

San Rafael City Schools



310 Nova Albion Way
San Rafael, CA 94903

Terra Linda High School Utility Relocation

320 Nova Albion Way
San Rafael, CA 94903

CONSTRUCTION DOCUMENTS

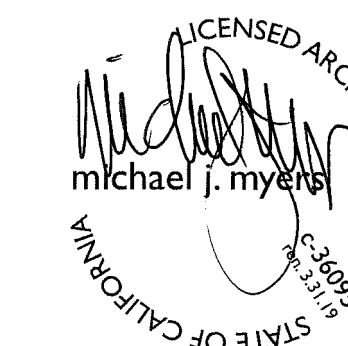
5/01/2018

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DRAWING LIST		
#	NAME	ISSUED FOR
G-000	COVER SHEET	
GENERAL		
G-001	GENERAL INFORMATION	
ARCHITECTURAL		
A-001	ARCHITECTURAL GENERAL INFORMATION	
ELECTRICAL		
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SAN RAFAEL
CITY SCHOOLS



Terra Linda High School Utility Relocation and Demolition

320 Nova Albion Way
San Rafael, CA 94903 (415) 492-3100

Date	Issued For
4/12/18	Construction Documents

PROJECT TEAM

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4701 PATRICK HENRY DRIVE, BLDG. 10
SANTA CLARA, CA 95054

APPLICABLE CODES

NATIONAL REFERENCE STANDARDS:

APPLICABLE CODES FOR THIS PROJECT SHALL BE:

- 2016 CALIFORNIA ADMINISTRATIVE CODE.....(CAC) (PART 1, TITLE 24, CCR)
- 2016 CALIFORNIA BUILDING CODE (CBC) VOLUMES 1 & 2.....(PART 2, TITLE 24, CCR)
(2015 EDITION INTERNATIONAL BUILDING CODE WITH 2016 CALIFORNIA AMENDMENTS)
- 2016 CALIFORNIA ELECTRICAL CODE (CEC).....(PART 3, TITLE 24, CCR)
(2015 EDITION NATIONAL ELECTRICAL CODE WITH 2016 CALIFORNIA AMENDMENTS)
- 2016 CALIFORNIA MECHANICAL CODE (CMC).....(PART 4, TITLE 24, CCR)
(2015 EDITION IAPMO UNIFORM MECHANICAL CODE WITH 2015 CALIFORNIA AMENDMENTS)
- 2016 CALIFORNIA PLUMBING CODE (CPC).....(PART 5, TITLE 24, CCR)
(2015 EDITION IAPMO UNIFORM PLUMBING CODE WITH 2015 CALIFORNIA AMENDMENTS)
- 2016 CALIFORNIA ENERGY CODE.....(PART 6, TITLE 24, CCR)
(2015 EDITION CALIFORNIA ENERGY COMMISSION BUILDING ENERGY EFFICIENCY STANDARDS)
- 2016 CALIFORNIA FIRE CODE (CFC).....(PART 9, TITLE 24, CCR)
(2015 EDITION OF INTERNATIONAL FIRE CODE WITH 2015 CALIFORNIA ADMENDMENTS)
- 2016 CALIFORNIA GREEN CODE.....(PART 11, TITLE 24, CCR)
- 2016 CALIFORNIA REFERENCE STANDARDS CODE.....(PART 12, TITLE 24, CCR)

NFPA 72 - 2015 NATIONAL FIRE ALARM CODE

- REFERENCE CODE SECTIONS FOR APPLICABLE STANDARDS

2018 CBC, CHAPTER 35
2016 CFC, CHAPTER 45

PROJECT DESCRIPTION

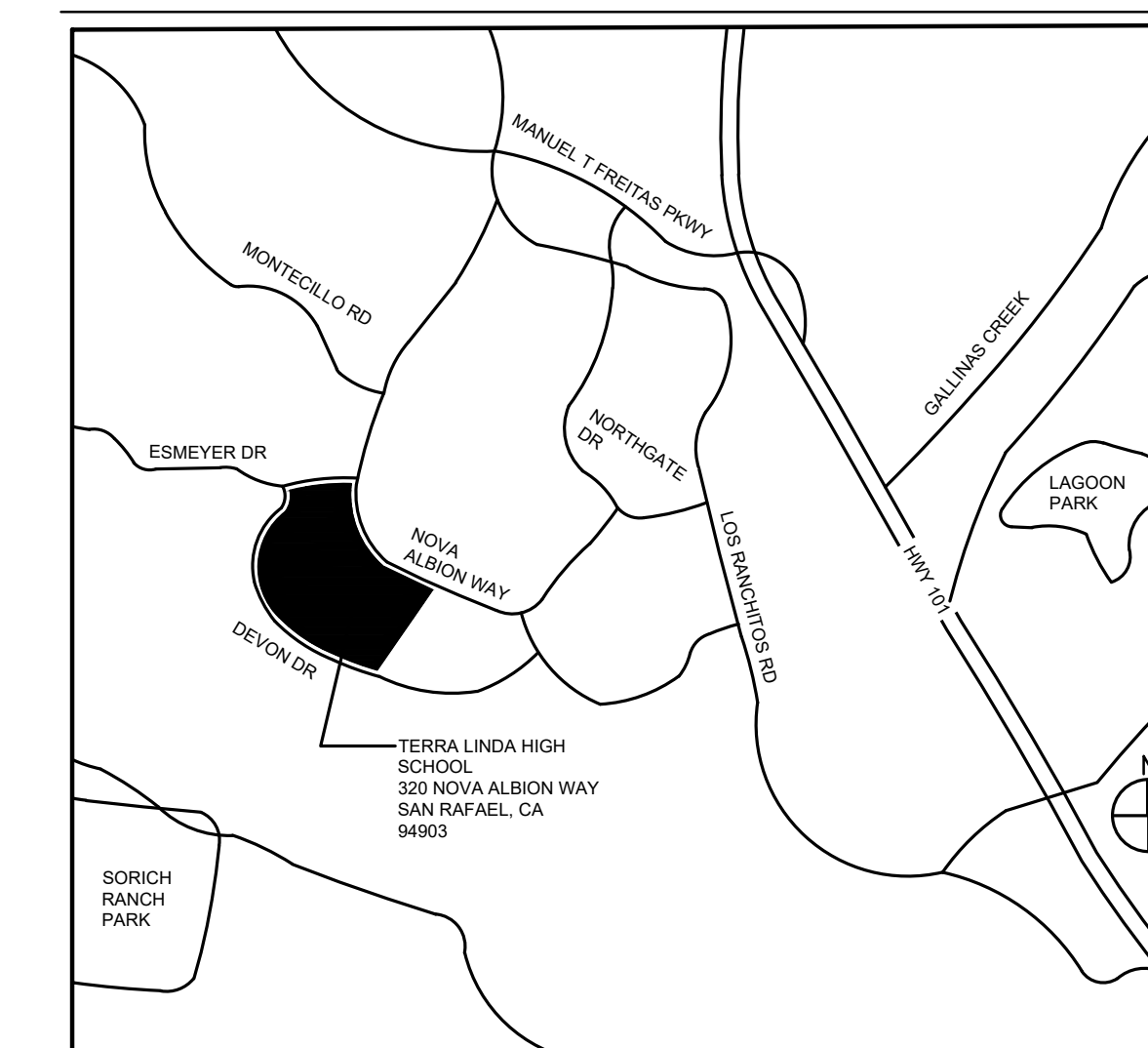
RELOCATION OF EXISTING UNDERGROUND UTILITIES.

THE PRECEDING DESCRIPTION DOES NOT LIMIT THE EXTENT OF WORK. CONTRACTOR IS RESPONSIBLE FOR ALL WORK CONTAINED WITHIN THE CONTRACT DOCUMENTS.

DSA REVIEW STATUS

THIS PROJECT IS EXEMPT FROM DSA REVIEW PER DSA IR A-22 (REV 08-25-15).

LOCATION MAP



417 Montgomery Street
Suite 400
San Francisco, CA
94104 USA
(415) 981-2345
WWW.HED.DESIGN

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2017-03447-000

General
Information

G-001

ABBREVIATIONS

NOTE: NOT ALL ABBREVIATIONS MAY BE USED IN THIS PROJECT

A.B./ANCHOR BOLT
 ABV./ABOVE
 A.C./ASPHALTIC CONCRETE
 A.C.T./ACOUSTICAL CEILING TILE
 A/C/AIR CONDITIONING
 SCHED./SCHEDULE
 A.D./AREA DRAIN
 ADMIN./ADMINISTRATION
 ADJ./ADJUSTABLE
 A.F.F./ABOVE FINISHED FLOOR
 AGGR./AGGREGATE
 AL./ALUMINUM
 ALT./ALTERNATE
 A.P./ACCESS PANEL
 APP./APPLICATION
 APPROX./APPROXIMATE
 ARCH./ARCHITECTURAL
 ASPH./ASPHALT
 ATTN./ATTENUATING

BD./BOARD
 BET./BETWEEN
 B.F./BRACED FRAME
 BLDG./BUILDING
 BLK./BLOCKING
 BM./BEAM
 BOT./BOTTOM

CAB./CABINET
 C/C/CENTER TO CENTER
 CEM./CEMENT
 CER./CERAMIC
 C.F./CURB FEET
 CH./CHANNEL
 C.I./CAST IRON
 C.J./CONTROL JOINT
 C.L./CENTERLINE
 CLG./CEILING
 CLKG./CALKING
 CLO./CLOSET
 CLR./CLEAR
 C.M./CONCRETE MASONRY UNIT
 COL./COLUMN
 COMP./COMPUTER
 CONC./CONCRETE
 CONF./CONFERENCE
 CONT./CONTINUOUS
 CONTR./CONTRACTOR
 CONST./CONSTRUCTION
 CORR./CORRIDOR
 CPT./CARPET
 C.R./C/D/ROLLED
 CSMT./CASEMENT
 C.T./CERAMIC TILE
 CTR./CENTER
 CYSK./COUNTERSUNK
 C.Y./CURB YARDS

D./DRYER
 DBL./DOUBLE
 DECK./DECKING
 DEG./DEGREE
 DEMO./DEMOLITION
 DEPT./DEPARTMENT
 DET./DETAIL
 D.F./DRINKING FOUNTAIN
 DIA./DIAMETER
 DIM./DIMENSION
 DIR./DIRECTION
 DIST./DISTRIBUTION
 DIV./DIVISION
 DN./DOWN
 DR./DOOR
 D.S./DOWNSPOUT
 D.S.A./DIVISION OF STATE ARCHITECT
 D.S.P./DRY STAND PIPE
 DWG./DRAWING

E./EAST
 (E)XISTING
 EA./EACH
 E.J./EXPANSION JOINT
 EL./ELEVATION
 ELAS./ELASTOMERIC
 ELEC./ELECTRICAL
 ELEV./ELEVATOR
 EMER./EMERGENCY
 ENCL./ENCLOSURE
 ENGR./ENGINEER
 EQ./EQUAL
 EQUIP./EQUIPMENT
 E.S./EACH SIDE
 EXP./EXPANSION
 EXH./EXHAUST
 EXIST./EXISTING
 EXT./EXTERIOR
 E.W./EACH WAY

F./FREEZER
 F.A./FIRE ALARM
 F.A.F./FORCED AIR FURNACE
 F.D./FLOOR DRAIN
 FND./FOUNDATION
 F.E./FIRE EXTINGUISHER
 F.E.C./FIRE EXTINGUISHER & CABINET
 FED./FEDERAL
 F.V./FIELD VERIFY
 F.F./FINISH FLOOR
 F.H.C./FIRE HOSE CABINET
 FIN./FINISH
 FIX./FIXTURE
 F.L./FLOW LINE
 FLR./FLOOR
 FLUR./FLUORESCENT
 F.O./FACE OF
 F.O.C./FACE OF CONCRETE
 F.O.F./FACE OF FINISH
 F.O.M./FACE OF MASONRY
 F.O.S./FACE OF STUD
 F.O.W./FACE OF WALL
 FRPF./FIREPROOFING
 FRMG./FRAMING
 F.R.P./FIRE RETARDANT TREATED
 F.R.P./FIBERGLASS REINFORCED
 POLYESTER
 F.S./FLOOR SINK
 F.S.E./FOOD SERVICE EQUIPMENT
 FT./FOOT OR FEET
 FTG./FOOTING
 FURR./FURRING
 FUT./FUTURE

GA./GAUGE
 GALV./GALVANIZED
 G.L./GLASS
 GND./GROUND
 GR./GLASS REINFORCED
 GYPSUM
 METAL
 GYP./GYPSUM
 G.W.B./GYPSUM WALL BOARD

H.B./HOSE BIBB
 H.C./HOLLOW CORE HDWR./HARDWARE
 HDWD./HARDWOOD
 HT./HEIGHT
 H.M./HOLLOW METAL
 HORIZ./HORIZONTAL
 H.P./HIGH POINT
 HVAC/HEATING, VENTILATING,
 AIR CONDITIONING

I.D./INSIDE DIAMETER
 IN./INCH
 INCAND./INCANDESCENT
 INCR./INCREMENT
 INFO./INFORMATION
 INSUL./INSULATION
 INT./INTERIOR

JAN./JANITOR
 JST./JOIST
 JT./JOINT

KIT./KITCHEN
 K.P./KICK PL.

LAB./LABORATORY
 LAM./LAMINATE
 LAV./LAVATORY
 LB./POUND
 L.F./LINEAR FEET
 L.H./LEFT HAND
 LIN./LINEAR
 LNK./LOCKER
 L.L.H./LONG LEG HORIZONTAL
 L.P./LOW POINT
 LT./LIGHT
 LVR./L/OVER

MACH./MACHINE
 MAINT./MAINTENANCE
 MATL./MATERIAL
 MAS./MASONRY
 MAX./MAXIMUM
 M.B./MARKER BOARD or
 MACHINE BOLT
 M.C./MEDICINE CABINET
 MECH./MECHANICAL
 MEMB./MEMBRANE
 MET./METAL
 MFR./MANUFACTURER
 MIN./MINIMUM
 MIR./MIRROR
 MISG./MISCELLANEOUS
 MK./MARK
 M.O./MASONRY OPENING
 MTD./MOUNTED
 MTL./METAL
 MUL./MULLION

N./NORTH
 (N)NEW
 N/A/NOT APPLICABLE
 N.E./NORTHEAST
 N.I.C./NOT IN CONTRACT
 NO./NUMBER
 NOM./NOMINAL
 N.T.S./NOT TO SCALE
 N.W./NORTHWEST

OBS./OBSCURE
 O.C./ION CENTER
 O.D./OUTSIDE DIAMETER or
 DIMENSION
 O.F.C./OWNER FURNISHED,
 CONTRACTOR INSTALLED
 O.F.D./OVERFLOW DRAIN
 O.F.S./OVERFLOW SCUPPER
 O.H./OVER HEAD
 OPNG./OPENING
 OPP./HD./OPPOSITE HAND
 OZ./OUNCE

P.A./PLANTING AREA
 P.B./PANIC BAR
 P.C.P./PRECAST CONCRETE
 PANEL
 PERIM./PERIMETER
 PL./PLATE
 PL.G./PLATE GLASS
 P.LAM./PLASTIC LAMINATE
 PLAS./PLASTER
 PLBG./PLUMBING
 PLYWD./PLYWOOD
 PNL./PANEL
 PRP./PAIR
 PREP./PREPARATION
 P.S.F./POUNDS PER SQUARE FOOT
 P.S.I./POUNDS PER SQUARE INCH
 P.T./PRESSURE TREATED
 PT./POINT
 P.T.D./PAPER TOWEL DISPENSER
 PTV./PARTITION
 PVP./POLYVINYL CHLORIDE
 PVMT./PAVEMENT

R./RISER OR REFRIGERATOR
 (R)REMOVE
 R.A./RETURN AIR
 RAD./RADIUS
 R.B./RUBBER BASE
 R.C.P./REFLECTED CEILING PLAN
 R.D./ROOF DRAIN
 REF./REFERENCE
 REFR./REFRIGERATION
 REINF./REINFORCED
 REQD./REQUIRED
 REV./REVISION OR REVISED
 RESIL./RESILIENT
 R.H./RIGHT HAND
 RM./ROOM
 R.O./ROUGH OPENING
 RWD./REDWOOD
 R.W.L./RAINWATER LEADER

S./SOUTH
 S.A./SUPPLY AIR
 S.B./SCOREBOARD
 S.C./SOLID CORE
 S.C.D./SEE CIVIL DRAWINGS
 SCHED./SCHEDULE
 S.D./STORM DRAIN
 S.D.S./SEE DOOR SCHEDULE
 S.E./SOUTHEAST
 S.E.D./SEE ELECTRICAL DRAWINGS
 S.M./SHEET METAL
 S.L./SLOPE
 SMA/NA./SHEET METAL AND AIR
 CONDITIONING CONTRACTORS
 NATIONAL ASSOCIATION
 S.M.D./SEE MECHANICAL DRAWINGS
 S.M.S./SHEET METAL SCREW
 S.N.D./SANITARY NAPKIN DISPENSER
 S.N.R./SANITARY NAPKIN RECEPTACLE
 S.O.G./SLAB ON GRADE
 S.P.D./SEE PLUMBING DRAWINGS
 SPEC./SPECIFICATION
 SPR/SPRINKLERED
 S.P.S./SEE PARTITION SCHEDULE
 SQ./SQUARE
 S.S.D./SEE STRUCTURAL DRAWINGS
 STD./STANDARD
 STL./STEEL
 STRL./STRUCTURAL
 SMS/SURFACE FOUR SIDES
 T.S.S./TWO SIDES
 S.S./STAINLESS STEEL
 SVC/SERVICE
 STOR./STORAGE
 SUS./SUSPENDED
 S.W./SOUTHWEST
 S.W.S./SEE WINDOW SCHEDULE
 SYM./SYMMETRICAL

T./TREAD
 T.B./TACKBOARD
 TECH./TECHNOLOGY
 TELE./TELEPHONE
 TEMP./TEMPERED OR TEMPERATURE
 TER./TERRAZZO
 T & G/TONGUE & GROOVE
 THK./THICK
 THRES./THRESHOLD
 T.O./TOP OF
 T.O.C./TOP OF CURB or CONCRETE
 T.O.D./TOP OF DECKING
 T.O.W./TOP OF MASONRY
 T.O.P./TOP OF PAVEMENT or PARAPET
 T.O.S./TOP OF STEEL
 T.O.W./TOP OF WALL
 T.S./TUBULAR STEEL
 T.S.C.D./TOILET SEAT COVER
 DISPENSER
 T.T.D./TOILET TISSUE DISPENSER
 TV/TELEVISION
 TYP./TYPICAL

U.B.C./UNIFORM BUILDING CODE
 U.G./UNDERGROUND
 U.L./UNDERWRITERS LABORATORY
 UNF./UNFINISHED
 U.O.N./UNLESS OTHERWISE NOTED
 UR./URINAL

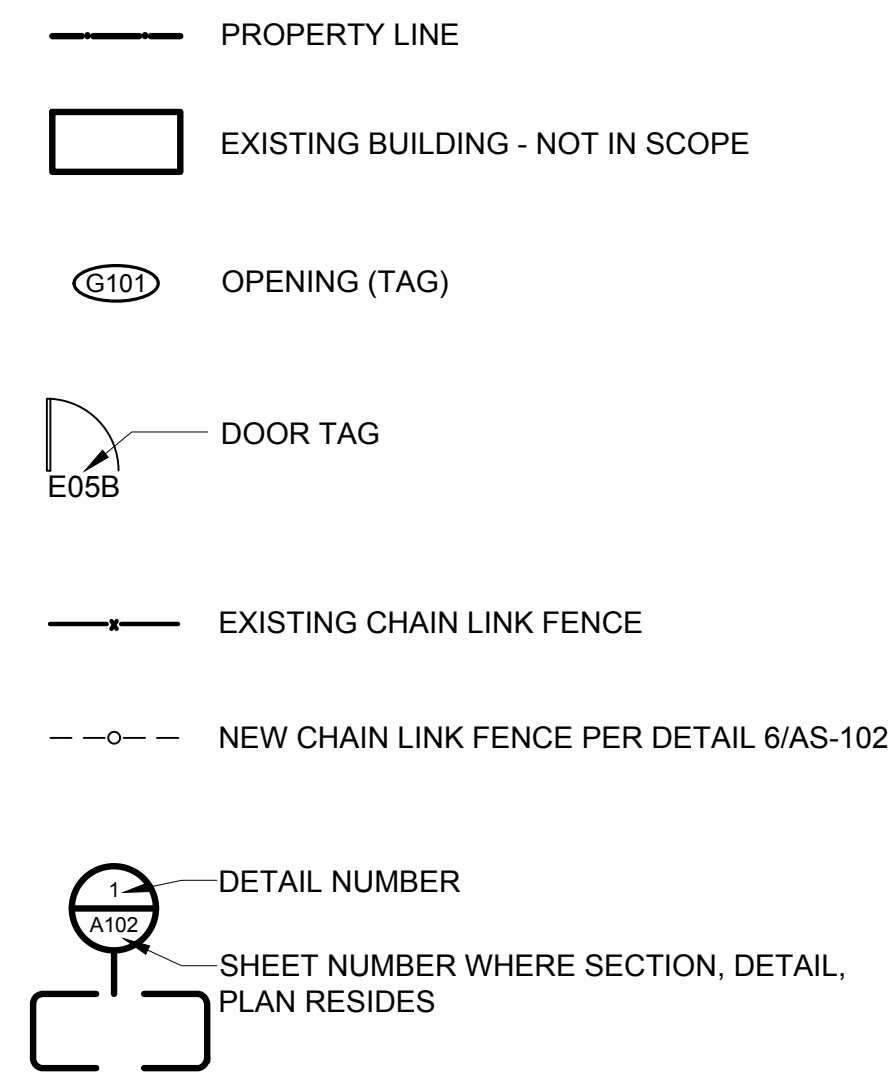
V.C.T./VINYL COMPOSITION TILE
 VERT./VERTICAL
 VEST./VESTIBULE
 V.G.D.F./VERTICAL GRAIN DOUGLAS FIR
 V.I.F./VERIFY IN FIELD
 VOL./VOLUME
 V.T.R./VENT THRU ROOF (S.P.D.)
 W.W.C./VINYL WALL COVERING
 W.O./WHERE OCCURS
 W.WEST OR WASHER
 W/WITH
 W.C./WATER CLOSET
 WD./WOOD
 WDW./WINDOW
 W.F./WIDE FLANGE
 WGL/WIRE GLASS
 W.H./WATER HEATER
 W.I./WOODWORK INSTITUTE
 W.O./WHERE OCCURS
 WO/WITHOUT
 W.P./WORKING POINT
 WSCOT./WANSICOT
 W.S.P./WET STANDPIPE
 WT./WEIGHT
 W.W.F./WELDED WIRE FABRIC

& /AND
 @ /AT
 # /POUND OR NUMBER

GENERAL NOTES

- CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMISSION OF BIDS TO REVIEW EXISTING CONDITIONS OF AREAS THAT ARE TO BE BID.
- ADMINISTRATIVE REQUIREMENTS:
 - A COPY OF PARTS 1 & 2, TITLE 24 C.C.R. SHALL BE KEPT ON THE JOB SITE AT ALL TIMES.
 - ALL CONSTRUCTION CHANGE DOCUMENTS AND ADDENDA ARE TO BE SIGNED BY THE ARCHITECT, THE CONTRACTOR AND THE OWNER.
 - ALL TESTS TO CONFORM TO THE REQUIREMENTS OF SECTION 4-335, PART 1, TITLE 24, AND APPROVED TESTING & INSPECTION SHEET.
 - TESTS OF MATERIALS AND TESTING LAB SHALL BE IN ACCORDANCE WITH SECTION 4-330 OF PART 1, TITLE 24 AND THE DISTRICT SHALL EMPLOY AND PAY THE LAB. COST OF RE-TEST MAY BE BACK-CHARGED TO THE CONTRACTOR.
 - INSPECTOR TO BE APPROVED BY THE ARCHITECT. INSPECTION TO BE IN ACCORDANCE WITH SECTION 4-330(b). THE DUTY OF THE INSPECTOR SHALL BE IN ACCORDANCE WITH SECTION 4-342, PART 1, TITLE 24.
 - THE ARCHITECT AND THE STRUCTURAL ENGINEER AND PROFESSIONAL ENGINEER SHALL PERFORM THEIR DUTIES IN ACCORDANCE WITH SECTIONS 4-333(a) AND 4-341, PART 1, TITLE 24.
 - THE CONTRACTOR SHALL PERFORM HIS DUTIES IN ACCORDANCE WITH SECTION 4-343, PART 1, TITLE 24.
 - THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE ALTERATION AND ADDITIONS IS TO BE IN ACCORDANCE WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHERE IN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS, THE ARCHITECT AND THE OWNER SHOULD BE NOTIFIED.
- USE OF ANY MATERIAL CONTAINING ASBESTOS IS PROHIBITED.
- DO NOT SCALE DRAWINGS. DRAWINGS SHOULD BE USED AS A SUPPLEMENTAL TOOL FOR THE CONTRACTOR'S USE IN REVIEWING ACTUAL FIELD CONDITIONS PRIOR TO BIDDING.
- ALL DIMENSIONS ARE APPROXIMATE DUE TO THE AS-BUILT CONDITIONS VARYING FROM ACTUAL FIELD CONDITIONS. ALL DIMENSIONS ARE TO BE FIELD VERIFIED PRIOR TO COMMENCING WORK. DIMENSIONS ARE FROM TO CENTERLINE OR FACE OF STUDS/SEATHING U.O.N. PER PLANS.
- MATCH LINES ARE INDICATORS OF WHERE ADJOINING FLOOR PLANS MEET. SEE PLANS ON BOTH SIDES OF MATCH LINE FOR INFORMATION OVERLAPPING THE LINE.
- THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS TO INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, AND SERVICES NECESSARY FOR ALL WORK SHOWN, PRESCRIBED, OR REASONABLY IMPLIED, BUT NOT LIMITED TO THAT EXPLICITLY INDICATED IN THE CONTRACT DOCUMENTS. WHERE WORK OR EQUIPMENT IS INDICATED N.I.C. (NOT IN CONTRACT), SUCH WORK AND/OR EQUIPMENT SHALL BE PROVIDED BY OTHERS. CONTRACTOR SHALL COORDINATE AND COOPERATE TO EFFECT SUCH INSTALLATION. ALL REQUESTS FOR CLARIFICATIONS OF THESE DRAWINGS SHALL BE DIRECTED TO HED. ALL REQUIRED WORK SHALL BE PERFORMED BY THE CONTRACTOR INCLUDING THE GENERAL CONTRACTOR AND HIS SUBCONTRACTORS. THEY SHALL BE ONE AND THE SAME. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL OTHER TRADES ON THE PROJECTS. ANY CHANGES OR DELAYS ARISING FROM CONFLICTS BETWEEN TRADES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ASSURING THAT ALL TRADES COORDINATE INTERFACE BETWEEN THEMSELVES, I.E., PLUMBING, ROUGH-IN CABINETS, ETC.
- EXISTING UTILITIES AND IMPROVEMENTS DAMAGED DURING THE COURSE OF THE WORK SHALL BE PROMPTLY REPAIRED. EXISTING UTILITIES AND IMPROVEMENTS DAMAGED FOR WHICH LOCATIONS WERE UNKNOWN, SHALL BE IMMEDIATELY BROUGHT TO THE OWNER'S AND ARCHITECT'S ATTENTION AND PROMPTLY REPAIRED AT HIS/HER DIRECTION. THE WORK REQUIRED TO REPAIR DAMAGED EXISTING UTILITIES AND IMPROVEMENTS FOR WHICH LOCATIONS WERE UNKNOWN WILL BE REVIEWED AND TAKEN UNDER CONSIDERATION AS EXTRA WORK.
- ALL ITEMS NOTED TO BE SALVAGED SHALL BE RETURNED TO THE OWNER.
- THE TERM "TYPICAL" (TYP.) SHALL BE CONSTRUED TO MEAN APPLYING TO ALL LIKE OR SIMILAR CONDITIONS IN THE AREAS DESIGNATED FOR WORK SCOPE (I.E. WITHIN THE BOUNDARIES OF THIS PROJECT).
- PENETRATIONS IN FIRE RATED ASSEMBLIES AND BEARING WALLS SHALL BE PROTECTED AS REQUIRED BY 2016 CBC CHAPTER 7.
- THE CONSTRUCTION DOCUMENTS, INCLUDING THE SPECIFICATIONS AND DRAWINGS, ARE COMPLEMENTARY AND WHAT IS CALLED FOR BY ANY ONE SHALL BE AS BINDING AS IF CALLED FOR BY ALL. IN CASE OF CONFLICT, LARGE SCALE (DETAIL) DRAWINGS SHALL GOVERN OVER SMALL-SCALE DRAWINGS. THE SPECIFICATIONS SHALL GOVERN OVER BOTH THE CONSTRUCTION PROJECT MANUAL AND THE CONTRACT DRAWINGS EXCEPT AS NOTED HEREIN. SPECIAL CONDITIONS SHALL GOVERN OVER BOTH THE CONSTRUCTION DRAWINGS AND THE GENERAL CONDITIONS, AND SUBSEQUENT ADDENDA. INTERPRETATIONS, OR CHANGE ORDERS SHALL GOVERN OVER THE ORIGINAL DOCUMENTS, UNLESS A DIFFERENT ORDER OF PRECEDENCE IS NOTED ELSEWHERE IN CONJUNCTION WITH A SPECIFIC PORTION OF THE DOCUMENTS.
- IN CASE OF CONFLICT BETWEEN THE DRAWINGS AND SPECIFICATIONS, THE DOCUMENT CONTAINING ADDITIONAL QUANTITIES SHALL GOVERN IN MATTERS OF QUANTITY. THE DOCUMENT REQUIRING A HIGHER DEGREE OF QUALITY SHALL GOVERN IN MATTERS OF QUALITY. IN CASE OF CONFLICT WITHIN THE DRAWINGS INVOLVING QUANTITIES OR WITHIN THE SPECIFICATIONS INVOLVING QUALITY, THE GREATER QUANTITY AND THE HIGHER QUALITY SHALL BE FURNISHED. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ALL SUCH QUANTITY AND QUALITY CONFLICTS AND SHALL AGREE UPON RESOLUTION, IN WRITING, PRIOR TO PROCEEDING.
- WHERE ON ANY DRAWING A PORTION OF THE WORK IS DRAWN OUT AND THE REMAINDER IS INDICATED IN OUTLINE, THE DRAWN-OUT PARTS SHALL APPLY TO ALL OTHER LIKE PORTIONS OF THE WORK. WHERE ORNAMENT OR OTHER DETAILS IS INDICATED AS STARTING, SUCH DETAIL SHALL BE CONTINUED THROUGHOUT THE COURSES OR PARTS IN WHICH IT OCCURS AND SHALL ALSO APPLY TO OTHER SIMILAR PARTS IN THE WORK, UNLESS OTHERWISE INDICATED.
- THE ARCHITECT'S APPROVAL OF SHOP DRAWINGS SHALL NOT RELIEVE THE GENERAL CONTRACTOR FROM RESPONSIBILITY FOR DEVIATIONS FROM DRAWINGS OR SPECIFICATIONS UNLESS HE HAS (IN WRITING) CALLED THE ARCHITECT'S ATTENTION TO SUCH DEVIATIONS AT THE TIME OF SUBMISSION NOR SHALL IT RELIEVE HIM OF RESPONSIBILITY FOR ERRORS OF ANY SORT IN THE SHOP DRAWINGS.
- GENERAL CONTRACTOR OR ITS SUBCONTRACTORS SHALL BE RESPONSIBLE FOR VERIFICATION AND APPROVALS OF SUBSTITUTED MATERIALS AS REQUIRED BY GOVERNING CODES AND AGENCIES.
- IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTORS TO SUPPLY AND DISTRIBUTE ADEQUATE COPIES OF ALL DRAWINGS TO ALL TRADES FALLING UNDER THEIR RESPONSIBILITY AT ALL TIMES DURING THE PROGRESS OF THE JOB (I.E., REVISIONS).
- UPON COMPLETION OF THE JOB, THE GENERAL CONTRACTOR SHALL SUBMIT CERTIFICATES OF INSPECTION OF SATISFACTORY COMPLETION, AND OPERATION AND MAINTENANCE INSTRUCTIONS OF ALL EQUIPMENT TO THE OWNER. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL WORK AND MATERIALS IN CONFORMANCE WITH ANY CODE OR CODES OF FEDERAL, STATE, COUNTY OR MUNICIPALITY HAVING JURISDICTION OVER SUCH WORK. ALL APPLICABLE REQUIREMENTS IN THESE REGULATIONS SHALL BE FOLLOWED THE SAME AS IF NOTED ON THE DRAWINGS. CONFLICTS BETWEEN WORK SET FORTH ON THE DRAWINGS AND BUILDING CODES, LAWS OR REGULATIONS NOTED BY THE GENERAL CONTRACTOR SHALL BE SUBMITTED TO THE ARCHITECT FOR RESOLUTION PRIOR TO PROCEEDING WITH THE WORK.
- THE CONTRACTOR SHALL SUBMIT ALL PERTINENT SHOP DRAWINGS AND COLOR SAMPLES FOR THE ARCHITECT'S REVIEW. ALLOWING ADEQUATE TIME FOR REVIEW AND CORRECTIVE ACTION, SHOULD IT BE REQUIRED. BY SUBMITTING SHOP DRAWINGS, THE CONTRACTOR THEREBY REPRESENTS THAT HE HAS VERIFIED ALL FIELD MEASUREMENTS, METHODS OF ACCESS TO THE POINT OF INSTALLATION AND SIMILAR FIELD CRITERIA FOR AND ALL PREFABRICATED ASSEMBLIES OTHER THAN BUILDING STANDARD WORK.
- THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL KEEP THE PROJECT AREA AND SURROUNDING AREA FREE FROM DUST NUISANCE. THE WORK SHALL BE IN CONFORMANCE WITH THE AIR POLLUTION CONTROL STANDARDS AND REGULATIONS OF THE STATE DEPARTMENT OF HEALTH AND AGENCIES.
- NO EXTRA WORK OR CHARGE SHALL BE MADE UNLESS WRITTEN AND COUNTERSIGNED BY THE ARCHITECT AND OWNER OR WRITTEN ORDER FROM THE ARCHITECT IS OBTAINED. THIS ORDER SHALL STATE THAT THE OWNER HAS AUTHORIZED THE EXTRA WORK OR CHARGE AND NO CLAIM FOR AN ADDITIONAL SUM SHALL BE VALID UNLESS SO PRESENTED AS DESCRIBED ABOVE.
- CONSTRUCTION DEBRIS AND WASTES SHALL BE DEPOSITED AT AN APPROPRIATE SITE. THE CONTRACTOR SHALL AT ALL TIMES, KEEP PREMISES FREE FROM ACCUMULATION OF DEBRIS CAUSED BY ITS OPERATIONS. AT THE COMPLETION OF THE WORK, THE CONTRACTOR SHALL CLEAN THE BUILDING AND LEAVE THE WORK READY FOR MOPPING AND WAXING.
- GENERAL CONTRACTOR IS RESPONSIBLE FOR REVIEWING AND FIELD VERIFYING DEMOLITION REQUIREMENTS IN RELATION TO CONSTRUCTION DRAWINGS. THE ARCHITECT IS TO BE NOTIFIED OF ANY AND ALL CONFLICTS, DISCREPANCIES OR PROBLEMS.
- CONTRACTOR TO REPAIR AND PATCH ALL AREAS DISTURBED DUE TO THIS PROJECT'S SCOPE OF WORK.

SYMBOL LEGEND



HAZARDOUS MATERIALS NOTES

THE DESIGN TEAM HAS NO RESPONSIBILITY FOR THE DISCOVERY, PRESENCE, HANDLING, REMOVAL OR DISPOSAL OF, OR EXPOSURE OF PERSONS TO, HAZARDOUS MATERIALS OR TOXIC SUBSTANCES IN ANY FORM AT THE PROJECT SITE, INCLUDING BUT NOT LIMITED TO ASBESTOS, ASBESTOS PRODUCTS, POLYCHLORINATED BIPHENYL (PCB), LEAD PAINT OR OTHER TOXIC SUBSTANCES. THE FACT THAT THESE DOCUMENTS DO NOT INDICATE THE PRESENCE OF OR REMOVAL OR CONTAINMENT OF THE FOREGOING IS NOT INTENDED TO INDICATE THAT THESE MATERIALS OR SUBSTANCES, AMONG OTHERS, ARE NOT PRESENT AND ARE NOT REQUIRED TO BE REMOVED OR CONTAINED IN COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.



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CITY SCHOOLS



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GENERAL NOTES,
LEGEND,
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AND DRAWING INDEX

E0.1



GENERAL NOTES	GENERAL NOTES (CONTINUATION)	LEGEND	DRAWING INDEX																																																																																												
<p>1. THE COMPLETE ELECTRICAL INSTALLATION SHALL BE IN ACCORDANCE WITH THE LATEST ADOPTED EDITION OF THE NATIONAL ELECTRICAL CODE, SPECIFICATIONS AND STANDARD, THE LATEST RULES AND REGULATIONS OF THE SAFETY ORDERS ISSUED BY THE DIVISION OF INDUSTRIAL SAFETY, THE NATIONAL BOARD OF FIRE UNDERWRITERS AND ALL APPLICABLE STATE AND LOCAL CODES ISSUED BY AUTHORITIES HAVING JURISDICTION.</p> <p>2. PRIOR TO SUBMITTING PROPOSAL, BIDDER SHALL EXAMINE ALL GENERAL CONSTRUCTION DRAWINGS. VISIT CONSTRUCTION SITE AND ATTEND THE PRE-BID MEETING TO BE FAMILIAR WITH EXISTING CONDITIONS UNDER WHICH HE WILL HAVE TO OPERATE AND WHICH WILL IN ANYWAY AFFECT THE WORK UNDER THIS CONTRACT. NO SUBSEQUENT ALLOWANCE WILL BE MADE IN THIS CONNECTION IN BEHALF OF THE CONTRACTOR FOR ANY ERROR OR NEGLIGENCE ON HIS PART.</p> <p>3. THIS CONTRACTOR SHALL INCLUDE ALL CONTINGENCIES WHICH MAY ARISE AND WHICH MAY BE REQUIRED BY ALTERATION AND DEMOLITION WORK. THIS IS TO INCLUDE ALL REMOVAL, RELOCATION AND REWORKING OF ELECTRICAL OUTLETS, CONDUITS, WIRING AND ITEMS FOR ELECTRICAL EQUIPMENT REQUIRED AND ANY NECESSARY SPLICING OR EXTENSION OF EXISTING CONDUIT AND WIRING SYSTEMS. THE ELECTRICAL CONTRACTOR SHALL VISIT JOB SITE AND DETERMINE EXTENT OF THE WORK.</p> <p>4. FIELD VERIFY TO CONFIRM ALL FIRE RESISTIVE CEILINGS AND WALLS. PROVIDE FIRE STOP SEALS PER CALIFORNIA BUILDING CODE FOR CONDUIT PENETRATION THROUGH FIRE RESISTIVE FLOORS, WALLS AND CEILINGS.</p> <p>5. ALL ELECTRICAL MATERIALS AND EQUIPMENT SHALL BE LISTED BY UNDERWRITER'S LABORATORIES AND BEAR THEIR LABEL.</p> <p>6. CONDUIT ROUTING SHOWN IS ESSENTIALLY DIAGRAMMATIC. CONTRACTOR SHALL LAYOUT RUNS TO SUIT FIELD CONDITIONS AND THE COORDINATION REQUIREMENTS OF OTHER TRADES. ALL EXPOSED CONDUIT, BOXES, FITTINGS, SUPPORT, ETC. SHALL BE PAINTED TO MATCH ADJACENT SURFACES.</p> <p>7. THE CONTRACTOR SHALL CONSULT THE ARCHITECTURAL AND OTHER DRAWINGS RELATED TO THIS PROJECT FOR ADDITIONAL WORK TO BE PROVIDED.</p> <p>8. ANY POWER SHUTDOWN SHALL BE COORDINATED WITH SRCS COORDINATOR. A SHUTDOWN SCHEDULE SHALL BE PRESENTED TO SCHOOL SITE COORDINATOR FOR APPROVAL TWO WEEKS PRIOR TO COMMENCEMENT OF WORK. SHUTDOWN SHALL BE PERFORMED IN OVERTIME HOURS IF SO DIRECTED BY SCHOOL DISTRICT.</p> <p>9. ALL FEEDER AND BRANCH CIRCUIT CONDUITS SHALL BE INSTALLED CONCEALED IN FINISHED AREA, UNLESS OTHERWISE NOTED. CUT AND PATCH (E) WALL OR CEILING AS REQUIRED.</p> <p>10. ALL PENETRATIONS THROUGH FIRE RESISTIVE WALLS SHALL BE TOTALLY SEALED TO PREVENT THE SPREAD OF SMOKE, FIRE, TOXIC GASES, AND WATER THROUGH THE PENETRATION BEFORE, DURING AND AFTER A FIRE CONDITION. THE FIRE RATING OF THE SEALED PENETRATION SHALL BE AT LEAST THAT OF THE WALL INTO WHICH IT IS INSTALLED. THE SEAL SHALL PERMIT THE VIBRATION, EXPANSION AND/OR CONTRACTION OF THE CONDUIT PASSING THROUGH THE PENETRATION WITHOUT THE SEAL CRACKING OR CRUMBLING.</p> <p>11. DEMOLITION WORK SHALL BE PROVIDED AS REQUIRED TO ACCOMPLISH NEW WORK CALLED FOR AND AS NOTED. WORK SHALL BE PERFORMED CAREFULLY TO AVOID DAMAGE TO SURFACES, STRUCTURES, AND EQUIPMENT NOT BEING REMOVED. EXISTING EQUIPMENT AND/OR ELECTRICAL WIRING WHICH IS TO REMAIN, BUT HAS BEEN REMOVED TO FACILITATE THE INSTALLATION OF THE NEW EQUIPMENT, SHALL BE RESTORED TO ITS ORIGINAL OPERATING CONDITION.</p> <p>12. THE CONTRACTOR SHALL REMOVE ALL ELECTRICAL ITEMS IN OR ON WALLS, CEILINGS AND FLOORS WHICH WILL BE REMOVED FOR THE RENOVATION WORK OF THIS PROJECT. DISCONNECT COMPLETELY BEFORE START OF REMOVAL.</p> <p>13. WHERE OUTLETS ARE REMOVED AND/OR CONDUIT IS CUT OFF, ALL EXISTING CONDUCTORS SHALL BE REMOVED BACK TO THE NEXT OUTLET, JUNCTION BOX OR PANEL.</p> <p>14. EXISTING CONDUCTORS REMOVED FROM SERVICE SHALL NOT BE PERMITTED TO BE USED FOR NEW WORK UNDER THIS CONTRACT.</p> <p>15. EXISTING CONDUIT RUNS REMAINING IN PLACE MAY BE UTILIZED FOR THE RENOVATION WORK, PROVIDED THAT THE CONDUIT IS OF ADEQUATE SIZE PER C.E.C. FOR THE NUMBER AND SIZE OF CONDUCTORS BEING INSTALLED.</p> <p>16. BLANK COVERS SHALL BE INSTALLED WHEREVER DEVICE IS REMOVED AND OUTLET BOX REMAINS IN PLACE.</p> <p>17. AN EXISTING ELECTRICAL ITEM REMAINING IN SERVICE WHICH HAS ITS EXISTING SUPPLY CIRCUIT INTERRUPTED BY DEMOLITION WORK PERFORMED UNDER THIS CONTRACT, SHALL NOT BE RECONNECTED TO A SOURCE WHICH COULD BE OVERLOADED BY THE ADDITION OF THIS ITEM.</p> <p>18. WHERE EXISTING CONDUIT AND/OR CIRCUIT HAS BEEN INTERRUPTED BY REMOVAL OF AN OUTLET(S), WALL, OR PORTION OF THE CIRCUIT, THE REMAINING CONDUIT AND/OR CIRCUIT SHALL BE REROUTED, EXTENDED AND RECONNECTED AS REQUIRED TO PROVIDED CONTINUITY FOR THE CIRCUIT THAT IS TO REMAIN IN SERVICE.</p> <p>19. UNLESS OTHERWISE INDICATED, THE MINIMUM SIZE OF CONDUCTORS SHALL BE 12 AWG THIN STRANDED COPPER ONLY.</p> <p>20. UNLESS OTHERWISE INDICATED, THE MINIMUM SIZE OF CONDUIT SHALL BE 3/4".</p> <p>21. GREEN INSULATED GROUND CONDUCTORS SHALL BE INSTALLED IN ALL FEEDER AND BRANCH CIRCUIT WIRING.</p> <p>22. PROVIDE LABELS ON ALL EQUIPMENT AND DEVICES. LABELS SHALL BE SELF-ADHESIVE PHENOLIC TYPE AND WHITE LETTER ON BLACK BACKGROUND, PROVIDE BRADY OR DYMO TYPE LABELS (CIRCUIT IDENTIFICATION) FOR ALL SWITCHES AND RECEPTACLES.</p> <p>23. THE CONTRACTOR SHALL PROVIDE TYPED DIRECTORIES FOR ALL ELECTRICAL PANELS INVOLVED IN THIS PROJECT. THE PANEL DIRECTORIES SHALL REFLECT THE AS-BUILT CIRCUITS. ONE COPY OF THE SCHEDULE SHALL BE TAPED TO THE INSIDE OF THE PANEL DOOR, AND ONE COPY SHALL BE SUBMITTED TO THE ENGINEER AS AN "AS-BUILT" DRAWING.</p> <p>24. ALL ELECTRICAL EQUIPMENT SHALL BE BRACED OR ANCHORED TO RESIST A HORIZONTAL FORCE ACTING IN ANY DIRECTION PER CBC REQUIREMENTS.</p> <p>25. EXISTING ELECTRICAL WIRING WHICH WILL BE DISTURBED DUE TO CONSTRUCTION CHANGES REQUIRED BY THIS CONTRACT SHALL BE RESTORED TO OPERATING CONDITION.</p> <p>26. THE CONTRACTOR SHALL EMPLOY QUALIFIED AND EXPERIENCED WORKMEN FOR THIS WORK. ALL RESTORATION WORK SHALL BE SUBJECT TO THE APPROVAL OF THE ARCHITECT AND/OR OWNER AND IOR.</p>	<p>27. THE CONTRACTOR SHALL BE HELD FULLY RESPONSIBLE FOR THE PROPER RESTORATION OF ALL EXISTING SURFACES REQUIRING PATCHING, PLASTERING PAINTING AND/OR OTHER REPAIRS DUE TO THE INSTALLATION OF ELECTRICAL WORK UNDER THE TERMS OF THIS SPECIFICATION. CLOSE ALL OPENINGS, REPAIR ALL SURFACES, ETC., AS REQUIRED. THIS SHALL INCLUDE ALL WALLS, CEILINGS, ROOFS, PAVEMENT, PLANTERS, ETC.</p> <p>28. WHERE CONDUIT IS ROUTED ON ROOF STRUCTURES, PROVIDE CONDUIT SUPPORT AT 10'-0" O.C. MAXIMUM.</p> <p>29. ALL EXPOSED CONDUIT BELOW 7'-0" SHALL BE RSC OR IMC AND ALL EXPOSED HARDWARE SHALL BE "HOT DIPPED" GALVANIZED. ALL INTERIOR CONDUITS MAY BE EMT, UNLESS OTHERWISE NOTED.</p> <p>30. GENERALLY, HORIZONTAL RUNS SHALL BE INSTALLED ON THE CORNER BELOW CEILING LINE AS APPROVED BY THE ENGINEER.</p> <p>31. UPON COMPLETION OF CONSTRUCTION, PAINT ALL EXPOSED ELECTRICAL CONDUITS, DEVICES AND BOXES. PAINT COLOR SHALL MATCH THE EXISTING SURFACES.</p> <p>32. THE CONTRACTOR SHALL MAINTAIN AT THE JOB SITE, AN UP TO DATE "AS BUILT" DRAWING SET. THE "AS BUILT" DRAWING SET SHALL REFLECT ALL APPROVED CHANGES TO THE DESIGN DRAWINGS. THE "AS BUILT" DRAWING SET SHALL BE KEPT CLEAN AND IN GOOD CONDITION AND SHALL BE TURNED OVER TO THE OWNER AT THE COMPLETION OF THE PROJECT. THESE DRAWINGS SHALL BE UPDATED DAILY AND BE CHECKED WEEKLY BY IOR. THE PROGRESS PAYMENT IS TIED TO THEIR COMPLETION.</p> <p>33. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL SCHEDULE AND PERFORM A COMPLETE FUNCTIONAL TEST IN THE PRESENCE OF IOR TO DEMONSTRATE TO THE OWNER THAT THE NEW INSTALLATION IS OPERATING AS INTENDED TEST RESULTS SHALL BE SENT TO DISTRICT FOR IOR AND AOR. ANY DEFECTS OR DEFICIENCIES IN THE MATERIALS OR WORK SHALL BE CORRECTED IMMEDIATELY BY AND AT THE CONTRACTOR'S EXPENSE.</p>	<p> HOMERUN TO PANEL, HASHMARKS INDICATE NUMBER OF #12 AWG, NO HASHMARK INDICATES 3 #12 + GND; U.O.N.; (T) INDICATES GROUND.</p> <p> FLEXIBLE WIRING AND EQUIPMENT CONNECTION.</p> <p> CONDUIT AND CONDUCTORS CONCEALS IN WALL OR CEILING</p> <p> CONDUIT AND WIRES CONCEALED IN FLOOR OR UNDERGROUND</p> <p> CONDUIT STUBBED OUT IN ACCESSIBLE LOCATION, CAP AND MARK LOCATION</p> <p> CONDUIT RISER</p> <p> SURFACE MOUNTED ELECTRICAL PANELBOARD</p> <p> RECESSED MOUNTED ELECTRICAL PANELBOARD</p> <p> HASHMARK INDICATES EXISTING ELECTRICAL ITEM TO BE DISCONNECTED AND REMOVED. REMOVE WIRES UP TO SOURCE AND UTILIZE (E) CONDUIT FOR (N) WORK.</p> <p> DUPLEX RECEPTACLE NEMA 5-20R, 20 AMP, 120V, +18" A.F.F. U.O.N.</p> <p> HORSEPOWER RATED MANUAL SWITCH, SQUARE "D" CLASS 2510, 208V, 2P</p> <p> HORSEPOWER RATED MANUAL SWITCH, SQUARE "D" CLASS 2510, 120V</p> <p> PULLBOX, SIZE AS SHOWN ON THE DRAWING</p> <p> JUNCTION BOX OR PULL BOX, SIZE PER CODE.</p> <p> DISCONNECT SWITCH</p> <p> SHEET NOTE REFERENCE, SEE NOTE 1</p> <p> DETAIL TAG. REFER TO DETAIL 1 ON SHEET NUMBER E-3.1</p> <p> EQUIPMENT IDENTIFICATION TAG</p>	<p>E0.1 GENERAL NOTES, LEGEND, ABBREVIATIONS AND DRAWING INDEX</p> <p>E1.1 ELECTRICAL SITE PLAN</p> <p>E2.1 SINGLE LINE DIAGRAM</p> <p>E3.1 DETAILS</p>																																																																																												
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SAN RAFAEL CITY SCHOOLS

Terra Linda High School Utility Relocation

320 Nova Albon Way
San Rafael, CA 94903 (415) 492-3105

Date	Issued For
2/1/18	CONSTRUCTION DOCUMENTS

Alliance Engineering Consultants, Inc.
 4201 Patrick Henry Drive, Ste. 101, Santa Clara, CA 95054
 Phone: (408) 970-9099 Fax: (408) 970-9378
 PROJECT NO. 101-17-07 www.aec-engineers.com

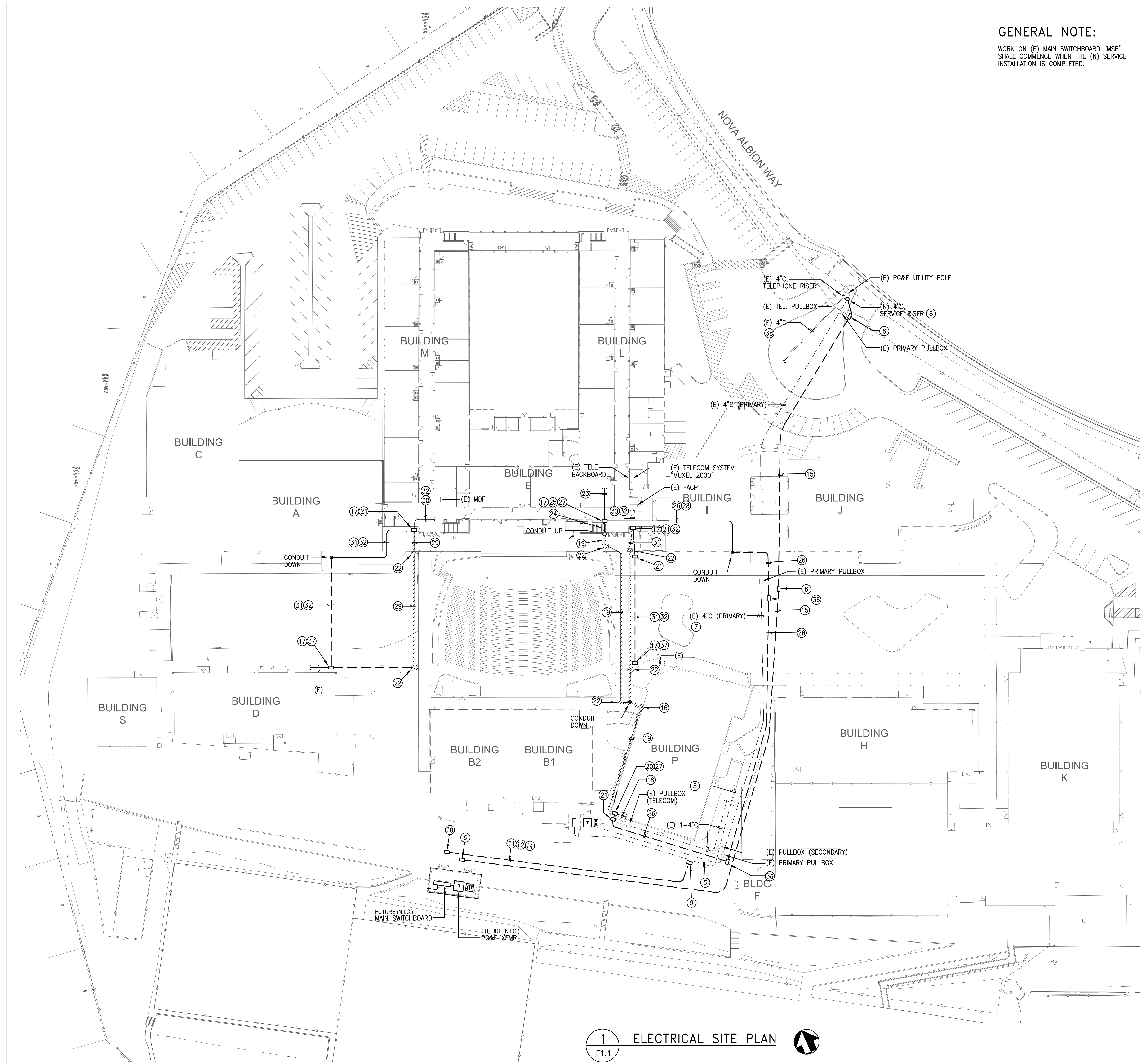
HED
 417 Montgomery Street, Suite 400, San Francisco, CA 94104 USA
 (415) 981-2345
 WWW.HED.DESIGN

GENERAL NOTE:

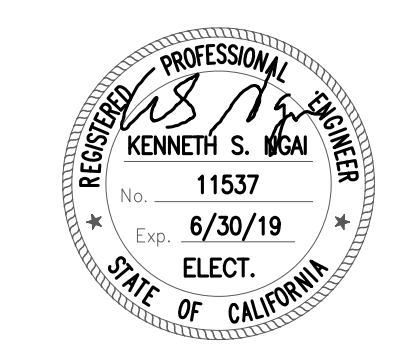
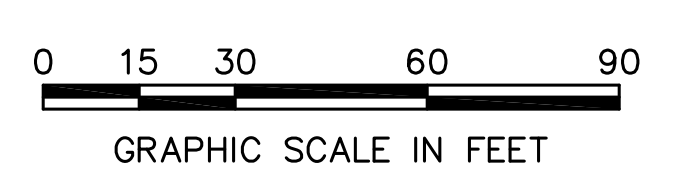
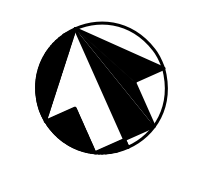
WORK ON (E) MAIN SWITCHBOARD "MSB" SHALL COMMENCE WHEN THE (N) SERVICE INSTALLATION IS COMPLETED.

SHEET NOTES:

- ① NOT USED
- ② NOT USED
- ③ NOT USED
- ④ NOT USED
- ⑤ (E) 2-4" WITH BRANCH FEEDER WIRES.
- ⑥ PROVIDE PRIMARY PULLBOX PER PG&E REQUIREMENT.
- ⑦ NOT USED
- ⑧ PROVIDE (1) 4" RISER PER PG&E REQUIREMENT.
- ⑨ INSTALL (N) PULLBOX ADJACENT TO (E) CONDUIT RUN
- ⑩ NOT USED
- ⑪ (3) 3 1/2" C
(7) 2 1/2" C
(3) 1 1/2" C
- ⑫ (2) 3 1/2" C
(6) 2 1/2" C
(6) 2 1/2" C (SPARE)
- ⑬ NOT USED
- ⑭ SEE SINGLE LINE DIAGRAM FOR WIRE SIZE.
- ⑮ (N) 1-4" CO
- ⑯ (E) PULLBOX ON THE EXTERIOR WALL OF (E) BUILDING "P" SHALL BE REMOVED.
- ⑰ INSTALL (N) PULLBOX IN (E) CONDUIT RUN.
- ⑱ REMOVE (E) 3-2 1/2" C MOUNTED ON THE (E) CANOPY OR WALL. PULL (E) 4 #4/0 & 1 #4 GND. IN EACH UP TO (E) DISTRIBUTION PANEL "DP-P" IN ELECTRICAL ROOM OF (E) BLDG "P".
- ⑳ INSTALL (N) PULLBOX IN (E) CONDUIT RUN AND MOUNT ON THE INTERIOR WALL OF THE BUILDING. FIELD VERIFY EXACT MOUNTING HEIGHT. (N) PULLBOX SIZE SHALL BE 24"x18"x8" IN NEMA 1 ENCLOSURE.
- ㉑ PROVIDE 24"x18"x8" NEMA 3R PULLBOX AND SECURE ON EXTERIOR WALL OF THE BUILDING, FIELD VERIFY EXACT MOUNTING HEIGHT.
- ㉒ REMOVE (E) PULLBOX MOUNTED ON THE CANOPY.
- ㉓ (E) 3-2 1/2" C, 4 #4/0 & 1 #4 GND (EACH)
- ㉔ PULL PORTION OF (E) WIRES IN EACH 2 1/2" C UP TO (N) PULLBOX ON THE ROOF, SEE NOTE ㉕.
- ㉕ INSTALL (N) PULLBOX IN (E) CONDUIT RUN ON THE ROOF. (N) PULLBOX SIZE SHALL BE 24"x18"x8" IN NEMA 3R ENCLOSURE.
- ㉖ (N) 3-2 1/2" C, 4 #4/0 & 1 #4 GND (EACH).
- ㉗ SPLICE (E) CONDUCTORS TO (N) CONDUCTOR INSIDE PULLBOX.
- ㉘ ROUTE CONDUIT ON THE ROOF AND PROVIDE CONDUIT SUPPORT AT 10FT. INTERVAL MAXIMUM.
- ㉙ (E) (3) 2" C WITH LOW VOLTAGE WIRES LOCATED ON THE (E) CANOPY, REMOVE THESE CONDUITS AND ASSOCIATED WIRES UP TO SOURCE.
- ㉚ (E) (3) 2" C WITH LOW VOLTAGE WIRES UP TO (E) HEAD-END EQUIPMENTS.
- ㉛ (N) 3-2" (CLOCK/SPEAKER/TEL/DATA/FIRE ALARM)
- ㉜ PROVIDE (N) LOW VOLTAGE WIRES FROM HEAD-END EQUIPMENT UP TO (E) DEVICES BEING SERVED TO MATCH (E) CONDITION.
- ㉝ NOT USED
- ㉞ NOT USED
- ㉟ NOT USED
- ㊱ (N) PULLBOX SHALL BE CHRISTY CAT #B1730 WITH 12" EXTENSION AND COVER CAT #B1730-51JH. COVER SHALL BE ENGRAVED WITH "ELECTRIC".
- ㊲ SAME AS NOTE ㊱ EXCEPT COVER SHALL BE ENGRAVED WITH "SIGNAL".
- ㊳ PROTECT (E) TEL. PRIMARY CONDUIT DURING CONSTRUCTION. MAINTAIN CIRCUIT CONTINUITY.



1 ELECTRICAL SITE PLAN



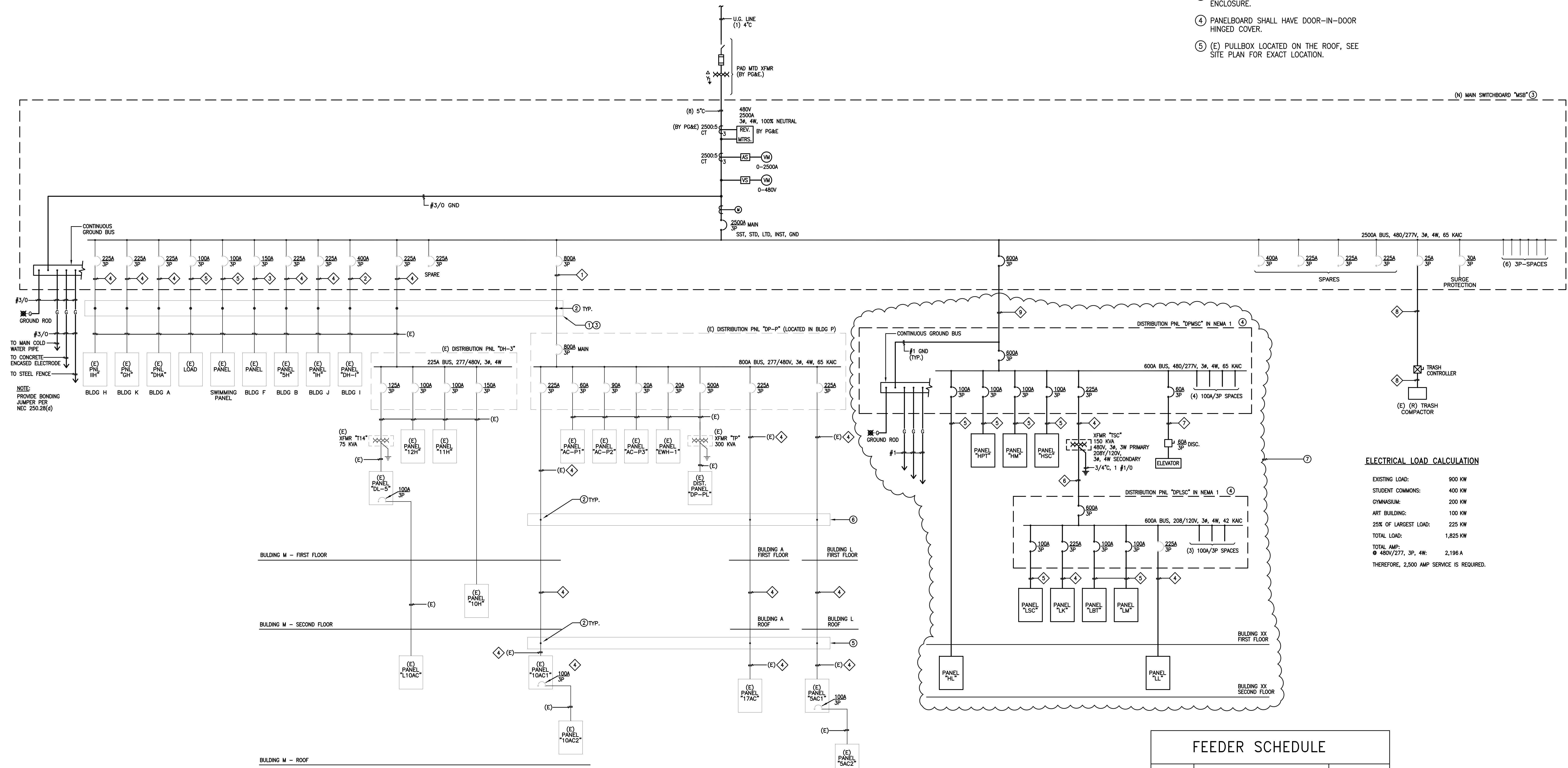
ELECTRICAL SITE PLAN

E1.1

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2016-1000

SHEET NOTES:

- ① (N) CONCRETE PULLBOX, SEE ELECTRICAL SITE PLAN FOR LOCATION.
- ② SPLICE (N) WIRES TO (E).
- ③ (N) SWITCHBOARD SHALL BE IN NEMA 3R ENCLOSURE.
- ④ PANELBOARD SHALL HAVE DOOR-IN-DOOR HINGED COVER.
- ⑤ (E) PULLBOX LOCATED ON THE ROOF, SEE SITE PLAN FOR EXACT LOCATION.
- ⑥ (N) CONCRETE PULLBOX, SEE SITE PLAN FOR SIZE AND EXACT LOCATION.
- ⑦ WORK IN THIS AREA IS PART OF STUDENT COMMON PROJECT.



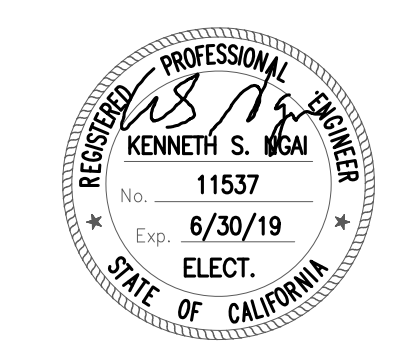
ELECTRICAL LOAD CALCULATION

EXISTING LOAD:	900 KW
STUDENT COMMONS:	400 KW
GYMNASIUM:	200 KW
ART BUILDING:	100 KW
25% OF LARGEST LOAD:	225 KW
TOTAL LOAD:	1,825 KW
TOTAL AMP:	2,196 A
④ 480V/277, 3φ, 4W:	
THEREFORE, 2,500 AMP SERVICE IS REQUIRED.	

FEEDER SCHEDULE

TAG	WIRE SIZE	CONDUIT SIZE
①	4 #500 KCMIL & 1 #1/0 GND EA.	(2) 3 1/2" C
②	4 #500 KCMIL & 1 #2 GND	3 1/2" C
③	4 #1/0 & 1 #6 GND	1 1/2" C
④	4 #4/0 & 1 #4 GND	2 1/2" C
⑤	4 #2 & 1 #8 GND	1 1/2" C
⑥	4 #250 KCMIL & 1 #1/0 GND EA.	(2) 3" C
⑦	3 #4 & 1 #10 GND	1" C
⑧	3 #10 & 1 #10 GND	1" C
⑨	4 #350 KCMIL & 1 #1 GND EA.	(2) 3" C

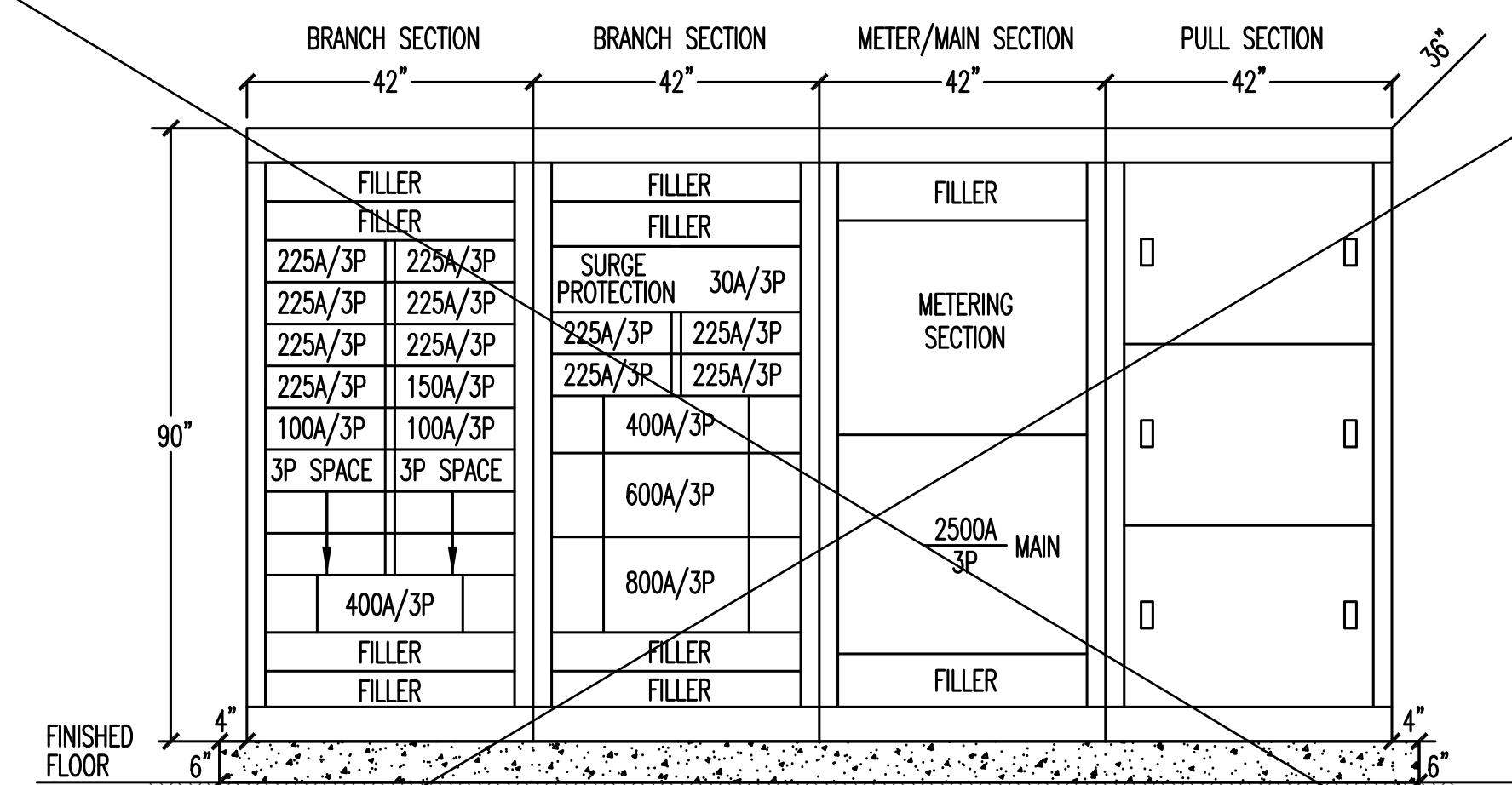
① SINGLE LINE DIAGRAM
E5.1 NOT TO SCALE



FILE: M:\101-16-00_Terra Linda_High_School\BIDD\Drawings Nov 21, 2016 3:18 pm Scale: 1=1 by: TRANG
XREFS: 2016-0700 TLHS HVAC SPECIFICATIONS.dwg

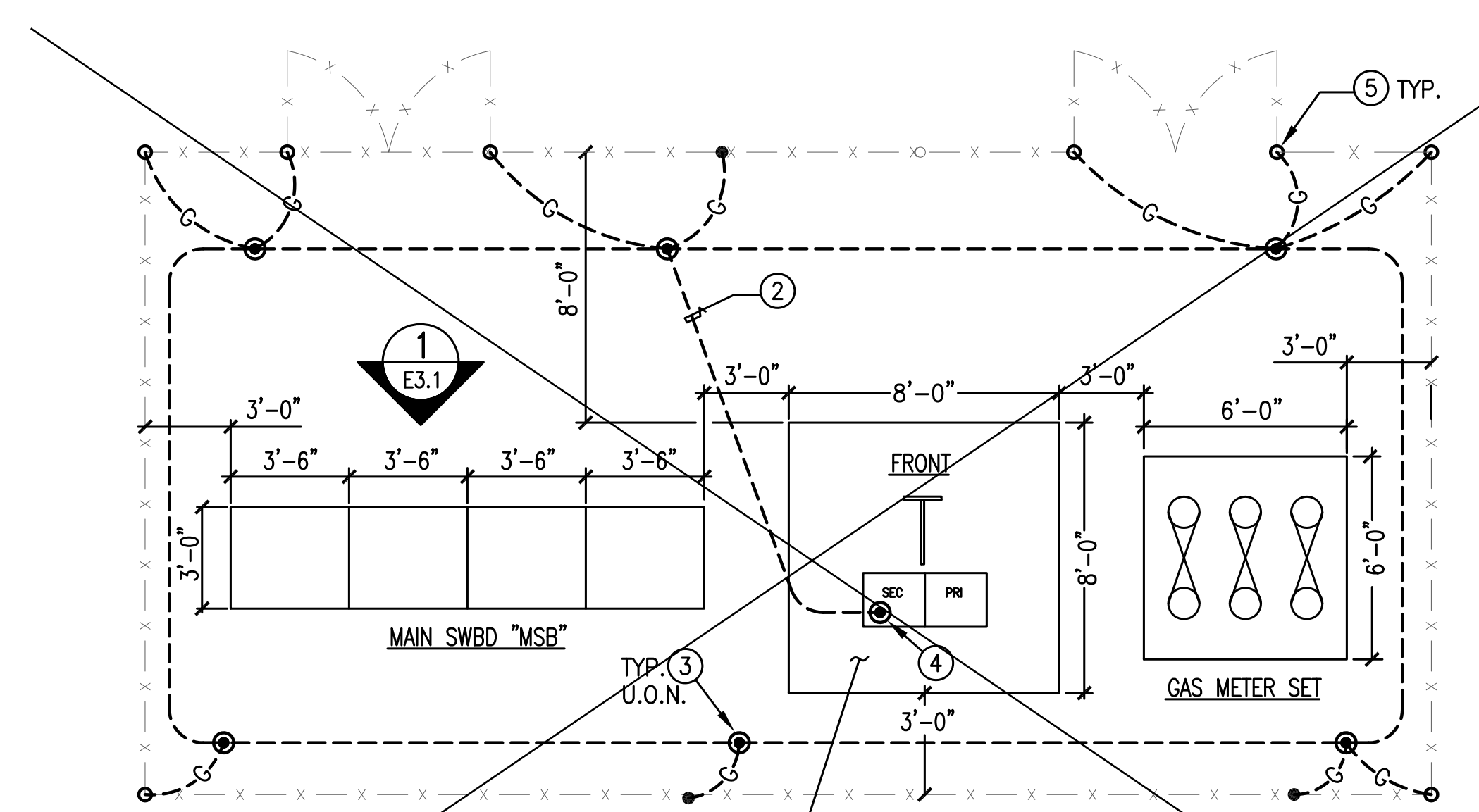
SHEET NOTES:

- 1 PROVIDE 8'x8' TRANSFORMER PAD WITH #4 REBAR ON 9" CENTER (MAX) BOTH DIRECTIONS. ALL REBAR SHALL BE TIED AND SECURED.
- 2 #2 STRANDED BARE COPPER WIRE UNDER PAD. CONNECT TO GROUND ROD AT SECONDARY SIDE OF TRANSFORMER AS SHOWN AND LEAVE 4' MIN. OF WIRE SLACK.
- 3 5/8" DIA. x 8' COPPER CLAD GROUND ROD, LOCATE 6" MINIMUM FROM SECONDARY OPENING.
- 4 3/4" DIA. x10' COPPER CLAD GROUND ROD.
- 5 GROUND FENCE WITH #2 AWG BARE SOLID TINNED COPPER GROUND WIRE. SEE DETAIL 3/E3.1 FOR ADDITIONAL WORK REQUIRED.

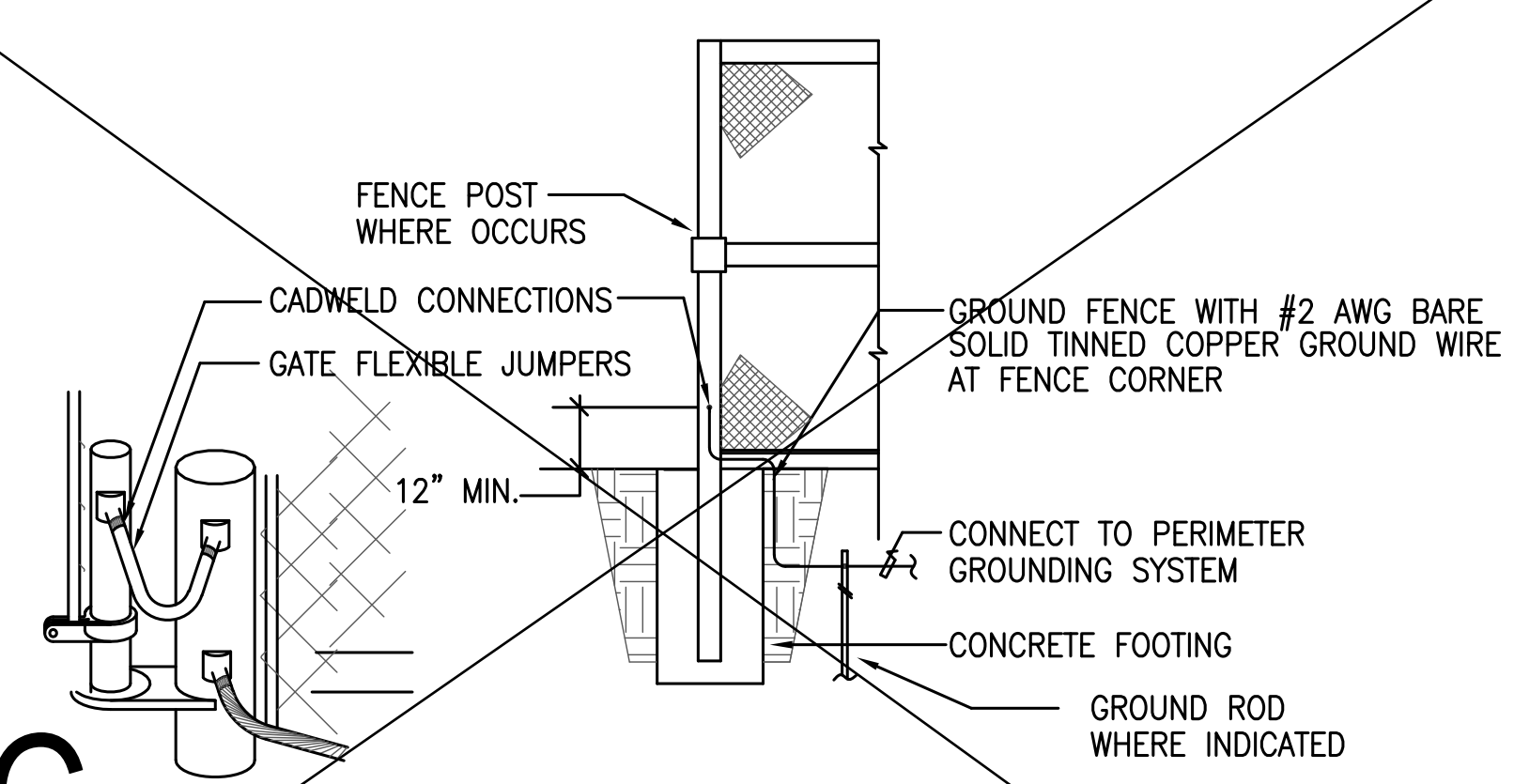


N.I.C.
1 MAIN SWITCHBOARD "MSB" ELEVATION
E3.1 NOT TO SCALE

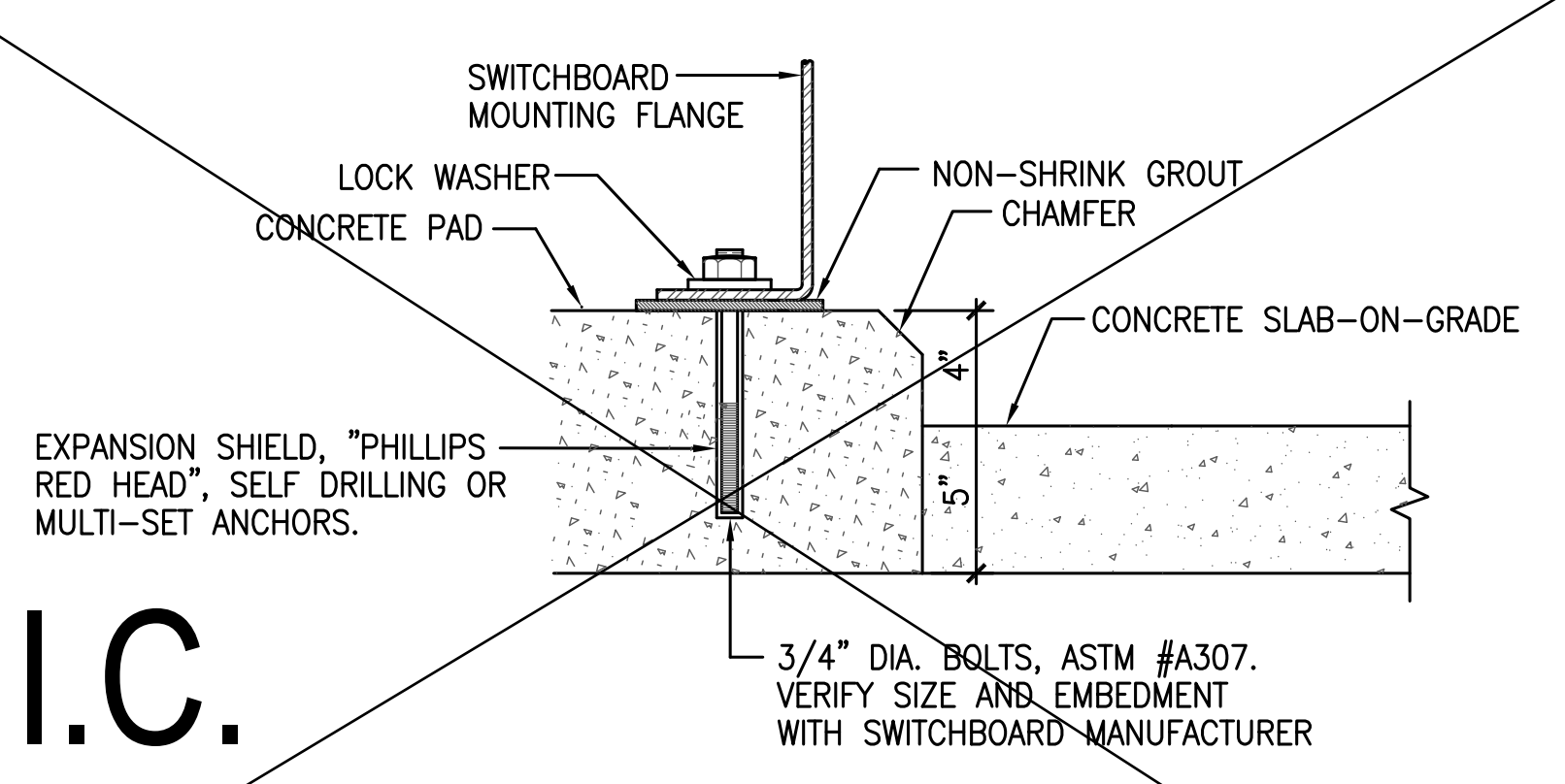
CONCRETE PAD, SEE DETAIL 4/E3.1 FOR TOTAL THICKNESS AND SWITCHBOARD ANCHORING



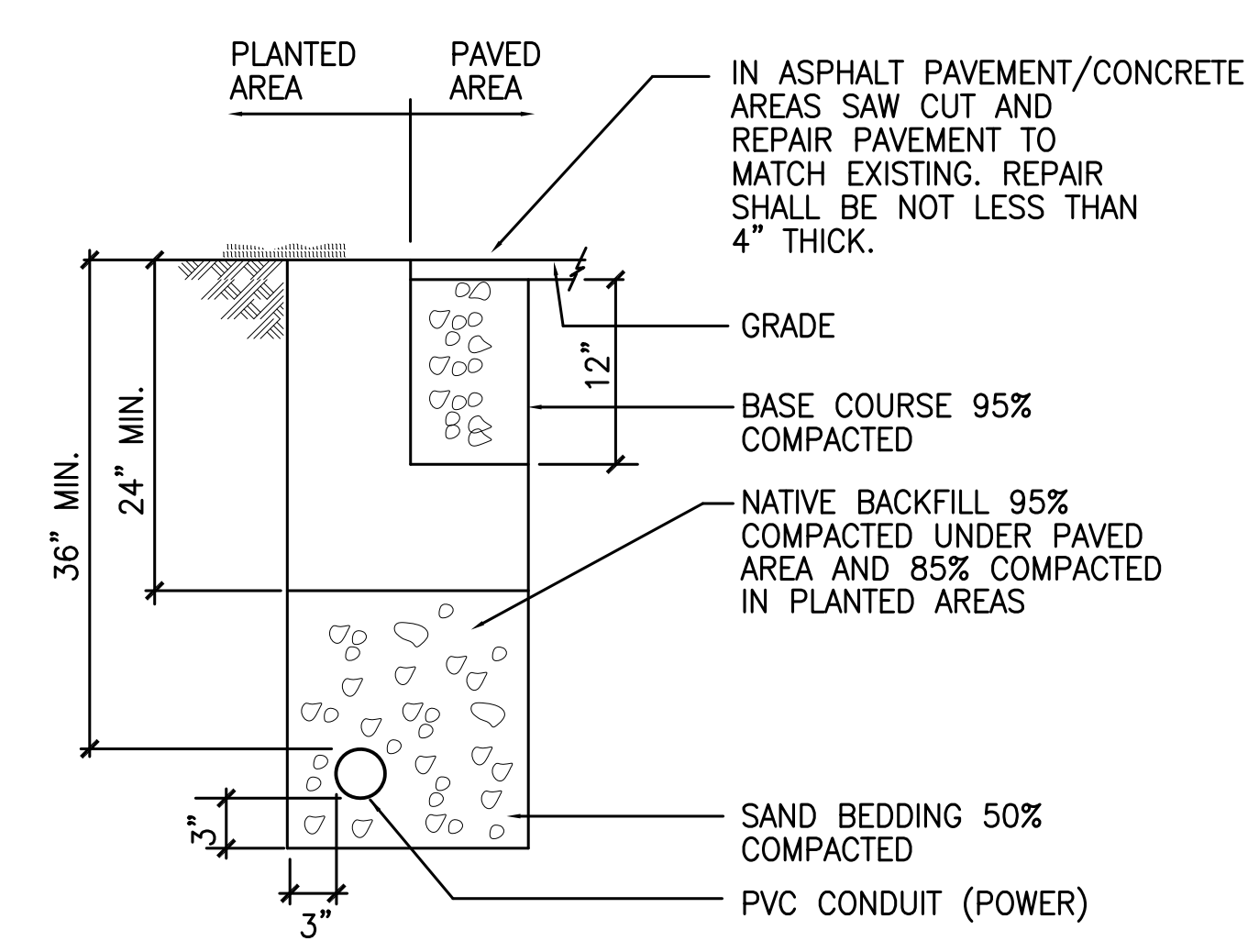
N.I.C.
2 SWITCHYARD LAYOUT
E3.1 NOT TO SCALE



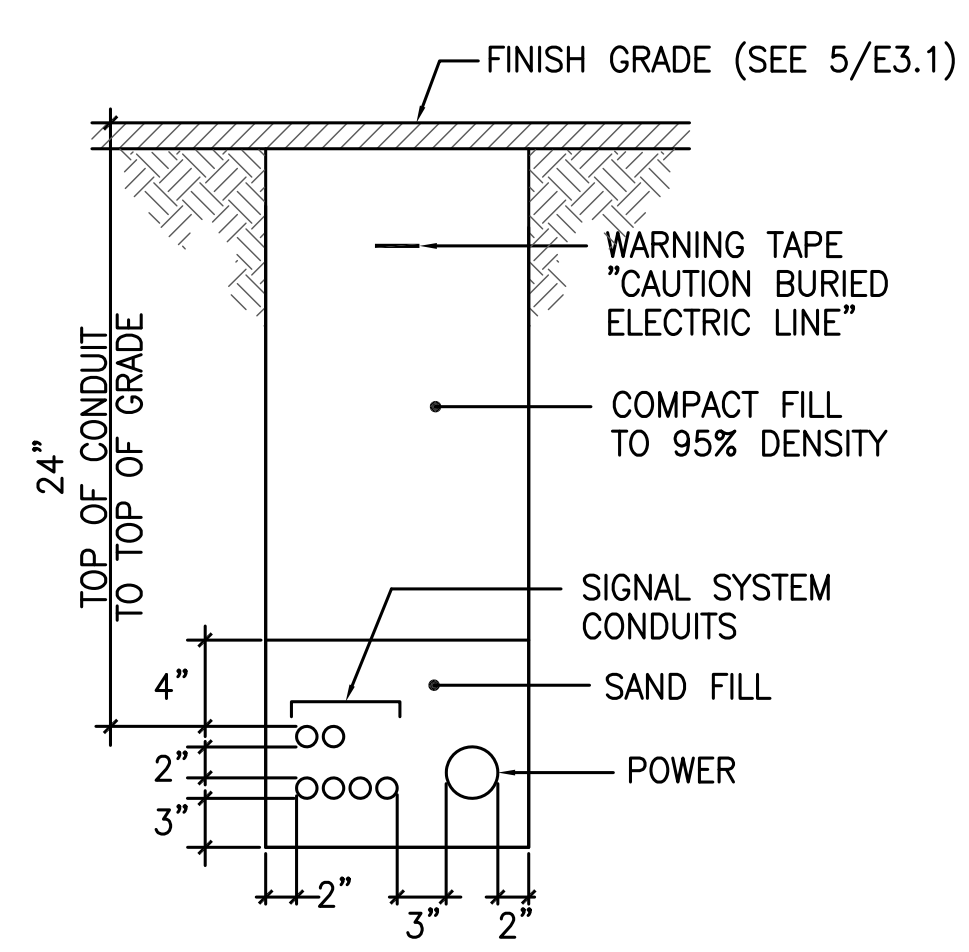
N.I.C.
3 DETAIL - FENCE GROUND
E3.1 NOT TO SCALE



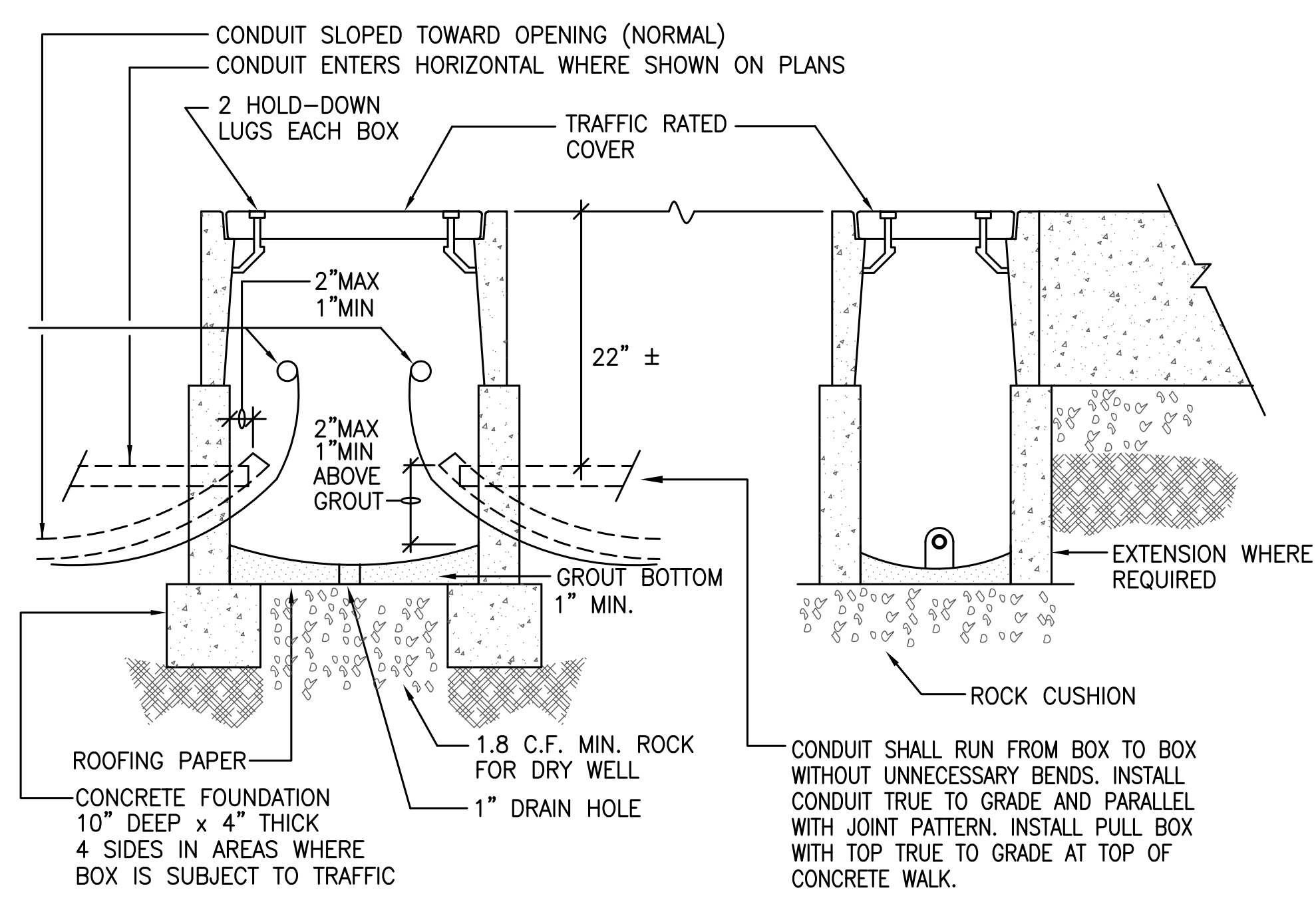
N.I.C.
4 SWITCHBOARD ANCHORING DETAIL
E3.1 NOT TO SCALE



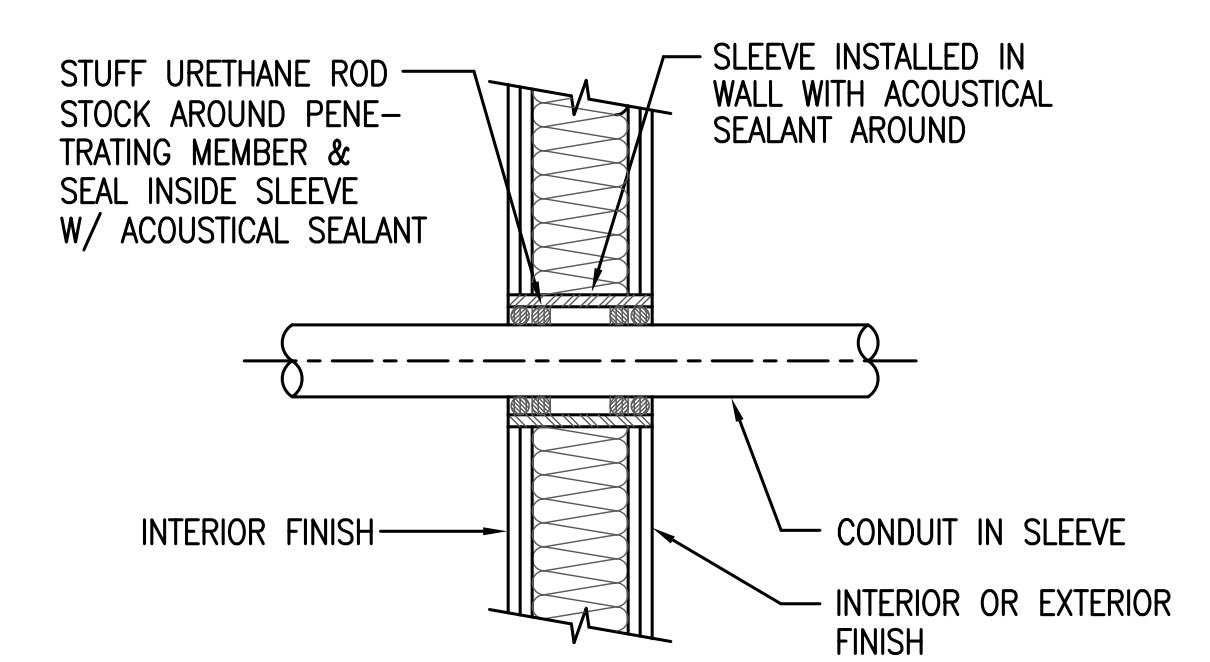
5 TRENCH DETAIL (PRIMARY CONDUIT)
E3.1 NOT TO SCALE



6 TRENCH DETAIL (SECONDARY)
E3.1 NOT TO SCALE

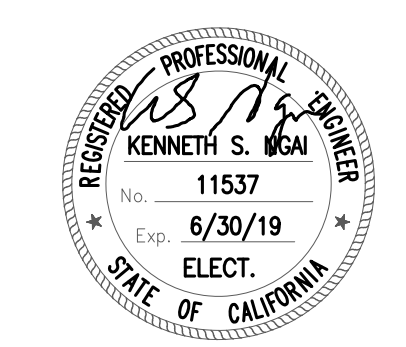


7 CONCRETE PULLBOX INSTALLATION
E3.1 NOT TO SCALE



NOTE: PATCH AND FINISH TO MATCH (E)
THESE RECOMMENDATIONS ARE BASED ON PRODUCT PERFORMANCE PER ASTM E-814(UL1479) FIRE TEST AND UL THROUGH PENETRATION FIRESTOP SYSTEM #WL1001.

8 TYPICAL WALL PENETRATION
E3.1 NOT TO SCALE



FILE: M:\101-17-07 Terra Linda HS Upgrade\01E30.dwg Oct 25, 2017 6:40 pm Scale: 1=1 by: TRAND
XREFS: 2016-1000 SHEET BORDER_30x42.dwg