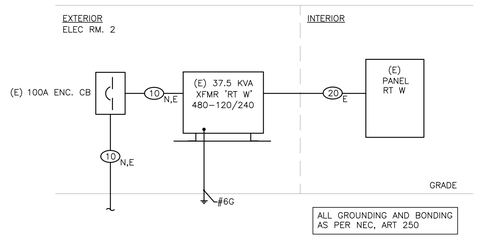
3 PHASE COPPER FEEDER SCHEDULE

NUMBER	CONDUCTORS	COND	W/O NEUTRAL	NUMBER	CONDUCTORS	COND	W/O NEUTRAL
02	4#12, 1#12 GND	3/4"	3/4"	38	4#500 KCMIL, 1#3 GND	3 1/2"	3"
03	4#10, 1#10 GND	3/4"	3/4"	42	4#600 KCMIL, 1#2 GND	4"	3 1/2"
05	4#8, 1#10 GND	1"	3/4"	46	(2 SETS) 4#4/0, 1#2 GND	2 1/2"	2"
06	4#6, 1#8 GND	1 1/4"	1"	51	(2 SETS) 4#250 KCMIL, 1#2 GND	3"	2 1/2"
08	4#4, 1#8 GND	1 1/4"	1 1/4"	62	(2 SETS) 4#350 KCMIL, 1#1 GND	3"	3'
10	4#3, 1#8 GND	1 1/4"	1 1/4"	76	(2 SETS) 4#500 KCMIL, 1#1/0 GND	3 1/2"	3 1/2"
11	4#2, 1#6 GND	1 1/2"	1 1/4"	85	(3 SETS) 4#300 KCMIL, 1#1/0 GND	3 1/2"	3"
13	4#1, 1#6 GND	2"	1 1/2"	93	(3 SETS) 4#350 KCMIL, 1#2/0 GND	3"	3"
15	4#1/0, 1#6 GND	2"	1 1/2"	100	(3 SETS) 4#400 KCMIL, 1#2/0 GND	3 1/2"	3"
17	4#2/0, 1#6 GND	2"	2"	126	(3 SETS) 4#600 KCMIL, 1#3/0 GND	4"	3 1/2"
20	4#3/0, 1#6 GND	2-1/2"	2"	138	(3 SETS) 4#700 KCMIL, 1#3/0 GND	5"	4"
23	4#4/0, 1#4 GND	2-1/2"	2"	168	(4 SETS) 4#600 KCMIL, 1#4/0 GND	4"	3 1/2"
25	4#250 KCMIL, 1#4 GND	3"	2 1/2"	210	(5 SETS) 4#600 KCMIL, 1#250 KCMIL GND	4"	3 1/2"
28	4#300 KCMIL, 1#4 GND	3"	2 1/2"	20w	3#3/0, 1#6 GND	3"	3"
31	4#350 KCMIL, 1#3 GND	3"	3"	30w	3#250 KCMIL, 1#2 GND	3"	3"
33	4#400 KCMIL, 1#3 GND	3"	3"	40w	(2 SETS) 3#3/0, 1#6 GND	3"	3"

NOTES
1. WHERE THE FEEDER SYMBOL IS SHOWN WITH SUBSCRIPT
   MV = MEDIUM VOLTAGE COPPER CONDUCTOR
   N = NO NEUTRAL CONDUCTOR
   G = NO EQUIPMENT GROUNDING CONDUCTOR
   E = EXISTING CONDUCTORS
2. 5KV MEDIUM VOLTAGE CABLE CALCULATED IN SCHEDULE 40 PVC. ALL OTHERS IN RMC.
3. ALL CONDUIT CALCULATIONS BASED ON THHN COPPER CONDUCTORS.
4. AMPACITIES BASED ON 75°C TEMPERATURE RATING OF CONDUCTORS.

ELECTRICAL LOAD ANALYSIS

LOAD			VA
EXISTING LOAD	20500 X 125%	=	25625
NEW LOAD	500 X 100%	=	500
TOTAL		=	26125
AT 240V, 1ø = 108 AMPS			
EXISTING PANEL CAPACITY IS 200 AMPS			



ALL GROUNDING AND BONDING AS PER NEC, ART 250

2 ELECTRICAL RISER DIAGRAM - ELEC. RM. 2
NO SCALE

NOTE: ALL ELECTRICAL EQUIPMENT IS EXISTING TO REMAIN. SHOWN FOR REFERENCE ONLY.

MCB AMPS 200	**PANEL RT W**	NOTES
AMP BUS RATING: 200	**NEMA 1**	1. AIC RATING REFER TO SCHEDULE
VOLTS 120/240		2. BALANCE ALL LOADS
PHASE 1 WIRE 3		3. LABEL ALL CIRCUITS

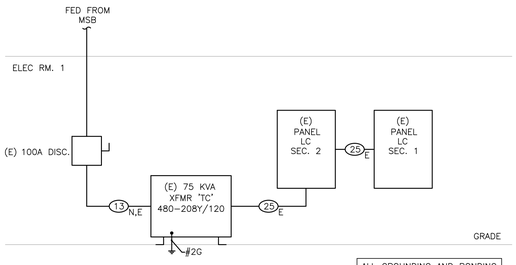
CIRCUIT DESCRIPTION	*	WATT LOAD	WIRE	BRKR	CIRCUIT NUMBER							BRKR	WIRE	WATT LOAD	*	CIRCUIT DESCRIPTION
EXISTING LOAD	2	500	#12	20/1	1	500		A		500	2	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	3		500	C	500		4	20/1	#12	500	2	EXISTING LOAD
PERSONNEL GATE	**1**	**500**	**#12**	**20/1**	**5**	**500**		A		500	6	20/1	#12	500	2	EXISTING LOAD
SPACE		0			7		0	C	1800		8	30/2	#10	1800	2	EXISTING LOAD
SPACE		0			9	0		A		1800	10		#10	1800	2	
SPACE		0			11		0	C	0		12			0		SPACE
SPACE		0			13	0		A		0	14			0		SPACE
SPACE		0			15		0	C	0		16			0		SPACE
SPACE		0			17	0		A		0	18			0		SPACE
SPACE		0			19		0	C	0		20			0		SPACE
EXISTING LOAD	2	3600	#4	60/2	21	3600		A		3600	22	60/2	#4	3600	2	EXISTING LOAD
	2	3600	#4		23		3600	C	3600		24		#4	3600	2	
SPACE		0			25	0		A		0	26			0		SPACE
SPACE		0			27		0	C	0		28			0		SPACE
SPACE		0			29	0		A		0	30			0		SPACE

	CONNECTED		DEMAND
NON-CONTINUOUS *1	500	100%	500
EXISTING *2	20500	125%	25625
KITCHEN EQUIPMENT *3	0	65%	0
RECEPTACLE *4	0	NEC 220.44	0

TOTAL	LOAD (VA)	A PH (AMP)		C PH (AMP)
	26125	113.54		104.2

ELECTRICAL LOAD ANALYSIS

LOAD			VA
EXISTING LOAD	48700 X 125%	=	60875
NEW LOAD	1500 X 100%	=	1500
TOTAL		=	62375
AT 208V, 3ø = 173 AMPS			
EXISTING PANEL CAPACITY IS 225 AMPS			



ALL GROUNDING AND BONDING AS PER NEC, ART 250

1 ELECTRICAL RISER DIAGRAM - ELEC. RM. 1
NO SCALE

MLO AMPS 225	**PANEL LC SEC. 1**	NOTES
AMP BUS RATING: 225	**NEMA 1**	1. AIC RATING REFER TO SCHEDULE
VOLTS 120/208		2. BALANCE ALL LOADS
PHASE 3 WIRE 4		3. LABEL ALL CIRCUITS

CIRCUIT DESCRIPTION	*	WATT LOAD	WIRE	BRKR	CIRCUIT NUMBER								BRKR	WIRE	WATT LOAD	*	CIRCUIT DESCRIPTION
EXISTING LOAD	2	500	#12	20/1	43	500			A	500			44	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	45		500		B		500		46	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	47			500	C			500	48	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	49	500			A	500			50	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	1200	#12	20/2	51		1200		B		500		52	20/1	#12	500	2 EXISTING LOAD
	2	1200	#12		53			1200	C			500	54	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	55	500			A	500			56	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	57		500		B		500		58	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	1800	#10	30/1	59			1800	C			500	60	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	1800	#10	30/1	61	1800			A	500			62	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	63		500		B		500		64	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	65			500	C			3000	66	50/2	#6	3000	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	67	500			A	3000			68		#6	3000	2
EXISTING LOAD	2	500	#12	20/1	69		500		B		500		70	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	71			500	C			500	72	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	73	500			A	**500**			**74**	**20/1**	**#10**	**500**	**1 VEHICLE GATE**
EXISTING LOAD	2	500	#12	20/1	75		500		B		**500**		**76**	**20/1**	**#10**	**500**	**1 VEHICLE GATE**
SPACE		0			77			0	C			**500**	**78**	**20/1**	**#10**	**500**	**1 PERSONNEL GATE**
SPACE		0			79	0			A	0			80			0	SPACE
SPACE		0			81		0		B		0		82			0	SPACE
SPACE		0			83			0	C			0	84			0	SPACE

	CONNECTED		DEMAND
NON-CONTINUOUS *1	1500	100%	1500
EXISTING *2	25000	125%	31250
KITCHEN EQUIPMENT *3	0	65%	0
RECEPTACLE *4	0	NEC 220.44	0

TOTAL	LOAD (VA)	A PH (AMP)	B PH (AMP)	C PH (AMP)
	32750	101.04	68.75	103.1

MCB AMPS 225 W/ FTL TO PANEL LC SEC. 1	**PANEL LC SEC. 2**	NOTES
AMP BUS RATING: 225	**NEMA 1**	1. AIC RATING REFER TO SCHEDULE
VOLTS 120/208		2. BALANCE ALL LOADS
PHASE 3 WIRE 4		3. LABEL ALL CIRCUITS

CIRCUIT DESCRIPTION	*	WATT LOAD	WIRE	BRKR	CIRCUIT NUMBER								BRKR	WIRE	WATT LOAD	*	CIRCUIT DESCRIPTION
EXISTING LOAD	2	500	#12	20/1	1	500			A	500			2	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	3		500		B		500		4	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	5			500	C			500	6	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	7	500			A	500			8	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	9		500		B		500		10	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	11			500	C			500	12	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	13	500			A	500			14	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	15		500		B		500		16	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	17			500	C			500	18	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	19	500			A	500			20	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	21		500		B		500		22	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	23			500	C			500	24	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	25	500			A	0			26			0	SPACE
EXISTING LOAD	2	500	#12	20/1	27		500		B		500		28	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	29			500	C			500	30	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	31	500			A	500			32	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	33		500		B		2400		34	40/1	#8	2400	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	35			500	C			500	36	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	37	500			A	500			38	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	1800	#10	30/1	39		1800		B		500		40	20/1	#12	500	2 EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	41			500	C			500	42	20/1	#12	500	2 EXISTING LOAD

	CONNECTED		DEMAND
NON-CONTINUOUS *1	0	100%	0
EXISTING *2	23700	125%	29625
KITCHEN EQUIPMENT *3	0	65%	0
RECEPTACLE *4	0	NEC 220.44	0

TOTAL	LOAD (VA)	A PH (AMP)	B PH (AMP)	C PH (AMP)
	62375	168.75	175	176

yesprep PUBLIC SCHOOLS

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H4 Engineers
H4Engineers.com
25215 Oakhurst Dr
Spring, Texas 77386
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STATE OF TEXAS — SHERIE E. HENSLEY — 91827 — LICENSED PROFESSIONAL ENGINEER
09.18.20
F-16795
DIV 21,22,23

STATE OF TEXAS — BRAD B. BOYER — 68704 — LICENSED PROFESSIONAL ENGINEER
09.18.20
F-16795
DIV 26,28

No.	Description	Date
	ISSUE FOR CONSTRUCTION	SEP 17, 20

YES PREP SCHOOL

SECURITY IMPROVEMENTS

NORTHSIDE CAMPUS

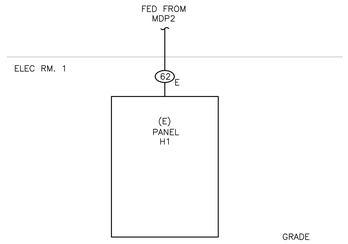
Project Number	20044
Date	09/10/20
Drawn By	DKS
Checked By	BBB/SEH

MEP7-2

Scale: AS NOTED

ELECTRICAL LOAD ANALYSIS

LOAD			VA
EXISTING LOAD	247568 X 125%	=	309460
NEW LOAD	500 X 100%	=	500
	TOTAL :	=	309960
AT 480V, 3ø = 373 AMPS			
EXISTING PANEL CAPACITY IS 600 AMPS			



③ ELECTRICAL RISER DIAGRAM
NO SCALE

3 PHASE COPPER FEEDER SCHEDULE

NUMBER	CONDUCTORS	COND	W/O NEUTRAL	NUMBER	CONDUCTORS	COND	W/O NEUTRAL
02	4#12, 1#12 GND	3/4"	3/4"	38	4#500 KCMIL, 1#3 GND	3 1/2"	3"
03	4#10, 1#10 GND	3/4"	3/4"	42	4#600 KCMIL, 1#2 GND	4"	3 1/2"
05	4#8, 1#10 GND	1"	3/4"	46	(2 SETS) 4#4/0, 1#2 GND	2 1/2"	2"
06	4#6, 1#8 GND	1 1/4"	1"	51	(2 SETS) 4#250 KCMIL, 1#2 GND	3"	2 1/2"
08	4#4, 1#8 GND	1 1/4"	1 1/4"	62	(2 SETS) 4#350 KCMIL, 1#1 GND	3"	3"
10	4#3, 1#8 GND	1 1/4"	1 1/4"	76	(2 SETS) 4#500 KCMIL, 1#1/0 GND	3 1/2"	3 1/2"
11	4#2, 1#6 GND	1 1/2"	1 1/4"	85	(3 SETS) 4#300 KCMIL, 1#1/0 GND	3 1/2"	3"
13	4#1, 1#6 GND	2"	1 1/2"	93	(3 SETS) 4#350 KCMIL, 1#2/0 GND	3"	3"
15	4#1/0, 1#6 GND	2"	1 1/2"	100	(3 SETS) 4#400 KCMIL, 1#2/0 GND	3 1/2"	3"
17	4#2/0, 1#6 GND	2"	2"	126	(3 SETS) 4#600 KCMIL, 1#3/0 GND	4"	3 1/2"
20	4#3/0, 1#6 GND	2-1/2"	2"	138	(3 SETS) 4#700 KCMIL, 1#3/0 GND	5"	4"
23	4#4/0, 1#4 GND	2-1/2"	2"	168	(4 SETS) 4#600 KCMIL, 1#4/0 GND	4"	3 1/2"
25	4#250 KCMIL, 1#4 GND	3"	2 1/2"	210	(5 SETS) 4#600 KCMIL, 1#250 KCMIL GND	4"	3 1/2"
28	4#300 KCMIL, 1#4 GND	3"	2 1/2"	20w	3#3/0, 1#6 GND	3"	3"
31	4#350 KCMIL, 1#3 GND	3"	3"	30w	3#250 KCMIL, 1#2 GND	3"	3"
33	4#400 KCMIL, 1#3 GND	3"	3"	40w	(2 SETS) 3#3/0, 1#6 GND	3"	3"

NOTES
1. WHERE THE FEEDER SYMBOL IS SHOWN WITH SUBSCRIPT
   MV = MEDIUM VOLTAGE COPPER CONDUCTOR
   N = NO NEUTRAL CONDUCTOR
   G = NO EQUIPMENT GROUNDING CONDUCTOR
   E = EXISTING CONDUCTORS
2. 5KV MEDIUM VOLTAGE CABLE CALCULATED IN SCHEDULE 40 PVC. ALL OTHERS IN RMC.
3. ALL CONDUIT CALCULATIONS BASED ON THHN COPPER CONDUCTORS.
4. AMPACITIES BASED ON 75°C TEMPERATURE RATING OF CONDUCTORS.

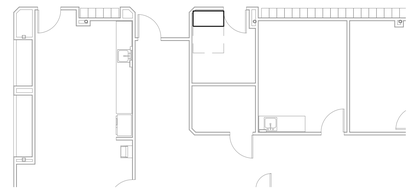
POWER GENERAL NOTES

1. FIELD VERIFY ALL EXISTING CONDITIONS.
2. ALL RECEPTACLES SHALL BE 20 AMP UNLESS NOTED OTHERWISE. PLUG AS INDICATED IN SCHEDULE OR AS PROVIDED BY MANUFACTURER.
3. ROUTE ALL CONDUIT AND ACCESSORIES IN AREAS WITH NO CEILING ORGANIZED AND PARALLEL TO WALLS.

KEY NOTES

1. ENTRY GATE. PROVIDE 1KVA TRANSFORMER 480/120V FOR GATE OPENER MOUNTED ON POST WITH DISCONNECT. PROVIDE 120/24V TRANSFORMER FOR ACCESS CONTROL DEVICE. COORDINATE EXACT REQUIREMENTS WITH GATE VENDOR.
2. PROVIDE (1) 1-1/2"C EMPTY CONDUIT WITH PULL STRING ADJACENT TO POWER. COORDINATE EXACT ROUTING AND REQUIREMENTS INSIDE BUILDING WITH BUILDING OWNER.

(E) PANEL H1



② ELEC. RM . 1
1/8" = 1'-0"

① MEP SITE PLAN
1" = 40'-0"

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DIV 26,28

No.	Description	Date
	ISSUE FOR CONSTRUCTION	SEP 17, 20

YES PREP SCHOOL

SECURITY IMPROVEMENTS

HOBBY CAMPUS

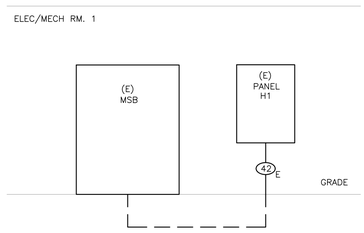
Project Number	20044
Date	09/10/20
Drawn By	DKS
Checked By	BBB/SEH

MEP8-1

Scale: AS NOTED

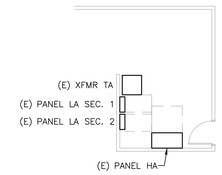
ELECTRICAL LOAD ANALYSIS			
LOAD			VA
EXISTING LOAD	755893 X 125%	=	944866
NEW LOAD	500 X 100%	=	500
	TOTAL	=	945366
AT 480V, 3ø = 1138 AMPS			
EXISTING PANEL CAPACITY IS 1600 AMPS			

ALL GROUNDING AND BONDING AS PER NEC, ART 250



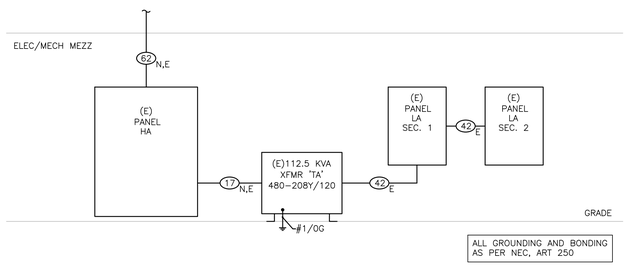
5 ELEC/MECH RM. 1 - ELECTRICAL RISER DIAGRAM
NO SCALE

NOTE: ALL ELECTRICAL EQUIPMENT IS EXISTING TO REMAIN. SHOWN FOR REFERENCE ONLY.



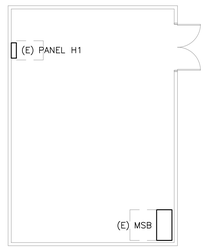
3 ELEC/MECH MEZZANINE
1/8" = 1'-0"

ELECTRICAL LOAD ANALYSIS			
LOAD			VA
EXISTING LOAD	288728 X 125%	=	360910
NEW LOAD	1000 X 100%	=	1000
	TOTAL	=	361910
AT 480V, 3ø = 435 AMPS			
EXISTING PANEL CAPACITY IS 600 AMPS			



ALL GROUNDING AND BONDING AS PER NEC, ART 250

4 ELEC/MECH MEZZANINE - ELECTRICAL RISER DIAGRAM
NO SCALE



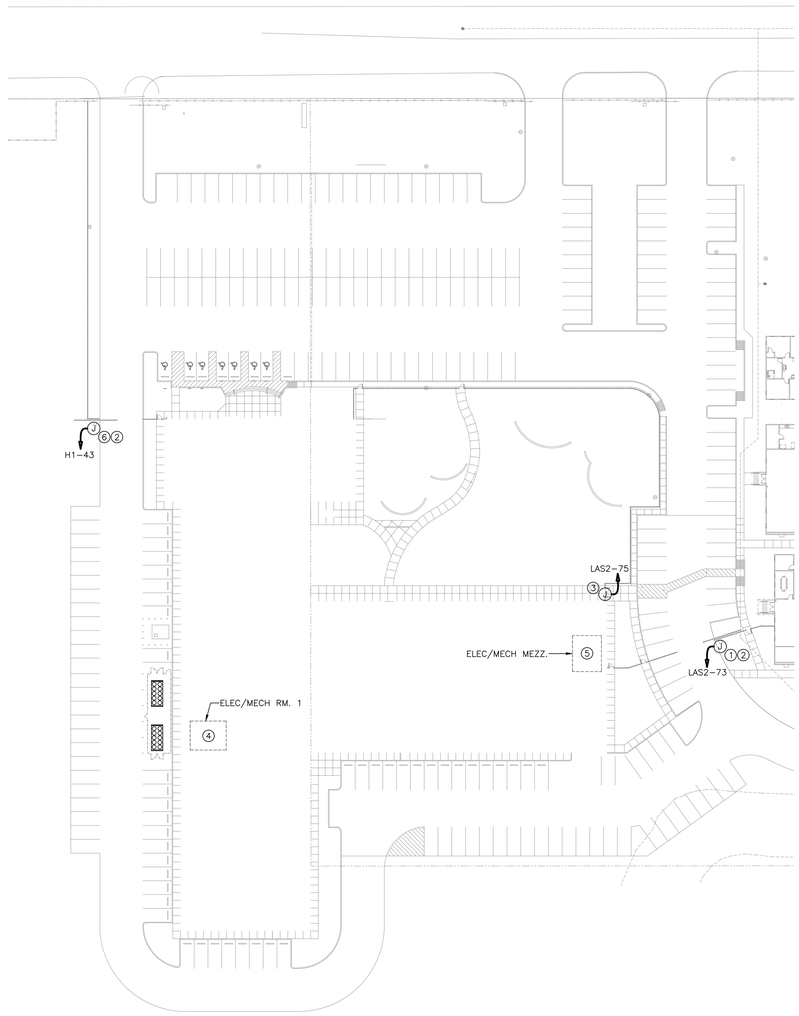
2 ELEC/MECH RM. 1
1/8" = 1'-0"

POWER GENERAL NOTES

1. FIELD VERIFY ALL EXISTING CONDITIONS.
2. ALL RECEPTACLES SHALL BE 20 AMP UNLESS NOTED OTHERWISE. PLUG AS INDICATED IN SCHEDULE OR AS PROVIDED BY MANUFACTURER.
3. ROUTE ALL CONDUIT AND ACCESSORIES IN AREAS WITH NO CEILING ORGANIZED AND PARALLEL TO WALLS.

KEY NOTES

1. PROVIDE 120V POWER FOR VEHICLE ENTRY GATE. COORDINATE EXACT REQUIREMENTS WITH OWNER AND SECURITY VENDOR.
2. PROVIDE (1) 1-1/2"C EMPTY CONDUIT WITH PULL STRING ADJACENT TO POWER.
3. PROVIDE 120V POWER FOR PERSONNEL SWING GATE. COORDINATE EXACT ROUTING OF CONDUIT WITH OWNER. COORDINATE EXACT REQUIREMENTS WITH SECURITY VENDOR.
4. FIELD VERIFY EXACT LOCATION OF MECH/ELEC RM ON LEVEL 1.
5. FIELD VERIFY EXACT LOCATION OF MECH/ELEC MEZZANINE.
6. ENTRY GATE. PROVIDE 1KVA TRANSFORMER 480/120V FOR GATE OPENER MOUNTED ON POST WITH DISCONNECT. PROVIDE 120/24V TRANSFORMER FOR ACCESS CONTROL DEVICE. COORDINATE EXACT REQUIREMENTS WITH GATE VENDOR.



1 MEP SITE PLAN
1" = 40'-0"

yes prep PUBLIC SCHOOLS

2007 Ea architects

H4 Engineers

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DIV 21,22,23

STATE OF TEXAS
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LICENSED PROFESSIONAL ENGINEER
09.18.20
F-16795
DIV 26,28

No.	Description	Date
	ISSUE FOR CONSTRUCTION	SEP 17, 20

YES PREP SCHOOL

SECURITY IMPROVEMENTS

SOUTHWEST CAMPUS

Project Number	20044
Date	09/10/20
Drawn By	DKS
Checked By	BBB/SEH

MEP9-1

Scale: AS NOTED

PANEL H1

NEMA 1

MLO AMPS 300	NOTES
AMP BUS RATING: 400	1. AIC RATING REFER TO SCHEDULE
VOLTS 277/480	2. BALANCE ALL LOADS
PHASE 3 WIRE 4	3. LABEL ALL CIRCUITS

CIRCUIT DESCRIPTION	*	WATT LOAD	WIRE	BRKR	CIRCUIT NUMBER									BRKR	WIRE	WATT LOAD	*	CIRCUIT DESCRIPTION
EXISTING LOAD	2	1000	#12	20/1	1	1000			A	1000			2	20/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	3		1000		B		1000		4	25/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	5			1000	C			1000	6	20/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	7	1000			A	1000			8	25/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	9		1000		B		6233		10	45/1	#6	6232.5	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	11			1000	C			1000	12	25/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	13	1000			A	1000			14	25/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	15		1000		B		1000		16	25/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	17			1000	C			1000	18	25/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	19	1000			A	1000			20	25/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	21		1000		B		1000		22	25/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	15/1	23			1000	C			1000	24	25/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	25	1000			A	1000			26	25/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	1000	#10	30/1	27		1000		B		1000		28	25/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	4155	#10	30/1	29			4155	C			1000	30	15/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	31	1000			A	4155			32	30/1	#10	4155	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	33		1000		B		9695		34	70/1	#4	9695	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	35			1000	C			9695	36	70/1	#4	9695	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	37	1000			A	0			38	20/1	#12	0		SPARE
EXISTING LOAD	2	1000	#12	20/1	39		1000		B		6233		40	45/1	#6	6232.5	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	25/1	41			1000	C			9695	42	70/1	#4	9695	2	EXISTING LOAD
VEHICLE GATE	**1**	**500**	**#12**	**20/1**	**43**	**500**			A	8310			44	60/1	#4	8310	2	EXISTING LOAD
SPACE		0			45		0		B		0		46			0		SPACE
SPACE		0			47			0	C			0	48			0		SPACE
EXISTING LOAD	2	1000	#12	20/1	49	1000			A	0			50			0		SPACE
SPACE		0			51		0		B		0		52			0		SPACE
SPACE		0			53			0	C			0	54			0		SPACE

	CONNECTED		DEMAND
NON-CONTINUOUS *1	500	100%	500
EXISTING *2	93170	125%	116463
KITCHEN EQUIPMENT *3	0	65%	0
RECEPTACLE *4	0	NEC 220.44	0

TOTAL	LOAD (VA)	A PH (AMP)	B PH (AMP)	C PH (AMP)
	116963	116.72	149.64	155.9

PANEL MSB

NEMA 1

MCB AMPS 1600	NOTES
AMP BUS RATING: 1600	1. AIC RATING REFER TO SCHEDULE
VOLTS 277/480	2. BALANCE ALL LOADS
PHASE 3 WIRE 4	3. LABEL ALL CIRCUITS

CIRCUIT DESCRIPTION	*	WATT LOAD	WIRE	BRKR	CIRCUIT NUMBER									BRKR	WIRE	WATT LOAD	*	CIRCUIT DESCRIPTION
	2	13850			1	13850			A	9695			2			9695	2	
EXISTING LOAD	2	13850		100/3	3		13850		B		9695		4	70/3		9695	2	EXISTING LOAD
	2	13850			5			13850	C			9695	6			9695	2	
		32331.3			7	32331			A	0			8			0		NO SPACE
SUBFEED PANEL H1		41450		300/3	9		41450		B		0		10			0		NO SPACE
		43181.3			11			43181	C			0	12			0		NO SPACE
		0			13	0			A	0			14			0		NO SPACE
	2	55400			15		55400		B		41550		16			41550	2	
EXISTING LOAD	2	55400		400/3	17			55400	C			41550	18	300/3		41550	2	EXISTING LOAD
	2	55400			19	55400			A	41550			20			41550	2	
	2	0			21		0		B		0		22			0	2	
	2	41550			23			41550	C			41550	24			41550	2	
EXISTING LOAD	2	41550		300/3	25	41550			A	41550			26	300/3		41550	2	EXISTING LOAD
	2	41550			27		41550		B		41550		28			41550	2	
	2	0			29			0	C			0	30			0	2	
SPACE		0			31	0			A	17313			32			17312.5	2	
SPACE		0			33		0		B		17313		34	125/3		17312.5	2	EXISTING LOAD
SPACE		0			35			0	C			17313	36			17312.5	2	
SPACE		0			37	0			A	0			38			0		SPACE
SPACE		0			39		0		B		0		40			0		SPACE
SPACE		0			41			0	C			0	42			0		SPACE

	CONNECTED		DEMAND
NON-CONTINUOUS *1	0	100%	0
EXISTING *2	662723	125%	828403
KITCHEN EQUIPMENT *3	0	65%	0
RECEPTACLE *4	0	NEC 220.44	0

TOTAL	LOAD (VA)	A PH (AMP)	B PH (AMP)	C PH (AMP)
	945366	1113.6	1146.5	1153

PANEL LA SEC. 2

NEMA 1

MLO AMPS 400	NOTES
AMP BUS RATING: 400	1. AIC RATING REFER TO SCHEDULE
VOLTS 120/208	2. BALANCE ALL LOADS
PHASE 3 WIRE 4	3. LABEL ALL CIRCUITS

CIRCUIT DESCRIPTION	*	WATT LOAD	WIRE	BRKR	CIRCUIT NUMBER									BRKR	WIRE	WATT LOAD	*	CIRCUIT DESCRIPTION
EXISTING LOAD	2	500	#12	20/1	43	500			A	500			44	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	45		500		B		500		46	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	47			500	C			500	48	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	49	500			A	500			50	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	51		500		B		500		52	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	53			500	C			500	54	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	55	500			A	1200			56	20/2	#12	1200	2	EXISTING LOAD
EXISTING LOAD	2	1200	#12	20/2	57		1200		B		1200		58		#12	1200	2	
	2	1200	#12		59			1200	C			1800	60	30/2	#10	1800	2	EXISTING LOAD
EXISTING LOAD	2	1800	#10	30/2	61	1800			A	1800			62		#10	1800	2	
	2	1800	#10		63		1800		B		1200		64	20/2	#12	1200	2	EXISTING LOAD
EXISTING LOAD	2	1200	#12	20/2	65			1200	C			1200	66		#12	1200	2	
	2	1200	#12		67	1200			A	1200			68	20/2	#12	1200	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	15/1	69		500		B		1200		70		#12	1200	2	
EXISTING LOAD	2	500	#12	15/1	71			500	C			500	72	15/1	#12	500	2	EXISTING LOAD
VEHICLE GATE	**1**	**500**	**#12**	**20/1**	**73**	**500**			A	0			74			0		SPACE
PERSONNEL GATE	**1**	**500**	**#12**	**20/1**	**75**		**500**		B		0		76			0		SPACE
SPACE		0			77			0	C			0	78			0		SPACE
SPACE		0			79	0			A	0			80			0		SPACE
SPACE		0			81		0		B		0		82			0		SPACE
SPACE		0			83			0	C			0	84			0		SPACE

	CONNECTED		DEMAND
NON-CONTINUOUS *1	1000	100%	1000
EXISTING *2	27200	125%	34000
KITCHEN EQUIPMENT *3	0	65%	0
RECEPTACLE *4	0	NEC 220.44	0

TOTAL	LOAD (VA)	A PH (AMP)	B PH (AMP)	C PH (AMP)
	35000	105.21	98.958	87.5

PANEL LA SEC. 1

NEMA 1

MCB AMPS 400 W/ FTL TO PANEL LA SEC. 2	NOTES
AMP BUS RATING: 400	1. AIC RATING REFER TO SCHEDULE
VOLTS 120/208	2. BALANCE ALL LOADS
PHASE 3 WIRE 4	3. LABEL ALL CIRCUITS

CIRCUIT DESCRIPTION	*	WATT LOAD	WIRE	BRKR	CIRCUIT NUMBER									BRKR	WIRE	WATT LOAD	*	CIRCUIT DESCRIPTION
EXISTING LOAD	2	500	#12	20/1	1	500			A	500			2	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	3		500		B		500		4	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	5			500	C			500	6	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	7	500			A	500			8	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	9		500		B		500		10	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	11			500	C			500	12	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	13	500			A	500			14	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	15		500		B		500		16	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	17			500	C			500	18	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	19	500			A	500			20	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	21		500		B		500		22	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	23			500	C			1800	24	30/1	#10	1800	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	25	500			A	500			26	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	27		500		B		500		28	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	29			500	C			500	30	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	31	500			A	500			32	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	33		500		B		500		34	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	35			500	C			500	36	15/1	#12	500	2	EXISTING LOAD
	2	5400	#2		37	5400			A	5400			38		#2	5400	2	
EXISTING LOAD	2	5400	#2	90/3	39		5400		B		5400		40	90/3	#2	5400	2	EXISTING LOAD
	2	5400	#2		41			5400	C			5400	42		#2	5400	2	

	CONNECTED		DEMAND
NON-CONTINUOUS *1	0	100%	0
EXISTING *2	51700	125%	64625
KITCHEN EQUIPMENT *3	0	65%	0
RECEPTACLE *4	0	NEC 220.44	0

TOTAL	LOAD (VA)	A PH (AMP)	B PH (AMP)	C PH (AMP)
	99625	280.21	273.96	276

3 PHASE COPPER FEEDER SCHEDULE

NUMBER	CONDUCTORS	COND	W/O NEUTRAL	NUMBER	CONDUCTORS	COND	W/O NEUTRAL
02	4#12, 1#12 GND	3/4"	3/4"	38	4#500 KCMIL, 1#3 GND	3 1/2"	3"
03	4#10, 1#10 GND	3/4"	3/4"	42	4#600 KCMIL, 1#2 GND	4"	3 1/2"
05	4#8, 1#10 GND	1"	3/4"	46	(2 SETS) 4#4/0, 1#2 GND	2 1/2"	2"
06	4#6, 1#8 GND	1 1/4"	1"	51	(2 SETS) 4#250 KCMIL, 1#2 GND	3"	2 1/2"
08	4#4, 1#8 GND	1 1/4"	1 1/4"	62	(2 SETS) 4#350 KCMIL, 1#1 GND	3"	3"
10	4#3, 1#8 GND	1 1/4"	1 1/4"	76	(2 SETS) 4#500 KCMIL, 1#1/0 GND	3 1/2"	3 1/2"
11	4#2, 1#6 GND	1 1/2"	1 1/4"	85	(3 SETS) 4#300 KCMIL, 1#1/0 GND	3 1/2"	3"
13	4#1, 1#6 GND	2"	1 1/2"	93	(3 SETS) 4#350 KCMIL, 1#2/0 GND	3"	3"
15	4#1/0, 1#6 GND	2"	1 1/2"	100	(3 SETS) 4#400 KCMIL, 1#2/0 GND	3 1/2"	3"
17	4#2/0, 1#6 GND	2"	2"	126	(3 SETS) 4#600 KCMIL, 1#3/0 GND	4"	3 1/2"
20	4#3/0, 1#6 GND	2-1/2"	2"	138	(3 SETS) 4#700 KCMIL, 1#3/0 GND	5"	4"
23	4#4/0, 1#4 GND	2-1/2"	2"	168	(4 SETS) 4#600 KCMIL, 1#4/0 GND	4"	3 1/2"
25	4#250 KCMIL, 1#4 GND	3"	2 1/2"	210	(5 SETS) 4#600 KCMIL, 1#250 KCMIL GND	4"	3 1/2"
28	4#300 KCMIL, 1#4 GND	3"	2 1/2"	20_W	3#3/0, 1#6 GND	3"	3"
31	4#350 KCMIL, 1#3 GND	3"	3"	30_W	3#250 KCMIL, 1#2 GND	3"	3"
33	4#400 KCMIL, 1#3 GND	3"	3"	40_W	(2 SETS) 3#3/0, 1#6 GND	3"	3"

NOTES
1. WHERE THE FEEDER SYMBOL IS SHOWN WITH SUBSCRIPT
   MV = MEDIUM VOLTAGE COPPER CONDUCTOR
   N = NO NEUTRAL CONDUCTOR
   G = NO EQUIPMENT GROUNDING CONDUCTOR
   E = EXISTING CONDUCTORS
2. 5KV MEDIUM VOLTAGE CABLE CALCULATED IN SCHEDULE 40 PVC. ALL OTHERS IN RMC.
3. ALL CONDUIT CALCULATIONS BASED ON THHN COPPER CONDUCTORS.
4. AMPACITIES BASED ON 75°C TEMPERATURE RATING OF CONDUCTORS.

PANEL HA

NEMA 1

MCB AMPS 600	NOTES
AMP BUS RATING: 600	1. AIC RATING REFER TO SCHEDULE
VOLTS 480	2. BALANCE ALL LOADS
PHASE 3 WIRE 3	3. LABEL ALL CIRCUITS

CIRCUIT DESCRIPTION	*	WATT LOAD	WIRE	BRKR	CIRCUIT NUMBER									BRKR	WIRE	WATT LOAD	*	CIRCUIT DESCRIPTION
SPACE		0			1	0			A	2770			2		#12	2770	2	
SPACE		0			3		0		B		2770		4	20/3	#12	2770	2	EXISTING LOAD
SPACE		0			5			0	C			2770	6		#12	2770	2	
	2	17312.5	#1		7	17313			A	2770			8		#12	2770	2	
EXISTING LOAD	2	17312.5	#1	125/3	9		17313		B		2770		10	20/3	#12	2770	2	EXISTING LOAD
	2	17312.5	#1		11			17313	C			2770	12		#12	2770	2	
	2	2077.5	#12		13	2078			A	2770			14		#12	2770	2	
EXISTING LOAD	2	2077.5	#12	15/3	15		2078		B		2770		16	20/3	#12	2770	2	EXISTING LOAD
	2	2077.5	#12		17			2078	C			2770	18		#12	2770	2	
	2	2077.5	#12		19	2078			A	8310			20		#4	8310	2	
EXISTING LOAD	2	2077.5	#12	15/3	21		2078		B		8310		22	60/3	#4	8310	2	EXISTING LOAD
	2	2077.5	#12		23			2078	C			8310	24		#4	8310	2	
	2	2770	#12		25	2770			A	8310			26		#4	8310	2	
EXISTING LOAD	2	2770	#12	20/3	27		2770		B		8310		28	60/3	#4	8310	2	EXISTING LOAD
	2	2770	#12		29			2770	C			8310	30		#4	8310	2	
		0			31	0			A	33625			32		#1	33625		
		0			33		0		B		32875		34	125/3	#1	32875		XFMR FEED TA
MAIN		0			35			0	C			33125	36		#1	33125		
		0		600/3	37	0			A	20775			38		#1/0	20775	2	
		0			39		0		B		20775		40	150/3	#1/0	20775	2	EXISTING LOAD
		0			41			0	C			20775	42		#1/0	20775	2	

	CONNECTED		DEMAND
NON-CONTINUOUS *1	0	100%	0
EXISTING *2	209828	125%	262284
KITCHEN EQUIPMENT *3	0	65%	0
RECEPTACLE *4	0	NEC 220.44	0

TOTAL	LOAD (VA)	A PH (AMP)	B PH (AMP)	C PH (AMP)
	361909	437.01	434.31	435.2

yesprep PUBLIC SCHOOLS

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09.18.20
F-16795
DIV 26,28

No.	Description	Date
	ISSUE FOR CONSTRUCTION	SEP 17, 20

YES PREP SCHOOL

SECURITY IMPROVEMENTS

SOUTHWEST CAMPUS

Project Number	20044
Date	09/10/20
Drawn By	DKS
Checked By	BBB/SEH

MEP9-2

Scale: AS NOTED

GENERAL NOTES

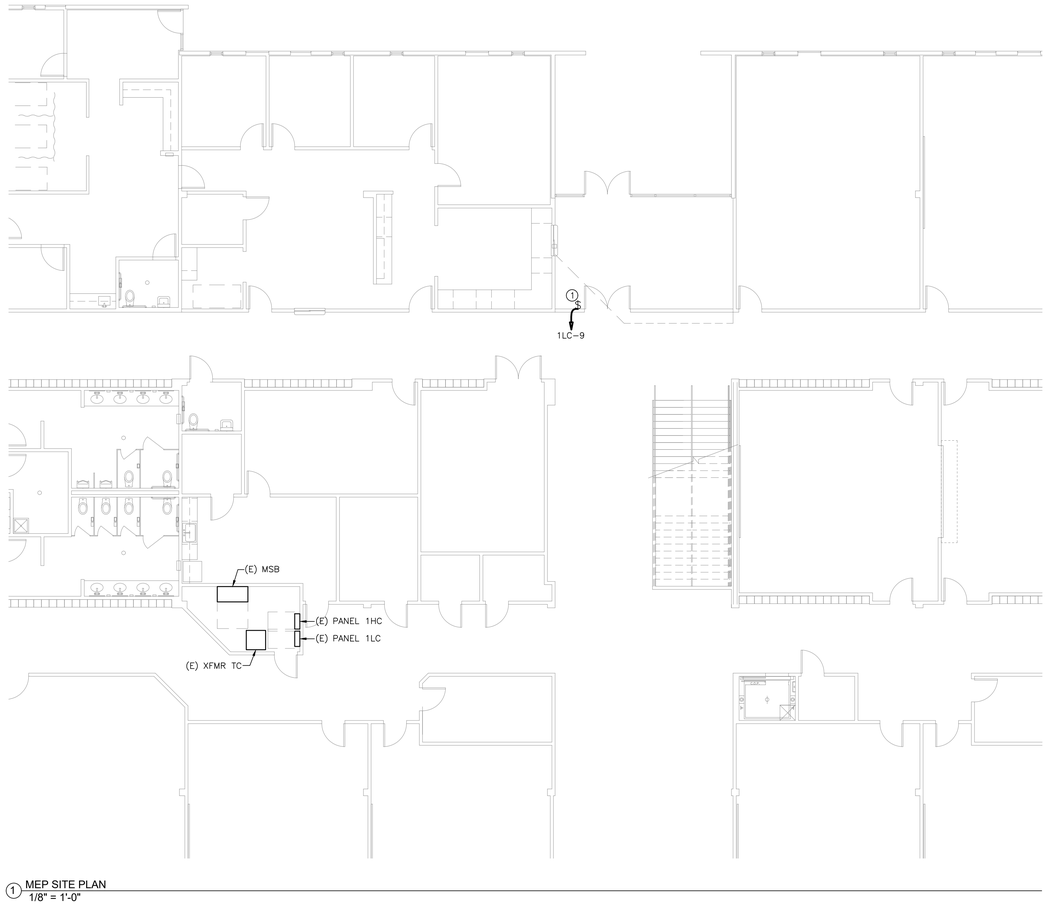
1. FIELD VERIFY ALL EXISTING CONDITIONS.
2. ALL RECEPTACLES SHALL BE 20 AMP UNLESS NOTED OTHERWISE. PLUG AS INDICATED IN SCHEDULE OR AS PROVIDED BY MANUFACTURER.
3. ROUTE ALL CONDUIT AND ACCESSORIES IN AREAS WITH NO CEILING ORGANIZED AND PARALLEL TO WALLS.
4. RELOCATE EXISTING LIGHT FIXTURES, LIGHTING CONTROLS AND EXIT SIGNS AS NECESSARY. COORDINATE EXACT LOCATION WITH ARCHITECT AND BUILDING OWNER.
5. CONNECT ALL EXIT AND EMERGENCY LIGHTS TO NEAREST LIGHTING CIRCUITS.
6. COORDINATE LOCATIONS OF ALL LIGHT SWITCHES WITH ARCHITECT.
7. ROUTE ALL LIGHTING, CONDUIT, AND ACCESSORIES IN AREAS WITH NO CEILING ORGANIZED AND PARALLEL TO WALLS.

FIRE SPRINKLER GENERAL NOTES

1. MODIFY FIRE SPRINKLERS AS NEEDED TO MAINTAIN COVERAGE.

KEY NOTES

1. PROVIDE ELECTRIFIED DOOR CONNECTION. COORDINATE WITH HARDWARE AND SECURITY VENDOR. MAG LOCK TO BE TIED TO FIRE ALARM. PROVIDE MOTION DETECTOR, PUSH BUTTON RELEASE BUTTON, KEYPAD, ETC AS REQUIRED. PROVIDE J-BOX AND 3/4"C WITH PULL STRING STUBBED TO ACCESSIBLE CEILING FOR CARD READER AND PUSH BUTTON RELEASE BUTTON.



1 MEP SITE PLAN
1/8" = 1'-0"

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No.	Description	Date
	ISSUE FOR CONSTRUCTION	SEP 17, 20

YES PREP SCHOOL

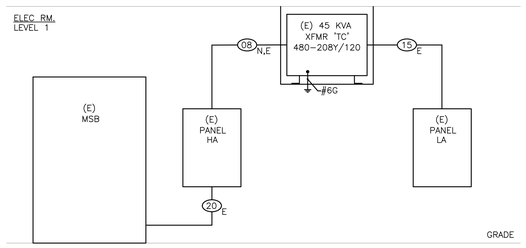
SECURITY IMPROVEMENTS

GULFTON CAMPUS

Project Number	20044
Date	09/10/20
Drawn By	DKS
Checked By	BBB/SEH

MEP10-1

Scale	AS NOTED



ALL GROUNDING AND BONDING AS PER NEC, ART 250

NOTE: ALL ELECTRICAL EQUIPMENT IS EXISTING TO REMAIN. SHOWN FOR REFERENCE ONLY.

1 ELECTRICAL RISER DIAGRAM
NO SCALE

ELECTRICAL LOAD ANALYSIS

LOAD			VA
EXISTING LOAD	1144638 X 125%	=	1430797
NEW LOAD	500 X 100%	=	500
	TOTAL	=	1431297
AT 480V, 3ø = 1721 AMPS			
EXISTING PANEL CAPACITY IS 2000 AMPS			

3 PHASE COPPER FEEDER SCHEDULE

NUMBER	CONDUCTORS	COND	W/O NEUTRAL	NUMBER	CONDUCTORS	COND	W/O NEUTRAL
02	4#12, 1#12 GND	3/4"	3/4"	38	4#500 KCMIL, 1#3 GND	3 1/2"	3"
03	4#10, 1#10 GND	3/4"	3/4"	42	4#600 KCMIL, 1#2 GND	4"	3 1/2"
05	4#8, 1#10 GND	1"	3/4"	46	(2 SETS) 4#4/0, 1#2 GND	2 1/2"	2"
06	4#6, 1#8 GND	1 1/4"	1"	51	(2 SETS) 4#250 KCMIL, 1#2 GND	3"	2 1/2"
08	4#4, 1#8 GND	1 1/4"	1 1/4"	62	(2 SETS) 4#350 KCMIL, 1#1 GND	3"	3"
10	4#3, 1#8 GND	1 1/4"	1 1/4"	76	(2 SETS) 4#500 KCMIL, 1#1/0 GND	3 1/2"	3 1/2"
11	4#2, 1#6 GND	1 1/2"	1 1/4"	85	(3 SETS) 4#300 KCMIL, 1#1/0 GND	3 1/2"	3"
13	4#1, 1#6 GND	2"	1 1/2"	93	(3 SETS) 4#350 KCMIL, 1#2/0 GND	3"	3"
15	4#1/0, 1#6 GND	2"	1 1/2"	100	(3 SETS) 4#400 KCMIL, 1#2/0 GND	3 1/2"	3"
17	4#2/0, 1#6 GND	2"	2"	126	(3 SETS) 4#600 KCMIL, 1#3/0 GND	4"	3 1/2"
20	4#3/0, 1#6 GND	2-1/2"	2"	138	(3 SETS) 4#700 KCMIL, 1#3/0 GND	5"	4"
23	4#4/0, 1#4 GND	2-1/2"	2"	168	(4 SETS) 4#600 KCMIL, 1#4/0 GND	4"	3 1/2"
25	4#250 KCMIL, 1#4 GND	3"	2 1/2"	210	(5 SETS) 4#600 KCMIL, 1#250 KCMIL GND	4"	3 1/2"
28	4#300 KCMIL, 1#4 GND	3"	2 1/2"	20_W	3#3/0, 1#6 GND	3"	3"
31	4#350 KCMIL, 1#3 GND	3"	3"	30_W	3#250 KCMIL, 1#2 GND	3"	3"
33	4#400 KCMIL, 1#3 GND	3"	3"	40_W	(2 SETS) 3#3/0, 1#6 GND	3"	3"

NOTES
1. WHERE THE FEEDER SYMBOL IS SHOWN WITH SUBSCRIPT
   MV = MEDIUM VOLTAGE COPPER CONDUCTOR
   N = NO NEUTRAL CONDUCTOR
   G = NO EQUIPMENT GROUNDING CONDUCTOR
   E = EXISTING CONDUCTORS
2. 5KV MEDIUM VOLTAGE CABLE CALCULATED IN SCHEDULE 40 PVC. ALL OTHERS IN RMC.
3. ALL CONDUIT CALCULATIONS BASED ON THHN COPPER CONDUCTORS.
4. AMPACITIES BASED ON 75°C TEMPERATURE RATING OF CONDUCTORS.

MCB AMPS 150	**PANEL 1LC**	NOTES
AMP BUS RATING: 250	**NEMA 1**	1. AIC RATING REFER TO SCHEDULE
VOLTS 120/208		2. BALANCE ALL LOADS
PHASE 3 WIRE 4		3. LABEL ALL CIRCUITS

CIRCUIT DESCRIPTION	*	WATT LOAD	WIRE	BRKR	CIRCUIT NUMBER								BRKR	WIRE	WATT LOAD	*	CIRCUIT DESCRIPTION
EXISTING LOAD	2	1200	#12	20/1	1	1200			A	500			2	20/1	#12	500	2	EXISTING LOAD
	2	1200	#12	20/1	3		1200		B		500		4	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	5			500	C			500	6	20/1	#12	500	2	EXISTING LOAD
EXISTING LOAD	2	500	#12	20/1	7	500			A	500			8	20/1	#12	500	2	EXISTING LOAD
SECURITY DOOR PWR	**1**	**500**	**#12**	**20/1**	**9**		**500**		B		500		10	20/1	#12	500	2	EXISTING LOAD
SPACE		0			11			0	C			500	12	20/1	#12	500	2	EXISTING LOAD
SPACE		0			13	0			A	0			14			0		SPACE
SPACE		0			15		0		B		0		16			0		SPACE
SPACE		0			17			0	C			0	18			0		SPACE
SPACE		0			19	0			A	0			20			0		SPACE
SPACE		0			21		0		B		0		22			0		SPACE
SPACE		0			23			0	C			0	24			0		SPACE
SPACE		0			25	0			A	0			26			0		SPACE
SPACE		0			27		0		B		0		28			0		SPACE
SPACE		0			29			0	C			0	30			0		SPACE

	CONNECTED		DEMAND
NON-CONTINUOUS *1	500	100%	500
EXISTING *2	6400	125%	8000
KITCHEN EQUIPMENT *3	0	65%	0
RECEPTACLE *4	0	NEC 220.44	0

TOTAL	LOAD (VA)	A PH (AMP)	B PH (AMP)	C PH (AMP)
	8500	28.125	27.083	15.63

MCB AMPS 200	**PANEL 1HC**	NOTES
AMP BUS RATING: 200	**NEMA 1**	1. AIC RATING REFER TO SCHEDULE
VOLTS 277/480		2. BALANCE ALL LOADS
PHASE 3 WIRE 4		3. LABEL ALL CIRCUITS

CIRCUIT DESCRIPTION	*	WATT LOAD	WIRE	BRKR	CIRCUIT NUMBER								BRKR	WIRE	WATT LOAD	*	CIRCUIT DESCRIPTION
EXISTING LOAD	2	1000	#12	20/1	1	1000			A	1000			2	20/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	4155	#10	30/1	3		4155		B		1000		4	20/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	5			1000	C			4155	6	30/1	#10	4155	2	EXISTING LOAD
EXISTING LOAD	2	4155	#10	30/1	7	4155			A	1000			8	20/1	#12	1000	2	EXISTING LOAD
EXISTING LOAD	2	1000	#12	20/1	9		1000		B		4155		10	30/1	#10	4155	2	EXISTING LOAD
EXISTING LOAD	2	4155	#10	30/1	11			4155	C			4155	12	30/1	#10	4155	2	EXISTING LOAD
SPARE		0	#10	30/1	13	0			A	11080			14		#8	11080	2	
SPARE		0	#12	20/1	15		0		B		11080		16	40/3	#8	11080	2	EXISTING LOAD
SPARE		0	#12	20/1	17			0	C			11080	18		#8	11080	2	
SPARE		0	#12	20/1	19	0			A	0			20	20/1	#12	0		SPARE
SPARE		0	#12	20/1	21		0		B		0		22	20/1	#12	0		SPARE
SPARE		0	#12	20/1	23			0	C			0	24	20/1	#12	0		SPARE
SPARE		0	#12	20/1	25	0			A	0			26	20/1	#12	0		SPARE
SPARE		0	#12	20/1	27		0		B		0		28	20/1	#12	0		SPARE
SPARE		0	#12	20/1	29			0	C			0	30	20/1	#12	0		SPARE
SPARE		0	#12	20/1	31	0			A	3375			32			3375		
SPARE		0	#12	20/1	33		0		B		3250		34	70/3		3250		XFMR FEED TC
SPARE		0	#12	20/1	35			0	C			1875	36			1875		
	2	8310	#4		37	8310			A	3463			38		#10	3462.5	2	
EXISTING LOAD	2	8310	#4	60/3	39		8310		B		3463		40	25/3	#10	3462.5	2	EXISTING LOAD
	2	8310	#4		41			8310	C			3463	42		#10	3462.5	2	

	CONNECTED		DEMAND
NON-CONTINUOUS *1	0	100%	0
EXISTING *2	99488	125%	124359
KITCHEN EQUIPMENT *3	0	65%	0
RECEPTACLE *4	0	NEC 220.44	0

TOTAL	LOAD (VA)	A PH (AMP)	B PH (AMP)	C PH (AMP)
	132859	147.6	161.38	170.7

MLO AMPS 2000	**PANEL MSB**	NOTES
AMP BUS RATING: 2000	**NEMA 1**	1. AIC RATING REFER TO SCHEDULE
VOLTS 277/480		2. BALANCE ALL LOADS
PHASE 3 WIRE 4		3. LABEL ALL CIRCUITS

CIRCUIT DESCRIPTION	*	WATT LOAD	WIRE	BRKR	CIRCUIT NUMBER								BRKR	WIRE	WATT LOAD	*	CIRCUIT DESCRIPTION
	2	110800			1	1E+05			A	0			2		0		NO SPACE
EXISTING LOAD	2	110800		800/3	3		110800		B		0		4		0		NO SPACE
	2	110800			5			1E+05	C			0	6		0		NO SPACE
	2	0			7	0			A	0			8		0		NO SPACE
	2	0			9		0		B		0		10		0		NO SPACE
	2	0			11			0	C			0	12		0		NO SPACE
	2	69250			13	69250			A	69250			14		69250	2	
EXISTING LOAD	2	69250		500/3	15		69250		B		69250		16	500/3	69250	2	EXISTING LOAD
	2	69250			17			69250	C			69250	18		69250	2	
	2	0			19	0			A	0			20		0	2	
	2	0			21		0		B		0		22		0	2	
	2	0			23			0	C			0	24		0	2	
	2	41550			25	41550			A	40884			26		40884.4		
EXISTING LOAD	2	41550		300/3	27		41550		B		44703		28	300/3	44703.1		SUBFEED PANEL 1HC
	2	41550			29			41550	C			47272	30		47271.9		
	2	0			31	0			A	0			32		0		
	2	0			33		0		B		0		34		0		
	2	0			35			0	C			0	36		0		
	2	55400			37	55400			A	0			38		0		SPACE
EXISTING LOAD	2	55400		400/3	39		55400		B		0		40		0		SPACE
	2	55400			41			55400	C			0	42		0		SPACE
	2	0			43	0			A	0			44		0		SPACE
	2	0			45		0		B		0		46		0		SPACE
	2	0			47			0	C			0	48		0		SPACE

	CONNECTED		DEMAND
NON-CONTINUOUS *1	0	100%	0
EXISTING *2	1038750	125%	1298438
KITCHEN EQUIPMENT *3	0	65%	0
RECEPTACLE *4	0	NEC 220.44	0

TOTAL	LOAD (VA)	A PH (AMP)	B PH (AMP)	C PH (AMP)
	1431297	1710.1	1723.9	1733

yesprep PUBLIC SCHOOLS

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No.	Description	Date
	ISSUE FOR CONSTRUCTION	SEP 17, 20

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SECURITY IMPROVEMENTS

GULFTON CAMPUS

Project Number	20044
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MEP10-2

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