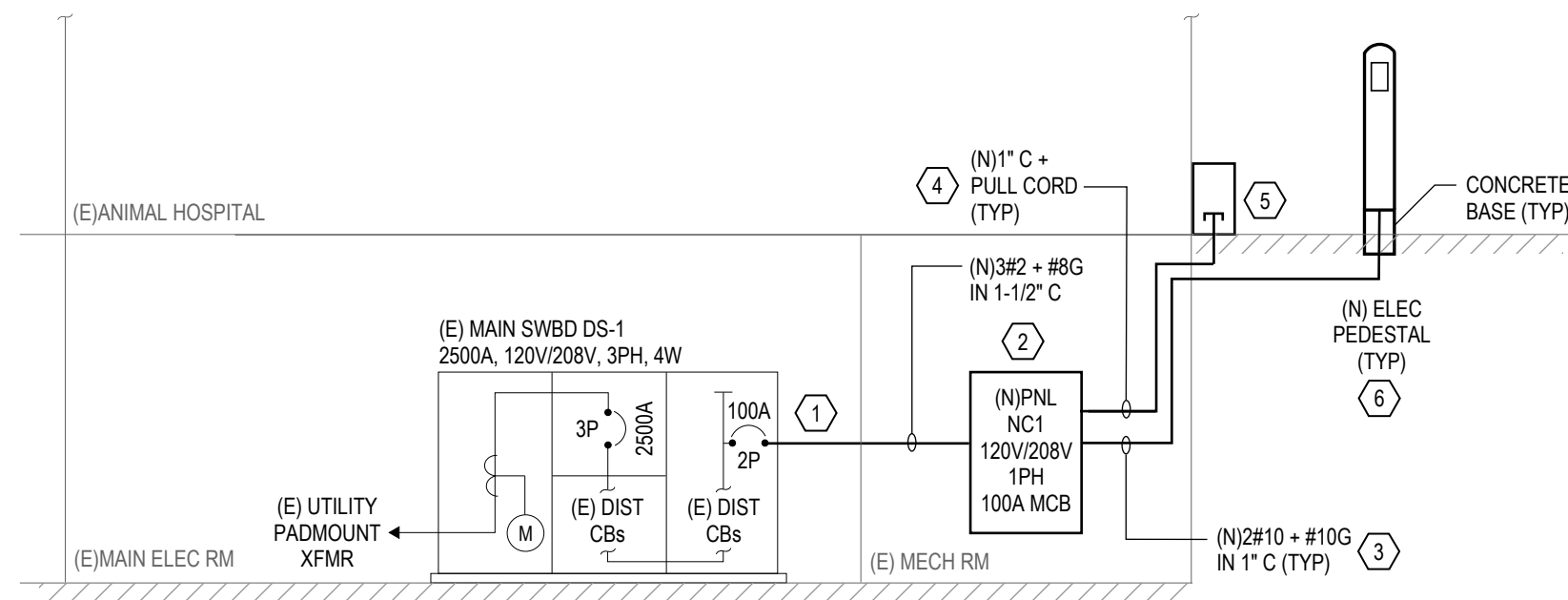


ELECTRICAL SITE PLAN

SCALE: 1" = 60'



ELECTRICAL SINGLE LINE DIAGRAM

SCALE: NONE

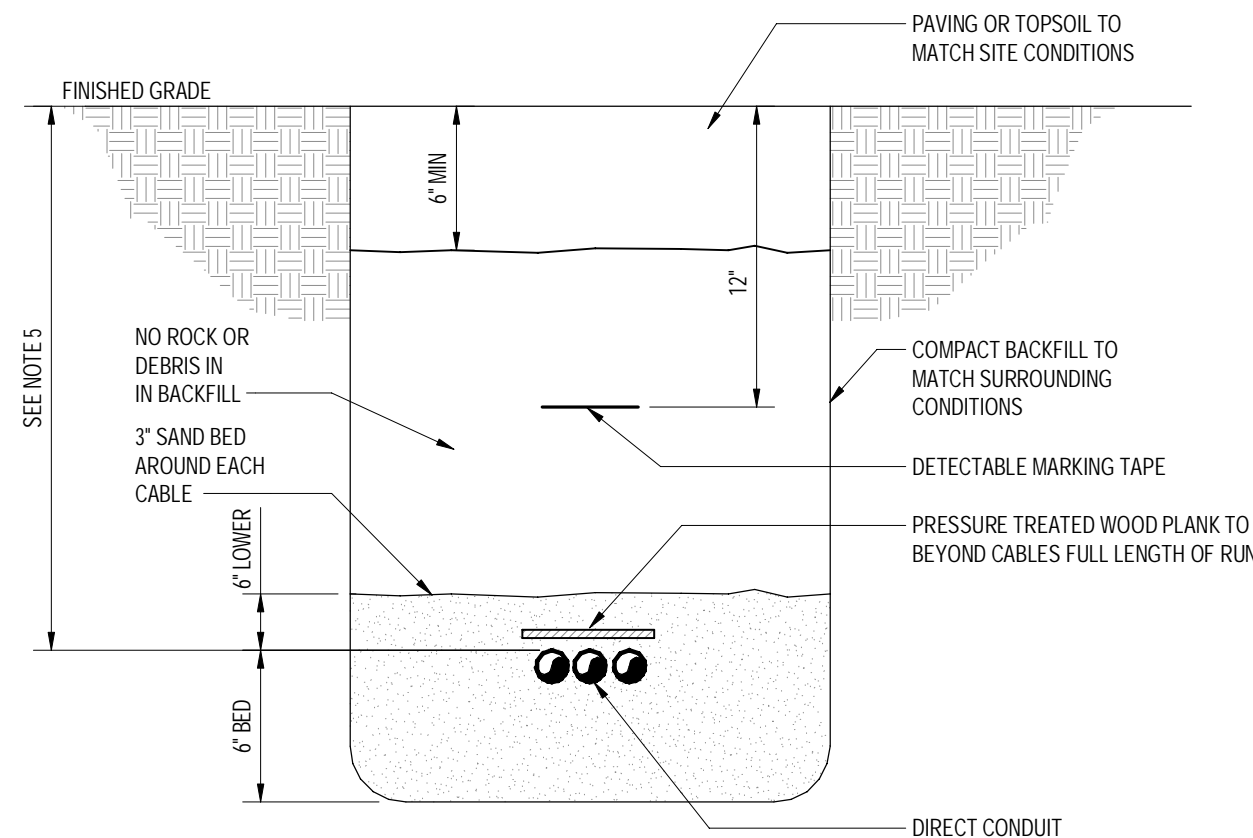
DRAWING NOTES:

- ALL ELECTRICAL WORK SHALL BE COORDINATED WITH EXISTING CONDITIONS AND THE OWNER PRIOR TO COMMENCEMENT OF WORK. MODIFICATIONS TO EXISTING INFRASTRUCTURE SHALL BE COMPLETED IN SUCH A MANNER AS TO MINIMIZE OUTAGES.
- ALL JUNCTION BOXES AND PULL BOXES ARE NOT NECESSARILY SHOWN ON THIS DRAWING AND SHALL BE PROVIDED WHERE NECESSARY IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC)
- ALL SCOPE INDICATED IN A LIGHT LINE AND LABELED AS 'E' SHALL BE EXISTING TO REMAIN UNLESS OTHERWISE NOTED. ALL OTHER SCOPE SHALL BE NEW WORK UNDER THIS PROJECT'S SCOPE OF WORK.
- BEFORE EXCAVATING, CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO LOCATE AND COORDINATE ALL EXISTING UNDERGROUND UTILITIES. COORDINATE ALL WORK WITH LOCAL UTILITY COMPANIES AND FIELD VERIFY EXISTING SITE CONDITIONS.
- LOCATIONS OF EQUIPMENT, PATHWAYS, AND PIPING ARE DIAGRAMMATIC ONLY. EQUIPMENT AND CONDUIT SHALL BE INSTALLED AS REQUIRED TO AVOID INTERFERENCE WITH EXISTING UTILITIES AND STRUCTURES.
- WHERE EQUIPMENT, CONDUIT, AND PIPING ARE TO BE INSTALLED IN LIMITING CONDITIONS, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MODIFY DETAILS OR PROVIDE SPECIAL FITTINGS. ALL MODIFICATIONS SHALL BE REVIEWED WITH ENGINEER PRIOR TO INSTALLATION.
- IF ANY EXISTING WORK IS DAMAGED BY CONSTRUCTION OPERATIONS, CONTRACTOR SHALL REPAIR AND RESTORE TO ORIGINAL CONDITIONS. TAKE NECESSARY PRECAUTIONS TO AVOID DAMAGES.
- ALL DIRECT BURIED CONDUITS SHALL BE SCHEDULE 80 PVC. ALL VERTICAL 90 DEGREE BENDS SHALL BE RIGID GALVANIZED STEEL CONDUIT AND HAVE BOTH INSIDE AND OUTSIDE SURFACES PROTECTED AGAINST CORROSION BY COATING OF ZINC OR ENAMEL.
- DIRECT BURIED CONDUITS SHALL BE INSTALLED AT DEPTHS PER NEC TABLE 300.5 UNLESS OTHERWISE NOTED. MINIMUM BURIAL DEPTH SHALL BE 18 INCHES.
- UNLESS OTHERWISE NOTED, THE MINIMUM CONDUIT CLEARANCES FROM OTHER UNDERGROUND FACILITIES SHALL BE AS FOLLOWS
 - CONDUIT PARALLELING OTHER UNDERGROUND FACILITIES - 24 INCHES
 - CONDUIT CROSSING OVER OR UNDER GAS AND WATER MAINS OR SWERES - 12 INCHES OF EARTH
- REFER TO SPECIFICATIONS IN PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS.
- ALL PANELBOARDS WITH NEW OR MODIFIED EXISTING LOADS, AS WELL AS ALL MAIN DISTRIBUTION PANELS FOR EACH BUILDING, SHALL BE METERED FOR 30 DAYS IN ACCORDANCE WITH NEC 220.87 BY ELECTRICAL CONTRACTOR. AFTER 30-DAY THIS INFORMATION SHALL BE PROVIDED TO THE ENGINEER OF RECORD IN ORDER TO EVALUATED CAPACITIES BASED ON THE LATEST METERING INFORMATION.

KEY NOTES:

SYMBOL DENOTES KEY NOTE

- PROVIDE NEW FEEDER AS INDICATED FROM EXISTING 100A, 2P SPARE CIRCUIT BREAKER AVAILABLE WITHIN MAIN SWBD 'DS-1' LOCATED ON THE BASEMENT LEVEL TO SERVE NEW NORMAL POWER ELECTRIC CART CHARGING PANEL 'NC1'. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND MODIFY EXISTING 'DS-1' AS REQUIRED TO ACCOMMODATE NEW FEEDERS.
- NEW ELECTRIC CART CHARGING PANEL 'NC1' SHALL BE NEMA-3R RATED AND LOCATED IN BASEMENT MECHANICAL ROOM ADJACENT TO THE MAIN ELECTRICAL. COORDINATE EXACT LOCATION WITH OWNER IN THE FIELD. PANEL SHALL BE MOUNTED TO UNISTRUT CHANNEL ATTACHED TO EXISTING STRUCTURE. PANEL SHALL BE EQUIPPED WITH 100A, 2-POLE MAIN CIRCUIT BREAKER WITH TWELVE (12) 20A, 1-POLE CIRCUIT BREAKERS.
- TYPICAL BRANCH CIRCUIT FOR ELECTRIC CART CHARGING PEDESTAL. CIRCUIT SHALL RUN IN CONDUIT TO EXTERIOR WALL ADJACENT TO CART CHARGING AREA AND ROUTE TO NEW ELECTRICAL PEDESTAL. ALL EXTERIOR AND UNDERGROUND CONDUIT SHALL BE GALVANIZED RIGID METAL CONDUIT. COORDINATE EXACT ROUTING IN FIELD WITH OWNER AND EXISTING CONDITIONS. CONTRACTOR SHALL PROVIDE SIX (6) ACTIVE 20A, 1-POLE CIRCUITS; TWO (2) FOR EACH ELECTRIC CART CHARGING PEDESTAL. ALL OTHER CIRCUITS SHALL BE LABELED AS SPARE.
- TYPICAL SPARE CONDUIT WITH PULL CORD FOR FUTURE. PROVIDE THREE (3) SPARE 1" CONDUITS STUBBED INTO EXTERIOR MOUNTED PULLBOX AS INDICATED.
- PROVIDE NEMA-3R PULLBOX ON EXTERIOR WALL SIZED TO ACCOMMODATE SPARE CONDUITS AS INDICATED. PULLBOX SHALL HAVE LOCKABLE HINGED COVER AND BE LABELED AS "ELECTRIC CART CHARGING CIRCUITS".
- PROVIDE 30" NEMA-3R ELECTRIC CART CHARGING PEDESTAL AS MANUFACTURED BY LEGRAND, MODEL# XPP2G30CD-SV OR EQUAL WITH TWO (2) 20A, DUPLEX GFCI TYPE WEATHERPROOF HEAVY-DUTY RECEPTACLES. INTERNAL DIVIDER WITH DEDICATED 20A CIRCUIT TO EACH DUPLEX RECEPTACLE. LOCKABLE HINGED WHILE-IN-USE COVER, AND SILVER FINISH. PEDESTAL SHALL BE MOUNTED TO MINIMUM 12" DIAMETER, 24" DEEP 3000 PSI #6 REBAR REINFORCED CONCRETE BASE.
- COORDINATE EXACT LOCATION OF EXTERIOR NEMA-3R PULLBOX FOR SPARE CONDUITS WITH OWNER IN FIELD. PROPOSED LOCATION IS AT THE CORNER OF THE EXISTING ANIMAL HOSPITAL EXTERIOR WALL ADJACENT TO THE PROPOSED ELECTRIC CART CHARGING AREA.
- ELECTRICAL CART CHARGER PEDESTALS SHALL BE INSTALLED WHERE EXISTING SHEDS RESIDE WITHIN THE PARKING AREA. COORDINATE WITH OWNER TO RELOCATE SHEDS WITHIN THE PARKING LOT AREA. LOCATE EACH PEDESTAL 16 FT APART ON CENTER WITH THE FIRST PEDESTAL LOCATED AT A MINIMUM 16 FT FROM EXTERIOR WALL. COORDINATE EXACT LOCATION WITH OWNER AND ENGINEER IN FIELD. PEDESTALS SHALL BE LOCATED AT A MINIMUM 18 INCHES OFF OF THE EDGE OF PAVEMENT.



NOTES:

- REPAIR ALL SETTLEMENT.
- INSTALL DIRECT BURIED CABLE WITHIN 4-INCH PVC SCHEDULE 80 CONDUIT.
- UNLESS OTHERWISE NOTED, MAINTAIN MINIMUM 12" SEPARATION FROM ALL OTHER UNDERGROUND SERVICES.
- ALL OTHER SERVICES SHALL BE RUN BELOW DIRECT BURIED CONDUIT.
- MINIMUM DIRECT BURIED COVER REQUIREMENTS SHALL BE AS REQUIRED BY NEC, TABLES 300.5 AND 300.50 AS APPLICABLE.

DIRECT BURIED CONDUIT

SCALE: NONE

AKF

MARYLAND ZOO - ELECTRIC CART CHARGING

SHEET TITLE AND NUMBER

E1.0 - ELECTRICAL SITE PLAN & SINGLE LINE DIAGRAM

SCALE: AS NOTED

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