

EXTERIOR LEARNING PAVILION AT Lawrenceville Elementary School

40 Craven Lane, Lawrenceville, NJ 08648

For The
Lawrence Township Public Schools
2565 Princeton Pike, Lawrence Township, NJ 08648

DOE STATE PROJECT# 21-2580-090-22-1000

SET ISSUE: 11/29/2022 ISSUED FOR BID

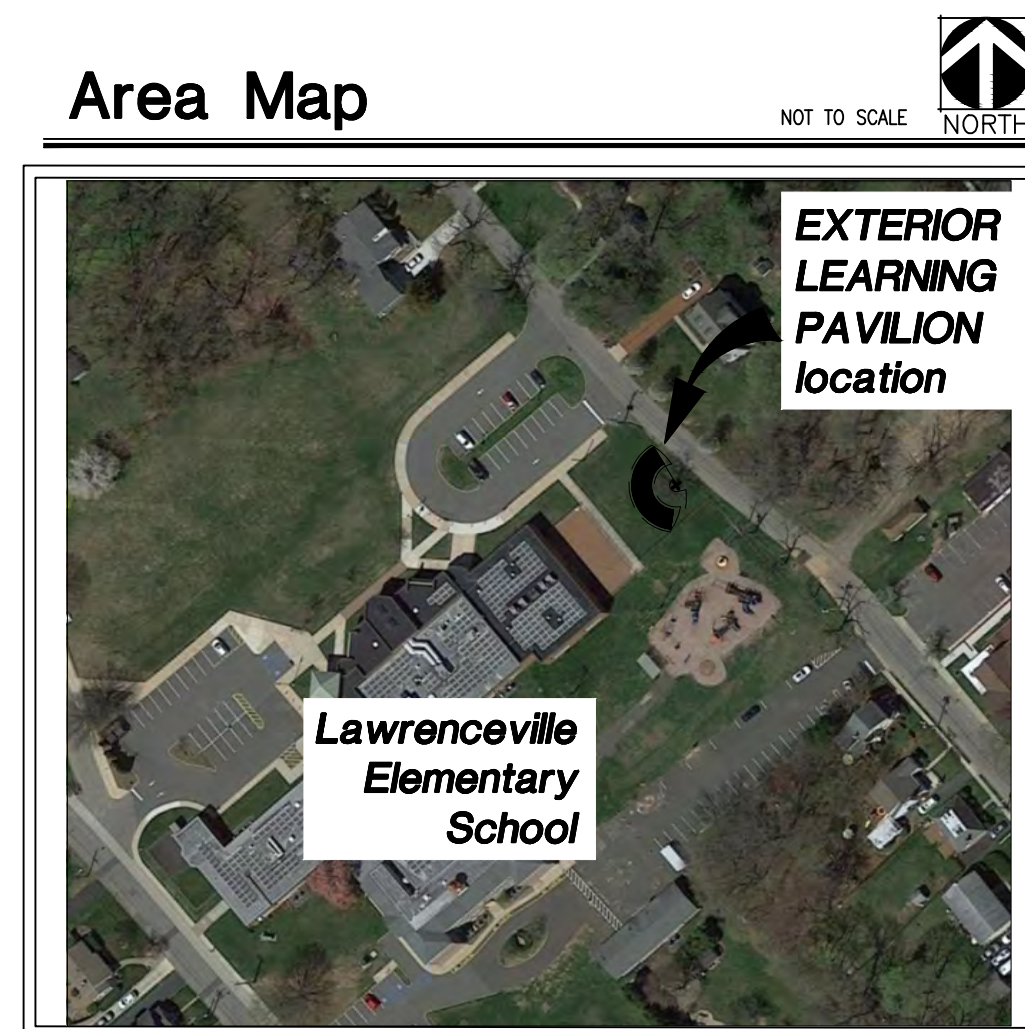
APPLICABLE CODES

- JURISDICTION: LAWRENCE TOWNSHIP
- APPLICABLE CODES:
 - INTERNATIONAL BUILDING CODE/ 2018 NEW JERSEY EDITION
 - ASHRAE 90.1-2016
 - INTERNATIONAL MECHANICAL CODE/ 2018
 - NATIONAL ELECTRIC CODE/ 2017
 - NATIONAL STANDARD PLUMBING CODE/ 2018
 - N.J.A.C. 5:23-6 REHABILITATION SUB CODE
 - N.J.A.C. 5:23-7 BARRIER FREE SUBCODE AND ICC-ANSI A117.1-2009
 - NEW JERSEY UNIFORM CONSTRUCTION CODE TITLE 6, CHAPTER 23, SUBCHAPTERS 1-12
- USE GROUP/ OCCUPANCY: IBC/ 2018 NEW JERSEY EDITION, CHAPTER 3: USE GROUP E

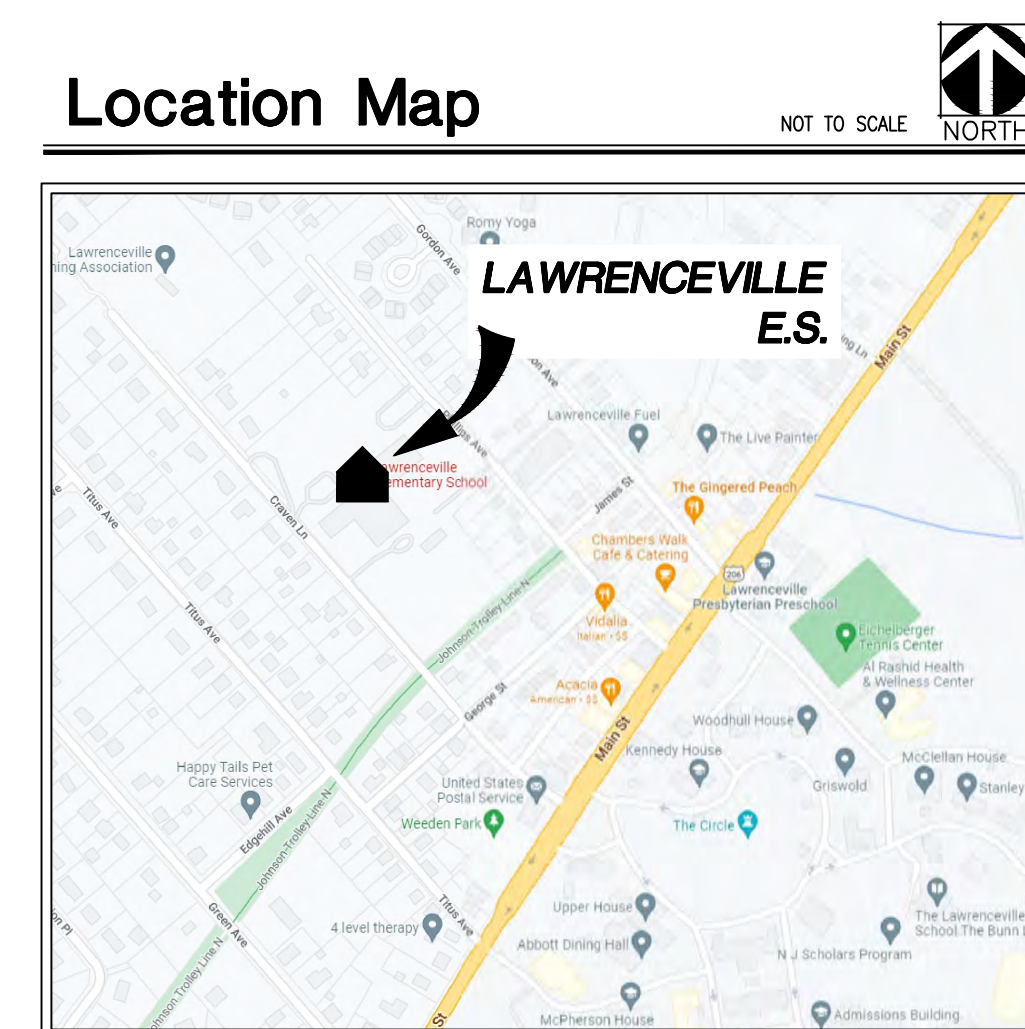
General Notes

- ALL WORK SHALL CONFORM TO THE 2018 INTERNATIONAL BUILDING CODE AND ALL OTHER APPLICABLE CODES, ORDINANCES, ETC. FOR NEW JERSEY STATE AND THE LOCAL AUTHORITY HAVING JURISDICTION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE SITE AND FAMILIARIZING HIMSELF WITH THE EXISTING CONDITIONS AND SCOPE OF THE WORK PRIOR TO SUBMITTING BIDS AND COMMENCING WORK. COORDINATE SITE ACCESS WITH OWNER.
- CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL SAFE WORKING CONDITIONS AND SHALL OBSERVE ALL SAFETY REQUIREMENTS ESTABLISHED BY JURISDICTIONAL AGENCIES AND THE OWNER. WHERE CONFLICTS EXIST, THE MORE STRINGENT REQUIREMENT SHALL APPLY. CARE SHALL BE EXERCISED TO AVOID ENDANGERING PERSONNEL OR STRUCTURES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION METHODS, PROCEDURES AND JOB SITE CONDITIONS, INCLUDING SAFETY. CONSTRUCTION SHALL BE PERFORMED IN SUCH A MANNER THAT WORKMEN, OCCUPANTS AND THE PUBLIC ARE PROTECTED FROM INJURY AND ADJOINING PROPERTY SHALL BE PROTECTED FROM DAMAGE BY USE OF SCAFFOLDING, UNDERPINNING OR OTHER APPROVED METHOD. THE CONTRACTOR SHALL REPAIR ANY AND ALL DAMAGE CAUSED DURING OR RESULTING FROM HIS OPERATIONS IN KIND TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL MAINTAIN THE JOB SITE IN A CLEAN, DEBRIS FREE CONDITION. THE DUST RESULTING FROM REMOVALS SHALL BE CONTROLLED SO AS TO PREVENT ITS SPREAD TO OCCUPIED PORTIONS OF THE BUILDING AND TO AVOID CREATION OF A NUISANCE IN THE SURROUNDING AREA.
- CONTRACTOR SHALL SECURE ALL REQUIRED PERMITS, APPROVALS, ETC. PRIOR TO COMMENCING WORK AND SHALL SECURE CERTIFICATE OF OCCUPANCY UPON COMPLETION OF WORK. OWNER SHALL PAY ALL REQUIRED PERMIT FEES.
- CONTRACTOR SHALL BE RESPONSIBLE TO DISPOSE OF ALL DEMOLISHED MATERIAL OFF SITE IN AN APPROVED MANNER. THE OWNER SHALL BE CONSULTED PRIOR TO DISPOSAL OF ANY SALVAGED OR EXCESS MATERIALS AT THE COMPLETION OF THE PROJECT.
- UPON COMPLETION OF WORK, ALL EXCESS MATERIAL, DEBRIS, ETC. SHALL BE REMOVED AND THE WORK AREA SHALL BE LEFT CLEAN TO THE OWNER'S SATISFACTION.
- ALL WORK SHALL BE SCHEDULED ACCORDING TO THE OWNER'S REQUIREMENTS. CONTRACTOR TO COORDINATE CONSTRUCTION SCHEDULE WITH OWNER.
- CONTRACTOR SHALL FURNISH ALL MATERIALS AND EQUIPMENT THAT MAY BE REQUIRED TO PERFORM THE WORK INDICATED IN A SAFE AND ORDERLY MANNER, UNLESS OTHERWISE NOTED ON THE CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RELOCATION AND TEMPORARY SUPPORT OF ANY UTILITIES ENCOUNTERED DURING THE COURSE OF HIS WORK AND TO ENSURE THE OWNER'S FACILITY IS OPERATIONAL.
- THE CONTRACTOR SHALL REVIEW ALL DRAWINGS AND FIELD VERIFY ALL DIMENSIONS, CONDITIONS AND ELEVATIONS PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES AND ADDRESS ALL QUESTIONS TO ARCHITECT, IN WRITING, PRIOR TO COMMENCING WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CUTTING, PATCHING, FILLING AND CLEANING UPON COMPLETION OF WORK.
- THE CONTRACTOR SHALL NOT SCALE DRAWINGS FOR DIMENSIONS. ALL WRITTEN OR DIMENSIONED INFORMATION TAKES PRECEDENCE OVER THE DRAWING.
- THE CONTRACTOR SHALL SUBMIT WHERE REQUIRED, SHOP DRAWINGS, SAMPLES AND MOCK-UPS TO THE ARCHITECT FOR APPROVAL PRIOR TO THE START OF FABRICATION OF THOSE ITEMS.
- THE CONTRACTOR SHALL PROVIDE THE OWNER AND ARCHITECT WITH CERTIFICATES OF INSURANCE PRIOR TO STARTING THE WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR SHORING AND BRACING OF STRUCTURES AS NEEDED TO COMPLETE THE NEW WORK.
- ALL MANUFACTURER'S MATERIALS, COMPONENTS, FASTENERS, ASSEMBLIES, ETC. SHALL BE HANDLED AND INSTALLED IN ACCORDANCE WITH MANUFACTURERS SPECIFIC INSTRUCTIONS AND RECOMMENDATIONS. WHERE BRAND NAMES AND MANUFACTURED PRODUCTS ARE CALLED FOR, APPROVED EQUALS WHICH MEET APPLICABLE STANDARDS AND SPECIFICATIONS MAY BE SUBSTITUTED WITH WRITTEN PERMISSION OF THE ARCHITECT AND THE OWNER. WHENEVER BRAND NAMES OR SPECIFIC PRODUCT SYSTEMS ARE INDICATED IT SHALL BE CLEARLY UNDERSTOOD THAT SUCH IDENTIFICATION IS FOR THE PURPOSE OF ILLUSTRATING THE TYPE OF PRODUCT AND DEGREE OF QUALITY DESIRED. SUCH IDENTIFICATION IN NO WAY PRECLUDES THE CONTRACTOR FROM USING PRODUCTS OF OTHER MANUFACTURERS WHICH CAN BE SHOWN IN ADVANCE TO BE OF LIKE AND OF EQUAL QUALITY.
- ALL CHANGES SHALL BE REQUESTED IN WRITING AND MAY ONLY BE APPROVED IN WRITING BY THE ARCHITECT AND THE OWNER PRIOR TO ANY CHANGES BEING MADE.
- THE ARCHITECT HAS THE RIGHT TO REJECT ANY PORTION OF WORK THAT IS POORLY INSTALLED, DOES NOT MEET INDUSTRY STANDARD, IS UNAUTHORIZED OR WORK DONE CONTRARY TO THE INTENT OF THE CONTRACT DOCUMENTS. SUCH WORK SHALL BE REPLACED, REPAIRED OR REMOVED AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL GUARANTEE ALL WORK AND THE WORK OF SUBCONTRACTORS FOR A PERIOD OF (COORDINATE WITH SPECIFICATIONS) AFTER RECEIVING FINAL ACCEPTANCE AND DO ALL REPAIR WORK AND REPLACEMENT AS NECESSARY DURING THAT PERIOD AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL MAINTAIN UNOBSTRUCTED ACCESS TO ALL UTILITIES AND PUBLIC FACILITIES INCLUDING FIRE HYDRANTS, FIRE ALARM BOXES, POLICE CALL BOXES, STREET LIGHTS, MANHOLES, AMONG OTHERS DURING DEMOLITION.

Area Map



Location Map



Abbreviations

A.F.F.	ABOVE FINISHED FLOOR
ALUM.	ALUMINUM
BLDG.	BUILDING
C.J.	TOOLED CONTROL JOINT
CLG.	CEILING
CL	CENTER LINE
COL.	COLUMN
CONC.	CONCRETE
CONT'D	CONTINUED
E.S.	ELEMENTARY SCHOOL
EQ.	EQUAL
(E)	EXISTING
EX.	EXPANSION JOINT WITH COVER
F.E.C.	FIRE EXTINGUISHER CABINET
F.R.P.	FIBER REINFORCED PANEL
G.C.	GENERAL CONTRACTOR
GYP.	GYPSON BOARD
HT.	HEIGHT
HM	HOLLOW METAL
H.V.A.C.	HEATING VENTILATING AIR CONDITIONING
MAX.	MAXIMUM
M.O.	MASONRY OPENING
MTL.	METAL
N.T.S.	NOT TO SCALE
N.I.C.	NOT IN CONTRACT
O.C.	ON CENTER
Q.C.	QUALITY CONTROL
PTD.	PAINTED
R.O.	ROUGH OPENING
S.F.	SQUARE FOOT (FEET)
S.S.	STAINLESS STEEL
S.T.	STEEL TYPICAL
U.O.N.	UNLESS OTHERWISE NOTED
U.N.O.	UNLESS NOTED OTHERWISE
V.C.B.	VINYL COVE BASE
VCT.	VINYL COMPOSITION TILE
V.I.F.	VERIFY IN FIELD
WD	WOOD
W/	WITH

Symbol Legend

	ITEM TO BE REMOVED IN ITS ENTIRETY
	BREAK LINE
	ELEVATION CALLOUT
	SECTION CALLOUT
	REVISION CLOUD
	CEILING FAN SEE ELECTRICAL DRAWINGS
	INFRARED HEATER N.I.C. SEE ELECTRICAL DRAWINGS

Drawing Index

SHT. NO.	DESCRIPTION
T.01-LE	COVER SHEET
A2.01-LE	NEW PLANS
A2.02-LE	ELEVATION AND SECTION
E2.01-LE	ELECTRICAL PLAN AND NOTES

Eng'r. No.	24047937500
Arch. No.	21A000012400
Date	11/29/22
Checked	JP
Drawn	LR

RONALD W. SCHWENKE III, R.A.
The REGISTERED ARCHITECT
License No. NJZ1A022051300

Revisions:

No.	Description

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11/29/22

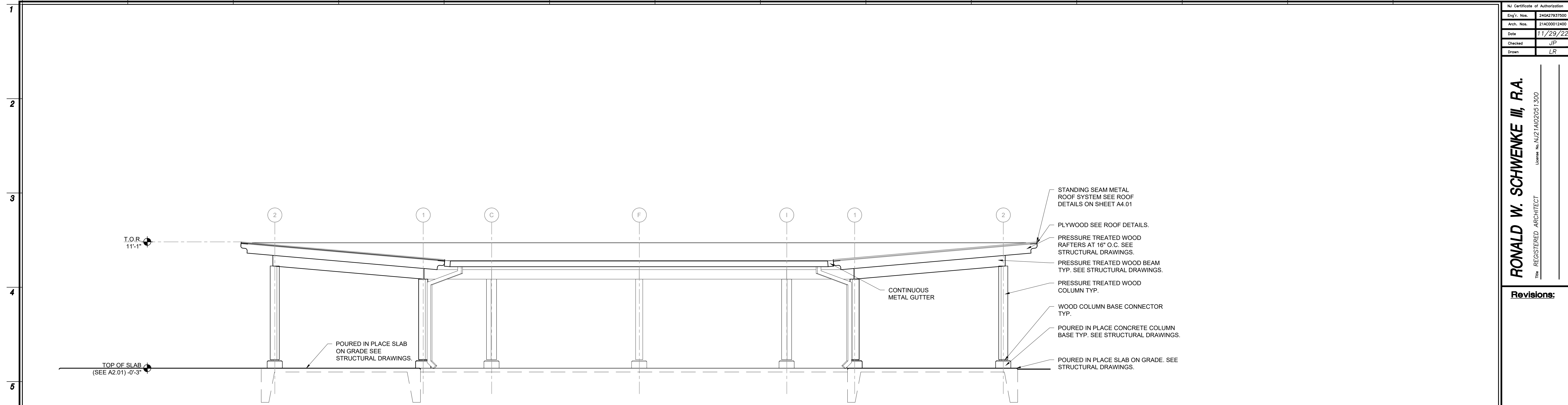
Engineering,
Planning,
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445 Godwin Ave Ste 9, Midland Park, NJ 07432 | T. 201-447-6400 | F. 201-447-1233

LAN ASSOCIATES
COVER SHEET
EXTERIOR LEARNING PAVILION
AT
LAWRENCEVILLE ELEMENTARY SCHOOL
40 CRAVEN LANE LAWRENCEVILLE, NJ 08648

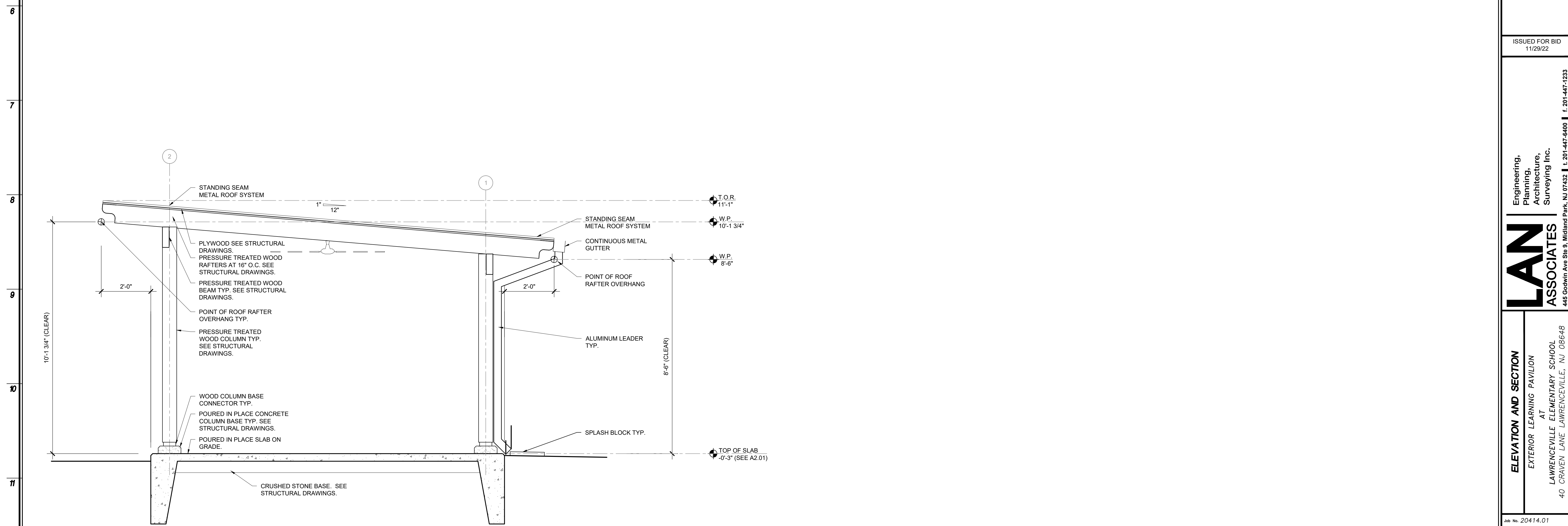
Job No. 20414.01

File No.

T.01-LE



2 EXTERIOR ELEVATION
1/4"=1'-0"



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

NJ Certificate of Authorization	
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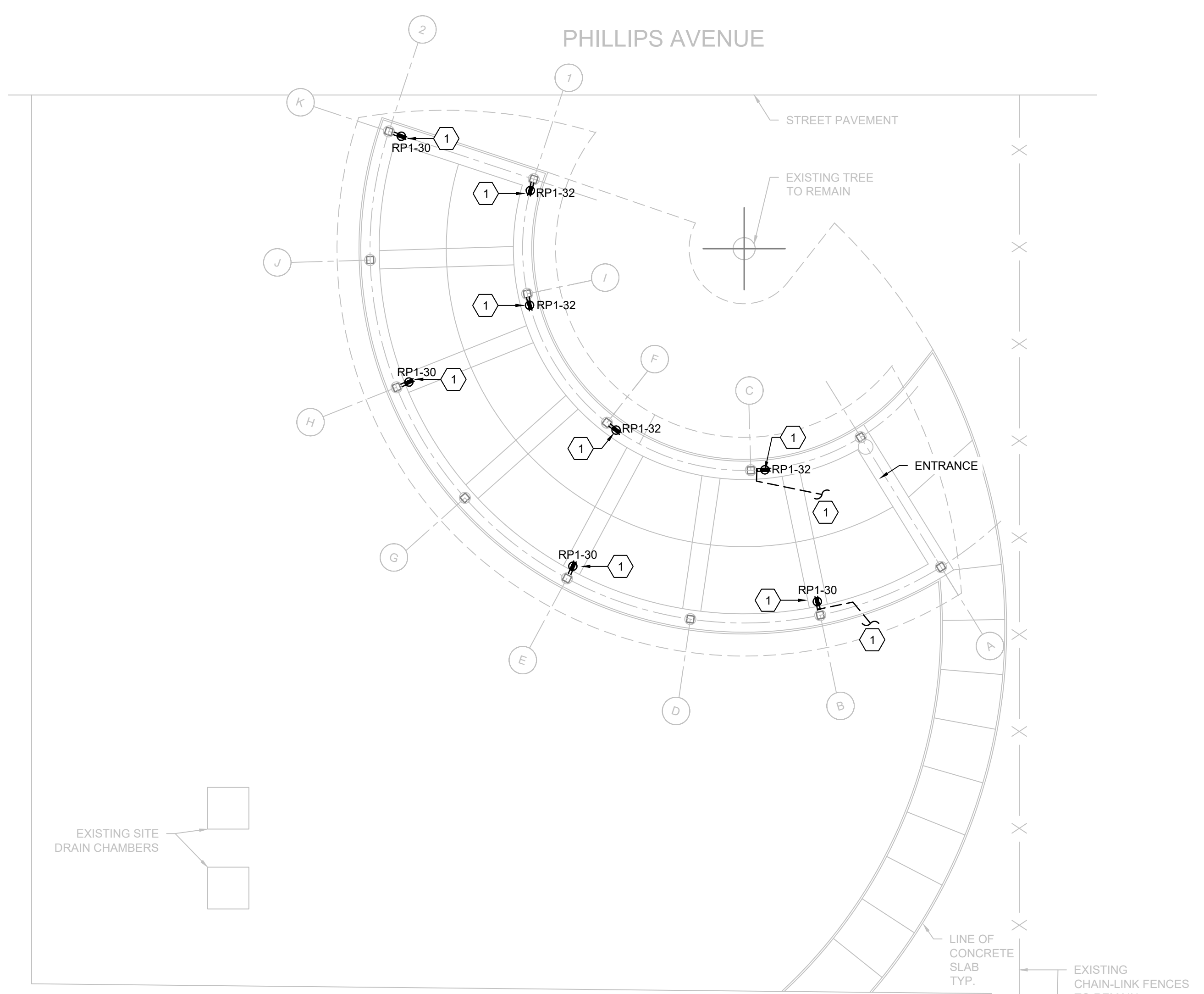
Job No. 20414.01

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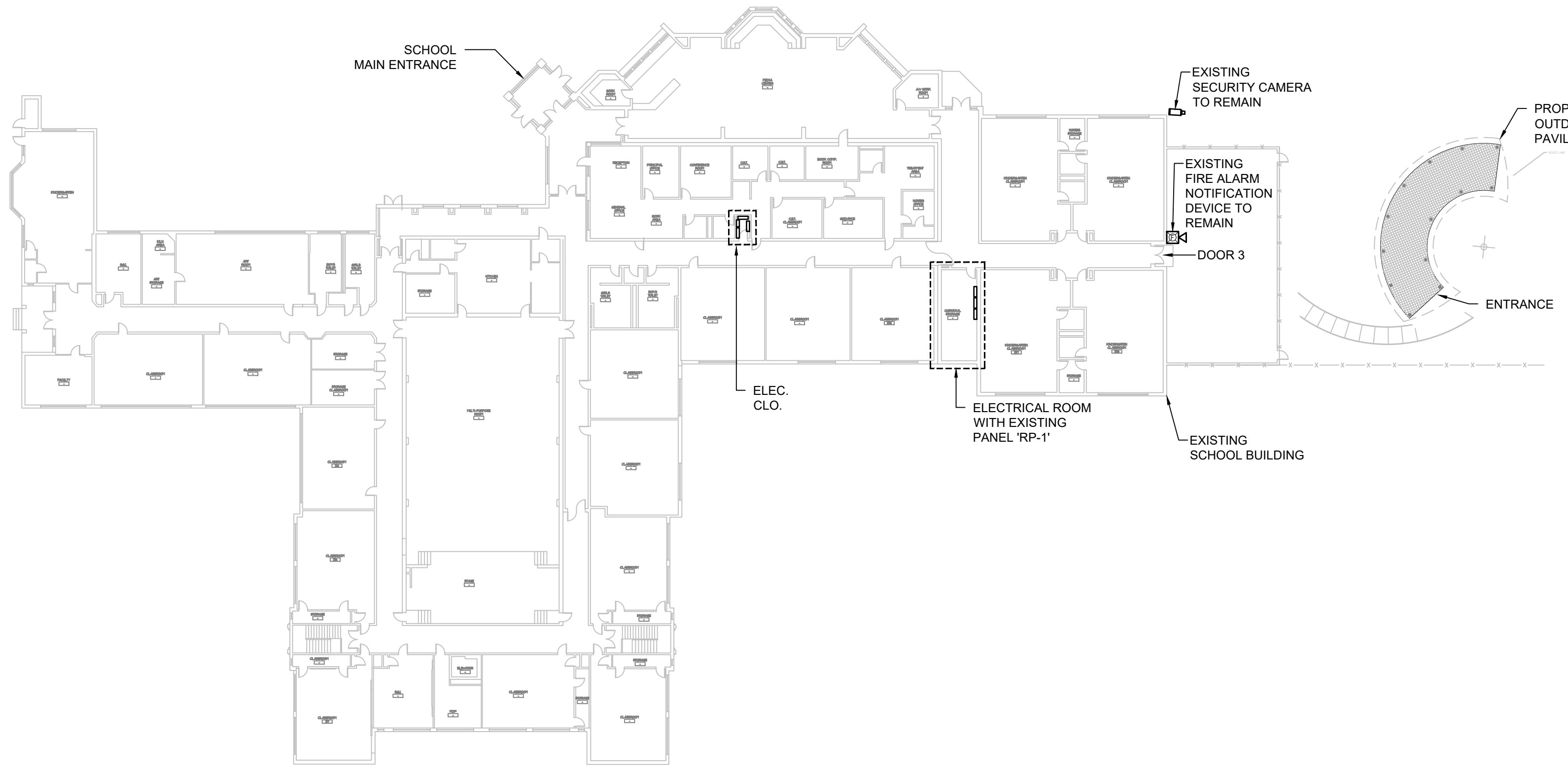
A2.02-LE

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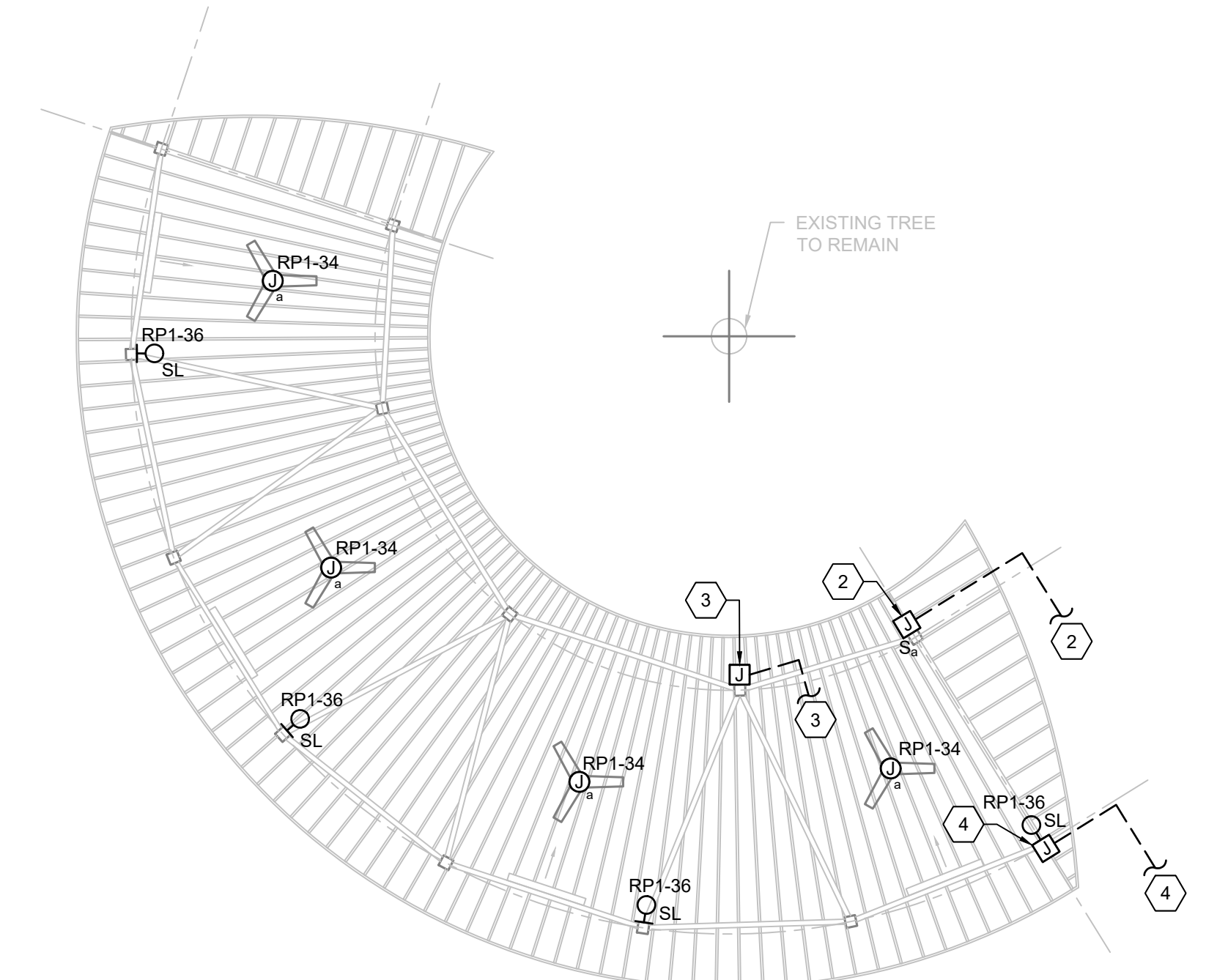
A B C D E F G H J K L M N O



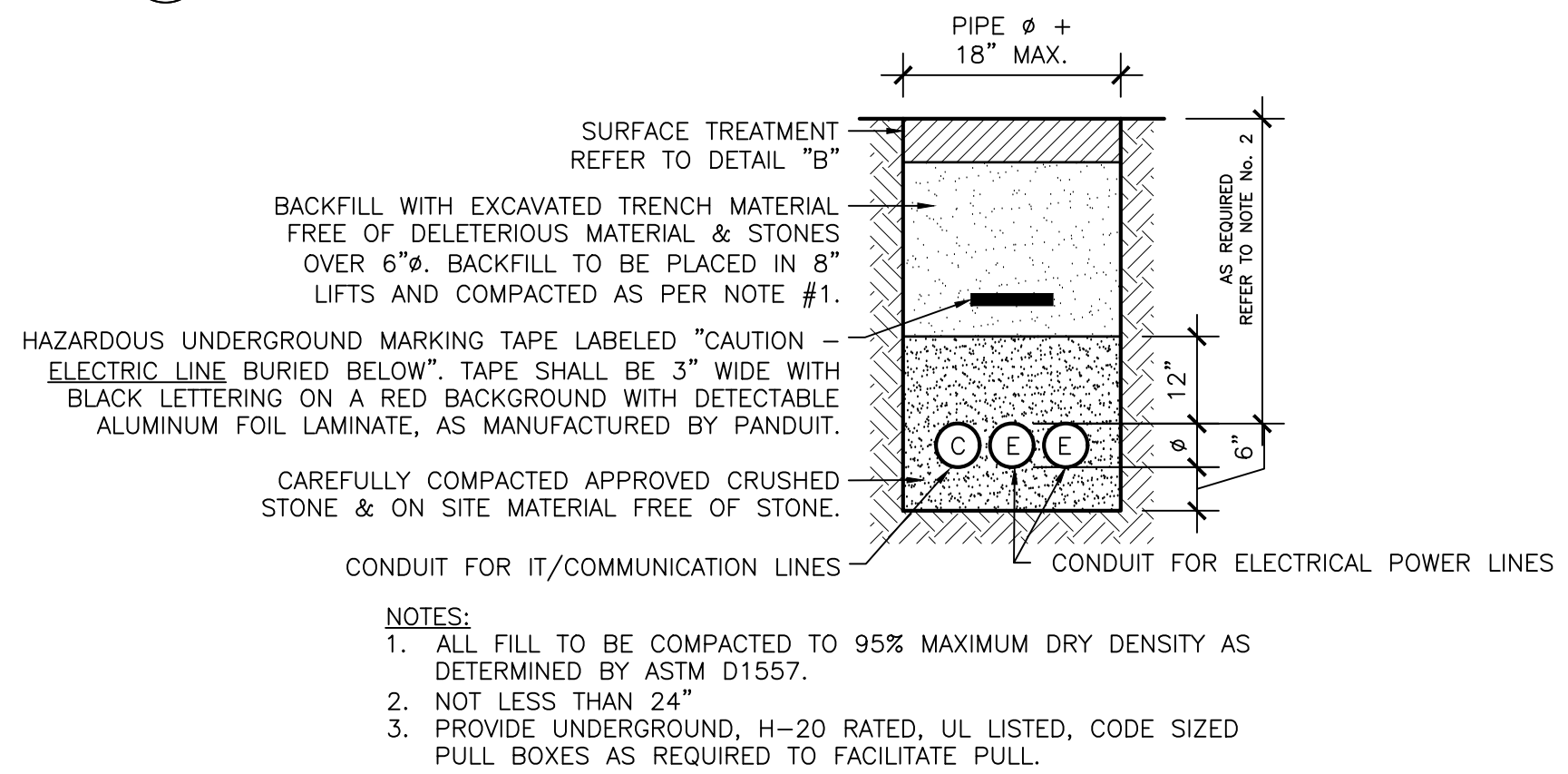
2 PROPOSED ELECTRICAL FLOOR PLAN
1/8"=1'-0"



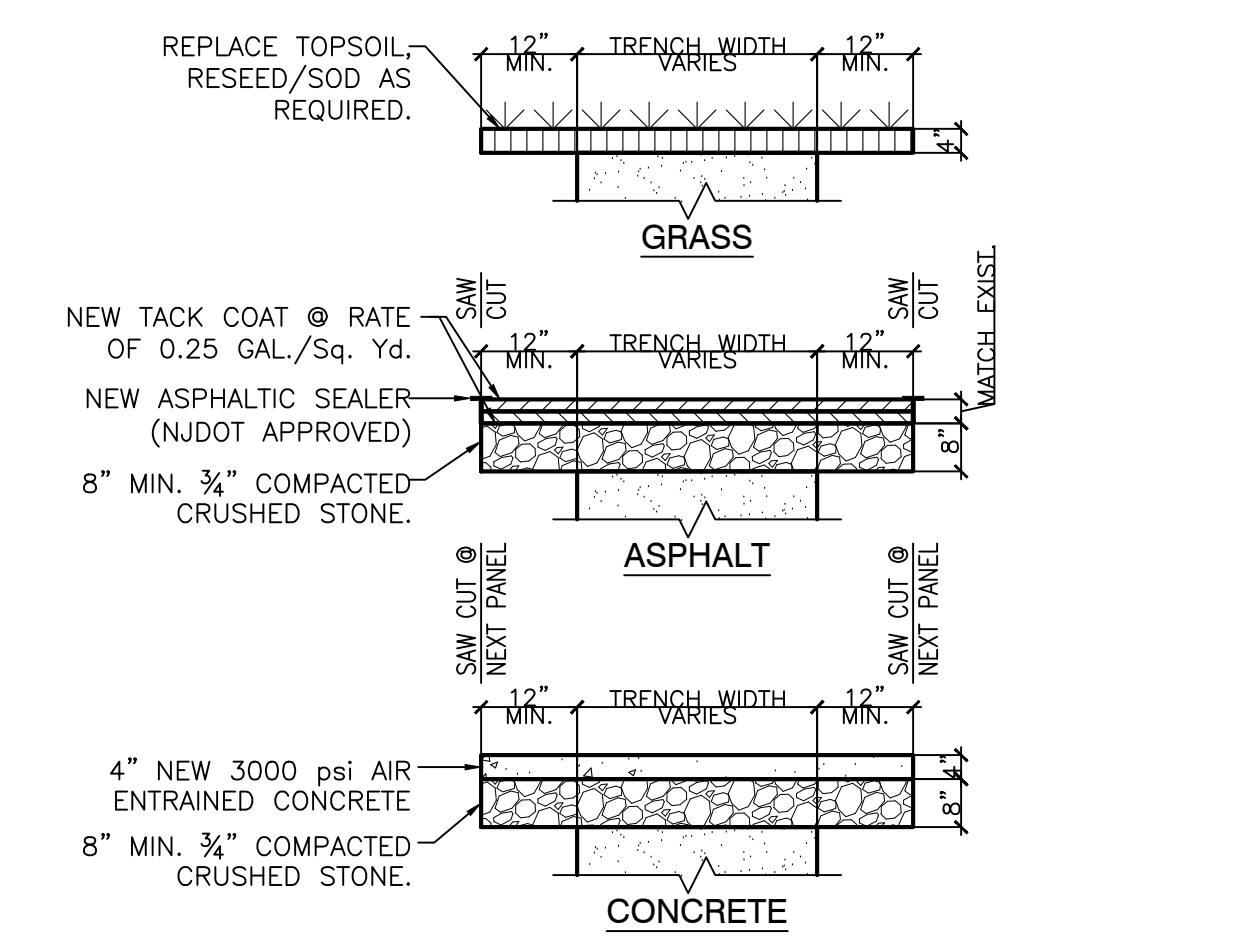
1 PROPOSED ELECTRICAL SITE PLAN
N.T.S.



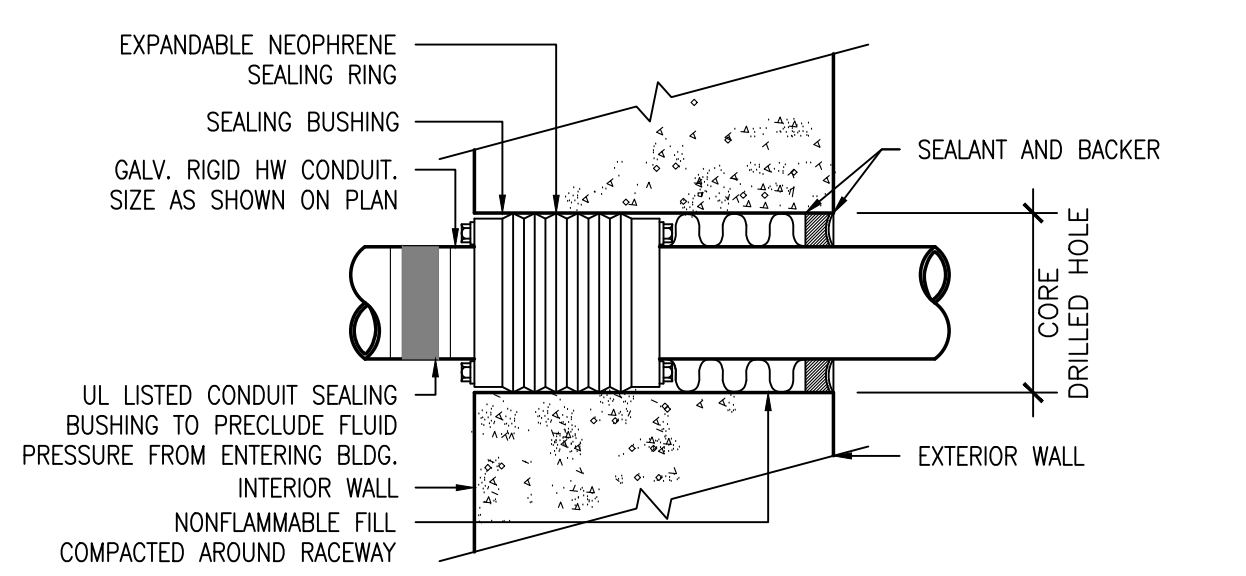
3 PROPOSED ELECTRICAL REFLECTIVE CEILING PLAN
1/8"=1'-0"



A TRENCHING DETAIL
N.T.S.



B TRENCHING SURFACE TREATMENT
N.T.S.



D THRU-WALL CONDUIT SEAL
N.T.S.

- ### Electrical General Notes
- CONTRACTOR SHALL CONDUCT A THOROUGH EXAMINATION OF THE PREMISES PRIOR TO PREPARING A PROPOSAL. ANY CHANGES TO THE DESIGN MADE NECESSARY BY THE FIELD CONDITIONS SHALL BE CONVEYED TO THE ENGINEER PRIOR TO PREPARING A PROPOSAL. NO ADDITIONAL COSTS BEYOND THE PROPOSAL PRICE WILL BE ACCEPTED FOR FIELD CONDITIONS THAT COULD HAVE BEEN DETERMINED BY AN INSPECTION OF THE PREMISES.
 - CONTRACTOR SHALL TAKE READING ON ANY PANEL DURING PEAK USAGE PRIOR TO ADDING ADDITIONAL LOADS. ALL CIRCUIT LOADS SHOWN ARE ESTIMATED. ELECTRICAL CONTRACTOR SHALL VERIFY AVAILABLE SPACE AND ADEQUATE POWER CAPACITY FOR EACH CIRCUIT PRIOR TO ROUGH-IN. REPORT FINDINGS TO THE ENGINEER.
 - RE-LABEL PANEL DIRECTORY DESCRIPTION SHEET AS REQUIRED.
 - ALL CONDUIT AND WIRING SHALL BE CONCEALED AS MUCH AS POSSIBLE WHEN MOUNTED TO STRUCTURE TO BE PREPARED FOR COVER PAINT.
 - ALL UNDERGROUND CONDUIT TO BE ROUTED AND TRENCHED TO MINIMIZE DISTURBING EXISTING SIDEWALK AND PAVED AREAS. CONTRACTOR TO MINIMIZE INSTANCES SHOWING EXPOSED CONDUIT.
 - ALL RECEPTACLES TO BE TAMPER-RESISTANT IN ACCORDANCE WITH NEC ARTICLE 406.12.

- ### Proposed Electrical Key Notes
- # SYMBOL INDICATES PROPOSED KEY NOTE
- ALL RECEPTACLE BRANCH CIRCUITS TO BE FED FROM EXISTING PANEL RP1 IN 1ST FLOOR STORAGE ROOM VIA 2#12 & 1#12 GROUND COPPER CONDUCTORS IN 3/4" UNDERGROUND PVC CONDUIT. SEE TRENCHING AND SURFACE TREATMENT DETAILS A & B. RECEPTACLE AND CONDUIT LOCATIONS TO BE COORDINATED WITH STRUCTURAL ENGINEER PRIOR TO POURING CONCRETE FOUNDATION. HOMERUN CONDUIT RUNS TO BE ROUTED INTO SCHOOL'S NEAREST ACCESSIBLE CEILING AND BE PROVIDED A THRU-WALL CONDUIT SEAL, SEE DETAIL D, AND A TRANSITION FITTING TO EMT CONDUIT.
 - ALL CEILING FAN AND SECURITY LIGHT BRANCH CIRCUITS TO BE FED FROM EXISTING PANEL RP1 IN 1ST FLOOR STORAGE ROOM VIA 2#12 & 1#12 GROUND COPPER CONDUCTORS IN 3/4" UNDERGROUND PVC CONDUIT. UNDERGROUND CONDUIT TO TRANSITION TO A POWER PULL BOX LOCATED AT TOP OF BEAM IN CEILING RAFTER SPACE. BRANCH CONDUIT RUNS FOR CEILING FANS AND SECURITY LIGHTS TO ORIGINATE FROM PULL BOX. SEE ARCHITECTURAL PLANS FOR ELEVATIONS.
 - TEL/DATA PULL BOX LOCATED AT TOP OF BEAM IN CEILING RAFTER SPACE. PROVIDE 2" EMPTY CONDUIT WITH PULL STRING STUBBED INTO ACCESSIBLE CEILING SPACE OF SCHOOL. INFORMATION TECHNOLOGY (IT) WIRING INSTALLATION BY OTHERS. SEE ARCHITECTURAL PLANS FOR ELEVATIONS.
 - MAIN POWER PULL BOX FOR FUTURE IR HEATERS LOCATED AT TOP OF BEAM IN CEILING RAFTER SPACE. PROVIDE 2" EMPTY CONDUIT WITH PULL STRING STUBBED INTO ACCESSIBLE CEILING OF SCHOOL.

Electrical Legend

SYMBOL	DESCRIPTION
	GFCI PROTECTED DUPLEX RECEPTACLE - NEW 20A COMMERCIAL GRADE GROUND FAULT CIRCUIT INTERRUPTING TAMPER-RESISTANT RECEPTACLE WITH WEATHERPROOF, LOCKABLE IN-USE COVER. MOUNTED 18" A.F.F. UNLESS NOTED OTHERWISE.
	NEMA 3R CEILING-MOUNTED JUNCTION BOX - OUTDOOR FAN RATED CEILING-MOUNTED JUNCTION BOX SIZED PER NEC REQUIREMENTS. SEE PLANS FOR ANY ADDITIONAL DETAILS
	NEMA 3R WALL-MOUNTED JUNCTION BOX - OUTDOOR RATED WALL-MOUNTED JUNCTION BOX SIZED PER NEC REQUIREMENTS. SEE PLANS FOR ANY ADDITIONAL DETAILS
	OUTDOOR CEILING FAN - CEILING HUNG OUTDOOR RATED 60-INCH CEILING FAN. MANUFACTURER: TROPSAIR, MODEL: OPTUM 6WS60, ELECTRICAL: 120V, 1-PH, 51W. SEE FLOOR PLANS FOR TOGGLE SWITCH CONTROL.
	TOGGLE SWITCH - NEW 20A, 120V COMMERCIAL GRADE OUTDOOR RATED TOGGLE SWITCH WITH WEATHERPROOF, LOCKABLE IN-USE COVER, MOUNTED 42" A.F.F. UNLESS NOTED OTHERWISE. 'a' LETTER DENOTES CONTROLLED LOAD DESIGNATION.
	EXISTING 120/208V SURFACE MOUNTED PANELBOARD - EXISTING PANELBOARDS TO REMAIN. HATCH PATTERN INDICATES NEEDED CLEARANCE IN FRONT OF EQUIPMENT. RP2# = PANEL - CIRCUIT NUMBER

ABBREVIATIONS & DESIGNATIONS

ABBR.	DEFINITION
A.F.F.	ABOVE FINISHED FLOOR
EMT	ELECTRIC METALLIC TUBING
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
NEC	NATIONAL ELECTRICAL CODE
PH	PHASE (ELECTRICAL)
PVC	POLYVINYL CHLORIDE

LUMINAIRE SCHEDULE

SYMBOL/TYP	MANUFACTURER	MODEL	DESCRIPTION	VOLTAGE	WATT
IO SL	STONCO - SIGNIFY	SL20-SCT-G1-8-BK	SURFACE MOUNTED LED SECURITY LIGHT W/ INTEGRATED MOTION AND DAYLIGHT SENSOR	120-277V	20W

- LUMINAIRE NOTES:**
- SECURITY LIGHTS CIRCUIT TO BE CONTROLLED BY AN ASTRONOMIC TIME SWITCH TO PROVIDE POWER TO LIGHTS FROM 5:00PM TO 07:00AM NEXT DAY. TIME SWITCH TO BE LOCATED ADJACENT TO PANEL SERVING SECURITY LIGHT CIRCUIT.
- GRADE, FEATHER & TAMP BACKFILL TO CREATE FLUSH INSTALLATION AND POSITIVE DRAINAGE AWAY FROM BOX
- PULLBOX - REFER TO NOTE BELOW
- CLEAN 3/4" CRUSHED ROCK
- CONDUIT(S) WITH BELL ENDS (TYP). SIZE, QUANTITY AND WIRING AS INDICATED ON PLANS
- PULL BOX NOTE:**
- UL LISTED UNDERGROUND HANDHOLE ENCLOSURE AND COVER (66WF), ANSI/SCFE TIER 15 LOAD RATING AS MANUFACTURED BY QUAZITE OR APPROVED EQUAL. UNITS SHALL BE DESIGNED FOR FLUSH BURIAL AND HAVE OPEN BOTTOM. INSTALL HANDHOLE AND BOXES LEVEL AND PLUMB AND WITH ORIENTATION AND DEPTH COORDINATED WITH CONNECTING CONDUITS TO MAXIMUM BENDS AND DEFLECTIONS REQUIRED FOR PROPER ENTRANCES. CONTRACTOR SHALL COORDINATE LAYOUT AND INSTALLATION OF HANDHOLE WITH FINAL ARRANGEMENTS OF SITE GRADING AND SURFACE FEATURES AS DETERMINED IN THE FIELD. SUPPORTS UNITS IN A LEVEL BED OF 3/4" CRUSHED STONE AND COMPACTED TO SAME DENSITY AS ADJACENT UNDISTURBED EARTH. SET SO COVER SURFACE WILL BE FLUSH WITH FINISHED GRADE IN PAVED AREAS.

C TYPICAL UNDERGROUND PULL BOX
N.T.S.

NJ Certificate of Authorization
 Eng'r. No. 24047937500
 Arch. No. 21A00012400
 Date 11/29/22
 Checked JC
 Drawn PAJ

THOMAS WIGHARD, P.E.
 License No. NJ24GE04901100
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Revisions:

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