

**ELECTRICAL LEGEND:**

- MOTOR
- EARTH GROUND
- JUNCTION BOX
- PULL BOX
- FUSE WITH RATING
- MOLDED CASE CIRCUIT BREAKER
- DISCONNECT SWITCH, FUSED
- DISCONNECT SWITCH, UNFUSED
- STARTER, COMBINATION WITH DISCONNECT SWITCH
- STARTER OR MOTOR CONTROLLER
- METER
- 20A 120V SINGLE RECEPTACLE
- 20A 120V DUPLEX RECEPTACLE
- 20A 120V DUPLEX RECEPTACLE WITH GROUND FAULT CIRCUIT INTERRUPTER
- 20A 120V QUADRAPLEX RECEPTACLE
- RECEPTACLE, SPECIAL PURPOSE
- EXISTING RECEPTACLE & DEVICE BOX TO REMAIN; UNINSTALL DEVICE, INSTALL EXTENSION RING TO ALLOW FOR NEW FURRING, THEN REINSTALL EXISTING DEVICE; REWIRE DEVICE AS NEEDED TO MAINTAIN CIRCUIT IF OTHER RECEPTACLES UPSTREAM ARE TO BE REMOVED
- EXISTING RECEPTACLE, DEVICE BOX & WIRING TO BE DISCONNECTED, REMOVED & PROPERLY DISPOSED OF; REFEED DOWNSTREAM RECEPTACLES IF THEY ARE TO REMAIN
- 20A 120V USB CHARGER RECEPTACLE TYPICAL OF HUBBELL USB20X OR ACCEPTABLE EQUAL
- WALL PHONE OUTLET MTD. 48" A.F.F.; 3/4" EMT CDT. IN WALL TO ABOVE CEILING W/ PULL CORD; DEEP 4-S BOX W/ VERTICALLY ORIENTED SINGLE-GANG PLASTER RING
- WALL BOX FOR TELEVISION CONNECTION; 1-1/4" EMT CDT. IN WALL TO ABOVE CEILING W/ PULL CORD; RANDL 5-SQUARE BOX W/ VERTICALLY ORIENTED SINGLE-GANG PLASTER RING OR ACCEPT. EQUAL; NO FACE PLATE
- TELEPHONE/DATA COMMUNICATION BOX W/ (2) 3/4" EMT CDT. IN WALL TO ABOVE CEILING W/ PULL CORD; RANDL 5-SQUARE BOX W/ VERTICALLY ORIENTED SINGLE-GANG PLASTER RING OR ACCEPT. EQUAL; NO FACE PLATE
- BRANCH CIRCUIT HOMERUN; LINES INDICATE NUMBER OF CIRCUITS, NEUTRAL, AND SWITCH LEG CONDUCTORS; ONE SEPARATE GROUNDING CONDUCTOR SHALL BE PROVIDED FOR EACH HOMERUN; NOT SHOWN
- SWITCH  
 BLANK = SINGLE POLE  
 2 = DOUBLE POLE  
 3 = THREE-WAY  
 4 = FOUR-WAY  
 D = DIMMER  
 K = KEY OPERATED  
 P = WITH PILOT LIGHT  
 T = TIMER OPERATED  
 X = EXPLOSION PROOF  
 WP = WEATHER PROOF  
 OC = OCCUPANCY SENSOR

**ELECTRICAL NOTES:**

1. ALL MATERIALS AND EQUIPMENT ARE TO BE NEW, UNUSED, AND FREE FROM DEFECTS OF ANY KIND. THE BASIS OF QUALITY SHALL BE THE LATEST REVISION OF ASTM, ANSI, OR OTHER ACCEPTABLE STANDARDS.
2. THESE DRAWINGS ARE DIAGRAMMATIC, AND INDICATE GENERAL ARRANGEMENT OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO HAVE REVIEWED THE SITE FOR HIS WORK PRIOR TO HAVING SUBMITTED HIS PROPOSAL. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR CONDITIONS FOUND DURING THE COURSE OF THE CONTRACT.
3. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THAT OF ALL OTHER TRADES.
4. ALL WORK INCLUDING LABOR AND MATERIALS SHALL BE FULLY GUARANTEED FOR ONE (1) YEAR FROM THE DATE OF PAYMENT AND FINAL ACCEPTANCE BY THE OWNER AND ENGINEER.
5. ALL CUTTING, PATCHING, FIRE-STOPPING, AND SURFACE RESTORATION IN CONNECTION WITH THIS TRADE SHALL BE COMPLETED BY THIS CONTRACTOR.
6. A MINIMUM OF FOUR (4) COPIES OF SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT FOR APPROVAL PRIOR TO ORDERING AND INSTALLATION OF THE EQUIPMENT AND/OR MATERIALS. BY SUBMITTING SHOP DRAWINGS, THE CONTRACTOR REPRESENTS THAT ACTUAL FIELD CONDITIONS ARE VERIFIED BY HIM AND ARE REFLECTED ON HIS SUBMITTALS.
7. THIS CONTRACTOR SHALL PAY ALL FEES, GIVE ALL NOTICES, FILE ALL NECESSARY DRAWINGS, AND OBTAIN ALL PERMITS, INSPECTIONS AND CERTIFICATES OF APPROVAL REQUIRED IN CONNECTION WITH WORK UNDER THIS CONTRACT.
8. EQUIPMENT AND MATERIALS FOR WHICH UNDERWRITERS LABORATORIES INC. (UL) PROVIDES PRODUCT LISTING SERVICE SHALL BE LISTED AND BEAR THE LISTING MARK.
9. ALL WORK IN ASSOCIATION WITH THIS CONTRACT SHALL BE COMPLETED IN STRICT COMPLIANCE WITH THE 2015 INTERNATIONAL BUILDING CODE (W/ 2017 NEW YORK STATE UNIFORM CODE SUPPLEMENT), 2015 INTERNATIONAL ENERGY CONSERVATION CODE (W/ 2016 SUPPLEMENT TO THE NEW YORK STATE ENERGY CONSERVATION CONSTRUCTION CODE), AND THE 2014 NATIONAL ELECTRIC CODE (NEC).
10. ALL NEW LIGHTING FIXTURES SHALL BE INSTALLED FULLY LAMPED AND OPERABLE. THE CONTRACTOR SHALL TURN OVER TO THE OWNER SPARE LAMPS OF EVERY TYPE ON THE PROJECT IN AN AMOUNT NOT LESS THAN 20% OF THE TOTAL NUMBER OF EACH TYPE (MINIMUM 1 PER TYPE).
11. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION, APPLICATIONS AND FEES OF ALL WORK ASSOCIATED WITH THE LOCAL UTILITY COMPANY AND/OR THE TELEPHONE COMPANY. ALL WORK INVOLVING THE UTILITY COMPANY SHALL BE COMPLETED IN ACCORDANCE WITH THEIR REGULATIONS AND GUIDELINES.
12. ALL CONDUCTORS SHALL BE COPPER, SHALL NOT BE LESS THAN #12 AWG, AND SHALL NOT EXCEED 70 FEET FROM PANEL BOARD TO FURTHEST CONNECTION UNLESS OTHERWISE NOTED ON PLANS.
13. WIRING SHALL CONSIST OF METALLIC ARMORED CABLES (TYPE AC) INSTALLED WHERE CONCEALED IN FRAMED WALLS, CEILINGS, OR PERMITTED BY THE NEC, OTHER AREAS SHALL CONSIST OF INSULATED CONDUCTORS INSTALLED IN RIGID STEEL CONDUIT (RGS), ELECTRICAL METALLIC TUBING (EMT), OR INTERMEDIATE METAL CONDUIT (IMC).
14. LIGHTING LOADS SHALL NOT BE COMBINED ON THE SAME CIRCUIT AS ANY OTHER ELECTRICAL LOADS.
15. CONTRACTOR SHALL BE RESPONSIBLE TO FURNISH & INSTALL ALL SMALL DETAILS AND INCIDENTAL WORK NOT SHOWN OR SPECIFIED, BUT WHICH CAN BE REASONABLY INFERRED AS REQUIRED FOR A COMPLETE AND OPERATING SYSTEM OF HIGH QUALITY MEETING ALL APPLICABLE CODES AND REGULATIONS.
16. FOR EACH NEW OR MODIFIED ELECTRICAL PANEL, THE CONTRACTOR SHALL PROVIDE A TYPE WRITTEN DIRECTORY CARD TO REFLECT ALL CIRCUITING. ADDITIONALLY, THE CONTRACTOR SHALL LABEL (WITH A PERMANENT MARKER OR LABEL) EACH RECEPTACLE ON THE INSIDE OF EACH FACE PLATE WITH PANEL AND CIRCUIT NUMBER DESIGNATION.
17. MINIMUM REQUIREMENT FOR EQUIPMENT GROUNDING SHALL BE GOVERNED BY THE NEC. ALL GROUNDS, BONDING, ETC. SHALL MEET THESE REQUIREMENTS. THE CONTRACTOR SHALL FURNISH AND INSTALL ANY AND ALL ITEMS NECESSARY TO MEET THESE REQUIREMENTS AT NO EXTRA COST, EVEN IF SUCH ITEMS ARE NOT DETAILED ON THE DRAWINGS.
18. ALL CONDUIT AND CABLE SHALL BE PROPERLY SUPPORTED AND ROUTED PARALLEL OR PERPENDICULAR TO BUILDING WALLS. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL SUPPORT HANGERS AND MISCELLANEOUS METALS REQUIRED FOR PROPER INSTALLATION OF WORK.
19. THE CONTRACTOR IS RESPONSIBLE TO TEST ALL EQUIPMENT, WIRING, DEVICES, AND SYSTEMS INSTALLED UNDER THIS CONTRACT TO ENSURE PROPER OPERATION PRIOR TO FINAL ACCEPTANCE BY THE OWNER AND ENGINEER.
20. THE CONTRACTOR IS RESPONSIBLE TO DETERMINE WHETHER SPECIAL LICENSING IS REQUIRED IN ORDER TO PERFORM THE REQUIRED WORK IN THE MUNICIPALITY WHERE THE PROJECT IS LOCATED. IF THE CONTRACTOR CANNOT OBTAIN THE REQUIRED LICENSING TO COMPLETE THE WORK WITHIN THE PROJECT SCHEDULE, THEN THE CONTRACTOR SHALL NOT BE PERMITTED TO BID ON THIS PROJECT.

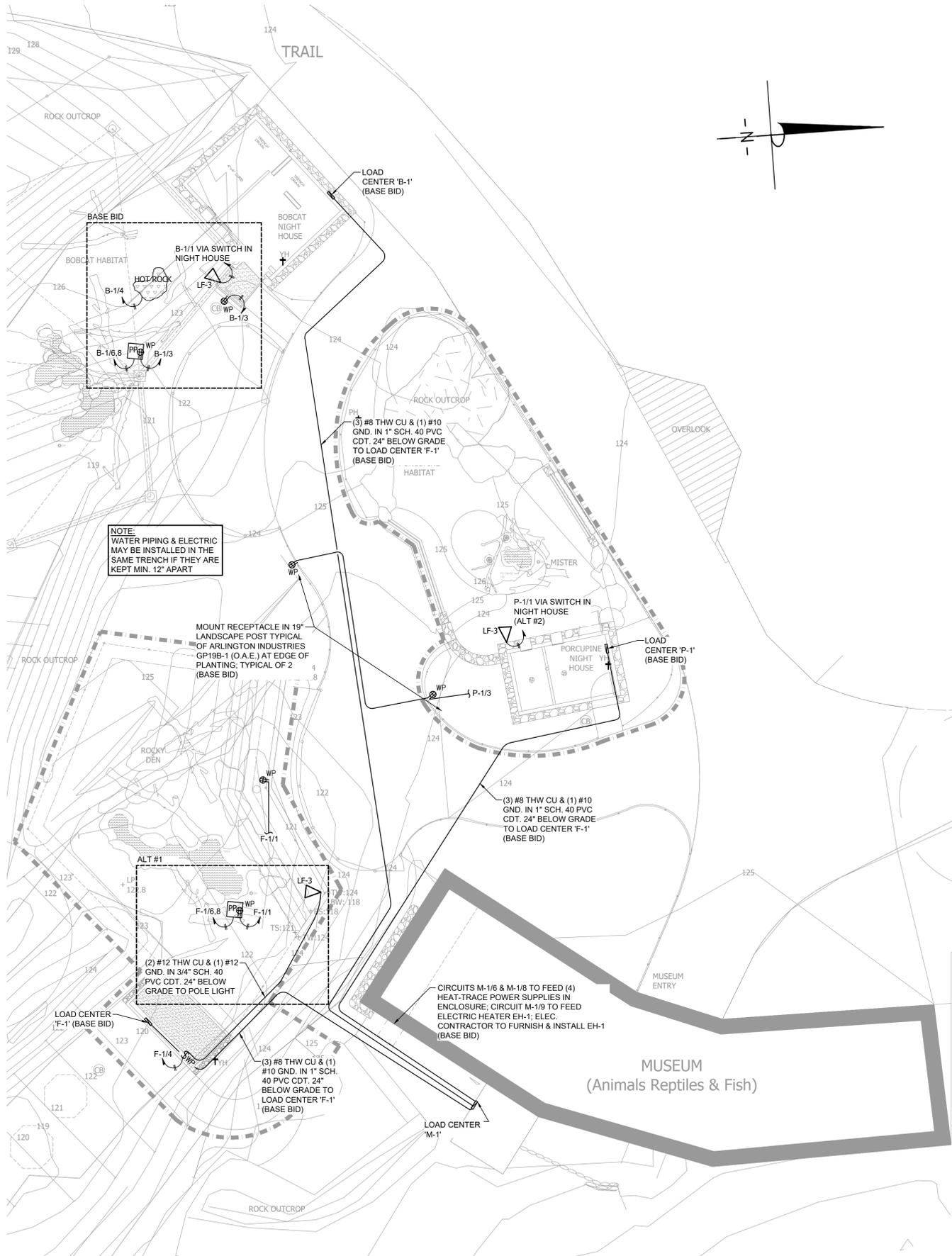
**ELECTRICAL EQUIPMENT:**

- SINGLE POLE LINE-VOLTAGE THERMOSTAT TYPICAL OF TPI MODEL TW155 OR ACCEPTABLE EQUAL; NEMA 4X RATED; DPDT; 22 FLA @ 120V; 40 TO 110°F RANGE; MOUNT 5'-0" A.F.F.
- DOUBLE POLE LINE-VOLTAGE THERMOSTAT TYPICAL OF TPI MODEL TW255 OR ACCEPTABLE EQUAL; NEMA 4X RATED; DPDT; 22 FLA @ 240V; 40 TO 110°F RANGE; MOUNT 5'-0" A.F.F.
- ELECTRIC HEATER TYPICAL OF Q-MARK MODEL WHT500 OR ACCEPTABLE EQUAL; 500 WATTS; 240V; 2.08A; 1,708 BTUH; INTEGRAL THERMOSTAT
- WATERPROOF ELECTRIC INFRARED HEATER TYPICAL OF SALAIRA MODEL SALPHA15240S OR ACCEPTABLE EQUAL; 1,500 WATTS; 240V; 6.25A; SUSPEND FROM CEILING; FURNISH W/ WIRE GUARD; VERIFY FINAL LOCATION W/ OWNER PRIOR TO INSTALLATION

- NOTES:**
1. ALL POWER RECEPTACLES (INDOOR & OUTDOOR) ARE TO BE GFCI & INSTALLED IN 1-GANG VERTICAL 'IN-USE' TYPE METAL WEATHERPROOF COVERS TYPICAL OF TAYMAC MODEL MX3200 OR ACCEPTABLE EQUAL. MOUNT 36" ABOVE FINISHED GRADE OR FINISHED FLOOR DEPENDING ON LOCATION.
  2. ALL LIGHT SWITCHES (INDOOR & OUTDOOR) ARE TO BE INSTALLED W/ WEATHERPOOF ELECTRICAL BOX LEVER SWITCH COVERS TYPICAL OF GREENFIELD MODEL KDL1P OR ACCEPTABLE EQUAL. MOUNT 48" ABOVE FINISHED GRADE OR FINISHED FLOOR DEPENDING ON LOCATION.
  3. ALL ABOVE-GRADE EXPOSED CONDUCTORS ARE TO BE INSTALLED IN EMT CONDUIT W/ RAINTIGHT FITTINGS.

**LIGHTING FIXTURE SCHEDULE**

TAG	MANUFACTURER & MODEL	TYPE	VOLTAGE	# OF LAMPS	LAMP WATTS	FIXTURE WATTS	MOUNTING	SIZE	NOTES
LF-1	HE WILLIAMS FULLY ENCLOSED & GASKETED LED 96-4-L40/840-HIAFR-WET/2-DRV-UNV	LED	120	1	40	40	SUSPENDED	4'	4000K COLOR TEMPERATURE; SUSPEND FROM CEILING
LF-2	HE WILLIAMS LED WALL PACK WPM-L8/750-PC-DRV-UNV	LED	120	1	11	1	SURFACE MTD.	-6"x6"	5000K COLOR TEMPERATURE
LF-3	HE WILLIAMS LED FLOOD VF-1-L35/740-WF-CU-DBZ-WG-DRV-UNV	LED	120	1	36	36	POST MTD.	-9"x9"	4000K COLOR TEMPERATURE; MOUNT ON POST; COORD. HEIGHT IN FIELD
CF	OUTDOOR COMMERCIAL CEILING FAN & LIGHT SELECTED & FURNISHED BY OWNER	-	120	TBD	TBD	TBD	PENDANT MOUNT	-	-



**1** Electric Site Plan  
**E1** 1/8" = 1'-0"

# TRAILSIDE MUSEUMS AND ZOO

Palisades Parks Conservancy  
 Bear Mountain State Park  
 Bear Mountain, New York 10911



Kevin Lucas Malone R.A.  
 2 Lower Reservoir Road  
 Goshen New York 10924  
 p.845.234.3968 f.845.360.8726  
 www.kimArchitect.com  
 e. info@kimArchitect.com



LEHMAN & GETZ, P.C.  
 CONSULTING ENGINEERS  
 PH. 845-955-7737 FAX 845-955-0245  
 17 RIVER STREET WARWICK, NEW YORK 10990

DAVID A. GETZ, P.E.  
 N.Y.S. LIC. No. 61265



BLAKE ENGINEERING PLLC  
 1498 COUNTY ROUTE 1, WESTTOWN, NY 10998  
 845-467-9207 MBLAKE@BLAKEENGINEERINGPLLC.COM

Number	Revision	Date



**100% CONSTRUCTION DOCUMENTS**



Coyle & Caron Inc.  
 Landscape Architects & Habitat Designers  
 236 PASADENA PLACE  
 ORLANDO, FL 32803  
 407-603-7039

Job #	0191
Project	ANIMAL HABITAT IMPROVEMENTS
Drawn By	MB
Checked	MB
Date	02 April 2021
Scale	1/8" = 1'
Drawing Title	

## Electric Legends, Notes & Site Plan

# E1.00