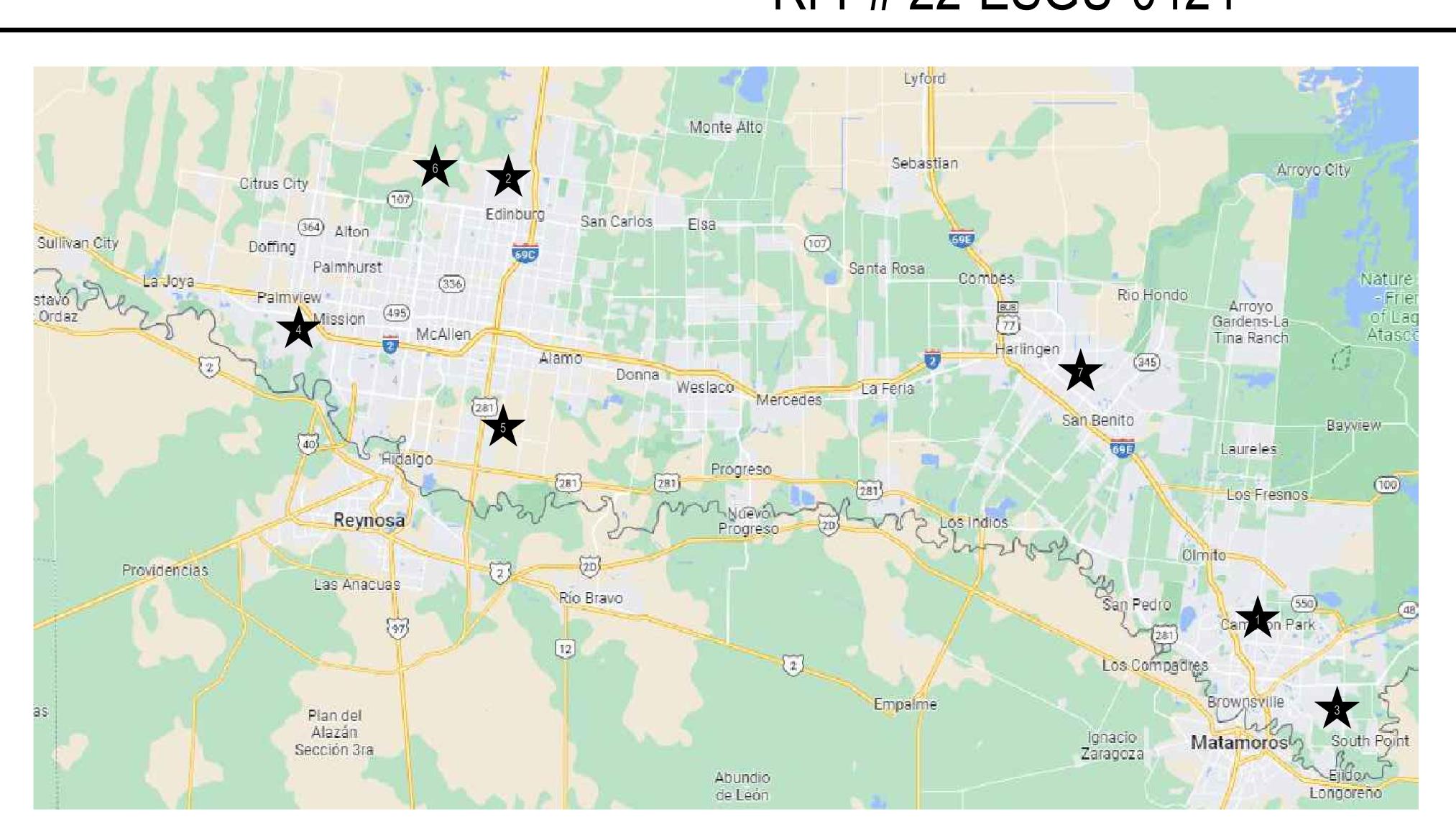
IDEA PUBLIC SCHOOLS

ELECTRICAL SWITCHGEAR UPGRADES AT MULTIPLE CAMPUSES RFP# 22-ESGU-0424



VICINITY MAP - RIO GRANDE VALLEY



SCHOOL LIST: 1. IDEA BROWNSVILLE 4395 PAREDES LINE RD, BROWNSVILLE, TX 2. IDEA EDINBURG 2553 N ROEGLERS ROAD, EDINBURG, TX 3. IDEA FRONTIER 2800 S DAKOTA AVE, BROWNSVILLE, TX 4. IDEA MISSION 1600 S SCHUERBACH ROAD, MISSION, TX 5. IDEA PHARR 600 E LAS MILPAS RD, PHARR, TX 6. IDEA QUEST 14001 N ROOTH RD, EDINBURG TX 7. IDEA SAN BENITO 2151 RUSSELL LN, SAN BENITO, TX

DATE OF ISSUE

MARCH 15, 2024

LIST OF DRAWINGS

E0.01 ELECTRICAL GENERAL NOTES, DETAILS, SYMBOLS S2.1 IDEA MISSION GENERAL STRUCTURAL NO

E1.01 IDEA BROWNSVILLE ELECTRICAL SITE PLAN

E1.02 IDEA BROWNSVILLE ELECTRICAL PLAI

E1.03 IDEA BROWNSVILLE ELECTRICAL RISER DIAGRAM

E2.01 IDEA EDINBURG ELECTRICAL SITE PLAN

E2.02 IDEA EDINBURG ELECTRICAL PLAN

3.02 IDEA FRONTIER ELECTRICAL PLAN

ET.OT IDEA WISSION ELECTRICAL SITE I DAN

F4.03 IDFA MISSION FLECTRICAL DETA

E5.01 IDEA PHARR ELECTRICAL SITE PI

E5.02 IDEA PHARR ELECTRICAL PLAN

E6.01 IDEA QUEST ELECTRICAL SITE P

E6.02 IDEA QUEST ELECTRICAL PLAN

E7.01 IDEA SAN BENITO ELECTRICAL SITE PLAN
E7.02 IDEA SAN BENITO ELECTRICAL PLAN

SCOPE OF WORK

a. WHERE NOTED ON DRAWINGS REMOVE AND DISPOSE OF EXISTING ELECTRICAL RELATED ITEMS.

b. REMOVE EXISTING CEILING TILES FOR NEW ELECTRICAL WORK. REINSTALL CEILING TILES AFTER ELECTRICAL WORK HAS BEEN COMPLETED.2. NEW WORK:

a. EXISTING CLASSROOMS ARE TO BE CONVERTED TO CTE LABS. NEW CTE FURNITURE TO BE PROVIDED BY OWNER.
b. PROVIDE ELECTRICAL WORK AS PER DRAWINGS. ITEMS INCLUDE A NEW CTE LAB DEDICATED FLUSH MOUNTED PANELBOARD AND WIRING DEVICES FOR CONNECTED OWNER PROVIDED CTE FURNITURE.
c. PROVIDE MECHANICAL WORK AS PER DRAWINGS.

BOARD OF DIRECTORS

COLLIN SEWELL	
ED RIVERA	VICE-CHAIR
ERICH HOLMSTEN	TREASURER
MICHAEL ADAMS	
GARY LINDGREN	MEMBER
THERESA BARRERA -SHAW	MEMBER
NANETTE COCERO	MEMBER

NO: REVISION: BY:

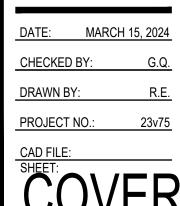
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CAMPUSES

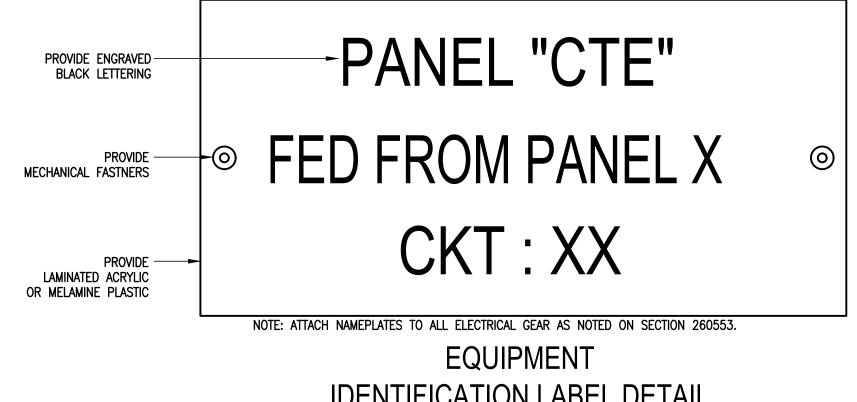
| IDEA PUBLIC SCHOOLS | ELECTRICAL SWITCHGEAR UPGRADES AT MULTIPLE



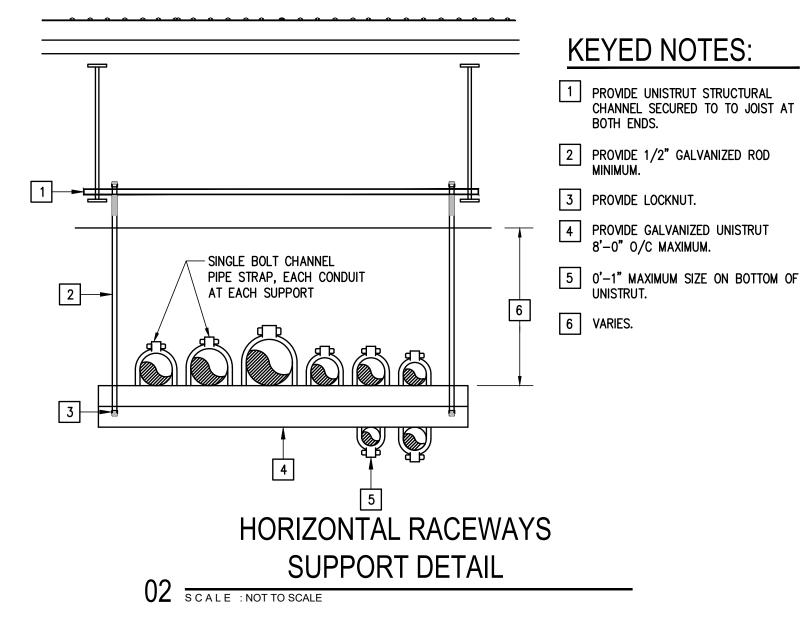


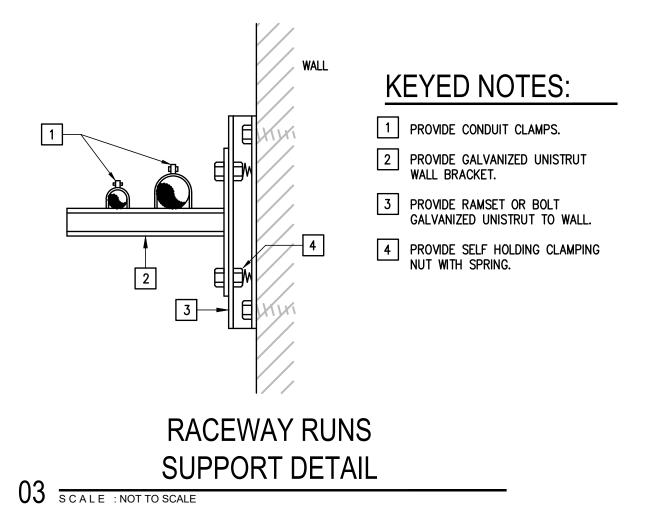
GENERAL NOTES:

- COORDINATE WORK AMONG ALL DISCIPLINES. IT IS NOT THE INTENT OF THESE DOCUMENTS TO DICTATE WHO MUST DO THE WORK. ALL WORK SHOWN IS THE RESPONSIBILITY OF THE (PRIME)
- 2. FIELD VERIFY PROJECT SITE EXISTING CONDITIONS AND ELEVATIONS PRIOR TO BEGINNING ANY
- DRAWINGS ARE SCHEMATIC IN NATURE AND NOT NECESSARILY REFLECT ALL WORK REQUIRED TO COMPLETE PROJECT. CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR, AND EQUIPMENT AS REQUIRED TO COMPLETE PROJECT WITHIN DESIGN INTENT AT NO ADDITIONAL COST TO OWNER.
- 4. PHASING AND SEQUENCE OF CONSTRUCTION SHALL BE PER DRAWINGS AND SPECIFICATIONS.
- 5. FIELD VERIFY/SPOT EXACT LOCATIONS AND EXISTING CONDITIONS OF EXISTING ELECTRICAL. IT IS THE INTENT OF THESE PLANS TO PROVIDE A COMPLETE AND WORKABLE SYSTEMS. SHOULD BIDDER FIND OMISSIONS OR DISCREPANCIES IN THE PLANS, BIDDER SHALL NOTIFY THE ENGINEER PRIOR TO THE BID DATE AND A WRITTEN CLARIFICATION WILL BE ISSUED.
- DAMAGED ITEMS SHALL BE REPAIRED AT NO ADDITIONAL COST TO OWNER. CONTRACTORS ARE REQUIRED TO SEARCH AND INVESTIGATE PROJECT SITE BEFORE BEGINNING ANY WORK.
- 7. ALL MATERIALS AND LABOR, WHETHER SPECIFICALLY INDICATED ON PLANS OR NOT, WHICH ARE NECESSARY FOR THE PROPER INSTALLATION AND FUNCTION OF THE SYSTEM SHALL BE FURNISHED BY THIS CONTRACTOR. INCLUDE ALL COSTS OF CHANGES, IF/AS REQUIRED IN BID
- 8. PROVIDE PULLBOXES/J-BOXES AS REQUIRED FOR PULL WIRING.
- 9. IN THE EVENT A CONFLICT BETWEEN DRAWINGS AND/OR SPECIFICATIONS ARISES, THE GREATER AMOUNT OF TOTAL COST SHALL BE PRICED. CONFLICT SHALL BE PRESENTED TO ENGINEER FOR FURTHER DIRECTION(S).
- 10. DISTRIBUTION PANELBOARDS/SWITCHBOARDS: PROVIDE ENGRAVED NAMEPLATES FOR EACH CIRCUIT BREAKERS.
- 11. ALL UNDERGROUND RACEWAYS SHALL BE SCH. 40 PVC.
- 12. ALL ELECTRICAL WORK SHALL BE UNDER THE MASTER ELECTRICIAN WHO PULLED THE PERMIT AND ITS JOURNEYMAN ELECTRICIANS.
- 13. NOTIFY ENGINEER OF ANY ASPECTS OF DESIGN WHICH ARE THOUGHT TO BE IN NONCOMPLIANCE WITH APPLICABLE CODES.
- 14. COORDINATE ALL WORK WITH OTHER TRADES; COORDINATE SCHEDULE OF WORK WITH ALL SUB-CONTRACTORS TO ACHIEVE SMOOTH FLOW OF CONSTRUCTION.
- 15. SEAL AROUND ELECTRICAL RACEWAYS AT ALL WALLS, A/C ROOMS AND WALL LOUVER PENETRATIONS WITH FIREPROOF CAULKING. RE: SPECS. PROVIDE FLASHING AROUND PENETRATION, BOTH INSIDE AND OUTSIDE, TO PROVIDE FINISHED LOOK.
- 16. ALL RACEWAYS EXPOSED/OUTDOORS SHALL BE GRC, ALL INTERIOR RACEWAYS SHALL BE EMT.
- 17. CONTRACTOR SHALL REVIEW COMPLETE DOCUMENTS PRIOR TO SUBMITTAL OF PROPOSAL TO GAIN COMPLETE UNDERSTANDING OF PROJECT SCOPE, WORK BY OTHERS, AND ELECTRICAL WORK ASSOCIATED WITH OTHER DISCIPLINES.
- 18. AFFIX ID TAGS TO ALL DIVISION 26 EQUIPMENT.
- 19. FIELD VERIFY ALL CONDITIONS AND MEASURE DIMENSIONS WITHIN THE BUILDING PRIOR TO ORDERING EQUIPMENT AND/OR PROCEEDING WITH INSTALLATION.
- 20. ALL EQUIPMENT SHALL BE FACTORY TESTED, AND CONTRACTOR SHALL VERIFY THEIR CONDITION PRIOR TO INSTALLATION. CONTRACTOR IS RESPONSIBLE FOR EQUIPMENT DAMAGED DURING MOVING AND INSTALLATION.
- 21. EQUIPMENT FOUND DEFECTIVE PRIOR TO FINAL ACCEPTANCE SHALL BE REPLACED AT NO COST
- 22. WORK TO BE DONE UNDER ALLOWANCES BECOMES AN INTEGRAL PART OF THE PROJECT AND RESPONSIBILITY OF CONTRACTOR ONCE ALLOWANCE IS APPROVED.
- 23. PRIOR TO SUBMITTING BID CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE THEMSELVES WITH THE EXISTING CONDITIONS AND MAKE PROVISION IN THEIR BID FOR CONDITIONS. FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL NOT BE CONSIDERED JUSTIFICATION FOR THE OMISSION OF FAULTY INSTALLATION OF ANY WORK COVERED BY THE CONTRACT DOCUMENTS.
- 24. CONTRACTOR SHALL NOT PROCEED WITH ANY WORK INVOLVING A CHANGE IN PROJECT SCOPE OR COST WITHOUT FIRST HAVING OBTAINED ENGINEER'S APPROVAL IN WRITING. UNLESS ENGINEER HAS AGREED TO SUCH CHANGE PRIOR TO IT BEING DONE. AND HAS AGREED THAT AN INCREASE IN COST ASSOCIATED WITH SUCH CHANGE IS WARRANTED; CONTRACTOR WILL NOT BE REIMBURSED FOR SUCH CHANGE.
- 25. USE LONG-SWEEPS ELBOWS FOR ALL CHANGES IN DIRECTION ON CONDUIT RUNS.
- 26. HAND-WRITTEN CIRCUIT BREAKER DIRECTORIES WILL NOT BE ACCEPTED. DIRECTORIES MUST BE COMPUTER GENERATED AND PRINTED TO REFLECT FINAL INSTALLED CONDITIONS.
- 27. MARK ALL J-BOXES WITH INDELIBLE INK, INDICATING POWER CIRCUITRY INFORMATION. LABEL ALL EQUIPMENT ITEMS PER SPECIFICATIONS.
- 28. PROVIDE ADDITIONAL SPARE MATERIALS DESCRIBED BELOW FOR EACH CAMPUS. PROVIDE PROTECTIVE COVERING FOR STORAGE & IDENTIFIED WITH LABELS DESCRIBING THE CONTENTS. INCLUDE THE INSTALLATION COST, FITTINGS AND SUPPORTS IN THE BASE BID PROPOSAL: A. 100 LINEAR FEET: 3/4" - 2#12 & #12G



IDENTIFICATION LABEL DETAIL





ABBREVIATIONS:

Α	AMPS	EXT.	EXTERNAL OR EXTERIOR	MOCP	MAX. OVERCURRENT PROTECTION	
ABC	ABOVE CEILING LINE	G.	GROUND	NTS	NOT TO SCALE	
AFF	ABOVE FINISHED FLOOR	GA.	GAGE	PNL	PANELBOARD	
B.	ВОТТОМ	GALV.	GALVANIZED	Р	POLE(S)	
BLC.	BELOW CEILING LINE	GRND.	GROUND	PH	PHASE	
C.	CONDUIT OR COMMON	HP	HORSEPOWER	RM.	ROOM	
CLG.	CEILING	LIVAC	HEATING, VENTILATION,	TFORMER	TRANSFORMER	
сомв.	COMBINATION		& AIR CONDITIONING		UNLESS OTHERWISE NOTED	
COND.	CONDUIT	MECH	MECHANICAL	٧	VOLTS	
CU.	COPPER	MS	MOTOR STARTER	w	WIRE	
DISC.	DISCONNECT	MCA	MINIMUM CIRCUIT AMPACITY			

GENERAL SYMBOL LEGEND:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
Ų	DISCONNECT SWITCH - NON-FUSED	AS REQUIRED
ď	DISCONNECT SWITCH - FUSED	AS REQUIRED
	ELECTRICAL PANELBOARD — SURFACE MOUNTED	AS REQUIRED
	ELECTRICAL PANELBOARD — RECESSED/FLUSH MOUNTED	AS REQUIRED
	CONCEALED RACEWAY	AS REQUIRED
	UNDERGROUND RACEWAY	AS REQUIRED
Here	CONDUIT OR EMT HOMERUN TO PANELBOARD CONCEALED IN WALLS OR ABOVE CEILING. LONG CROSSMARKS DENOTE NUMBER OF "HOT" CONDUCTORS SHORT CROSSMARKS INDICATE NEUTRALS AND DOTS INDICATE NUMBER OF GROUND CONDUCTORS. ARROW INDICATES HOME RUN TO ELECTRICAL PANEL.	AS REQUIRED

CODES AND ORDINANCES:

- 1. PERFORM ALL WORK PER LATEST VERSION OF NATIONAL ELECTRICAL CODE, NFPA AND APPLICABLE LOCAL CODES AND ORDINANCES, UNLESS DRAWINGS OR SPECIFICATIONS HAVE MORE STRINGENT REQUIREMENTS.
- 2. CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS AND FEES ASSOCIATED WITH PROJECT. INCLUDING FEES FOR INSPECTIONS, APPLICATIONS, AND PROVISION OF NEW SERVICES.
- 3. CONTRACTOR WHO WILL ACTUALLY PERFORM WORK MUST APPLY FOR ALL REQUIRED PERMITS
- 4. NOTIFY ENGINEER OF ANY ASPECTS OF DESIGN WHICH ARE THOUGHT TO BE IN NONCOMPLIANCE WITH APPLICABLE CODES.

COORDINATION:

- 1. COORDINATE ALL WORK WITH OTHER TRADES; COORDINATE SCHEDULE OF WORK WITH ALL SUB-CONTRACTORS TO ACHIEVE SMOOTH FLOW OF CONSTRUCTION.
- 2. TIME OR MONEY ALLOWANCES WILL NOT BE MADE TO ACCOMMODATE UTILITY CONFLICTS THAT CAN BE REASONABLY RESOLVED BY COORDINATION DURING SHOP DRAWING STAGE.
- 3. CONTRACTOR SHALL REVIEW COMPLETE DOCUMENTS PRIOR TO SUBMITTAL OF PROPOSAL TO GAIN COMPLETE UNDERSTANDING OF PROJECT SCOPE, WORK BY OTHERS, AND ELECTRICAL WORK ASSOCIATED WITH OTHER DISCIPLINES.
- 4. MAINTAIN MANUFACTURER RECOMMENDED CLEARANCE AROUND ALL EQUIPMENT.
- 5. ALL WORK THAT COULD DISRUPT SCHOOL INSTRUCTION SHALL BE SCHEDULE FOR AFTER SCHOOL OR DURING HOLIDAY HOURS. COORDINATE SCHEDULING WITH SCHOOL PRINCIPAL.

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PHONE: 956-230-3435 TEXAS REGISTERED ENGINEERING FIRM

MARCH 15, 2024 CHECKED BY: DRAWN BY: PROJECT NO.:

CAMPU SCHOOL PUB **SWITCHGEAR** IDEA ELECTRICAL

1126 SOUTH COMMERCE ST.
HARLINGEN, TX
PHONE: 956-230-3435
TEXAS REGISTERED
ENGINEERING FIRM
F-15098

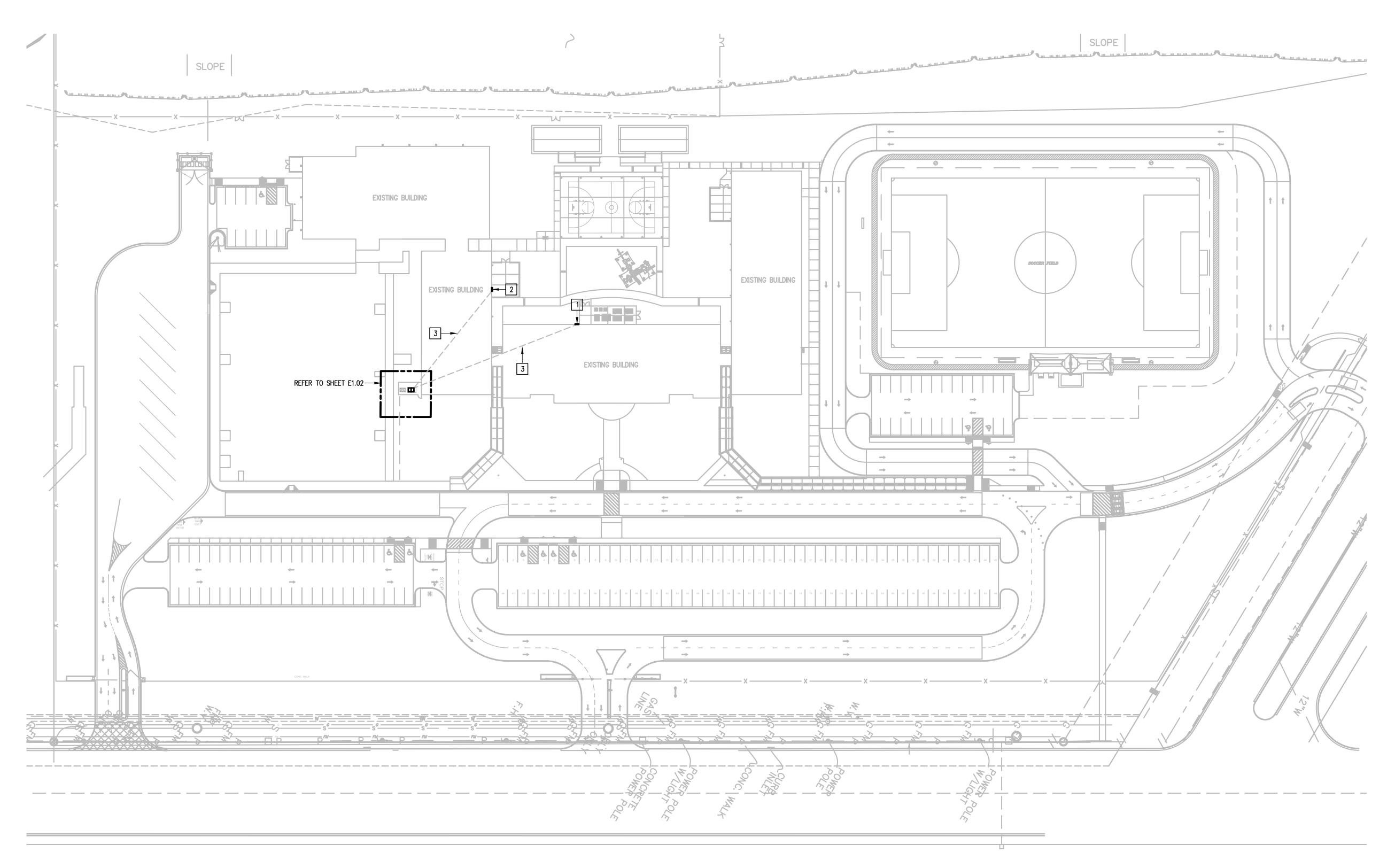
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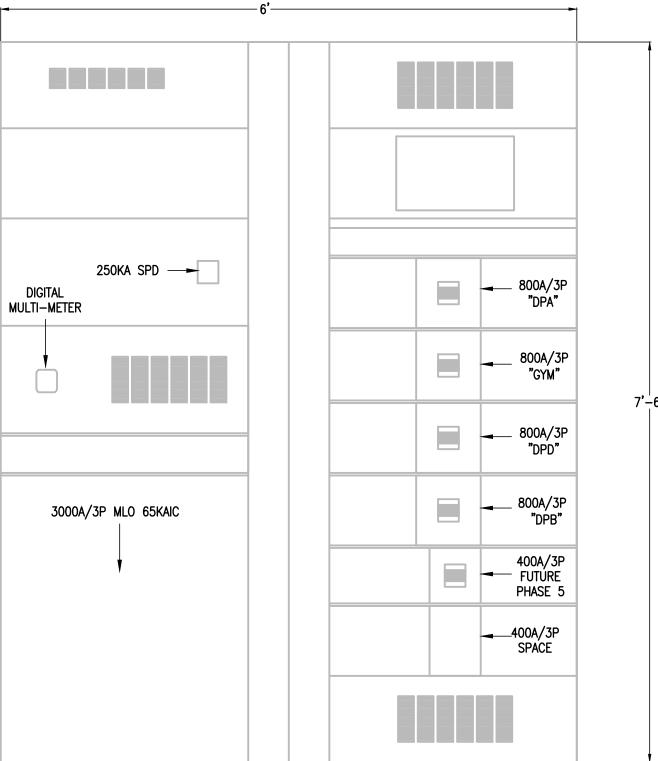
CHECKED BY: G.Q

DRAWN BY: R.E

PROJECT NO.: 23v75

CAD FILE:
SHEET:





NOTES:

- 1. PROVIDE NEMA 4X SS OUTDOOR ENCLOSURE.
- 2. PROVIDE NEW CIRCUIT BREAKER MUST BE AT OR BELOW EXISTING HEIGHT IN ORDER FOR EXISTING FEEDER TO RECONNECT TO NEW CIRCUIT BREAKER. FIELD VERIFY PRIOR TO ORDERED EQUIPMENT. NO CHANGE ORDERS WILL BE ALLOWED FOR FAILURE TO FIELD VERIFY.
- 3. PROVIDE INTEGRAL MOUNTED "SPD".4. PROVIDE INTEGRAL DIGITAL MULTI-METER.
- 5. PROVIDE A MIMIC BUS.6. LABEL EACH BREAKER WITH AN ENGRAVED NAMEPLATE.

NEW SWITCHBOARD ELEVATION

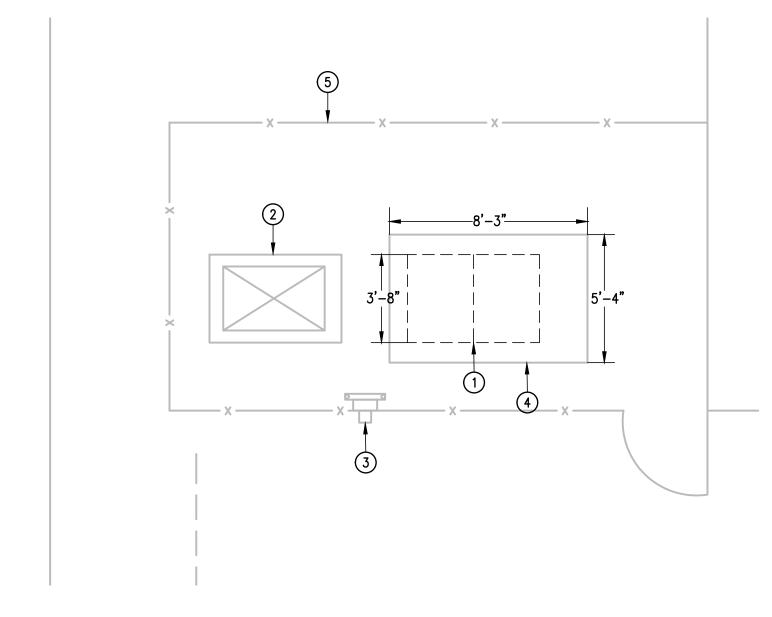
03 SCALE: NOT TO SCALE



IMAGE

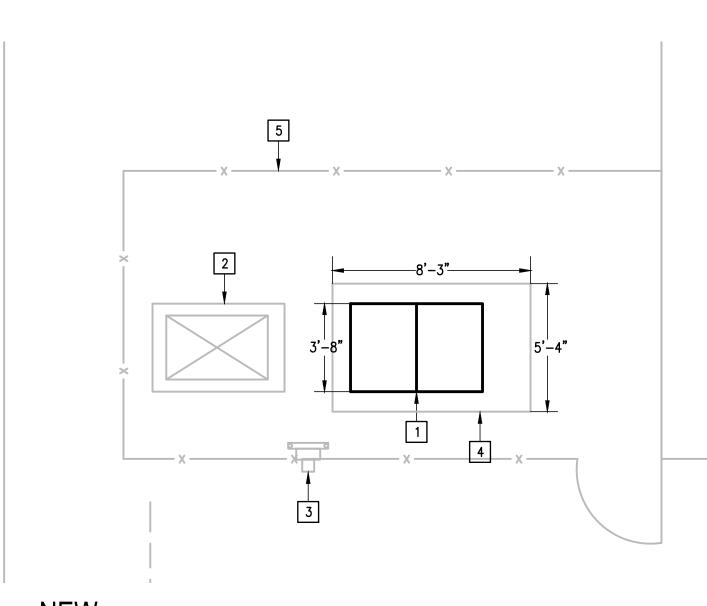
04 EXISTING ELECTRICAL SERVICE ENTRANCE

SCALE: NOT TO SCALE



DEMOLITION ENLARGED ELECTRICAL PLAN





NEW

8 ENLARGED ELECTRICAL PLAN

10 SCALE: 1/4" = 1'-0"



DEMOLITION GENERAL NOTES:

- THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE DRAWINGS AND BY THE REQUIREMENTS OF THIS SECTION. A VISIT TO THE SITE IS REQUIRED TO PROPERLY BID THE DEMOLITION WORK.
- REMOVED MATERIALS SHALL BELONG TO OWNER. DELIVER THEM TO OWNERS
 DESIGNATED LOCATION. IF OWNER DOES NOT WANT THE REMOVED MATERIALS
 THEN REMOVE THEM FROM SITE & PROPERLY DISPOSE OF THEM.

DEMOLITION KEYED NOTES:

- 1 DISCONNECT AND REMOVE EXISTING EATON POW-R-LINE MLO 3000A 65,000 AIC 480/277V 3ø, 4W SWITCHBOARD NO. SCP0305706 FOR REPLACEMENT.
- 2 EXISTING UTILITY (BPUB) TRANSFORMER TO REMAIN AS IS.
- 3 EXISTING ELECTRICAL UTILITY METER (BPUB) TO REMAIN AS IS.
- 4 EXISTING CONCRETE PAD TO REMAIN AS IS.
- 5 EXISTING CHAIN LINK FENCE TO REMAIN AS IS.

KEYED NOTES:

- PROVIDE NEW 3000A 65,000 AIC, 480/277V 3Ø, 4W SWITCHBOARD. RECONNECT EXISTING BRANCH CIRCUITS AND FEEDERS. SEE NEW SWITCHBOARD ELEVATION.
- 2 EXISTING ELECTRIC UTILITY (BPUB) PAD MOUNT TRANSFORMER.
- 3 EXISTING ELECTRIC UTILITY METER (BPUB).
- 4 EXISTING CONCRETE PAD.
- 5 EXISTING CHAIN LINK FENCE.

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NO: REVISION: BY:

CESAR A. GONZALEZ

108611

03.15.2024

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| IDEA PUBLIC SCHOOLS | |ELECTRICAL SWITCHGEAR UPGRADES AT MULTIPL



 DATE:
 MARCH 15, 2024

 CHECKED BY:
 G.Q.

 DRAWN BY:
 R.E.

 PROJECT NO.:
 23v7

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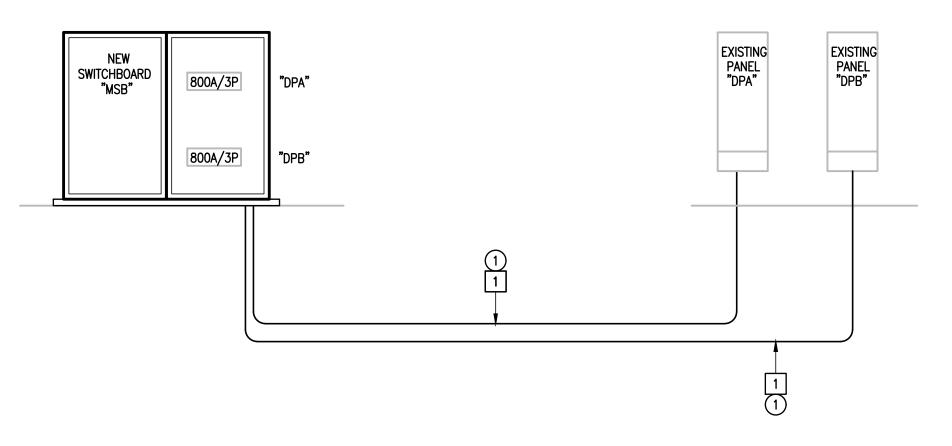
1 PROVIDE MEGGER TEST TO CHECK EXISTING BRANCH FEEDER WIRING INTEGRITY.

ALTERNATE BID **KEYED NOTES:**

KEYED NOTES:

BASE BID

1) IF BRANCH FEEDER WIRING FAILS THE MEGGER TEST PROVIDE NEW WIRING IN EXISTING (2)4" - 4#600KCMIL & #1/0G (EACH).



EXISTING PANELBOARDS "DPA" & "DPB" 01 ELECTRICAL RISER DIAGRAM

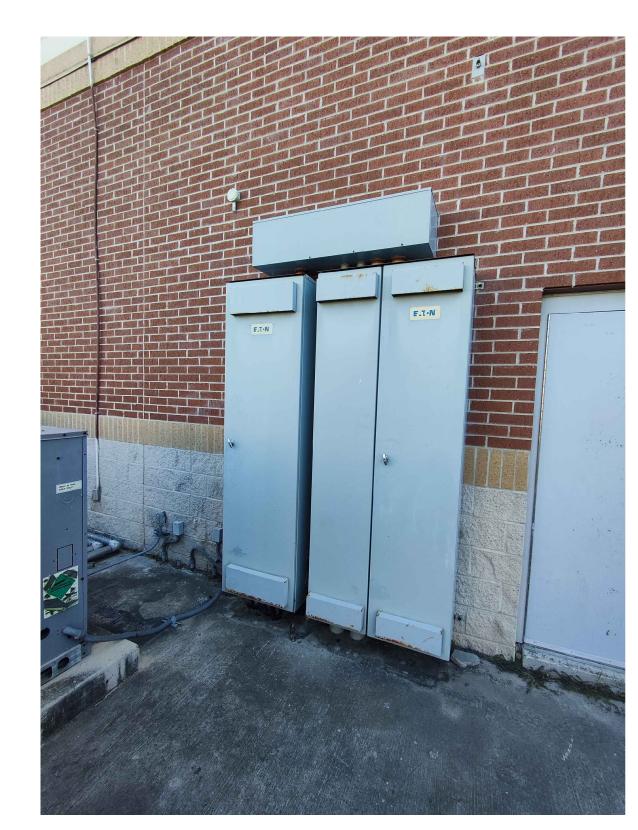


IMAGE 02 EXISTING PANEL "DPA"
SCALE : NOT TO SCALE

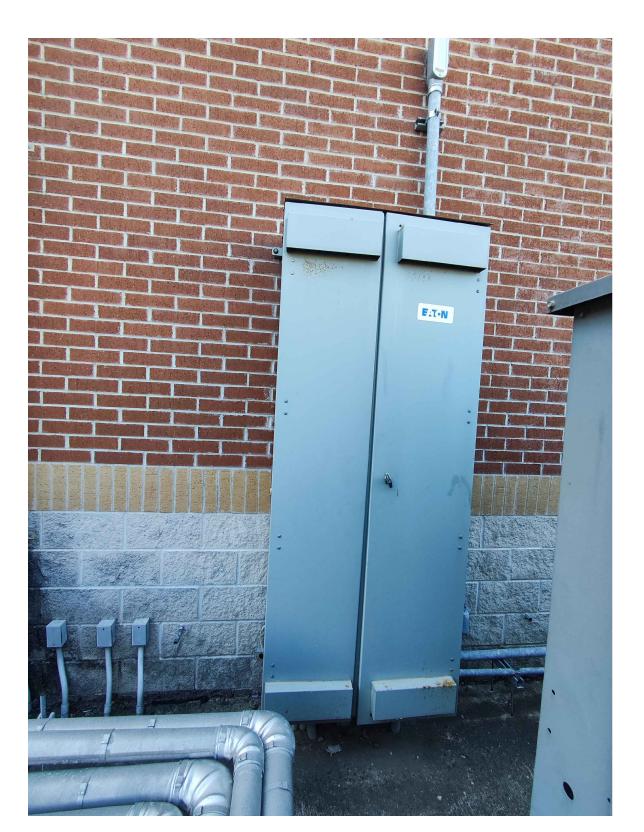


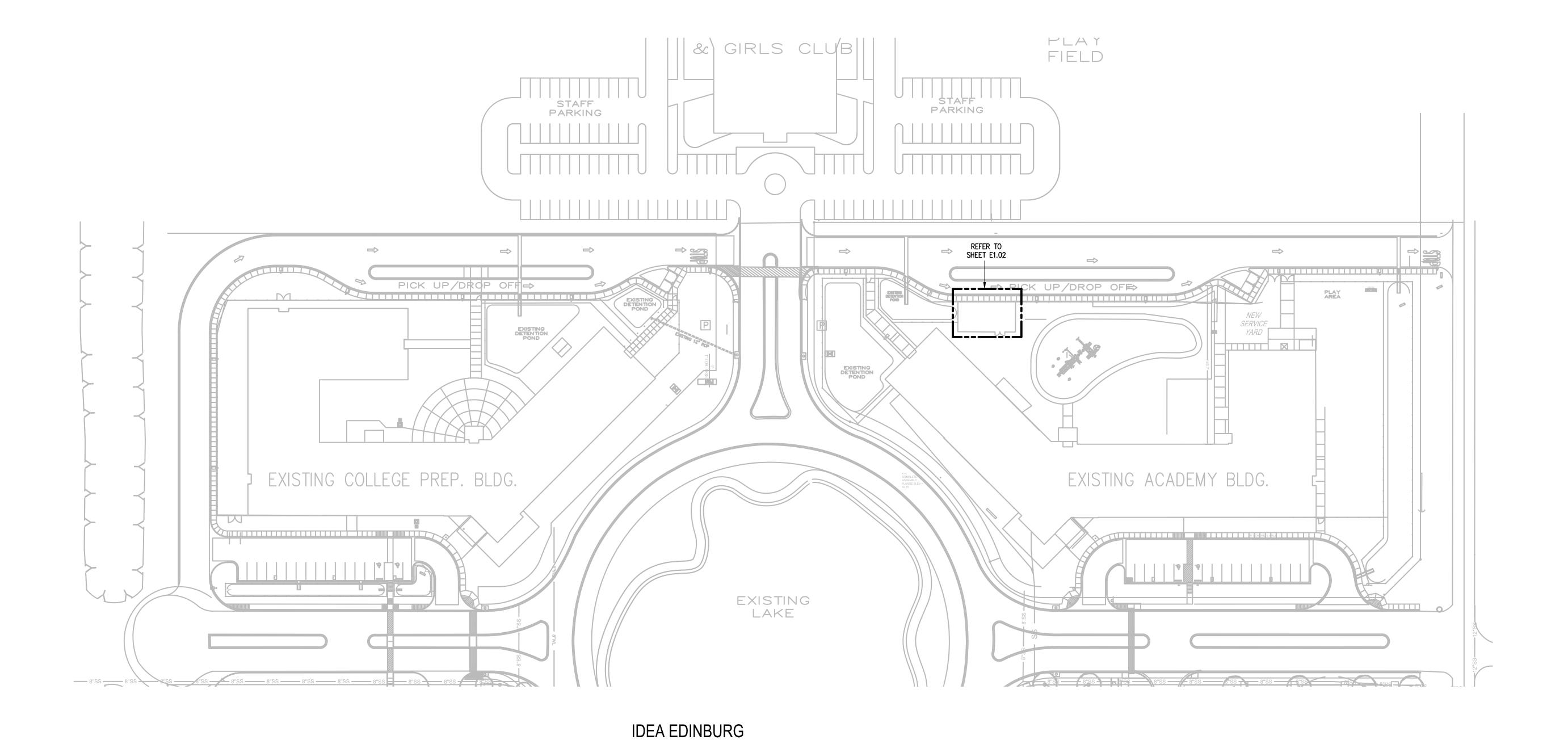
IMAGE 03 EXISTING PANEL "DPB"

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03.15.2024



TRUE N O R T H

01 ELECTRICAL SITE PLAN
SCALE: 1" = 50'=0"



DRAWN BY:

PROJECT NO.:

NOTES:
1. PROVIDE NEMA 3R OUTDOOR ENCLOSURE.

PROVIDE NEW CIRCUIT BREAKER MUST BE AT OR BELOW EXISTING HEIGHT IN ORDER FOR EXISTING FEEDER TO RECONNECT TO NEW CIRCUIT BREAKER. FIELD VERIFY PRIOR TO ORDERED EQUIPMENT. NO CHANGE ORDERS WILL BE ALLOWED FOR FAILURE TO FIELD VERIFY.

PROVIDE INTEGRAL MOUNTED "SPD".
 PROVIDE INTEGRAL DIGITAL MULTI-METER.

5. PROVIDE A MIMIC BUS.6. LABEL EACH BREAKER WITH AN ENGRAVED NAMEPLATE.

LABEL EACH BREAKER WITH AN ENGRAVED NAMEPLA
 PROVIDE SWITCHBOARD SERVICE ENTRANCE RATED.

8. PROVIDE ARC MITIGATION MEASURES FOR CIRCUIT BREAKERS RATED 1200A AND ABOVE TO COMPLY WITH NEC 240.87.

PROVIDE BRANCH CIRCUIT BREAKERS THERMAL MAGNETIC TYPE.
 PROVIDE GROUND—FAULT PROTECTION FOR CIRCUIT BREAKERS RATED 100A AND ABOVE TO

NEW SWITCHBOARD ELEVATION

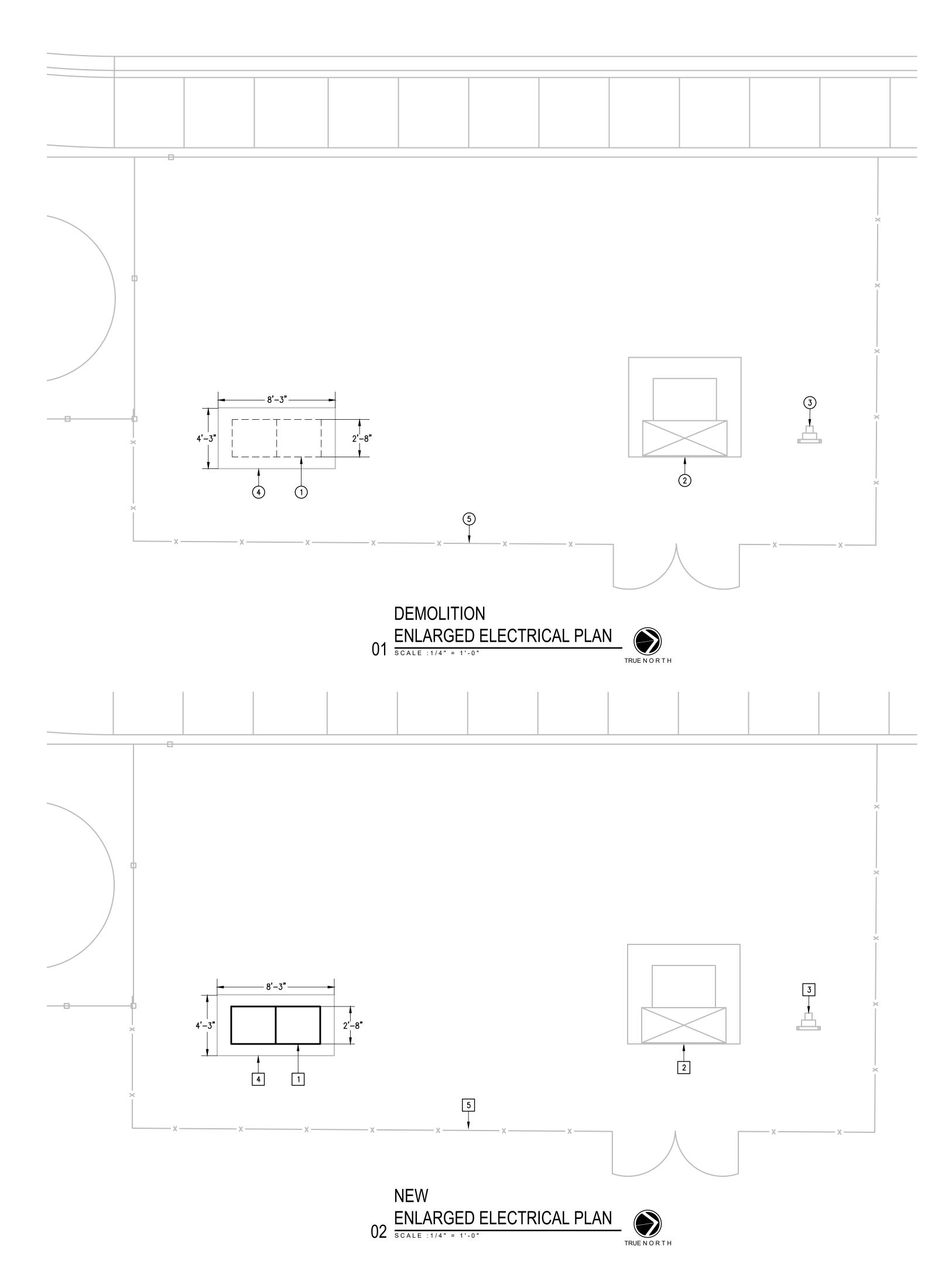
03 SCALE: NOT TO SCALE



IMAGE

04 EXISTING ELECTRICAL SERVICE ENTRANCE

S CALE : NOT TO SCALE



DEMOLITION GENERAL NOTES:

- THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE DRAWINGS AND BY THE REQUIREMENTS OF THIS SECTION. A VISIT TO THE SITE IS REQUIRED TO PROPERLY BID THE DEMOLITION WORK.
- 2. REMOVED MATERIALS SHALL BELONG TO OWNER. DELIVER THEM TO OWNERS DESIGNATED LOCATION. IF OWNER DOES NOT WANT THE REMOVED MATERIALS THEN REMOVE THEM FROM SITE & PROPERLY DISPOSE OF THEM.

DEMOLITION KEYED NOTES:

- 1) DISCONNECT AND REMOVE EXISTING SIEMENS 2000A MCB, 65,000 AIC 480/277V 3ø, 4W SWITCHBOARD NO. 3003170569-020010-01 FOR REPLACEMENT.
- 2 EXISTING UTILITY TRANSFORMER (MVEC) TO REMAIN AS IS.
- (3) EXISTING ELECTRICAL UTILITY METER (MVEC) TO REMAIN AS IS.
- 4 EXISTING CONCRETE PAD TO REMAIN AS IS.
- 5 EXISTING CHAIN LINK FENCE TO REMAIN AS IS.

KEYED NOTES:

- 1 PROVIDE NEW 2000A MLO, 65,000 AIC 480/277V 3Ø, 4W SWITCHBOARD. RECONNECT EXISTING BRANCH CIRCUITS AND FEEDERS. SEE NEW SWITCHBOARD ELEVATION.
- 2 EXISTING ELECTRIC UTILITY (MVEC) PAD MOUNT TRANSFORMER.
- 3 EXISTING ELECTRIC UTILITY METER (MVEC).
- 4 EXISTING CONCRETE PAD.
- 5 EXISTING CHAIN LINK FENCE.

MULTIPLE CAMPUSES

SCHOOL

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*

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1126 SOUTH COMMERCE ST.
HARLINGEN, TX
PHONE: 956-230-3435
TEXAS REGISTERED
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ELECTRICAL

SWITCHGE

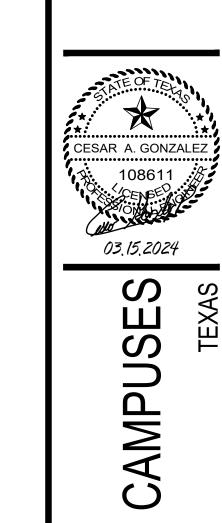
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DRAWN BY: R.E

PROJECT NO.: 23v75

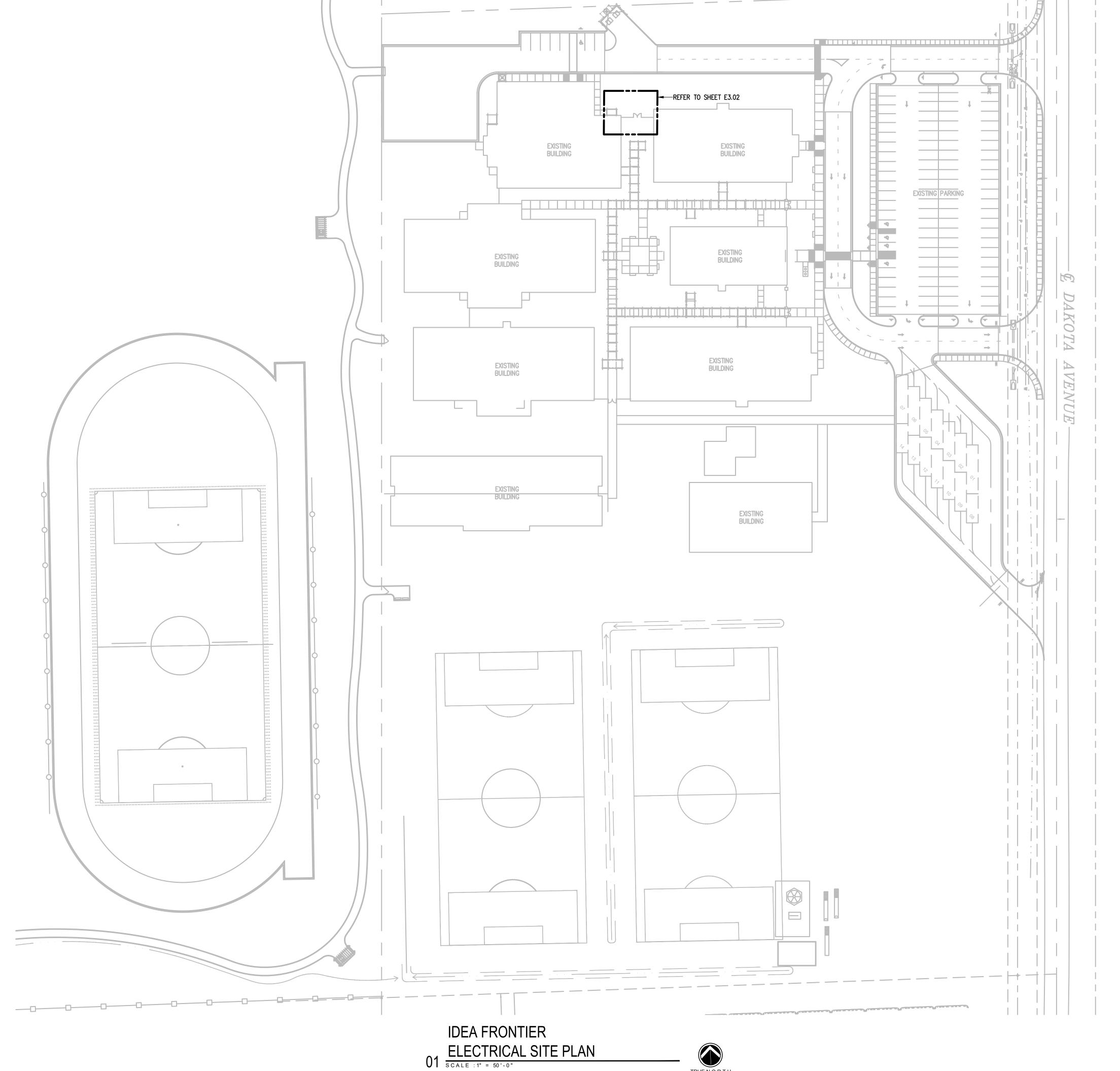
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SWITCHGEAR ELECTRICAL



DATE: MARCH 15, 2024 DRAWN BY: PROJECT NO.:



- 1. PROVIDE NEMA 4X SS OUTDOOR ENCLOSURE. 2. PROVIDE NEW CIRCUIT BREAKER MUST BE AT OR BELOW EXISTING HEIGHT IN ORDER FOR
- EXISTING FEEDER TO RECONNECT TO NEW CIRCUIT BREAKER. FIELD VERIFY PRIOR TO ORDERED EQUIPMENT. NO CHANGE ORDERS WILL BE ALLOWED FOR FAILURE TO FIELD VERIFY.
- 3. PROVIDE INTEGRAL MOUNTED "SPD". 4. PROVIDE INTEGRAL DIGITAL MULTI-METER.
- PROVIDE A MIMIC BUS.
- LABEL EACH BREAKER WITH AN ENGRAVED NAMEPLATE. 7. PROVIDE ARC MITIGATION MEASURES FOR CIRCUIT BREAKERS RATED 1200A AND ABOVE TO
- COMPLY WITH NEC 240.87.
- 8. PROVIDE BRANCH CIRCUIT BREAKERS THERMAL MAGNETIC TYPE.
 9. PROVIDE MAIN CIRCUIT BREAKER ELECTRO MAGNETIC TYPE.
- 10. PROVIDE GROUND-FAULT PROTECTION FOR CIRCUIT BREAKERS RATED 100A AND ABOVE TO
- COMPLY WITH NEC 230.95.

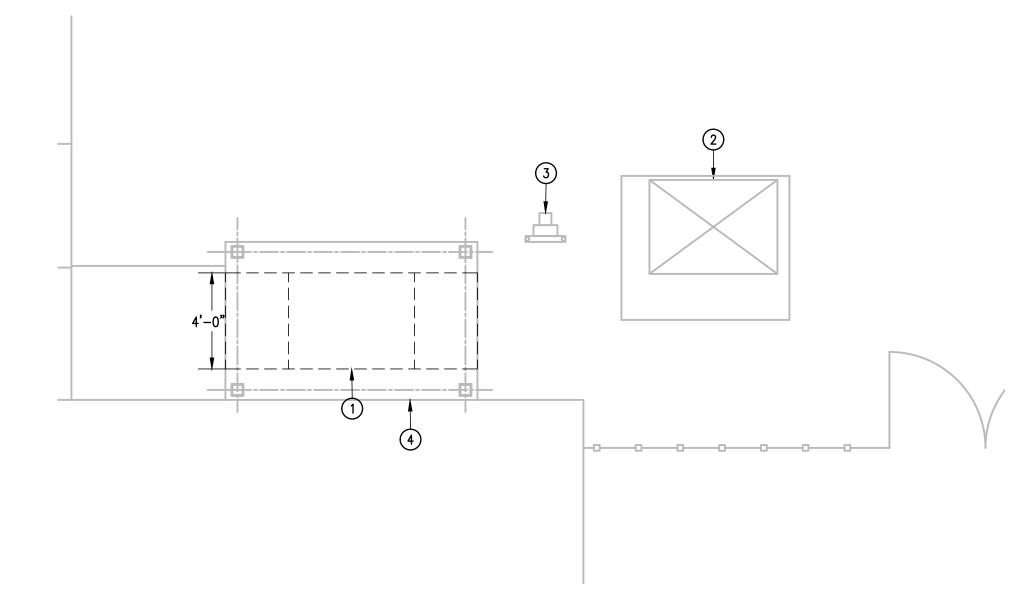
NEW SWITCHBOARD ELEVATION





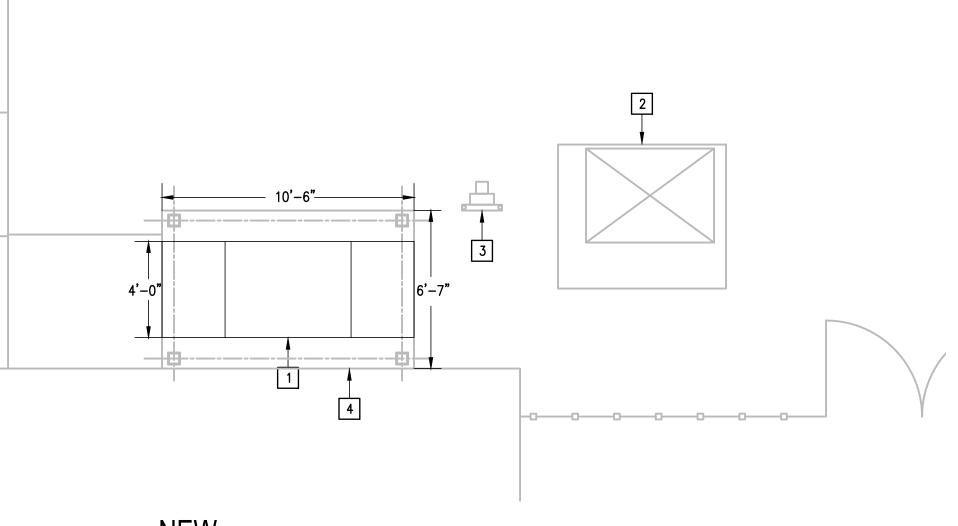
IMAGE

04 EXISTING ELECTRICAL SERVICE ENTRANCE



DEMOLITION ENLARGED ELECTRICAL PLAN





NEW

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



DEMOLITION GENERAL NOTES:

- 1. THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE DRAWINGS AND BY THE REQUIREMENTS OF THIS SECTION. A VISIT TO THE SITE IS REQUIRED TO PROPERLY BID THE DEMOLITION WORK.
- 2. REMOVED MATERIALS SHALL BELONG TO OWNER. DELIVER THEM TO OWNERS DESIGNATED LOCATION. IF OWNER DOES NOT WANT THE REMOVED MATERIALS THEN REMOVE THEM FROM SITE & PROPERLY DISPOSE OF THEM.

DEMOLITION KEYED NOTES:

- 1) DISCONNECT AND REMOVE EXISTING SQUARE "D" 2500A MCB, 65,000 AIC 480/277V 3ø, 4W SWITCHBOARD NO. 23993626-001 FOR REPLACEMENT.
- 2 EXISTING UTILITY (MVEC) TRANSFORMER TO REMAIN AS IS.
- (3) EXISTING ELECTRICAL UTILITY METER (MVEC) TO REMAIN AS IS.
- (4) EXISTING CONCRETE PAD TO REMAIN AS IS.

KEYED NOTES:

- PROVIDE NEW 2500A 65,000 AIC 480/277V 3Ø, 4W SWITCHBOARD.
 RECONNECT EXISTING BRANCH CIRCUITS AND FEEDERS. SEE NEW SWITCHBOARD ELEVATION.
- 2 EXISTING ELECTRIC UTILITY (MVEC) PAD MOUNT TRANSFORMER.
- 3 EXISTING ELECTRIC UTILITY METER (MVEC).
- 4 EXISTING CONCRETE PAD.

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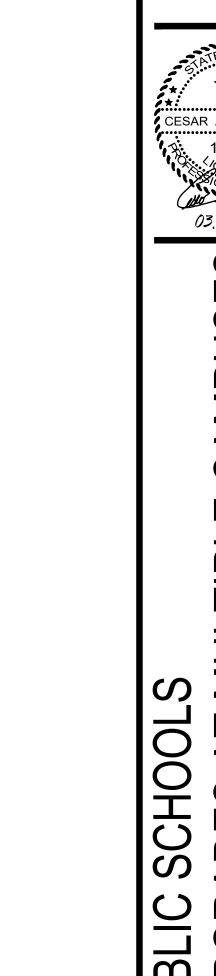


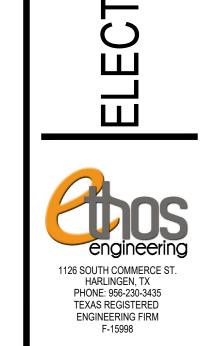
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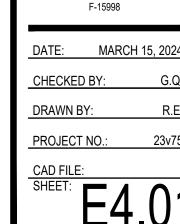
AMPU 르 SCHOOL PUBI IDEA SWITCHGE ELECTRICAL

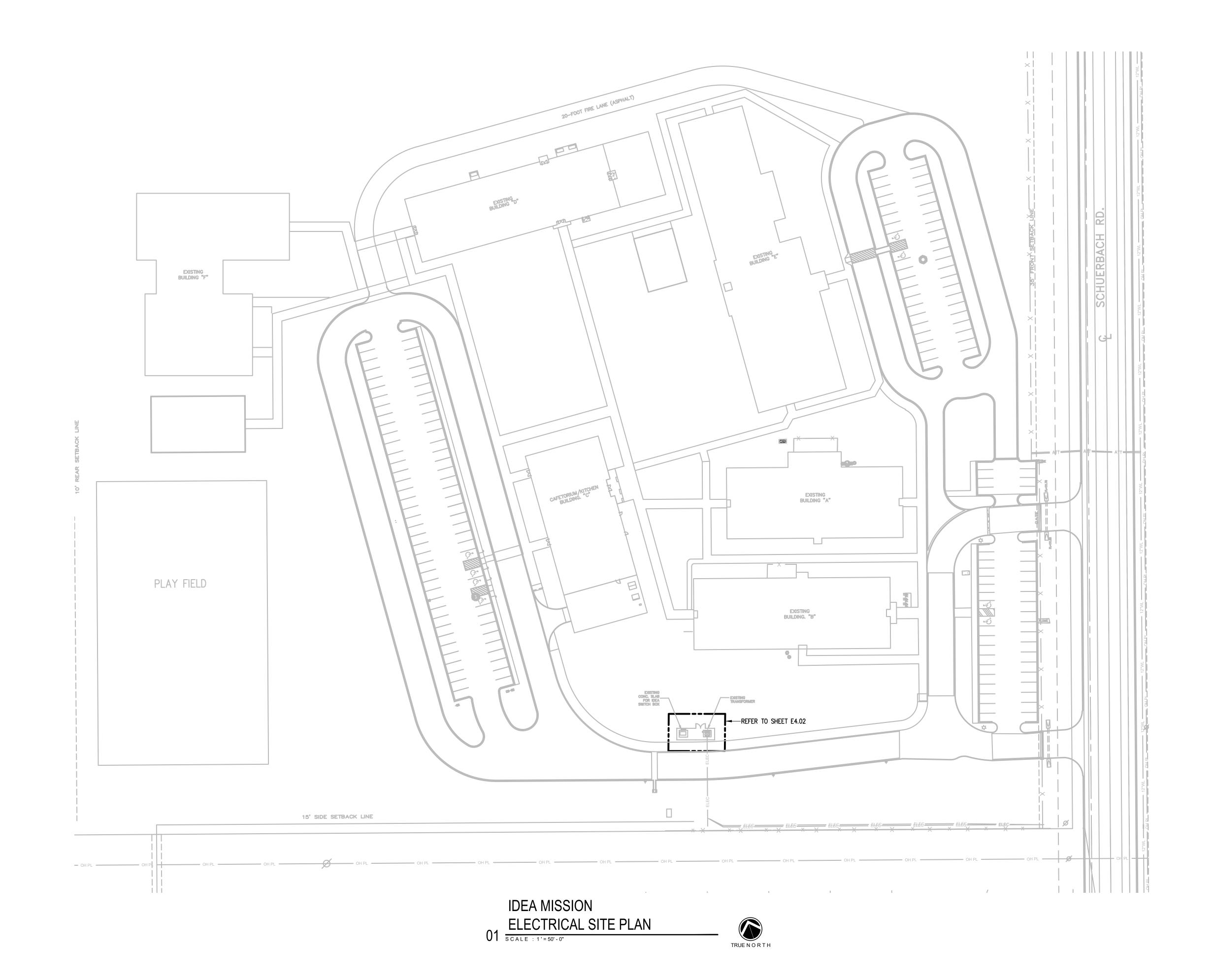


MARCH 15, 202



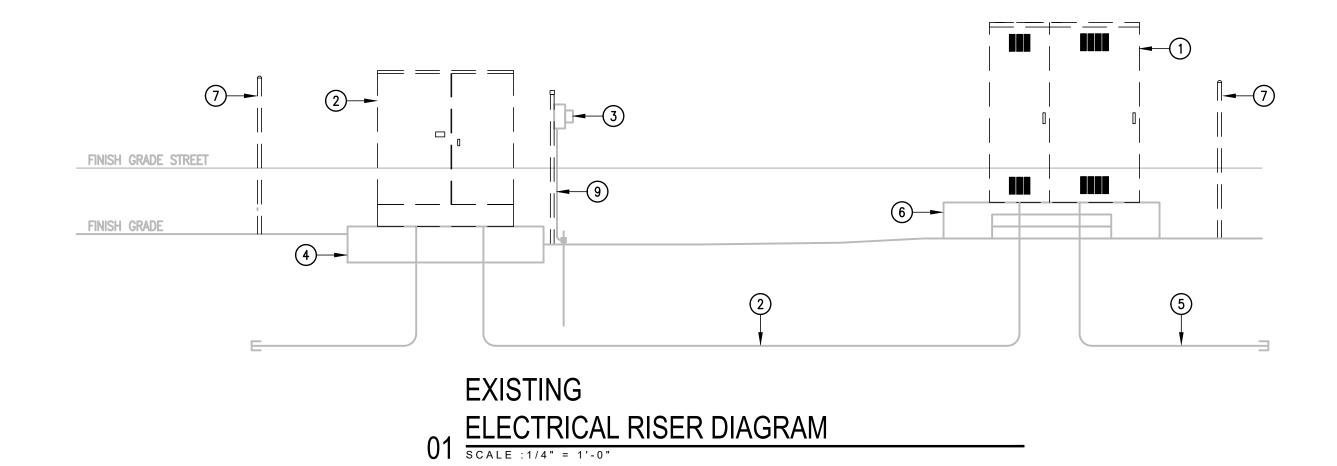


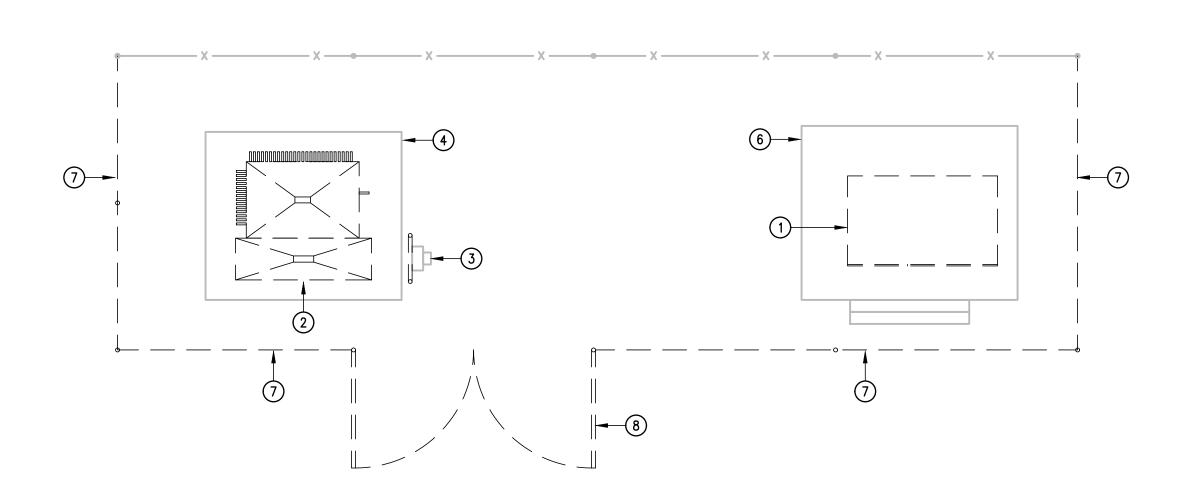




DEMOLITION KEYED NOTES:

- 1) DISCONNECT AND REMOVE EXISTING EATON POW-R-LINE C 480/277V 3Ø, 4W, 2500A, 65KAIC, SWITCHBOARD NO. SCP47499.
- 2 DISCONNECT AND REMOVE EXISTING FEEDERS. EXISTING UTILITY TRANSFORMER (AEP) TO BE REMOVED BY UTILITY COMPANY (AEP), COORDINATE WITH UTILITY COMPANY (AEP).
- 3 DISCONNECT AND UNIINSTALL EXISTING ELECTRIC UTILITY METER, RACEWAY, WRING AND SUPPORT HARDWARE. COORDINATE TEMPORARY SERVICE DISCONNECTION WITH UTILITY COMPANY (AEP).
- 4 EXISTING TRANSFORMER CONCRETE FOUNDATION TO REMAIN SEE STRUCTURAL DRAWINGS.
- 5 DISCONNECT EXISTING BRANCH CIRCUITS.
- 6 EXISTING CONCRETE PAD TO REMAIN AS IS.
- 7) REMOVE EXISTING CHAIN LINK FENCE.
- 8 REMOVE EXISTING CHAIN LINK DOOR.
- 9 EXISTING GROUNDING ELECTRODE CONDUCTOR AND EXISTING GROUND ROD TO REMAIN AS IS.







KEYED NOTES:

- 1 PROVIDE NEW 2500A, 65KAIC, 480/277V, 3ø, 4W, NEMA 3R SWITCHBOARD. REFER TO SWITCHBOARD ELEVATION.
- PROPOSED NEW ELECTRIC UTILITY PAD MOUNT TRANSFORMER, PROVIDE NEW 7 RUNS EACH 4"-4#500KCMIL IN EXISTING RACEWAYS. PROVIDE NEW RACEWAYS TO EXTEND UP" TO NEW ELEVATION. COORDINATE INSTALLATION OF UTILITY TRANSFORMER WITH UTILITY COMPANY (AEP).
- PROVIDE NEW ELECTRIC SUPPORT STRUCTURE, REINSTALL METER AND RECONNECT EXISTING RACEWAYS AND WIRING. EXTEND RACEWAYS AND WIRING AS NECESSARY.
- PROVIDE ELECTRIC UTILITY PAD MOUNT TRANSFORMER CONCRETE PAD, SEE AEP TRANSFORMER CONCRETE DETAIL AND REFER TO STRUCTURAL DRAWINGS.
- 5 RECONNECT EXISTING BRANCH CIRCUITS.
- 6 EXISTING CONCRETE PAD.
- 7 PROVIDE NEW CHAIN LINK FENCE SEE SPECIFICATIONS.
- 8 PROVIDE NEW CHAIN LINK DOOR.
- 9 RECONNECT GROUNDING ELECTRODE CONDUCTOR AND EXISTING GROUND
- 10 NEW GRADING. REFER TO CIVIL DRAWINGS.
- 11 NEW STAIRS. REFER TO CIVIL DRAWINGS.

DEMOLITION GENERAL NOTES:

- 1. THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE DRAWINGS AND BY THE REQUIREMENTS OF THIS SECTION. A VISIT TO THE SITE IS REQUIRED TO PROPERLY BID THE DEMOLITION WORK.
- 2. REMOVED MATERIALS SHALL BELONG TO OWNER. DELIVER THEM TO OWNERS DESIGNATED LOCATION. IF OWNER DOES NOT WANT THE REMOVED MATERIALS THEN REMOVE THEM FROM SITE & PROPERLY DISPOSE OF THEM.



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SWITCHGE

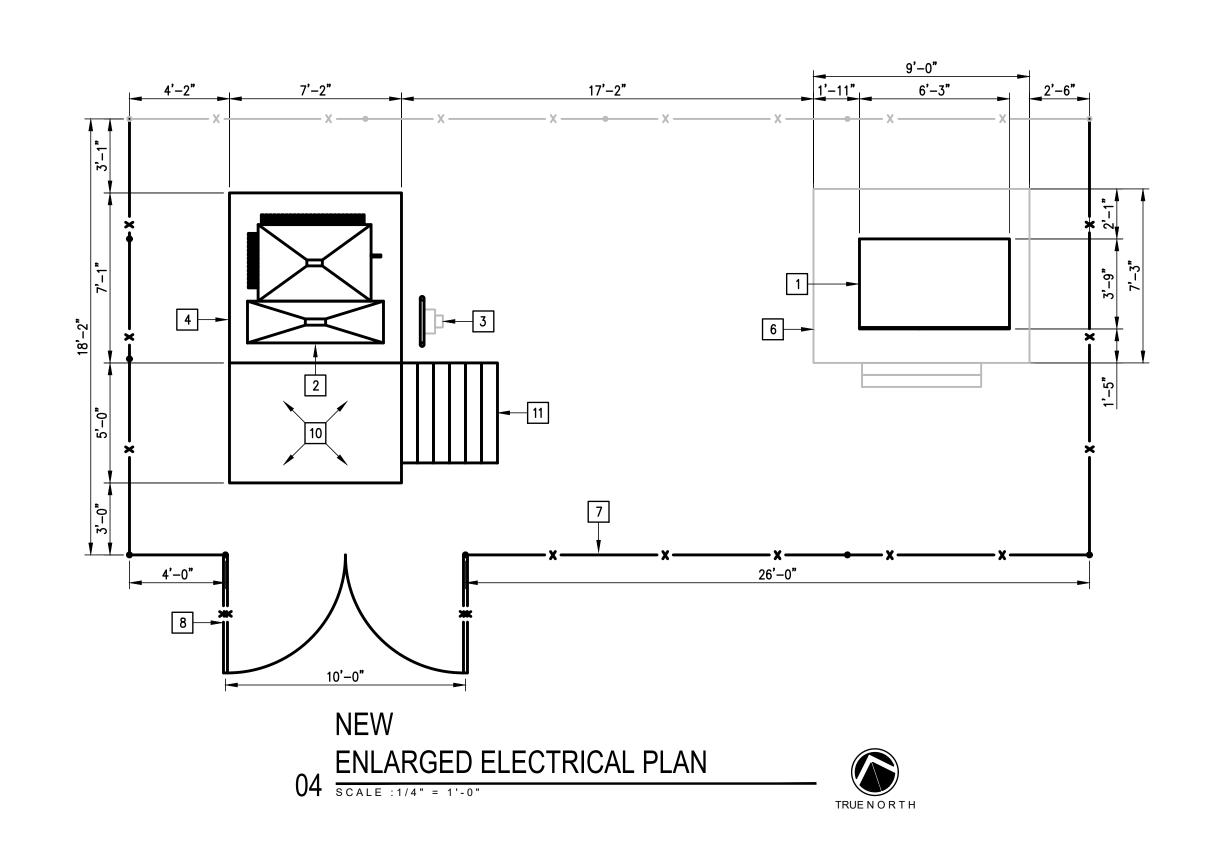
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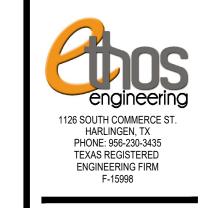
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PUBI

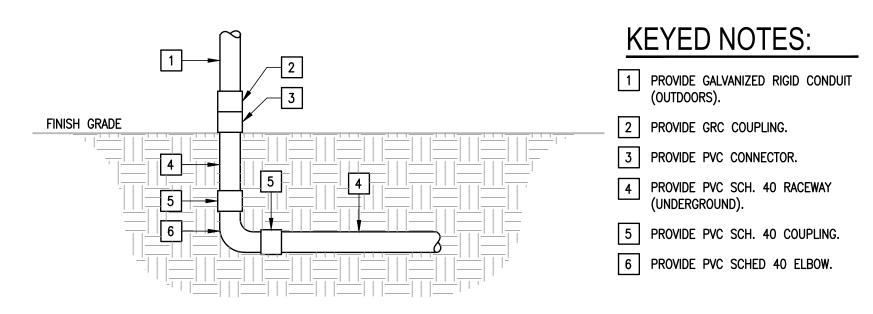
IDEA

FINISH GRADE STREET 4 6 OLD FINISH GRADE 02 ELECTRICAL RISER DIAGRAM

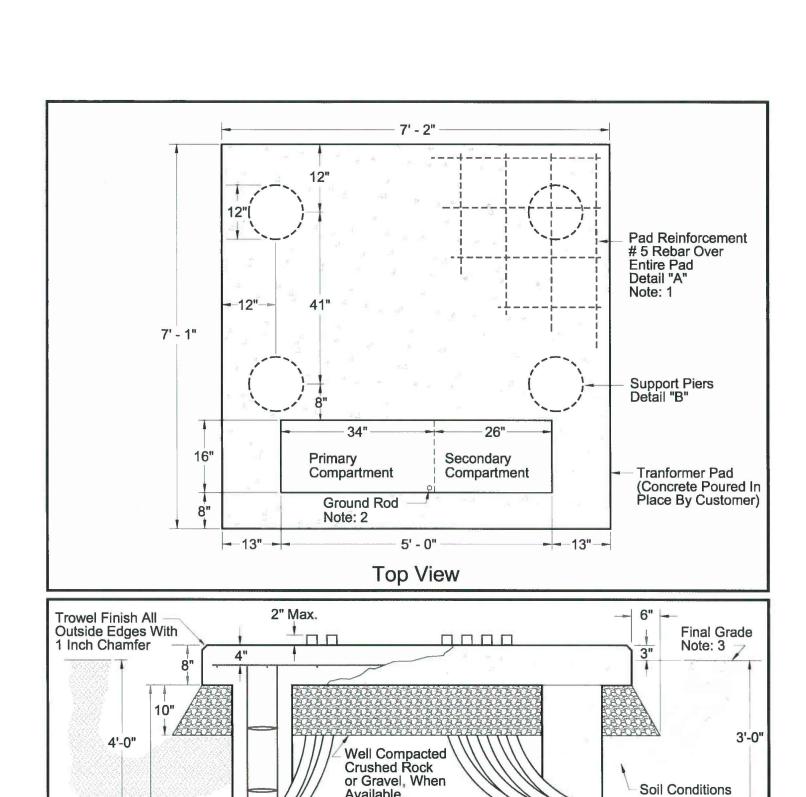




MARCH 15, 20



UNDERGROUND TO ABOVE GROUND 01 RACEWAYS TRANSITION SCALE :NONE



Available.

Primary Conduit D.S. 2000

Notes: 7 & 8

Support Pier

Concrete Pad & Piers for Three Phase Pad-Mounted Transformer

10/02/2013

--12"---

* See Notes on Page 5 of 7

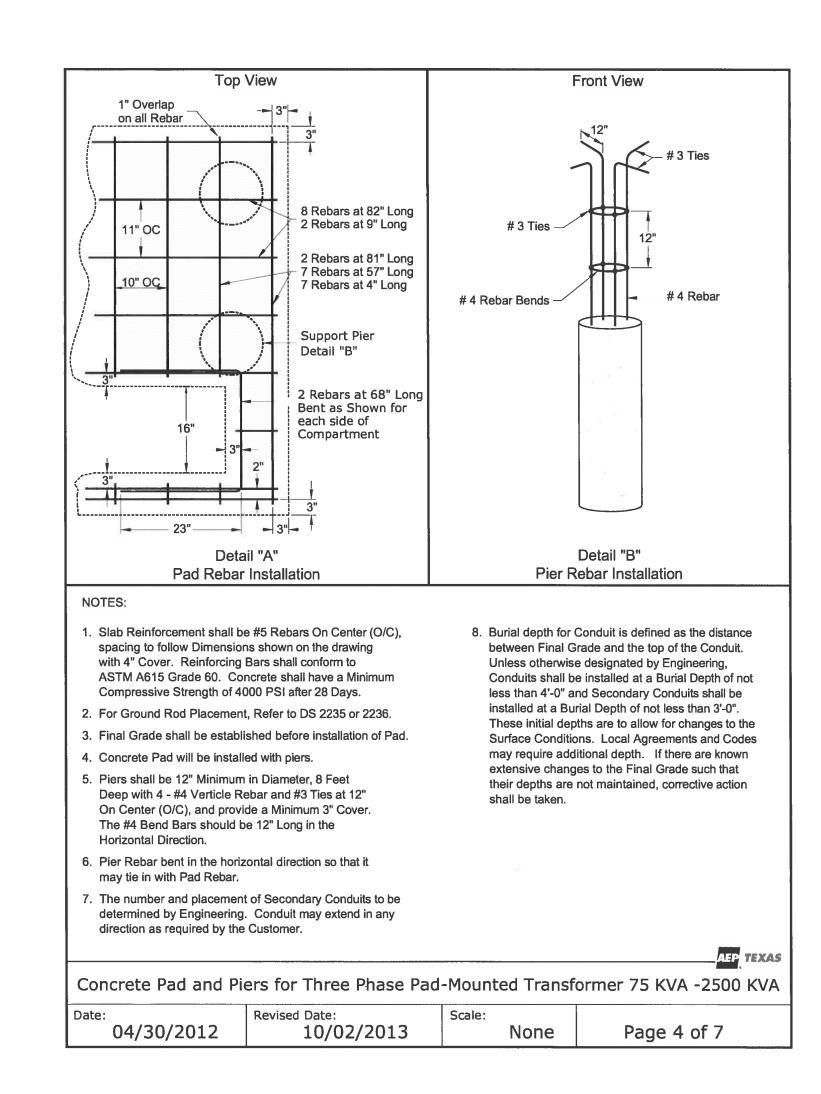
04/30/2012

(Concrete is Poured

in Place By Customer) Detail "B" Note: 6

Front View

None

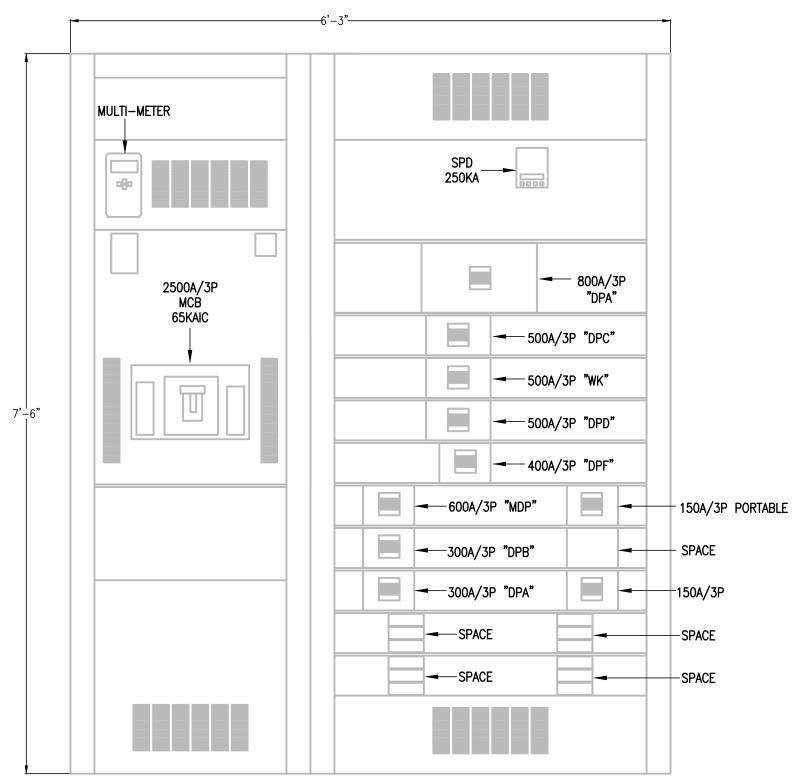


AEP TRANSFORMER 02 CONCRETE PAD DETAIL
SCALE: NOT TO SCALE

Secondary/Metering Conduit D.S. 2000 Notes: 7 & 8

AEP TEXAS

Page 3 of 7



1. PROVIDE NEMA 3R OUTDOOR ENCLOSURE. PROVIDE NEW CIRCUIT BREAKER MUST BE AT OR BELOW EXISTING HEIGHT IN ORDER FOR EXISTING FEEDER TO RECONNECT TO NEW CIRCUIT BREAKER. FIELD VERIFY PRIOR TO ORDERED EQUIPMENT. NO CHANGE ORDERS WILL BE ALLOWED FOR FAILURE TO FIELD VERIFY.

PROVIDE INTEGRAL MOUNTED "SPD".

PROVIDE INTEGRAL DIGITAL MULTI-METER. PROVIDE A MIMIC BUS.

LABEL EACH BREAKER WITH AN ENGRAVED NAMEPLATE.

PROVIDE ARC MITIGATION MEASURES FOR CIRCUIT BREAKERS RATED 1200A AND ABOVE TO COMPLY WITH NEC 240.87.

PROVIDE BRANCH CIRCUIT BREAKERS THERMAL MAGNETIC TYPE. 9. PROVIDE MAIN CIRCUIT BREAKER ELECTRO MAGNETIC TYPE.

10. PROVIDE GROUND-FAULT PROTECTION FOR CIRCUIT BREAKERS RATED 100A AND ABOVE TO COMPLY WITH NEC 230.95.

NEW SWITCHBOARD ELEVATION 03 SCALE: NOT TO SCALE



04 EXISTING ELECTRICAL SERVICE SWITCHBOARD

IDEA MISSION

1126 SOUTH COMMERCE ST. HARLINGEN, TX PHONE: 956-230-3435 TEXAS REGISTERED ENGINEERING FIRM

CHECKED BY:

PROJECT NO.:

DRAWN BY:

MARCH 15, 2024

NO: REVISION: BY:

COPY NO:

CESAR A. GONZALEZ

03.15.2024

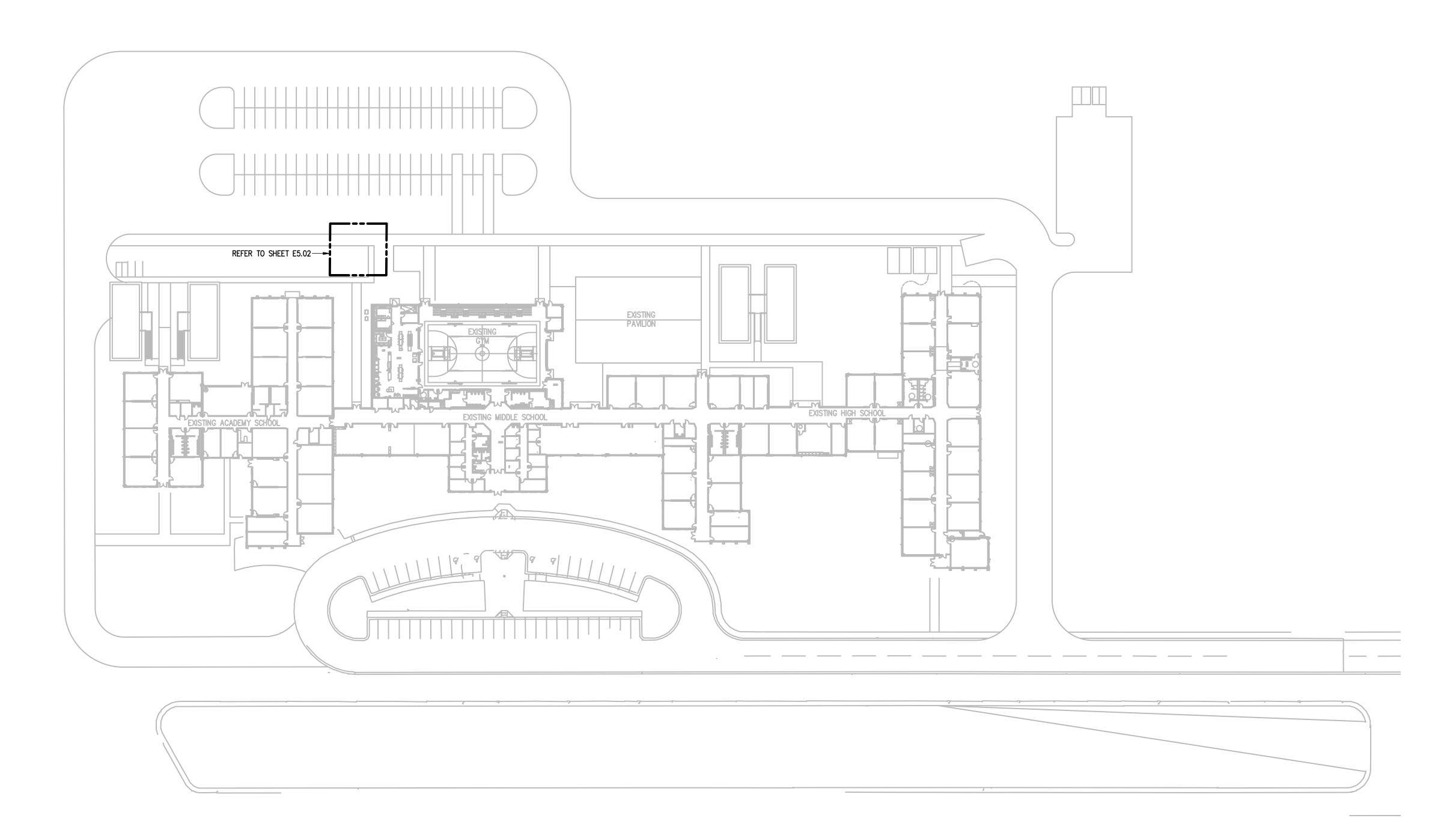


MULTIPLE GRADES

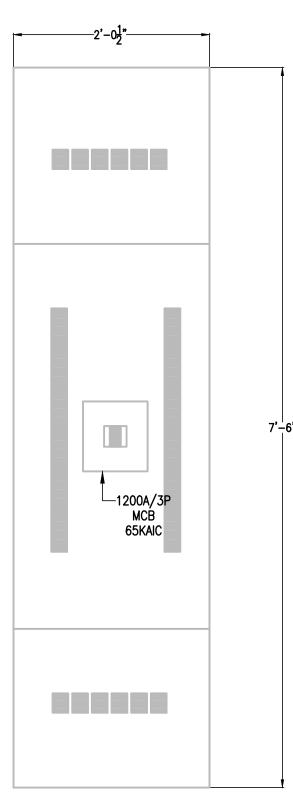
engineering

1126 SOUTH COMMERCE ST.
HARLINGEN, TX
PHONE: 956-230-3435
TEXAS REGISTERED
ENGINEERING FIRM
F-15998

DATE: MARCH 15, 2024 DRAWN BY: PROJECT NO.:



IDEA PHARR 01 ELECTRICAL SITE PLAN
SCALE : 1" = 50'-0" PLAN NORTH



1. PROVIDE NEMA 3R OUTDOOR ENCLOSURE.

2. PROVIDE NEW CIRCUIT BREAKER MUST BE AT OR BELOW EXISTING HEIGHT IN ORDER FOR EXISTING FEEDER TO RECONNECT TO NEW CIRCUIT BREAKER. FIELD VERIFY PRIOR TO ORDERED EQUIPMENT. NO CHANGE ORDERS WILL BE ALLOWED FOR FAILURE TO FIELD VERIFY.

3. PROVIDE INTEGRAL MOUNTED "SPD". . PROVIDE INTEGRAL DIGITAL MULTI-METER.

PROVIDE A MIMIC BUS.

LABEL EACH BREAKER WITH AN ENGRAVED NAMEPLATE.

PROVIDE ARC MITIGATION MEASURES FOR CIRCUIT BREAKERS RATED 1200A AND ABOVE TO

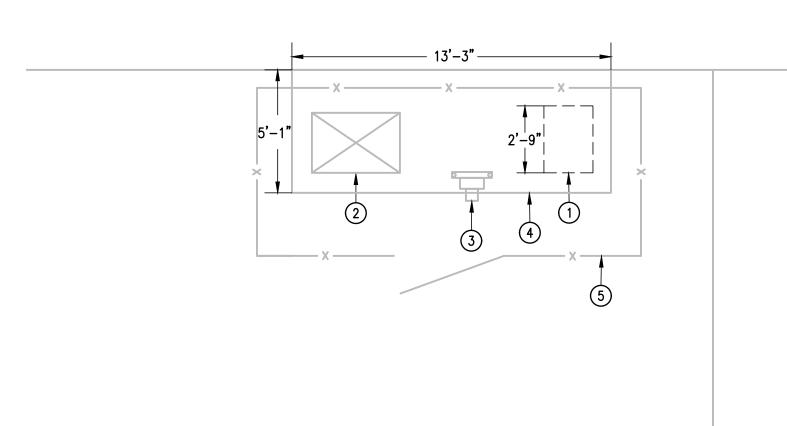
COMPLY WITH NEC 240.87. 8. PROVIDE MAIN CIRCUIT BREAKER ELECTRO MAGNETIC TYPE.

9. PROVIDE GROUND-FAULT PROTECTION FOR CIRCUIT BREAKERS RATED 100A AND ABOVE TO COMPLY WITH NEC 230.95.

NEW SWITCHBOARD ELEVATION SCALE: NOT TO SCALE



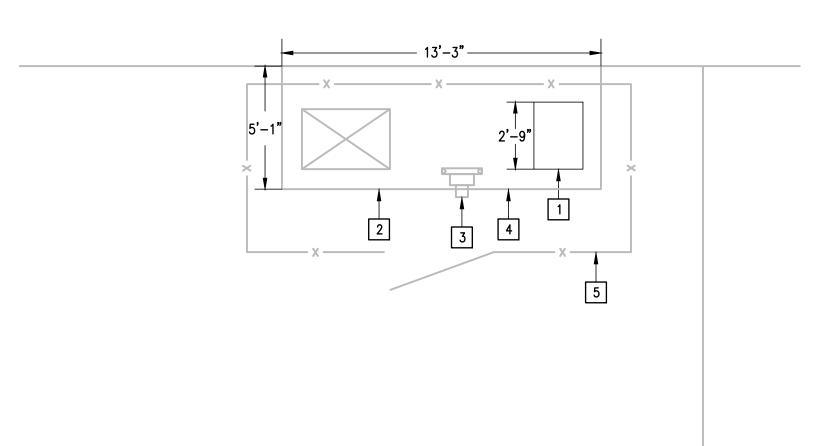
IMAGE 04 EXISTING ELECTRICAL SERVICE ENTRANCE



DEMOLITION

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





NEW 02 ENLARGED ELECTRICAL PLAN
SCALE:1/4" = 1'-0"



GENERAL NOTES:

- 1. ELECTRICAL BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" 2#12 & #12G. 20A/120V HOMERUNS EXCEEDING 100FT, THE WIRE SIZE SHALL BE #10 & #8
- 2. HOMERUNS INSTALL NO MORE THAN THREE PER RACEWAY (INCLUDING LIGHTING BRANCH CIRCUITS); 3 INSULATED "HOT", 3 INSULATED "NEUTRAL AND 1 SHARED "GROUND".
- 3. PROVIDE FIRE STOPPING AT ALL FIRE WALL PENETRATIONS; PROVIDE EXPANSION PLATES & BONDING JUMPERS AT BUILDING EXPANSION JOINTS.

DEMOLITION GENERAL NOTES:

- 1. THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE DRAWINGS AND BY THE REQUIREMENTS OF THIS SECTION. A VISIT TO THE SITE IS REQUIRED TO PROPERLY BID THE DEMOLITION WORK.
- 2. REMOVED MATERIALS SHALL BELONG TO OWNER. DELIVER THEM TO OWNERS DESIGNATED LOCATION. IF OWNER DOES NOT WANT THE REMOVED MATERIALS THEN REMOVE THEM FROM SITE & PROPERLY DISPOSE OF THEM.

DEMOLITION KEYED NOTES:

- 1) DISCONNECT AND REMOVE EXISTING EATON POW-R-LINE C 1200A MCB, 65,000 AIC 480/277V 3ø, 4W SWITCHBOARD NO. SCP0127636 FOR REPLACEMENT.
- (2) EXISTING UTILITY (MVEC) TRANSFORMER TO REMAIN AS IS.
- (3) EXISTING ELECTRICAL UTILITY (MVEC) METER TO REMAIN AS IS.
- (4) EXISTING CONCRETE PAD TO REMAIN AS IS.
- (5) EXISTING CHAIN LINK FENCE TO REMAIN AS IS.

KEYED NOTES:

- 1 PROVIDE NEW 1200A 65,000 AIC 480/277V 3ø, 4W SWITCHBOARD. RECONNECT EXISTING BRANCH CIRCUITS AND FEEDERS. SEE NEW SWITCHBOARD ELEVATION.
- 2 EXISTING ELECTRIC UTILITY (MVEC) TRANSFORMER.
- 3 EXISTING ELECTRIC UTILITY METER (MVEC).
- 4 EXISTING CONCRETE PAD.
- 5 EXISTING CHAIN LINK FENCE.

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AMPU SCHOOL PUBI **SWITCHGEAR** IDEA ELECTRICAL



MARCH 15, 202

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IDEA PHARR

1 APPROXIMATE LOCATION OF EXISTING SWITCHBOARD SERVING EXISTING DISTRIBUTION PANELBOARD "DPD".

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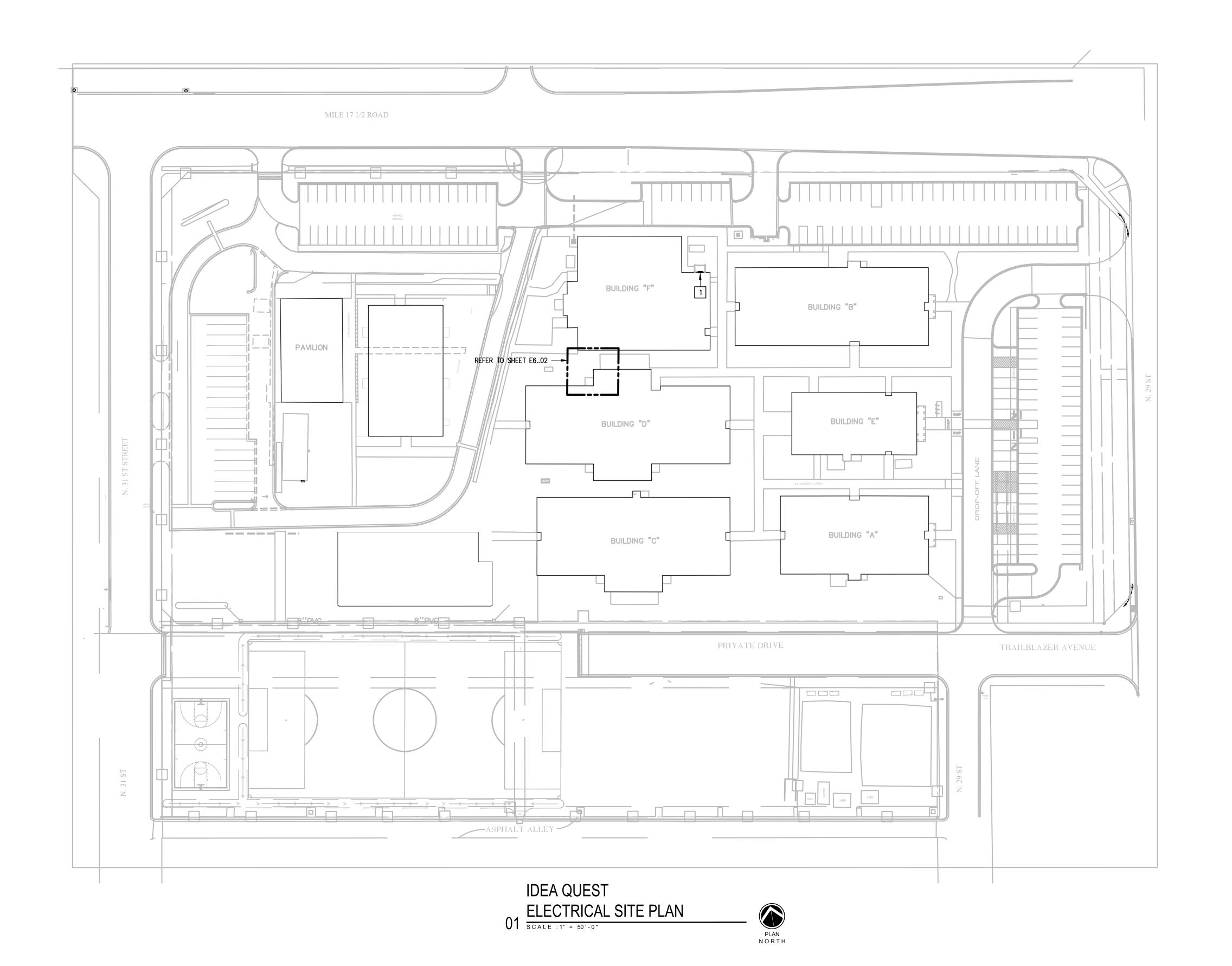
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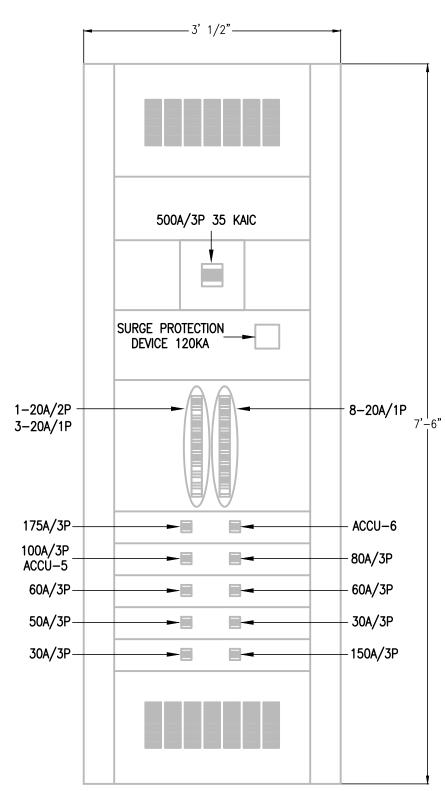
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MULTIPLE SCHOOL PUB **SWITCHGEAR** IDEA ELECTRICAL

1126 SOUTH COMMERCE ST. HARLINGEN, TX PHONE: 956-230-3435 TEXAS REGISTERD ENGINEERING FIRM F-15998

DATE: MARCH 15, 2024 DRAWN BY: PROJECT NO.:





 PROVIDE NEMA 3R OUTDOOR ENCLOSURE.
 PROVIDE NEW CIRCUIT BREAKER MUST BE AT OR BELOW EXISTING HEIGHT IN ORDER FOR EXISTING FEEDER TO RECONNECT TO NEW CIRCUIT BREAKER. FIELD VERIFY PRIOR TO ORDERED EQUIPMENT. NO CHANGE ORDERS WILL BE ALLOWED FOR FAILURE TO FIELD VERIFY.

PROVIDE INTEGRAL MOUNTED "SPD". PROVIDE INTEGRAL DIGITAL MULTI-METER.

PROVIDE A MIMIC BUS.

6. LABEL EACH BREAKER WITH AN ENGRAVED NAMEPLATE.

7. PROVIDE BRANCH CIRCUIT BREAKERS THERMAL MAGNETIC TYPE.

8. PROVIDE MAIN CIRCUIT BREAKER ELECTRO MAGNETIC TYPE.

NEW DISTRIBUTION PANELBOARD **ELEVATION**

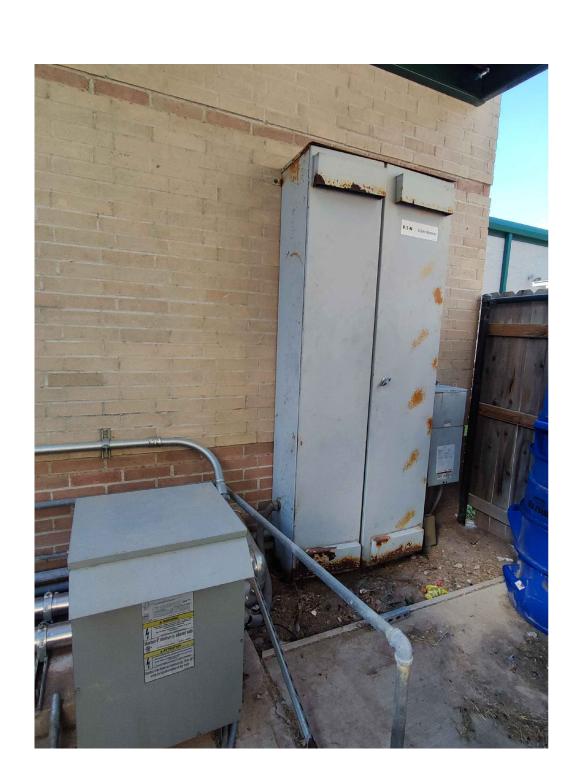
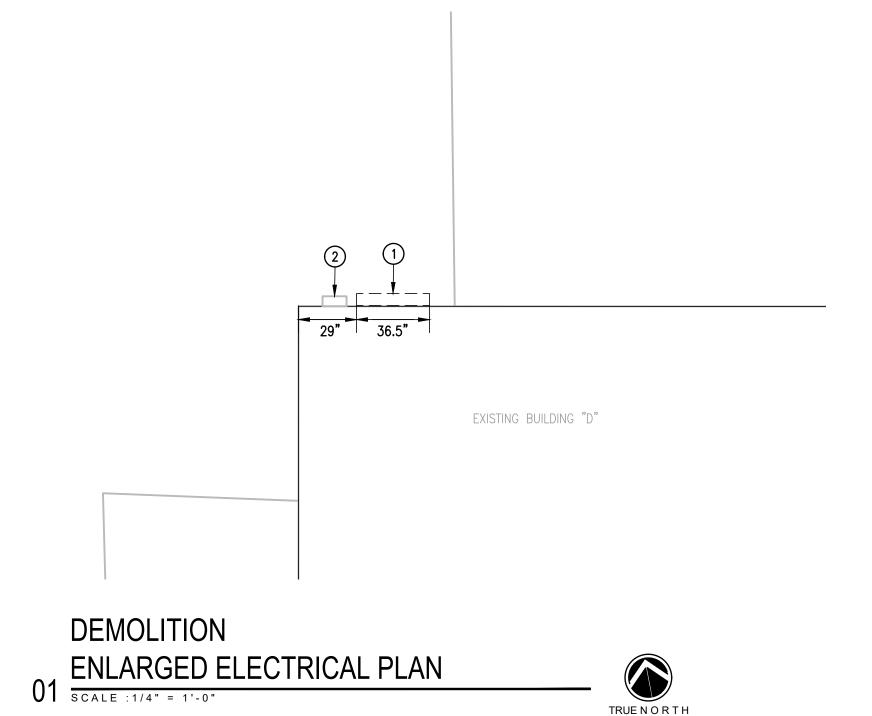
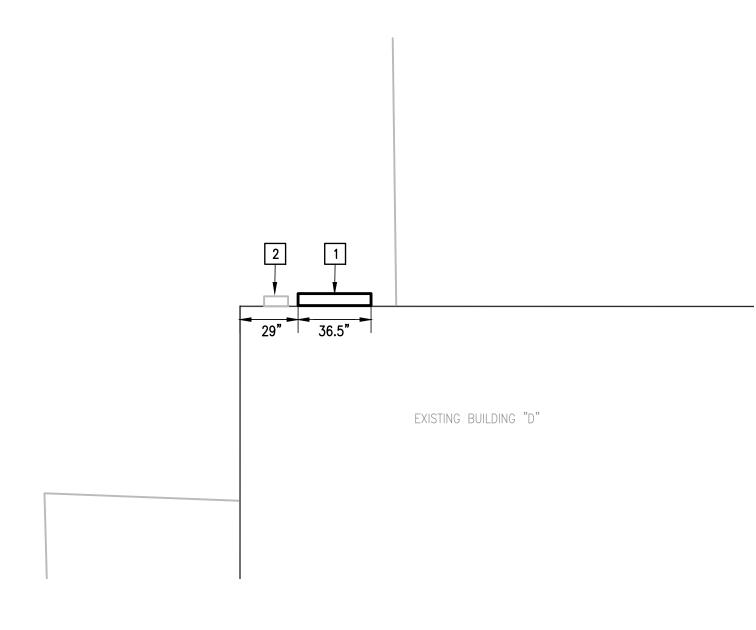


IMAGE 04 EXISTING DISTRIBUTION PANELBOARD "DPD"





NEW 02 ENLARGED ELECTRICAL PLAN
SCALE:1/4" = 1'-0"



DEMOLITION GENERAL NOTES:

- 1. THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE DRAWINGS AND BY THE REQUIREMENTS OF THIS SECTION. A VISIT TO THE SITE IS REQUIRED TO PROPERLY BID THE DEMOLITION WORK.
- 2. REMOVED MATERIALS SHALL BELONG TO OWNER. DELIVER THEM TO OWNERS DESIGNATED LOCATION. IF OWNER DOES NOT WANT THE REMOVED MATERIALS THEN REMOVE THEM FROM SITE & PROPERLY DISPOSE OF THEM.

DEMOLITION KEYED NOTES:

- 1 DISCONNECT AND REMOVE EXISTING EATON 600A MCB 35,000 AIC 480/277V 3Ø, 4W PANELBOARD "DPD" FOR REPLACEMENT.
- 2 EXISTING STEP-DOWN TRANSFORMER TO REMAIN AS IS TEMPORARY DISCONNECT.

KEYED NOTES:

- PROVIDE NEW 600A 35,000 AIC 480/277V 3Ø, 4W SWITCHBOARD. RECONNECT EXISTING BRANCH CIRCUITS AND FEEDERS. REFER TO DISTRIBUTION PANELBOARD ELEVATION.
- 2 RECONNECT EXISTING STEP DOWN TRANSFORMER.

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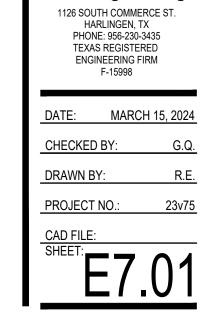
ENGINEERING FIRM

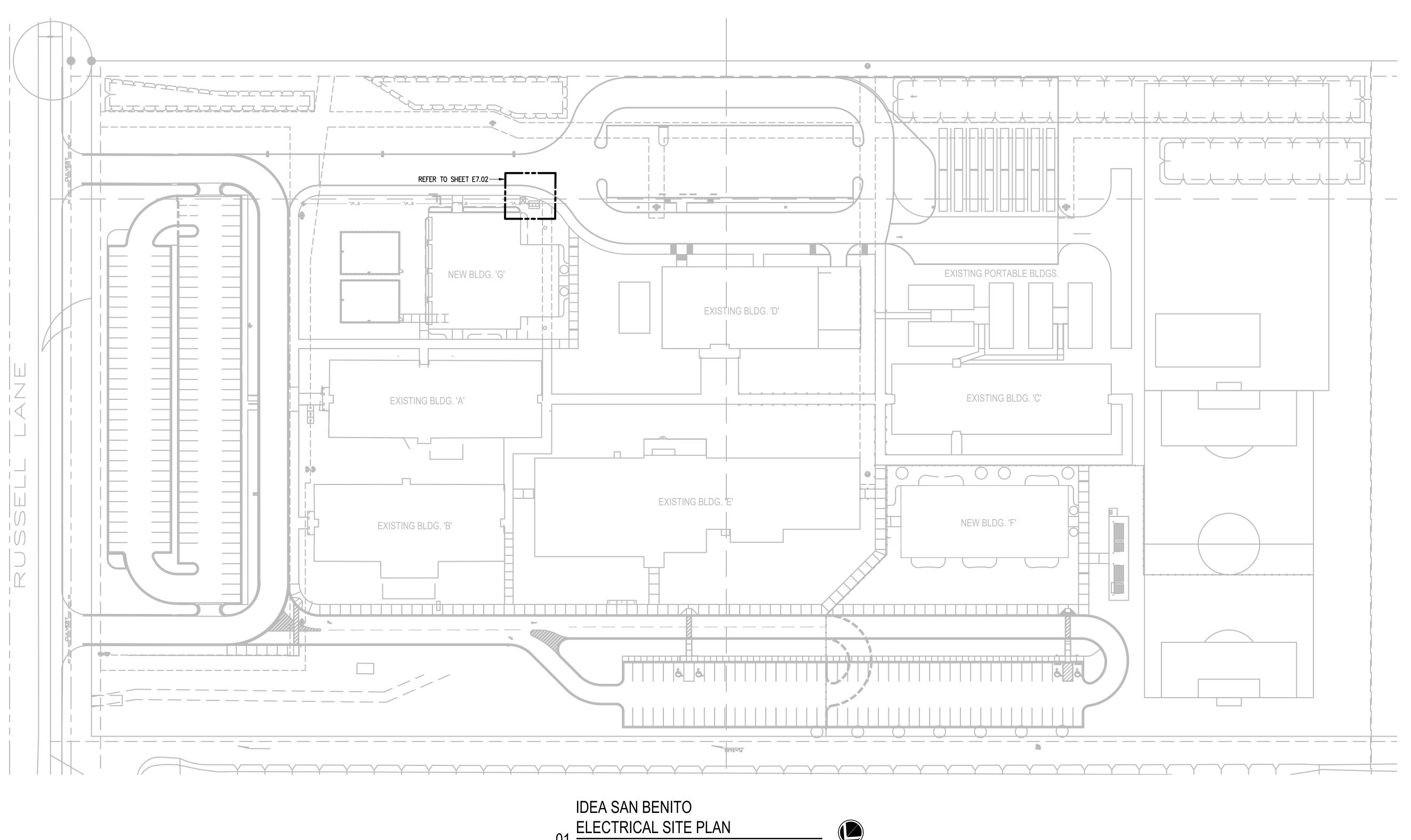
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SWITCHGEAR





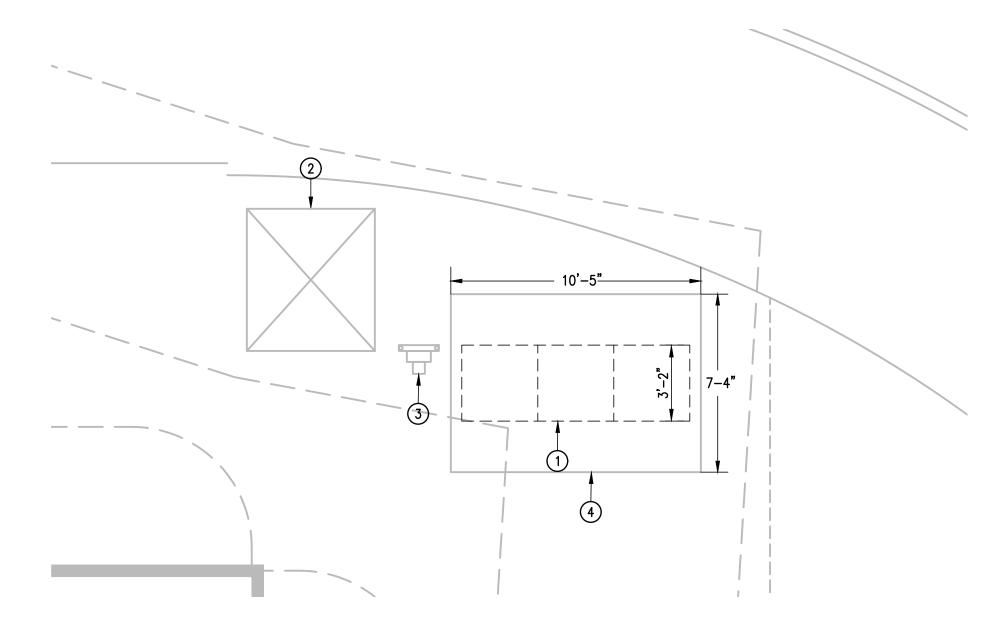


- 1. PROVIDE NEMA 3R OUTDOOR ENCLOSURE. PROVIDE NEW CIRCUIT BREAKER MUST BE AT OR BELOW EXISTING HEIGHT IN ORDER FOR
- EXISTING FEEDER TO RECONNECT TO NEW CIRCUIT BREAKER. FIELD VERIFY PRIOR TO ORDERED EQUIPMENT. NO CHANGE ORDERS WILL BE ALLOWED FOR FAILURE TO FIELD VERIFY.
- 3. PROVIDE INTEGRAL MOUNTED "SPD". 4. PROVIDE INTEGRAL DIGITAL MULTI-METER.
- 5. PROVIDE A MIMIC BUS.
- 6. LABEL EACH BREAKER WITH AN ENGRAVED NAMEPLATE.
- PROVIDE ARC MITIGATION MEASURES FOR CIRCUIT BREAKERS RATED 1200A AND ABOVE TO COMPLY WITH NEC 240.87.
- 8. PROVIDE BRANCH CIRCUIT BREAKERS THERMAL MAGNETIC TYPE. 9. PROVIDE MAIN CIRCUIT BREAKER ELECTRO MAGNETIC TYPE.
- 10. PROVIDE GROUND-FAULT PROTECTION FOR CIRCUIT BREAKERS RATED 100A AND ABOVE TO
- COMPLY WITH NEC 230.95. 11. PROVIDE COORDINATION STUDY TO SET UP THE LSI DIALS.

NEW SWITCHBOARD ELEVATION

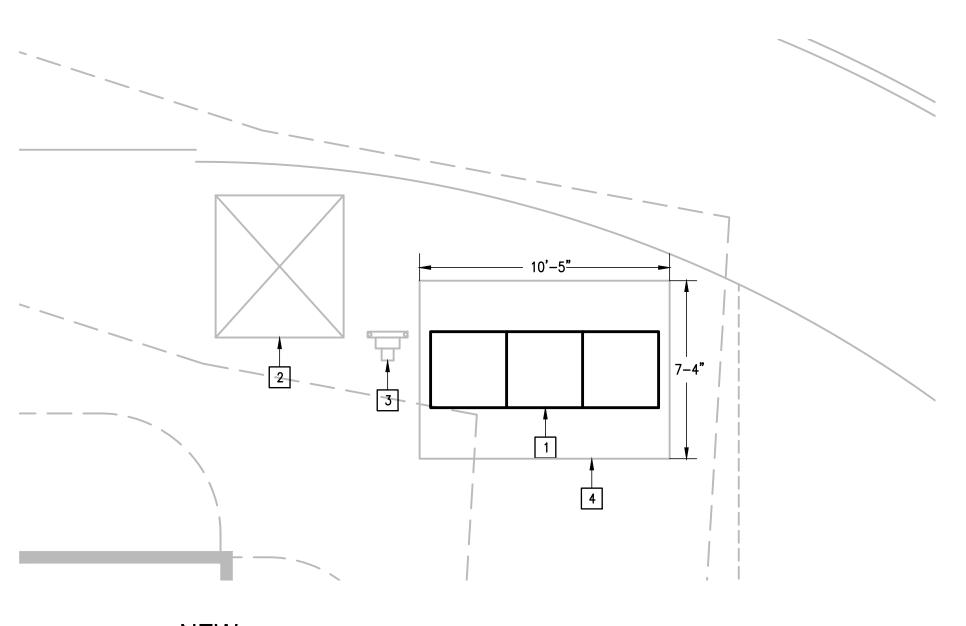


IMAGE 04 ELECTRICAL SERVICE ENTRANCE
SCALE: NOT TO SCALE



DEMOLITION ENLARGED ELECTRICAL PLAN O1 SCALE :1/4" = 1'-0"





NEW ENLARGED ELECTRICAL PLAN



DEMOLITION GENERAL NOTES:

- 1. THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE DRAWINGS AND BY THE REQUIREMENTS OF THIS SECTION. A VISIT TO THE SITE IS REQUIRED TO PROPERLY BID THE DEMOLITION WORK.
- 2. REMOVED MATERIALS SHALL BELONG TO OWNER. DELIVER THEM TO OWNERS DESIGNATED LOCATION. IF OWNER DOES NOT WANT THE REMOVED MATERIALS THEN REMOVE THEM FROM SITE & PROPERLY DISPOSE OF THEM.

DEMOLITION KEYED NOTES:

- DISCONNECT AND REMOVE EXISTING SIEMENS 2500A MCB 65,000 AIC 480/277V 3ø, 4W SWITCHBOARD NO. 86-15046-A00010-01 FOR REPLACEMENT.
- 2 EXISTING UTILITY (AEP) TRANSFORMER TO REMAIN AS IS.
- 3 EXISTING ELECTRICAL UTILITY (AEP) PAD MOUNT METER TO REMAIN AS IS.
- 4 EXISTING CONCRETE PAD TO REMAIN AS IS.

KEYED NOTES:

- PROVIDE 2500A MCB 65,000 AIC 480/277V 3Ø, 4W SWITCHBOARD.
 RECONNECT EXISTING BRANCH CIRCUITS AND FEEDERS. REFER TO NEW SWITCHBOARD ELEVATION.
- 2 EXISTING ELECTRIC UTILITY (AEP) PAD MOUNT TRANSFORMER.
- 3 EXISTING ELECTRIC UTILITY METER (AEP).
- 4 EXISTING CONCRETE PAD.

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