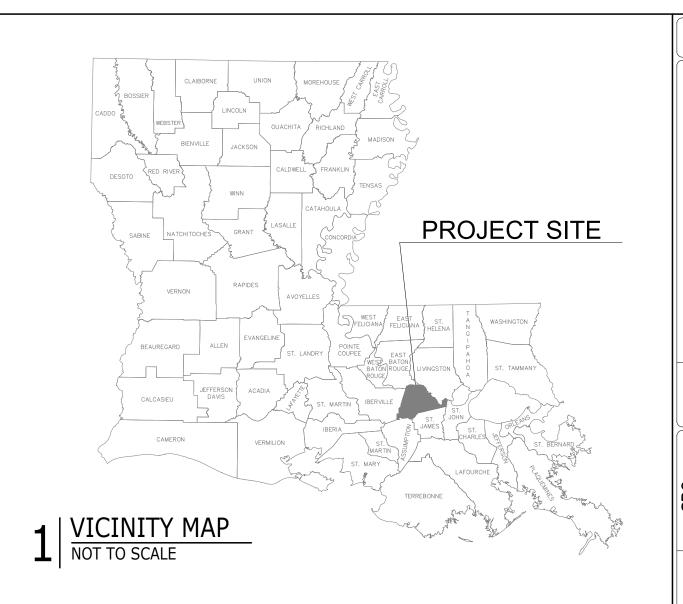
# ASCENSION PARISH 5% INITIATIVE GENERATOR PROJECT PARISH OF ASCENSION DEPARTMENT OF PUBLIC UTILITIES

HMGP 4263-DR-La-#20 38 Veterans Blvd, Donaldsonville, LA 70346 FEBRUARY 15, 2023



# PARISH PRESIDENT

CLINT COINTMENT

### **ASCENSION PARISH COUNCIL MEMBERS**

DISTRICT 1 ALVIN "COACH" THOMAS, JR.

DISTRICT 2 JOEL ROBERT

DISTRICT 3 TRAVIS TURNER

DISTRICT 4 COREY ORGERON

DISTRICT 5 DEMPSEY LAMBERT

DISTRICT 6 CHASE MELANCON

DISTRICT 7 AARON LAWLER

DISTRICT 8 TERI CASSO

DISTRICT 9 DAL WAGUESPACK

**DISTRICT 10 JOHN CAGNOLATTI** 

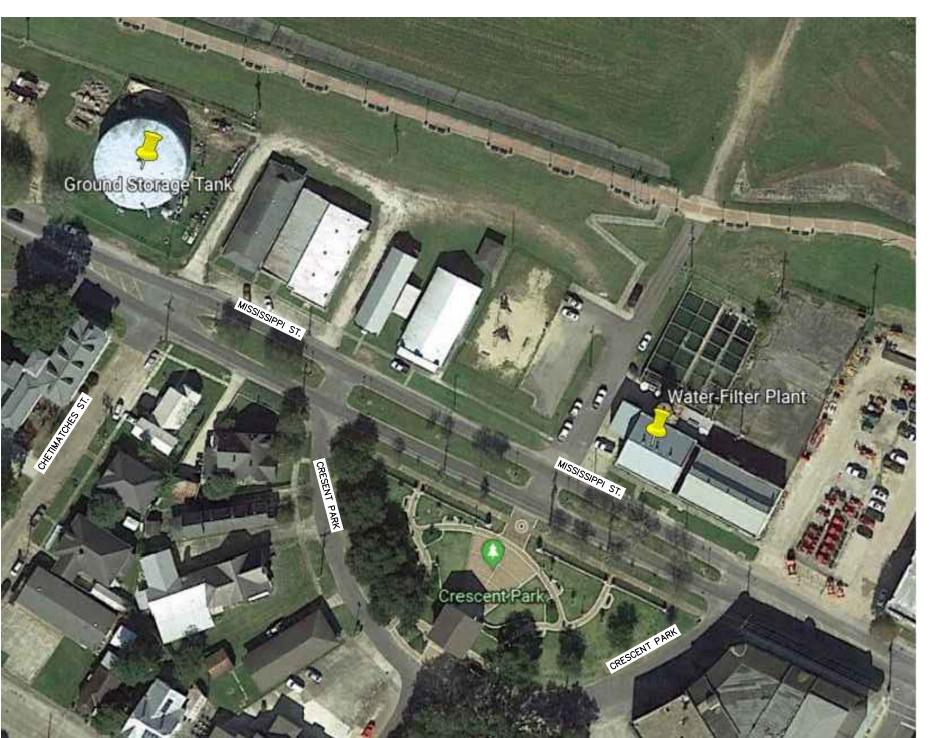
DISTRICT 11 MICHAEL MASON

#### INDEX TO SHEETS

SHEET NO. DESCRIPTION

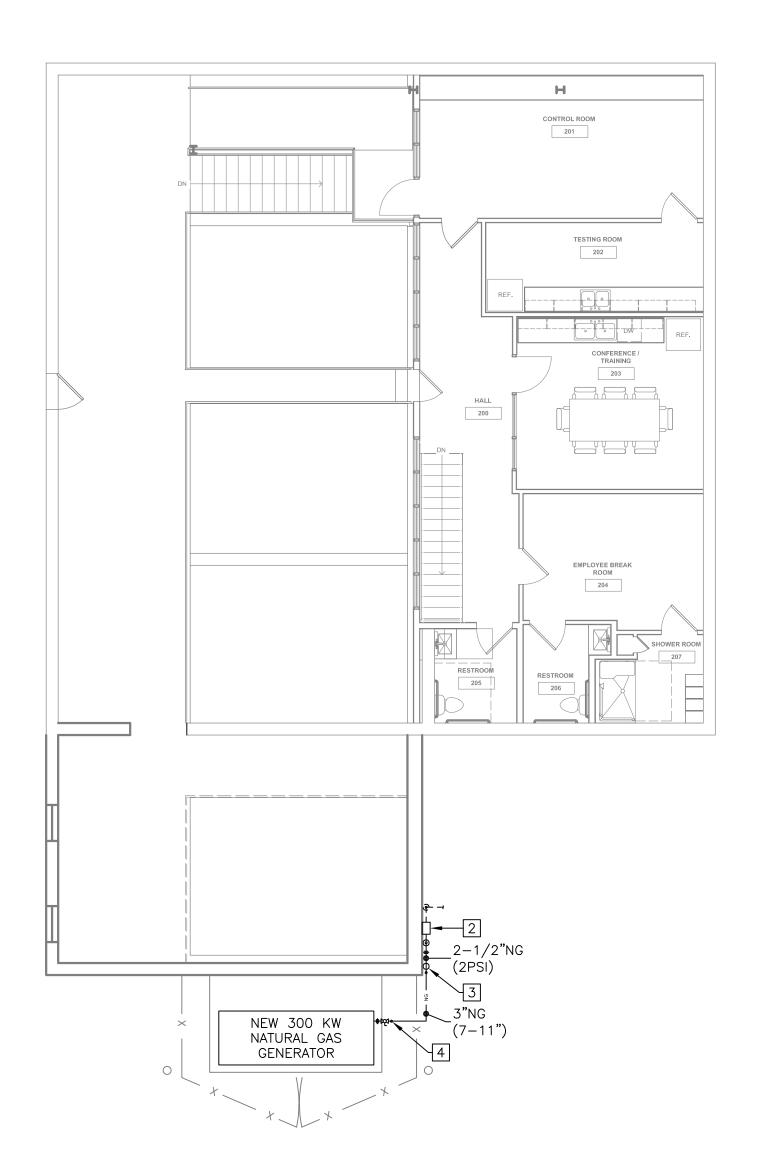
COVER P-1 E-1 E-2

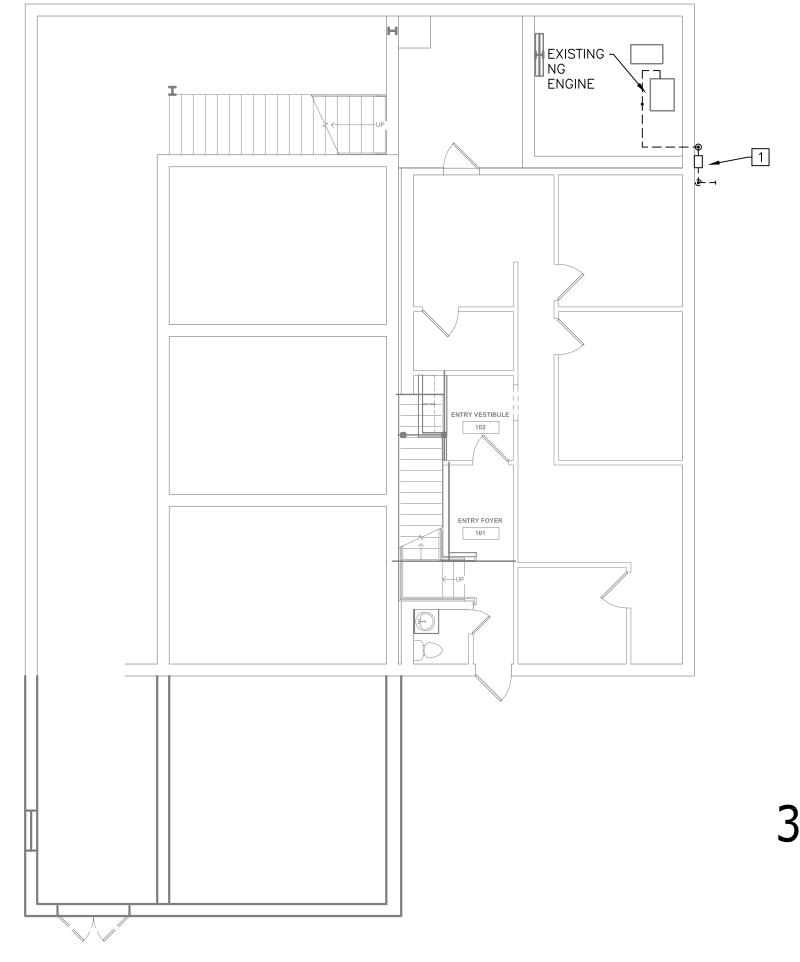
COVER SHEET
WATER FILTER PLANT NATURAL GAS PLAN & DETAILS
WATER FILTER PLANT ELECTRICAL SITE PLAN & RISER DIAGRAMS
ABOVE GROUND STORAGE ELECTRICAL SITE PLAN & RISER DIAGRAMS

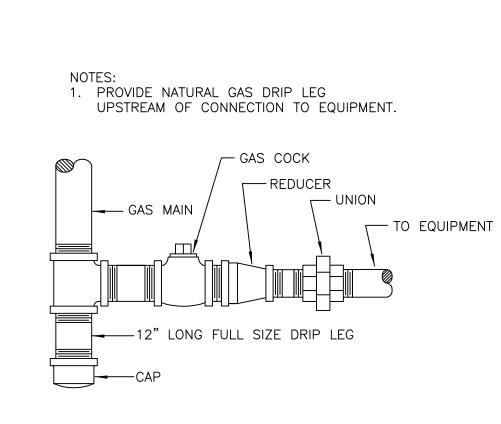












3 NATURAL GAS DRIP LEG SCALE: NTS

# $1 \mid \frac{\text{FIRST FLOOR - NATURAL GAS}}{\text{SCALE: } 1/8" = 1'-0"}$

### NATURAL GAS GENERAL NOTES:

- 1. NATURAL GAS PIPING & EQUIPMENT SHALL COMPLY WITH REQUIREMENTS OF INTERNATIONAL GAS CODE & INTERNATIONAL PLUMBING CODE (CURRENT ENFORCEABLE EDITIONS).
- 2. ABOVE GRADE, EXTERIOR NATURAL GAS PIPING SHALL BE COVERED WITH 2 COATS OF WATERPROOF ASPHALTIC COATING (OR EQUAL) FOR PIPE CORROSION PREVENTION. PAINT EXPOSED EXTERIOR NATURAL GAS PIPING GRAY.
- 3. UNDERGROUND PLASTIC PIPING SHALL BE INSTALLED WITH SUFFICIENT CLEARANCE FORM ANY HEAT SOURCE. UNDERGROUND NATURAL GAS PIPING SHALL BE INSTALLED TO ALLOW FOR PROPER MAINTENANCE & PROTECTION FROM DAMAGE FROM PROXIMITY TO OTHER STRUCTURES.
- 4. PROVIDE INSULATED COPPER TRACER WIRE OR OTHER APPROVED CONDUCTOR ADJACENT TO UNDERGROUND NONMETALLIC/PLASTIC PIPING. TRACER WIRE SHALL TERMINATE ABOVE GROUND AT EACH EACH OF NONMETALLIC NATURAL GAS PIPING. TRACER WIRE SHALL BE MINIMUM 14 AWG & SUITABLE FOR BURY. PROVIDE BRIGHTLY COLORED, METALLIC CORE, NON-DETERIORATING, MINIMUM 2" WIDE, ID RIBBON TAPE SET 12" ABOVE TOP OF PIPE OR 24" BELOW FINISHED GRADE (SHALLOWER OF THE TWO) FOR ALL NON-CONDUCTIVE PIPE.
- 5. PROVIDE ANODELESS GAS RISER AT WHERE NATURAL GAS PIPING IS ROUTED FROM UNDERGROUND TO ABOVE GRADE.
- 6. COORDINATE EXACT EXACT LOCATION, PRESSURE REQUIREMENTS & NATURAL GAS DEMAND FOR ALL NATURAL EQUIPMENT TO BE SUPPLIED TO PROJECT & EXACT LOCATION. COORDINATE LOCATION OF NATURAL GAS INLET WITH EQUIPMENT & NATURAL GAS PIPING & PIPING SPECIALTIES (VALVES, FLEXIBLE CONNECTION/HOSE, ETC.) WITH EQUIPMENT MANUFACTURER.
- 7. PROVIDE UNIONS ON BOTH SIDES OF NATURAL GAS REGULATOR WITHIN 1 FOOT OF REGULATOR.
- 8. NATURAL GAS REGULATORS (THAT VENT) & METERS SHALL BE INSTALLED WITH THE FOLLOWING MINIMUM DISTANCES:
- 8.1. 18" FROM EXTERIOR DOOR OR OPERABLE WINDOW
- 8.2. 3' FROM SOURCE OF IGNITION (ELECTRIC METERS, ELECTRIC BOX, AC UNIT, CHILLER, ETC.)
- 8.3. SHALL NOT BE INSTALLED BELOW WINDOW

8.4. 10' FROM ANY MECHANICAL AIR INLETS

9. NATURAL GAS REGULATORS & METERS SHALL BE INSTALLED IN A MANNER TO PREVENT DAMAGE BY VEHICLES & MECHANICAL EQUIPMENT. PROVIDE BOLLARDS AROUND NATURAL GAS ASSEMBLY IN AREAS WHERE DAMAGE MAY OCCUR. COORDINATE NATURAL GAS ASSEMBLY LOCATION WITH LOCAL NATURAL GAS COMPANY PROVIDER & PIPE BOLLARD LOCATION (WHERE REQUIRED) WITH ARCHITECT & MECHANICAL ENGINEER PRIOR TO INSTALLATION.

# 2 | SECOND FLOOR - NATURAL GAS | SCALE: 1/8" = 1'-0"

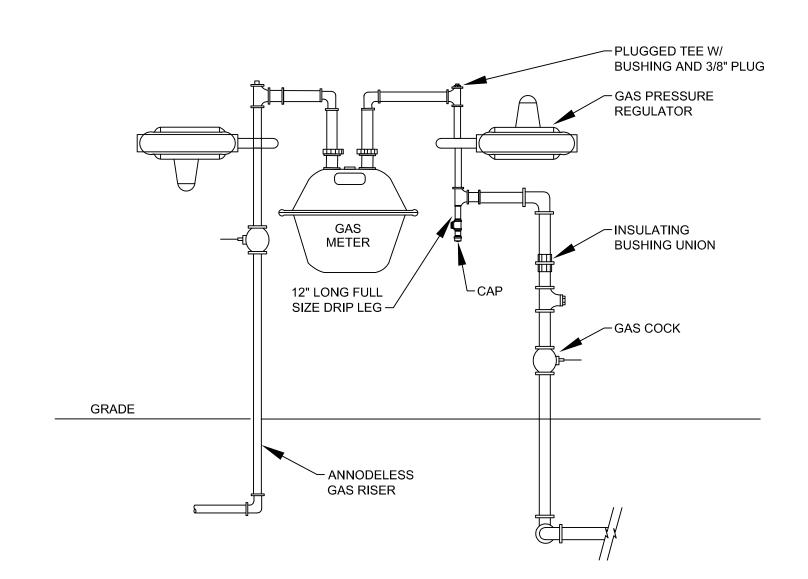
### NATURAL GAS SPECIFICATIONS:

- 1. NEW ABOVE GROUND NATURAL GAS PIPING 2PSI & GREATER SHALL BE ASTM A53 STEEL PIPE WITH WROUGHT STEEL FITTINGS &
- WELDED JOINTS. COAT PIPE & FITTINGS WITH PROTECTIVE COATING & PAINTED YELLOW.

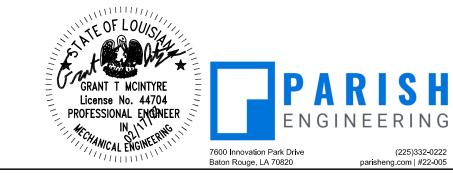
  2. NEW ABOVE GROUND NATURAL GAS PIPING 14"W.C. & LESS SHALL BE STEEL PIPE WITH MALLEABLE IRON FITTINGS & THREADED JOINTS. COAT PIPE & FITTINGS WITH PROTECTIVE COATING & PAINTED YELLOW.
- 3. UNDERGROUND NATURAL GAS PIPING SHALL BE PE PIPE & FITTINGS JOINED BY HEAT FUSION. SERVICE LINE RISERS WITH TRACER WIRE TERMINATED AT AN ACCESSIBLE LOCATION. INSTALL PIPING MINIMUM 36" BELOW GRADE.
- 4. TEST, INSPECT & PURGE NATURAL GAS ACCORDING TO NFPA 54 & AUTHORITIES HAVING JURISDICTION.

#### PLUMBING PLAN KEYNOTES: X

- 1 EXISTING NATURAL GAS REGULATOR, METER, & PIPING TO EXISTING BACK UP NG ENGINE TO REMAIN.
- EXISTING NATURAL GAS METER TO REMAIN AND BE REUSED. PROVIDE NEW REGULATOR AS REQUIRED FROM METER SIZED DOWN FROM CITY PRESSURE TO 2 PSI, SIZED TO HANDLE 3,120 CFH. COORDINATE WITH NATURAL GAS UTILITY COMPANY TO VERIFY EXISTING NG SUPPLY LINE SIZE IS SUFFICIENT FOR NEW NG LOAD. COORDINATE WITH NG UTILITY COMPANY FOR NEW NG SUPPLY LINE IF EXISTING NG PIPE SIZE IS NOT OFF SUFFICIENT SIZE FOR NEW NG DEMAND.
- NG REGULATOR SIZED DOWN FROM 2 PSI TO OPERATING PRESSURE OF NEW NG GENERATOR (7-11"), SIZED TO HANDLE 3,120 CFH. ROUTE NG PIPING BELOW GRADE FROM REGULATOR TO GENERATOR. NG REGULATOR SHALL BE MINIMUM 10' FROM GENERATOR CONNECTION. VERIFY EXACT LOCATION REQUIREMENTS OF NG REGULATOR WITH NEW GENERATOR MANUFACTURER'S RECOMMENDED INSTALLATION INSTRUCTIONS.
- 4 NG PIPING UP FROM BELOW GRADE TO NG GENERATOR. PROVIDE ACCESSIBLE SHUTOFF VALVE AND DRIP LEG. COORDINATE EXACT LOCATION OF NG CONNECTION TO GENERATOR IN FIELD.



4 | NATURAL GAS SERVICE REGULATOR & METER SCALE: NTS



NO.

SHEET NUMBER *AIC*:10,000

ROUTE GENERATOR CONTROL WIRING ALONG

BOTTOM OF PLATFORM AND SECOND FLOOR

WIRING ALONG BOTTOM OF PLATFORM AND

FLOOR: PROVIDE SUPPORTS EVERY 10'-0"

■ | SECOND FLOOR - ELECTRICAL PLAN

- NEW 800A, 3

POLE CKT BKR

- NEW CONCRETE PAD BY

E-2 FOR PAD DETAIL

CONTRACTOR; HEIGHT OF

CONCRETE PAD SHALL MATCH

PRIOR TO BIDDING; SEE SHEET

SLAB; FIELD VERIFY HEIGHT

THE EXISTING EXPOSED BUILDING

EXIST.

800A

ATS

EXIST. TO UTIL.

——THREE (3) 3"C, 4#300 MCM

THWN & 1#3/0 GND. EA.

SECOND FLOOR TO LOCATION ON FIRST

TO EXIST. ATS; ROUTE ANNUNCIATOR

PER NEC REQUIREMENTS -

EXTERIOR

OWNER FURNISHED.

CONTRACTOR INSTALLED

300KW/375KVA

NATURAL GÁS GENERATOR

277/480 VOLT 3ø,4W

B-2

 $^{\perp}$ 1/2"C, 4#12 THWN TO ATS FOR

GEN. START/STOP CONTROLS;

1/2"C, 4#12 FOR GENERATOR

ANNUNCIÄTOR PANEL

PNL

#3/0 AWG —

3/4" X 10'

LONG CU.

GND. ROD -

REMARKS: GROUND BUS

TYPE:BOLT-ON BREAKER PANELBOARD MOUNTING:SURFACE

SERVICE:120/208 VOLT, 3ø, 4W

MAIN:200 AMP MCB

trip bkr. wire amp pole size cd service 30 3 10 EXIST. INTERNAL SPD 1,3,5 20 1 12 3/4" GENERATOR BATTERY CHARGER 4,6 20 2 12 3/4" GENERATOR JACKET HEATER 7-42 20 1 PROVISIONS

201 202 ----∕—EXIST. PANEL "B" -ROUTE CIRCUITS FOR GENERATOR BATTERY CHARGER AND JACKET HEATER ALONG BOTTOM OF SECOND FLOOR TO EXIST. PANEL "B": PROVIDE SUPPORTS EXIST. 75 KVA XFMR FOR EVERY 10'-0" PER NEC REQUIREMENTS EXIST. PANEL "B" EXIST. MCC-EXIST. ATS THREE (3) 3"C, 4#300 MCM THWN & 1#3/0 GND. EA.; ROUTE ALONG BOTTOM SECOND FLOOR TO EXIST.

ATS; PROVIDE SUPPORTS EVERY

20'-0" PER NEC REQUIREMENTS

EXISTING MCC

277/480V

3ø, 4W

800 AMP

800A

MCB

LEXIST. CONDUIT & WIRE

> | ELECTRICAL RISER DIAGRAM

NOT TO SCALE

"MCC-A"

INTERIOR

-EXIST. CONDUIT & WIRE

EXIST.

75 KVA

480V PRI

12<u>0/208 SE</u>C

EXIST. CONDUIT & WIRE

EXIST.

PANEL "B"

120/208V 3ø,4W

200A MCB

SPD

2ND FLOOR

1ST FLOOR

NEW GENERATOR ANNUNCIATOR PANEL; COORDINATE LOCATION WITH THE OWNER'S REPRESENTATIVE PRIOR TO ROUGH-IN -----SEE SECOND FLOOR PLAN FOR CONDUIT AND WIRE INFORMATION NEW CONTRACTOR FURNISHED AND - NEW CONTRACTOR INSTALLED INSTALLED CHAIN LINK FENCE; FENCE CONCRETE PAD; PAD SHALL BE SHALL BE A MINIMUM OF 3'-0" FROM —THE SAME HEIGHT AS THE THE ENDS OF NEW GENERATOR; GATE -EXPOSED BUILDING SLAB; FIELD SHALL BE SUFFICIENTLY SIZED FOR JKT. BATT. VERIFY HEIGHT PRIOR TO BIDDING; HTR. CHGR. GENERATOR ACCESS FOR FUTURE SEE SHEET E-2 FOR PAD DETAIL REPAIRS OR REPLACEMENT -NEW OWNER FURNISHED, CONTRACTOR INSTALLED 300 KW NATURAL GAS GENERATOR; -NEW BOLLARD FURNISHED AND COORDINATE LOCATION WITH INSTALLED BY THE CONTRACTOR; THE OWNER'S REPRESENTATIVE BOLLARD SHALL BE PAINTED PRIOR TO INSTALLATION; YELLOW (TYP. FOR 2) MAINTAIN 3'-0" MINIMUM CLEARANCE BETWEEN GENERATOR AND BUILDING-

7 | FIRST FLOOR - ELECTRICAL PLAN

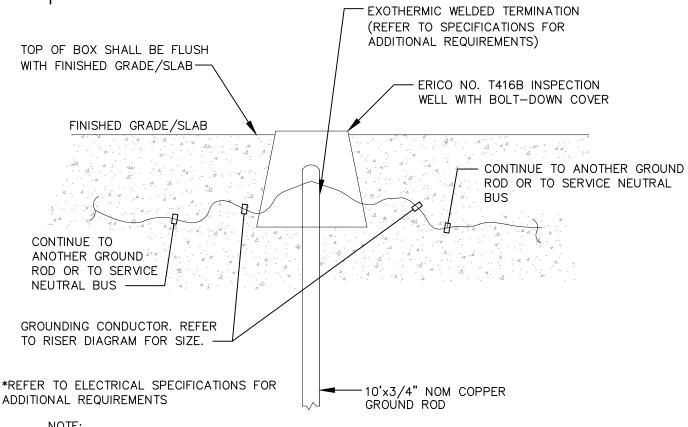
TYPICAL PANELBOARD PLAQUE (INDICATE PANEL DESIGNATION) \_\_/\_\_ VOLTS \_\_ PHASE \_\_ WIRE \_\_ AMPS MAIN \_\_ FED FROM (INDICATE FEEDER ORIGINATION I.D.) (PANEL AND CIRCUIT NO.)

SEE SPECIFICATIONS FOR MATERIALS, COLORS SIZE LETTERING, ETC.

TYPICAL DISCONNECT PLAQUE (INDICATE EQUIPMENT DESCRIPTION) FUSED AT \_\_ AMPERES FED FROM (INDICATE FEEDER ORIGINATION I.D.) (PANEL AND CIRCUIT NO.)

ATTACH PLAQUES USING INDUSTRIAL GRADE DOUBLE FACE ADHESIVE.

> | EQUIPMENT SIGNAGE DETAIL NOT TO SCALE



SUBMIT DIGITAL PHOTOS OF ALL GROUNDING TERMINATIONS

| GROUND ROD INSTALLATION DETAIL

SYMBOL SCHEDULE POWER PANEL EXPOSED CONDUIT RUN UNDERGROUND CONDUIT RUN JUNCTION BOX

#### ELECTRICAL GENERAL NOTES

- 1. ALL ELECTRICAL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE. ALL WORK SHOWN IS NEW UNLESS NOTED OTHERWISE.
- 2. THE CONDUIT SYSTEM, ALL ELECTRICAL EQUIPMENT, ALL STEEL STRUCTURES, MOTOR FRAMES, ETC. SHALL BE CONNECTED TO THE GROUNDING SYSTEM PER ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE.
- 3. ALL EQUIPMENT LOCATIONS SHALL BE VERIFIED IN THE FIELD WITH MECHANICAL TRADES, CONDUIT ROUTING AND EQUIPMENT LOCATIONS SHOWN ARE DIAGRAMMATIC ONLY. THE EXACT LOCATION OF ALL EQUIPMENT AND ROUTING OF CABLES SHALL BE COORDINATED WITH & APPROVED BY THE ENGINEER DURING CONSTRUCTION.
- 4. LOCATIONS OF CONDUITS, BOXES, FITTINGS, ETC., ARE DIAGRAMMATIC. IT SHALL BE THE ELECTRICAL CONTRACTORS RESPONSIBILITY TO VERIFY ALL SIZES AND LOCATIONS. REVIEW ALL MECHANICAL SHOP DRAWINGS AND COORDINATE WITH THE MECHANICAL CONTRACTOR, OWNER, AND ENGINEER TO INSURE THE TIMELY DELIVERY AND PROPER INSTALLATION OF ALL ELECTRICAL EQUIPMENT. (I.E. CONTROL PANELS, AREA LIGHTING,
- 5. BEFORE INSTALLATION, THE ELECTRICAL CONTRACTOR SHALL SUBMIT DETAILED LAYOUT DRAWINGS TO THE ENGINEER FOR REVIEW COVERING PROPOSED LOCATIONS, MOUNTING, AND ROUTING FOR ALL CONDUITS, SERVICES, FITTINGS, GROUND RODS, AREA LIGHTING, CONTROL PANELS, SUPPORTS, ETC.
- 6. ENCLOSURE, JUNCTION BOXES, RECEPTACLES AND ALL OTHER ELECTRICAL EQUIPMENT USED OUTDOOR SHALL BE OF NEMA 4X (STAINLESS STEEL) CONSTRUCTION UNLESS OTHERWISE NOTED.
- 7. MINIMUM CONDUIT SIZE IS 3/4" UNLESS NOTED OTHERWISE. ALL EXPOSED CONDUIT SHALL BE RIGID STEEL AND ALL DUCT BANK CONDUIT SHALL BE SCHEDULE 40PVC UNLESS NOTED OTHERWISE.
- 8. THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE MECHANICAL CONTRACTOR AND CAREFULLY REVIEW THE MECHANICAL PACKAGES PROPOSED TO BE SUPPLIED. IT SHALL BE THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY TO INSURE THAT ALL WIRE AND CONDUIT NEEDED FOR ELECTRICAL APPURTENANCES, ASSOCIATED WITH MECHANICAL PACKAGES, ARE PROVIDED EVEN IF NOT SPECIFICALLY CALLED FOR IN THE PLANS AND SPECIFICATIONS.
- 9. THERE SHALL BE WARNING LABELS LOCATED ON THE FRONT OF EACH ELECTRICAL ENCLOSURE. SEE SIGNAGE DETAIL ON THIS
- 10. WARNING TAPE SHALL BE INSTALLED 12 TO 18 INCHES BELOW GRADE OVER ALL CONDUITS.
- 11. FOR SERVICE ENTRANCE CONDUITS, UTILIZE LONG RADIUS (36") CONDUIT BENDS.
- 12. ALL CONDUIT RISERS FROM UNDERGROUND SHALL HAVE RIGID METAL ELLS AND RISERS.
- 13. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES. AVOID DISTURBANCE OF EXISTING UTILITIES NOT INCLUDED IN THIS
- 14. CONTRACTOR SHALL COORDINATE WITH ICE CONTROLS FOR CONNECTION OF NEW EMERGENCY SYSTEM EQUIPMENT TO THE EXISTING SCADA SYSTEM.
- 15. ALL DEMOLISHED EQUIPMENT SHALL BE TURNED OVER TO THE OWNER'S DESIGNATED REPRESENTATIVE FOR RIGHT OF FIRST REFUSAL. CONTRACTOR SHALL DISPOSE OF ANY EQUIPMENT REFUSED BY THE OWNER'S REPRESENTATIVE.
- 16. FIELD VERIFY EXISTING CONDITIONS PRIOR TO BIDDING.
- 17. CONTRACTOR SHALL COORDINATE ANY PLANNED SHUT DOWNS WITH THE OWNER'S DESIGNATED REPRESENTATIVE A MINIMUM OF ONE (1) CALENDAR WEEK PRIOR TO PROPOSED DATE OF SHUT DOWN.
- 18. CONTRACTOR SHALL COORDINATE ANY SCHEDULED WEEKEND WORK WITH THE OWNER'S DESIGNATED REPRESENTATIVE.



E-1

TREATMENT

NUMBER

PLANT PLAN ATER FILTER F STRICAL SITE RISER DIAGRA

<u>ب</u> ≷



