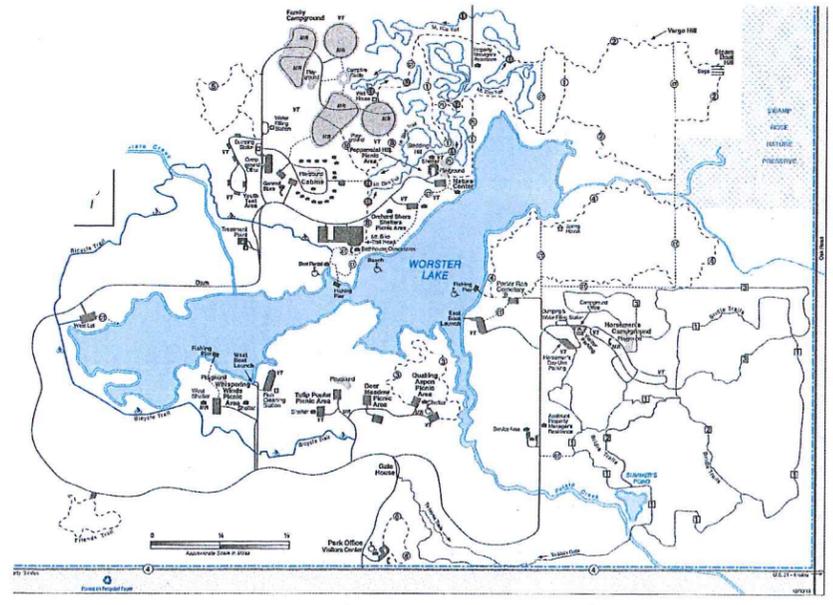


POTATO CREEK STATE PARK
INDIANA DEPT. OF NATURAL RESOURCES
ELECTRICAL DISTRIBUTION RENOVATION OF CAMPGROUND PEDESTALS
 NORTH LIBERTY, INDIANA
 ST. JOSEPH COUNTY, INDIANA
 PROJECT NO. E030283

DRAWING INDEX

- T-1 TITLE SHEET
- E-1 DEMOLITION PLAN
- E-2 NEW CAMPSITE INSTALLATION PLAN
- E-3 ELECTRICAL SITE DETAILS
- E-4 ELECTRICAL PANEL & PANELBOARD SCHEDULE



POTATO CREEK STATE PARK
 SCALE: NTS **LOCATION MAP**

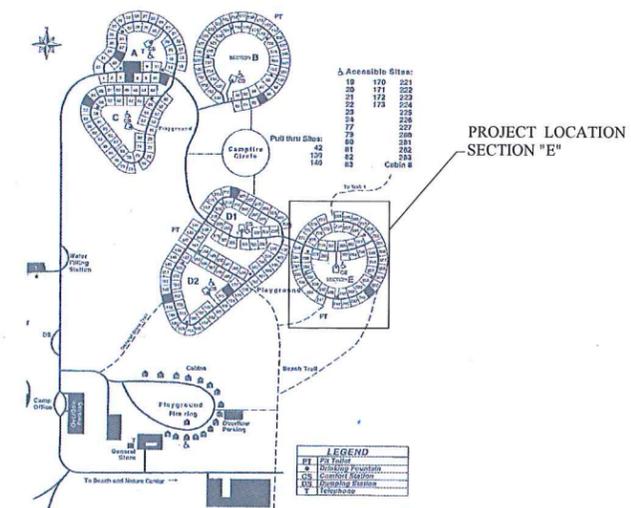
POTATO CREEK S.P.



"HOLEY MOLEY" SAYS CALL AT LEAST TWO FULL WORKING DAYS BEFORE YOU DIG. IT'S THE LAW



1-800-382-5544
CALL TOLL FREE



CAMPGROUND SITES @
POTATO CREEK STATE PARK
 SCALE: NTS **SITE MAP**

CODE COMPLIANCE FOR
 CAMPGRD. PEDESTAL INSTALLATIONS
 AT POTATO CREEK S.P.
 APPLICABLE CODES:
 GENERAL ADMINISTRATIVE RULES (GAR) 675 IAC 12
 2009 INDIANA ELECTRICAL CODE (NFPA 70-2008) 675 IAC 17-1.8



Certified by: _____

TITLE SHEET
 DRAWING INDEX
 LOCATION MAPS

POTATO CREEK STATE PARK
 NEW 50AMP ELECTRICAL CAMPGRD. PEDESTALS
 INDIANA DEPT. OF NATURAL RESOURCES
 25601 ST. RD. #4
 NORTH LIBERTY, INDIANA 46554-0908



STATE OF INDIANA
 DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENGINEERING
 ROOM W509, INDIANA GOVERNMENT CENTER SOUTH
 402 WEST WASHINGTON STREET
 INDIANAPOLIS, INDIANA 46204
 TEL 317-232-4150, FAX 317-232-1205

Project Number:	#E030079
Requisition Number:	Requisition#
Designer:	RGF
Drawing Date:	1/14/15
Drafter:	MAC
Drawing Scale:	AS NOTED
DNR Approval:	
Client Approval:	
File Number:	45-59
Drawing Number:	T-1
Sheet:	1 of 5



NOTES: SECTION "E" - SITE DEMOLITION PLAN

1. EXISTING UTILITY TRANSFORMER. CONTACT INDIANA MICHIGAN POWER AT (800)311-4634 WHEN WORKING AROUND TRANSFORMER. UTILITY WILL DISCONNECT HIGH VOLTAGE. TRANSFORMER IS PROPERTY OF THE PARK.
2. CONTRACTOR SHALL REMOVE FROM CAMPGROUND METAL PEDESTAL RISER. REMOVE WIRE AND CONDUIT TO A MINIMUM DEPTH OF 24 INCHES BELOW GRADE. MATERIAL SHALL BE DISPOSED OF LEGALLY BY THE CONTRACTOR. FILL HOLES WITH TOP SOIL AND TAMP FIRM.
3. CONTRACTOR IS RESPONSIBLE FOR ALL LOCATOR SERVICE.

LEGEND

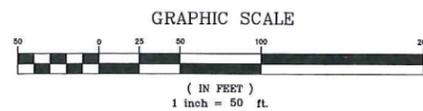
- EXIST. ELECT. PEDESTALS TO BE REMOVED
- GATE VALVE & VALVE BOX
- WATER
- TRAFFIC DIRECTIONAL FLOW ARROW
- SANITARY SEWER LINE
- UNDERGROUND ELECTRICAL LINE
- TRANSFORMER
- EXIST. DRINKING FOUNTAIN
- VAULT TOILET
- PRIMARY ELECTRIC

"HOLEY MOLEY" SAYS CALL AT LEAST TWO FULL WORKING DAYS BEFORE YOU DIG. IT'S THE LAW



1-800-382-5544
CALL TOLL FREE

CAMPGROUND DEMOLITION PLAN



Certified by: _____

CAMPSITE
DEMOLITION PLAN

POTATO CREEK STATE PARK
NEW 50AMP ELECT. PEDESTALS - SECTION "E"
INDIANA DEPT. OF NATURAL RESOURCES
25601 ST. ROAD #4
NORTH LIBERTY, IN. 46554-0908



STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENGINEERING
ROOM 1039, INDIANA GOVERNMENT CENTER SOUTH
402 WEST WASHINGTON STREET
INDIANAPOLIS, INDIANA 46204
TEL. 317-232-4150, FAX 317-233-1205

Revisions:

Project Number: **#E030283**

Requisition Number: _____

Requisition# _____

Designer: RGP Drawing Date: 1/14/15

Drafter: MAC Drawing Scale: AS NOTED

DNR Approval: _____

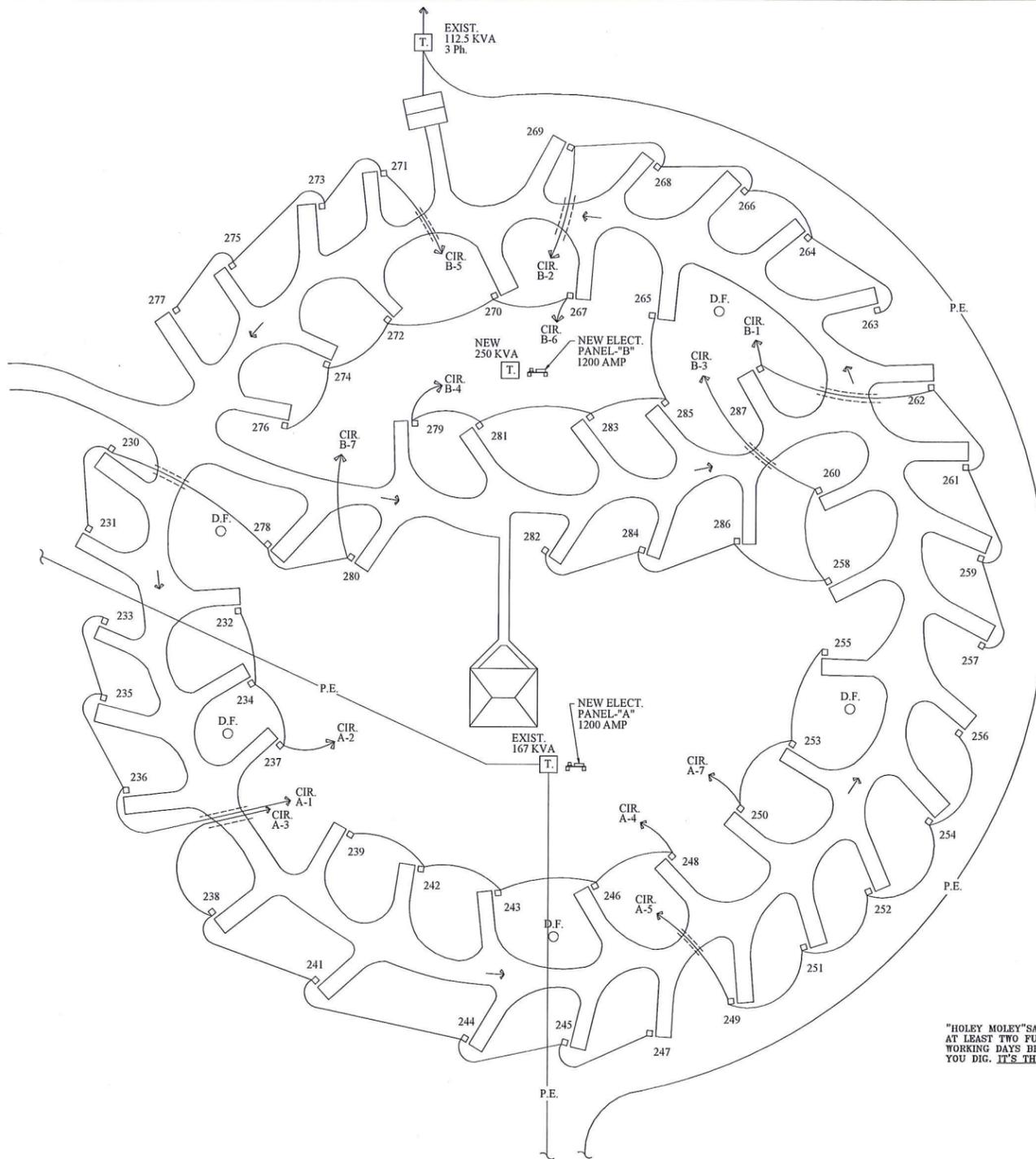
Client Approval: _____

File Number: **45-59**

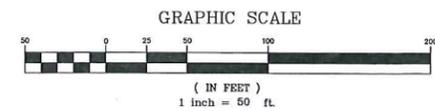
Drawing Number: **E-1**

Sheet: 2 of 5

Feb 11, 2015 2:28pm S:\ACTIVE-PROJECTS\STATE PARKS\POTATO CREEK\45-55\NEW\50 AMP Demol.dwg



CAMPGROUND INSTALLATION PLAN



- LEGEND**
- EXIST. ELECT. PEDESTALS TO BE REMOVED
 - GATE VALVE & VALVE BOX
 - WATER
 - TRAFFIC DIRECTIONAL FLOW ARROW
 - SANITARY SEWER LINE
 - UNDERGROUND ELECTRICAL LINE
 - TRANSFORMER
 - EXIST. DRINKING FOUNTAIN
 - VAULT TOILET
 - PRIMARY ELECTRIC

"HOLEY MOLEY" SAYS CALL AT LEAST TWO FULL WORKING DAYS BEFORE YOU DIG. IT'S THE LAW



NOTES:

1. ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH ALL APPLICABLE CODES, ORDINANCES, AND INDUSTRY STANDARDS.
2. THE NATIONAL ELECTRIC CODE (NEC) AND NATIONAL ELECTRICAL CONTRACTOR ASSOCIATION (NECA) STANDARDS SHALL BE CONSIDERED MINIMUM INSTALLATION STANDARDS.
3. THIS SITE PLAN DOES NOT SHOW CHANGES IN ELEVATION. NO CHANGE IN BID PRICE WILL BE ALLOWED FOR CHANGES IN ELEVATION OR INACCURACY OF THE SCALE OF THIS SITE PLAN. CONTRACTOR SHALL VISIT THE SITE AND MAKE NECESSARY MEASUREMENTS TO DETERMINE THE QUANTITY OF TRENCHING AND WIRE REQUIRED.
4. THIS SITE PLAN SHALL BE USED TO DETERMINE THE QUANTITY AND ORDER IN WHICH EACH ELECTRICAL PEDESTAL IS TO BE CONNECTED INTO EACH CIRCUIT. THE SIZE AND NUMBER OF WIRES BETWEEN PEDESTALS, THE SIZE, LOCATION, AND NUMBER OF DISTRIBUTION PANELS, AND A GENERAL ROUTE FOR TRENCHING AND WIRE TO FOLLOW.
5. THE MINIMUM CLEARANCE BETWEEN THE BASE OF ANY TREE AND A TRENCH SHALL BE TEN (10) FEET. IF TWO TREES ARE LESS THAN TWENTY (20) FEET APART, THE CLEARANCE MAY BE REDUCED TO ONE-HALF THE DISTANCE BETWEEN THE TWO TREES. CONTACT THE OWNER REPRESENTATIVE FOR APPROVAL OF TRENCH LOCATION WHERE CLEARANCE IS LESS THAN FIVE (5) FEET FROM THE BASE OF THE TREE.
6. CONTRACTOR SHALL STAKE THE LOCATION OF EACH PEDESTAL USING DETAILS ON SHEET E-2. SOME CAMPSITES/RECREATION VEHICLE SITES HAVE IRREGULAR SHAPES. THE LOCATION OF POWER OUTLET PEDESTALS SHALL BE APPROVED BY THE OWNER REPRESENTATIVE PRIOR TO INSTALLATION.
7. ALL TRENCHES SHALL BE BACKFILLED AS SOON AS POSSIBLE AFTER THE INSTALLATION OF THE CONDUCTORS. IF ANY TRENCH IS LEFT OPEN AND UNATTENDED, IT SHALL BE COVERED BY MIN. 3/4" THICK BY MIN. TWO FEET WIDE PLYWOOD SECURED TO PREVENT ANY PERSON(S) OR ANIMAL FROM FALLING INTO THE EXCAVATION.
8. AT ALL PAVED AND/OR CHIP & SEAL CAMPSITE, ROADWAY, AND WALKWAY CROSSINGS CONTRACTOR SHALL PUSH FROM ONE SIDE TO THE OTHER SIDE A CONTINUOUS 2-1/2" DIA. GALVANIZED RIGID STEEL OR HDV PVC SCHEDULE 80 CONDUIT LOCATED MIN. 24" BELOW EXISTING GRADE. CONDUIT SHALL EXTEND MIN. FIVE (5) FEET BEYOND EACH SIDE OF THE PAVED FEATURE.
9. ALL DISTURBED GROUND BY EITHER DEMOLITION OR INSTALLATION SHALL BE COMPACTED, LEVELLED AND SEEDED. ANY SETTLEMENT OF GROUND SHALL BE LEVELLED AND RE-SEDED. CONTRACTOR SHALL PROTECT FROM OFF THE PROPERTY ADDITIONAL TOP SOIL IF REQUIRED TO LEVEL ANY SETTLEMENT.
10. ALL ROCK LARGER THAN 4" IN DIAMETER OR NOT SUITABLE FOR BACKFILL SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY BY THE CONTRACTOR.
11. CONTRACTOR SHALL FURNISH TWO (2) SPARE PEDESTALS FOR THE PROPERTY.
12. CONTRACTOR SHALL RUN NEW CONDUCTORS TO THE CONDUIT STATIONS PER THE PANEL SCHEDULES SHOWN ON SHEET E-2. IF EXISTING CONDUIT TO MAIN DISCONNECT SWITCH IS ADEQUATE SIZE PER NEC, CONDUIT MAY BE REUSED. IF INADEQUATE INSTALL NEW CONDUIT AND PULL NEW CONDUCTORS PER SCHEDULE.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE DONE TO WATER LINES, SEWERS, DRAINAGE PIPE, COMMUNICATION LINES, ELECTRICAL LINES, STRUCTURES, OTHER UTILITIES, OR OTHER PROPERTY AS A RESULT OF CONTRACTOR'S ACTIVITY. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR AND/OR REPLACEMENT AT CONTRACTOR EXPENSE. REPAIR AND/OR REPLACEMENT SHALL MEET THE APPROVAL OF THE OWNER.
14. WHERE FLOWING OR TRENCHING IS USED BY THE CONTRACTOR, PATH SHALL GO OUT AROUND THE PAD AREA, NOT CUT ACROSS THE PAD, AS DEFINED BY THE OWNER REPRESENTATIVE.
15. CONTRACTOR SHALL PROVIDE AND INSTALL UNDERGROUND CONDUIT FOR USE BY THE UTILITY TO INSTALL PRIMARY CONDUCTORS TO NEW TRANSFORMERS.

GENERAL NOTES:

1. ALL CAMPSITE PADS AND ROADS ARE EXISTING GRAVEL UNLESS OTHERWISE NOTED.
2. LOT LINES ARE FOR REFERENCE ONLY AND DO NOT DEPICT ACTUAL LOT CORNERS.
3. ACCESSIBLE SITES ARE EXISTING ASPHALT BASE.
4. EXISTING ROUTES OF UNDERGROUND ELECTRIC RUNS ARE SHOWN AS APPROXIMATE ONLY AND MAY VARY IN DETAIL IN ORDER TO CLEAR TREES, PHYSICAL OBSTRUCTIONS ETC. . .
5. ALL EXISTING LOCATIONS, SIZES AND INVERTS OF EXISTING UTILITIES ARE SHOWN BASED ON BEST INFORMATION POSSIBLE. HOWEVER, THE ENGINEER DOES NOT GUARANTEE OR ASSURE THAT SUCH INFORMATION IS TRUE OR EVEN APPROXIMATE. THIS CONTRACTOR SHALL DETERMINE WHICH UTILITIES MAY CONFLICT WITH HIS WORK AND VERIFY THEIR LOCATIONS, SIZES AND INVERTS, ETC., ADJUST HIS WORK ACCORDINGLY, AND BE RESPONSIBLE FOR THE REPAIR OF ANY DAMAGE. CONTRACTOR SHALL REFER TO APPLICABLE SECTIONS OF THE SPECIFICATIONS RELATIVE TO THE ABOVE.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL PERMIT ISSUING AGENCIES WITHIN THE TIME FRAME SPECIFIED BY THAT AGENCY PRIOR TO CONSTRUCTION.
7. REMOVE ALL EXISTING METAL PEDESTALS FROM CAMPGROUND SITE. REMOVE WIRE AND CONDUIT TO MINIMUM DEPTH OF 24" BELOW EXISTING GRADE. MATERIAL SHALL BE DELIVERED TO RECYCLER BY CONTRACTOR.
8. PROVIDE AND INSTALL NEW ELECTRICAL GEAR AND TRANSFORMER. THE UTILITY PROVIDER IS AMERICAN ELECTRIC POWER 1.800.311.4634. THE NEW TRANSFORMER WILL BE OWNED AND MAINTAINED BY STATE OF INDIANA.



Certified by: _____

NEW CAMPSITE
INSTALLATION PLAN

POTATO CREEK STATE PARK
NEW 50AMP ELECT. PEDESTALS - SECTION "E"
INDIANA DEPT. OF NATURAL RESOURCES
25601 ST. ROAD #4
NORTH LIBERTY, IN. 46354-0908



STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENGINEERING
ROOM W206 INDIANA GOVERNMENT CENTER SOUTH
402 WEST WASHINGTON STREET
INDIANAPOLIS, INDIANA 46204
TEL. 317-232-1150, FAX 317-232-1205

Revisions:
PROPOSAL #2

Project Number: #E030283

Requisition Number: _____

Requisition#: _____

Designer: RGP Drawing Date: 1/14/15

Drafter: MAC Drawing Scale: AS NOTED

DNR Approval: _____

Client Approval: _____

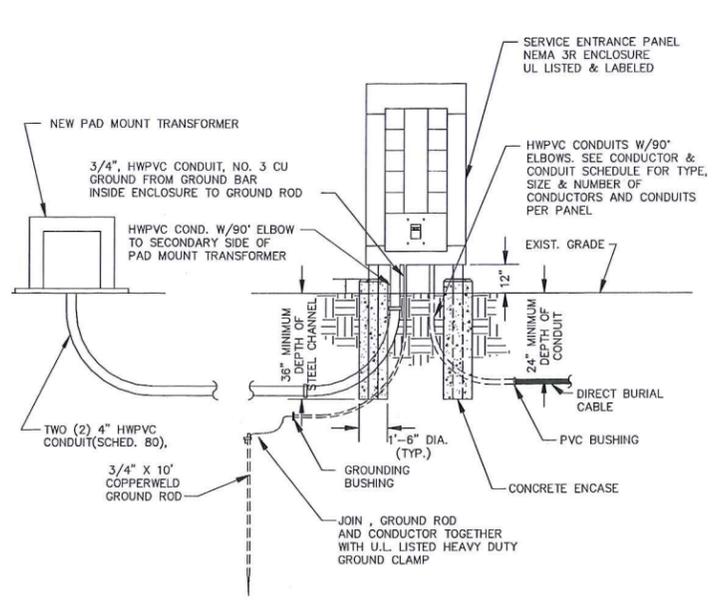
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Drawing Number: E-2

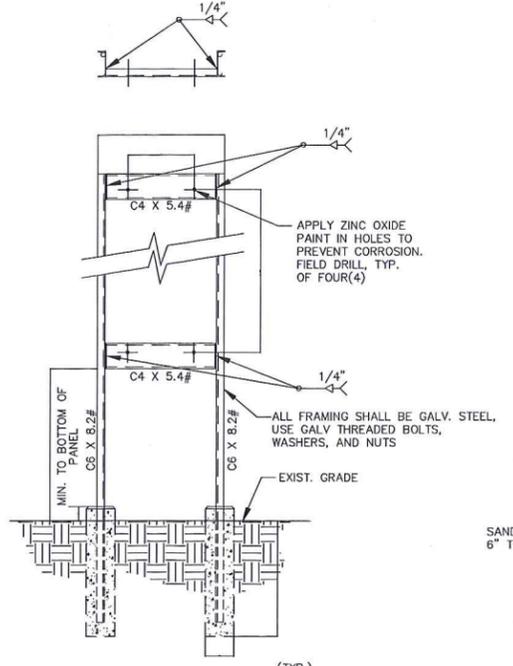
Sheet: 3 of 5

REF. DWG. S:\ARCH\SDSK\FRO\STATE PARKS\POTATO CREEK\45-59
REF. DWG. S:\ACTIVE\PROJECTS\STATE PARKS\35-CRAN O LAKES\35-91 NEW 50AMP ELECT. CAMPGRD. PEDESTALS 8-29-14

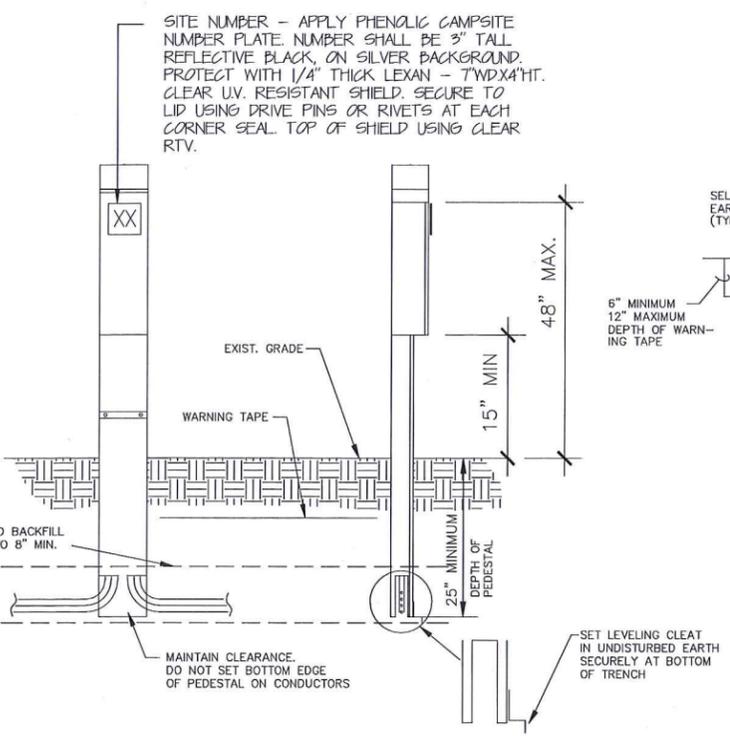
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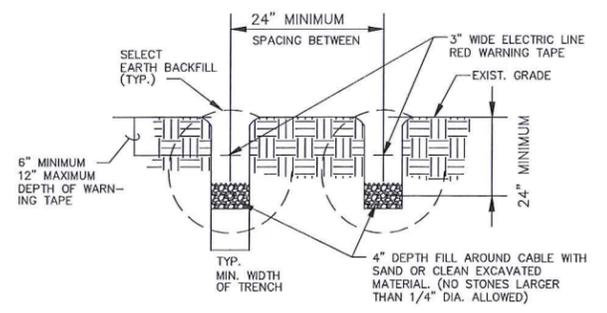
TRANSFORMER & DISTRIBUTION PANEL DETAILS
SCALE: NONE



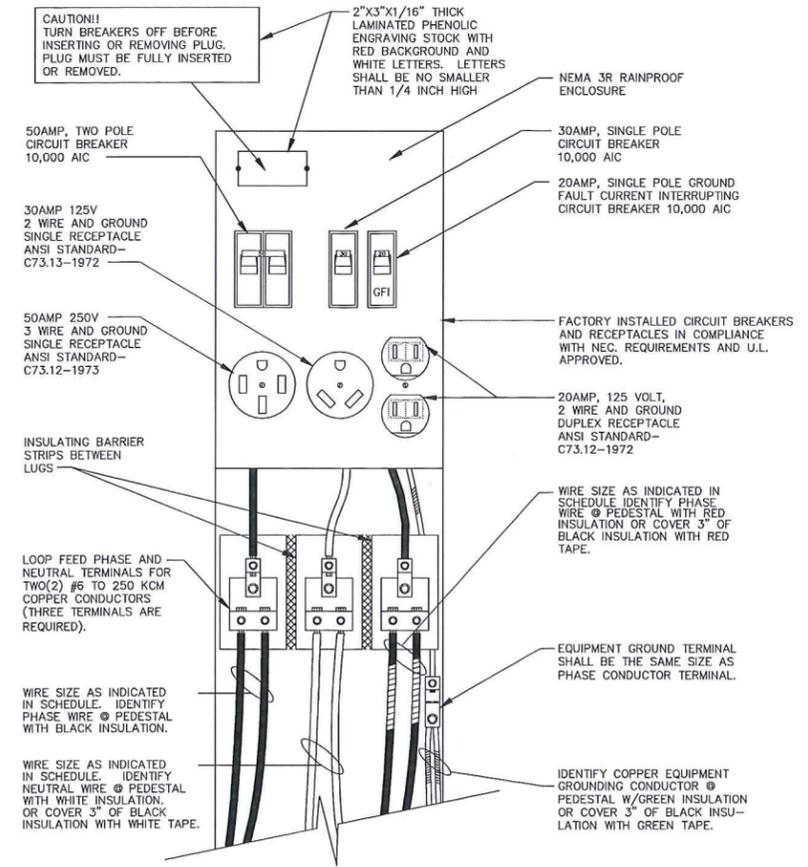
PANEL MOUNTING DETAIL
SCALE: NONE



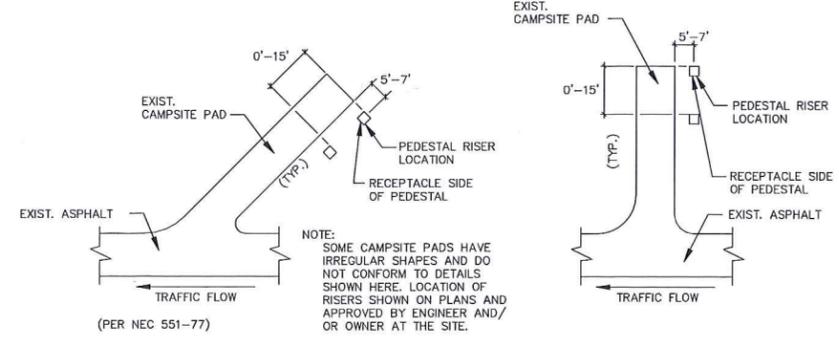
PEDESTAL RISER DETAIL
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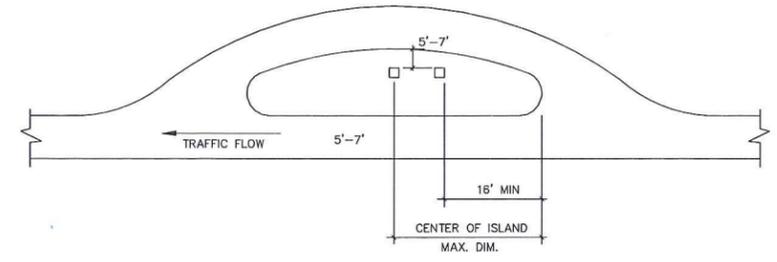
CONDUCTOR TRENCH DETAIL
SCALE: NONE



TYPE 2 PEDESTAL RISER WIRING DETAILS
SCALE: NONE



ELECTRIC PEDESTAL RISER LOCATION DETAILS
SCALE: NONE



ELECTRIC PEDESTAL RISER LOCATION DETAILS
SCALE: NONE



Certified by:
**ELECTRICAL
SITE DETAILS**

POTATO CREEK STATE PARK
NEW 50AMP ELECTRICAL CAMPGRD. PEDESTALS
DEPT. OF NATURAL RESOURCES
2355 E. 75 SOUTH
ALBION, INDIANA 46701



STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES
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402 WEST WASHINGTON STREET
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Revisions:

Project Number:	#E030079
Requisition Number:	Requisition#
Designer:	RGP
Drawing Date:	1/29/15
Drafter:	MAC
Drawing Scale:	AS NOTED
DNR Approval:	
Client Approval:	
File Number:	35-91
Drawing Number:	E-3
Sheet:	4 of 5



Certified by:

ELECTRICAL PANEL
SCHEDULE
PROPOSAL #2

POTATO CREEK STATE PARK
NEW 50AMP ELECTRICAL CAMPGRD. PEDESTALS
DEPT. OF NATURAL RESOURCES
25601 ST. RD. #4
NORTH LIBERTY, INDIANA 46554-0908



STATE OF INDIANA
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Revisions:
PROPOSAL #2

Project Number: #E030283

Requisition Number:
Requisition#

Designer: RGP Drawing Date: 1/28/15

Drafter: MAC Drawing Scale: AS NOTED

DNR Approval:

Client Approval:

File Number: 45-59

Drawing Number: E-4

Sheet: 5 of 5

PANELBOARD-"A" SCHEDULE									
PANEL # NEW DISTRIBUTION PANEL - "A"					LOCATION: TRANSFORMER "A" NEMA 3R RAINPROOF				
PANEL RATING		MAIN C/B FRAME	1200A	120/240V	1200AMP @ 240V, 42KA SCA	NO. OF BAYS	NO. OF MAINS	NO. OF CIRCUIT BREAKERS	NO. OF CIRCUITS
DESCRIPTION	CR.	POLE/AMPS	LOAD (KW)	CR.	POLE/AMPS	LOAD (KW)	CR.	POLE/AMPS	DESCRIPTION
A-1	1.	2P-125A	28.8	2.	2P-125A	28.8	3.	2P-125A	A-2
	3.			4.			5.		
	5.			6.			7.		
A-3	7.	2P-200A	48.0	8.	2P-200A	48.0	9.	2P-200A	A-4
	10.			11.			12.		
A-5	13.	2P-200A	48.0	14.	2P-400A	48.0	15.	2P-400A	A-6 C-S
	16.			17.			18.		
A-7	19.	2P-125A	28.8	20.	2P-200A	12.0	21.	2P-200A	A-8 LTG.
	22.			23.			24.		
	25.			26.			27.		
	28.			29.	2P-100A	9.6	30.	2P-100A	A-10 W/H
	30.								
TOTAL LOAD:		153.6	+	146.4	=	300.0			

LOAD BALANCE CHECK: BLACK = 153.6 KW
RED = 146.4 KW

PANELBOARD-"B" SCHEDULE									
PANEL # NEW DISTRIBUTION PANEL - "B"					LOCATION: TRANSFORMER "B" NEMA 3R RAINPROOF				
PANEL RATING		MAIN C/B FRAME	1200A	120/240V	1200AMP @ 240V, 42KA SCA	NO. OF BAYS	NO. OF MAINS	NO. OF CIRCUIT BREAKERS	NO. OF CIRCUITS
DESCRIPTION	CR.	POLE/AMPS	LOAD (KW)	CR.	POLE/AMPS	LOAD (KW)	CR.	POLE/AMPS	DESCRIPTION
B-1	1.	2P-200A	48.0	2.	2P-200A	48.0	3.	2P-200A	B-2
	4.			5.			6.		
B-3	7.	2P-200A	48.0	8.	2P-200A	48.0	9.	2P-200A	B-4
	10.			11.			12.		
B-5	13.	2P-175A	38.4	14.	2P-200A	48.0	15.	2P-200A	B-6
	16.			17.			18.		
B-7	19.	2P-175A	38.4	20.			21.		
	22.			23.			24.		
	25.			26.			27.		
	28.			29.			30.		
TOTAL LOAD:		172.8	+	144.0	=	316.8			

LOAD BALANCE CHECK: BLACK = 172.8 KW
RED = 144.0 KW

GENERAL NOTES

- CONTRACTOR SHALL INSTALL TYPE 2 50AMP 240VOLT PEDESTAL (COPPER INTERIOR) WITH GFCI CIRCUIT BREAKER
- THE LOAD ON ALL BRANCH CIRCUITS TO THE 120 VOLT RECEPTACLES SHALL BE BALANCED EQUALLY BETWEEN THE TWO PHASE CONDUCTORS BY THE METHOD OF ALTERNATING THE PHASE WIRE LOADING AT EACH PEDESTAL.

ALLOWABLE CONDUCTOR TYPES:

- (Ø) - 1/0, TYPE USE WIRE (Ø&N); UL LISTED, ANNEALED CU, WITH VULCANIZED INTERLOCKED POLYETHYLENE INSULATION (ØØØV); DIRECT BURIAL
- (Ø) - 1/0, GROUND WIRE BARE OR INSULATED (GREEN) CU, SOFT DRAWN, STANDARD PER ASTM CLASS "B" OR "C", DIRECT BURIAL

