DEPARTMENT OF NATURAL RESOURCES

ELECTRICAL DISTRIBUTION RENOVATION @ TURKEY RUN CAMPGROUND

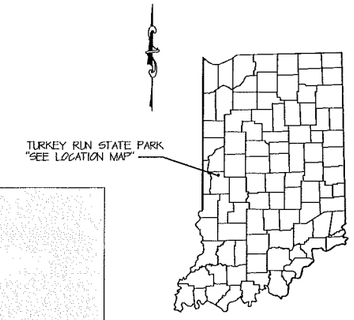
TURKEY RUN STATE PARK

MARSHALL, INDIANA

PARKE COUNTY, INDIANA

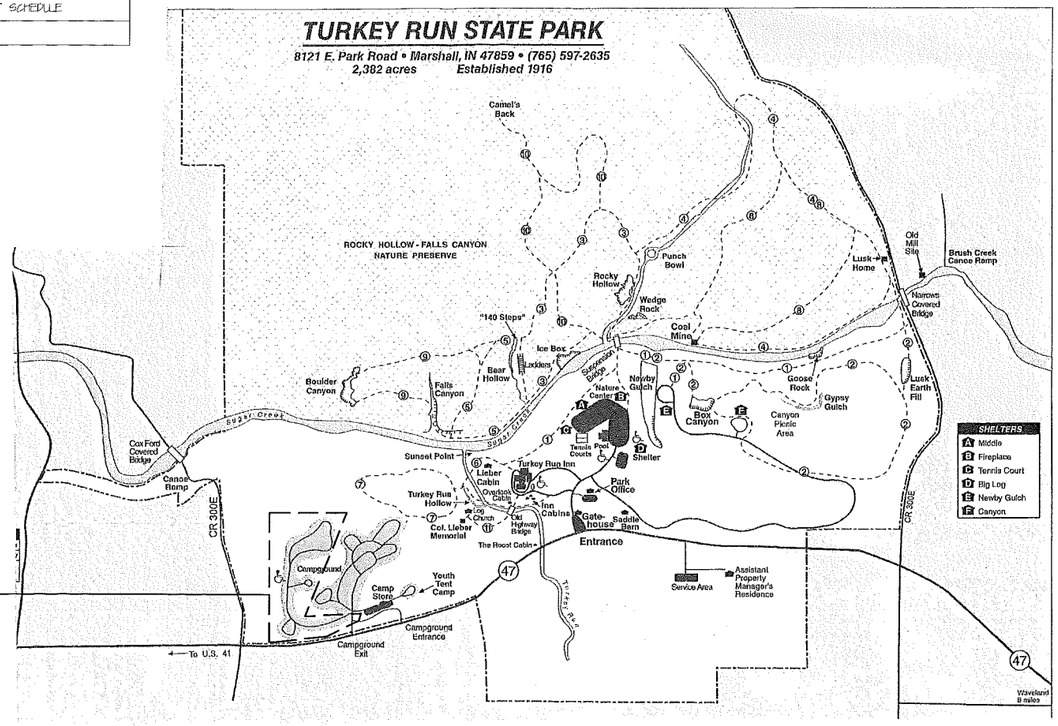
PROJECT NO. E030280

SHEET INDEX	
SHEET #	DESCRIPTION
T-1	TITLE SHEET
E-1, E-2, E-3	CAMPSITE INSTALLATION PLAN
E-4	INSTALLATION DETAILS
E-5	DISTRIBUTION PANEL, CONDUCTORS, AND CONDUIT SCHEDULE



STATE MAP

CONSTRUCTION AREA



TURKEY RUN STATE PARK
LOCATION MAP

RONALD G. PEERSON
No. PE00012045
STATE OF INDIANA
PROFESSIONAL ENGINEER

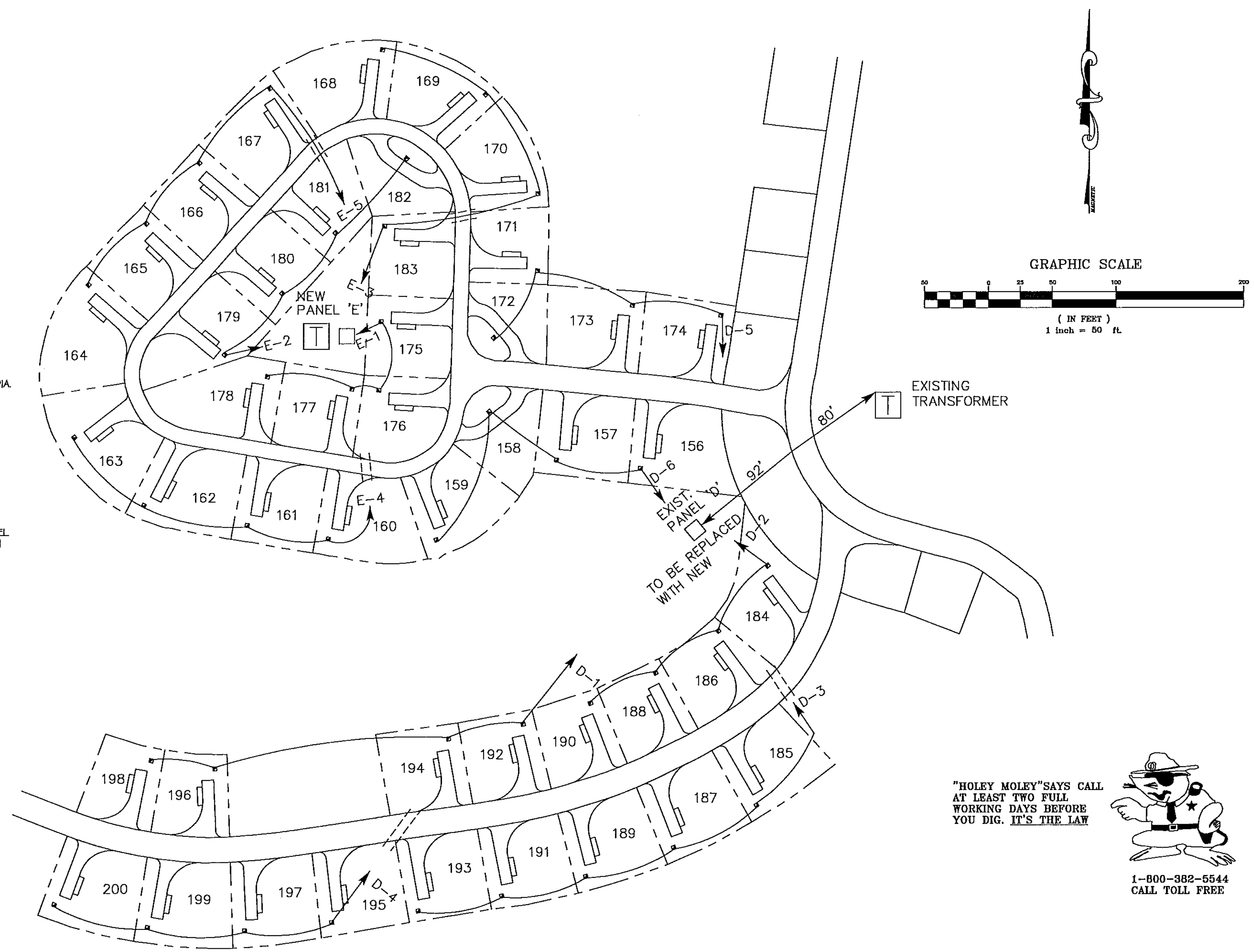
CAMPGROUND ELECTRICAL RENOVATION
TURKEY RUN STATE PARK
DEPT. OF NATURAL RESOURCES
8121 E. PARK ROAD
MARSHALL, INDIANA 47859

STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENGINEERING

E030280
Republican
REP 6/27/14
JSD NO SCALE
2-194
T-1

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 HW 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 INSTALLALTION SHALL BE COMPACTED, LEVELED AND SEEDED. ANY SETTLEMENT OF GROUND SHALL BE RELEVELED AND RE-SEEDED. CONTRACTOR SHALL PROVIDE 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 COMFORT STATIONS PER THE PANEL SCHEDULES SHOWN ON SHEET E-2. IF EXISTING CONDUIT TO MAIN DISCONNECT SWITCH IS ADEQUATE SIZE PER N.E.C., 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, DRAINS 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 PLOWING 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.



CAMPGROUND INSTALLATION PLAN

SCALE: 1"=50'

GENERAL NOTES:

1. ALL CAMPSITE PADS AND ROADS ARE EXISTING PAVED 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 RESPONIBLE FOR CONTACTING ALL PERMIT ISSUING AGENCIES WITHIN THE TIME FRAME SPECIFIED BY THAT AGENCY PRIOR TO CONSTRUCTION.
7. NOTIFY UTILITY OF INCREASED CAPACITY SERVICE BEING INSTALLED. PROVIDE AND INSTALL ALL NEW ELECTRICAL GEAR AS PRESCRIBED BY THE UTILITY: PARKE COUNTY REMC.

RONALD G. PETERSON
REGISTERED
No. PE60012045
STATE OF INDIANA
PROFESSIONAL ENGINEER

Certified by:

CAMPGROUND ELECTRICAL RENOVATION
TURKEY RUN STATE PARK
DEPT. OF NATURAL RESOURCES
8121 E. PARK ROAD
MARSHALL, INDIANA 47859

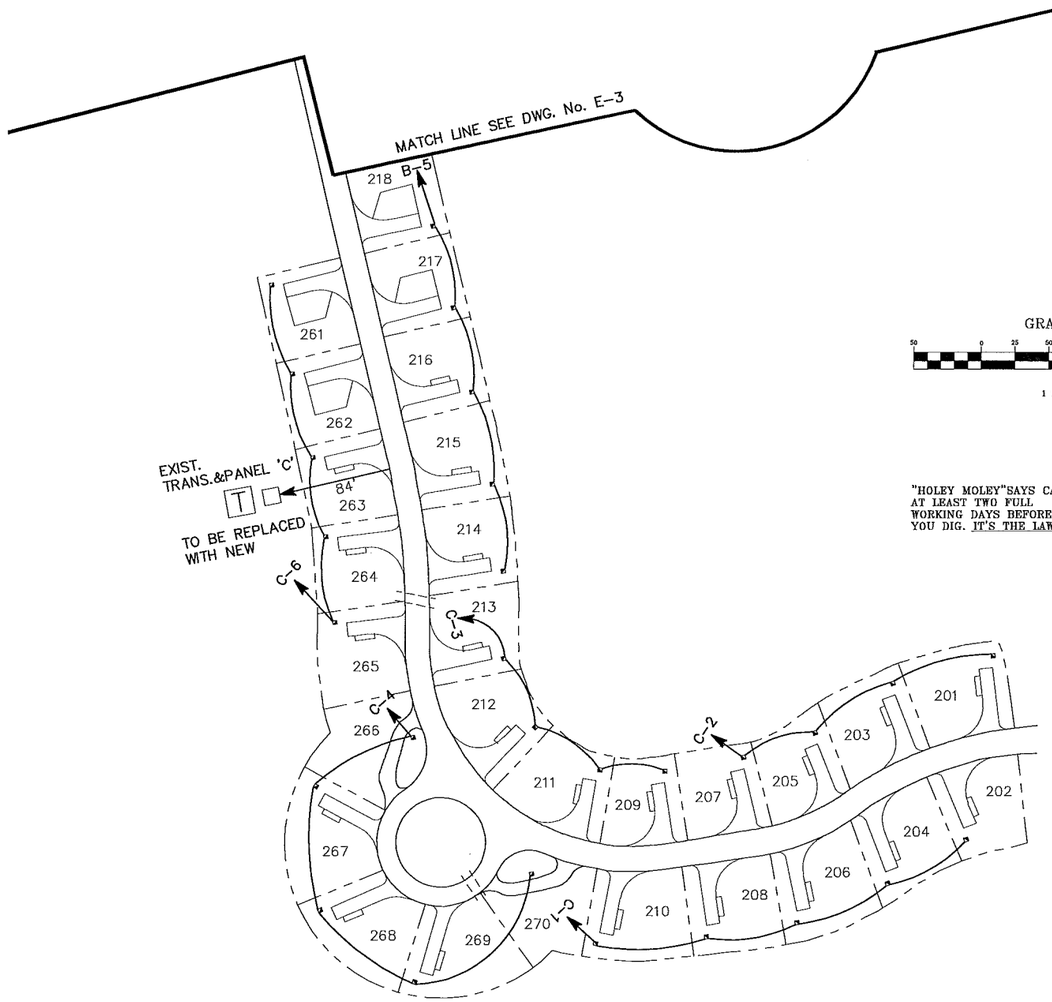
STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENGINEERING
ROOM W299, INDIANA GOVERNMENT CENTER SOUTH
402 WEST WASHINGTON STREET
INDIANAPOLIS, INDIANA 46204
TEL 317-232-4150, FAX 317-233-1205

Revisions:

Project Number: E030280	
Requisition Number: Requisition#	
Designer: RGP	Drawing Date: 8/27/14
Drafter: JSB	Drawing Scale: AS NOTED
DNR Approval:	
Client Approval:	
File Number: 2-194	
Drawing Number: E-1	
Sheet: 2 of 6	

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 HW 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, LEVELED AND SEEDED. ANY SETTLEMENT OF GROUND SHALL BE RELEVELED AND RE-SEEDED. CONTRACTOR SHALL PROVIDE 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 COMFORT 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, DRAINS 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 PLOWING 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.



GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

"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 INSTALLATION PLAN

SCALE: 1"=50'

GENERAL NOTES:

1. ALL CAMPSITE PADS AND ROADS ARE EXISTING PAVED 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 RESPONIBLE FOR CONTACTING ALL PERMIT ISSUING AGENCIES WITHIN THE TIME FRAME SPECIFIED BY THAT AGENCY PRIOR TO CONSTRUCTION.
7. NOTIFY UTILITY OF INCREASED CAPACITY SERVICE BEING INSTALLED. PROVIDE AND INSTALL ALL NEW ELECTRICAL GEAR AS PRESCRIBED BY THE UTILITY: PARKE COUNTY REMC.

RONALD G. RIDSON
No. PE80012043
STATE OF INDIANA
PROFESSIONAL ENGINEER

TURKEY RUN S. P. WEST CAMPGROUND
CAMPSITE ELECTRICAL
DEPT. OF NATURAL RESOURCES
8141 E PARK ROAD
MARSHALL, INDIANA 47859

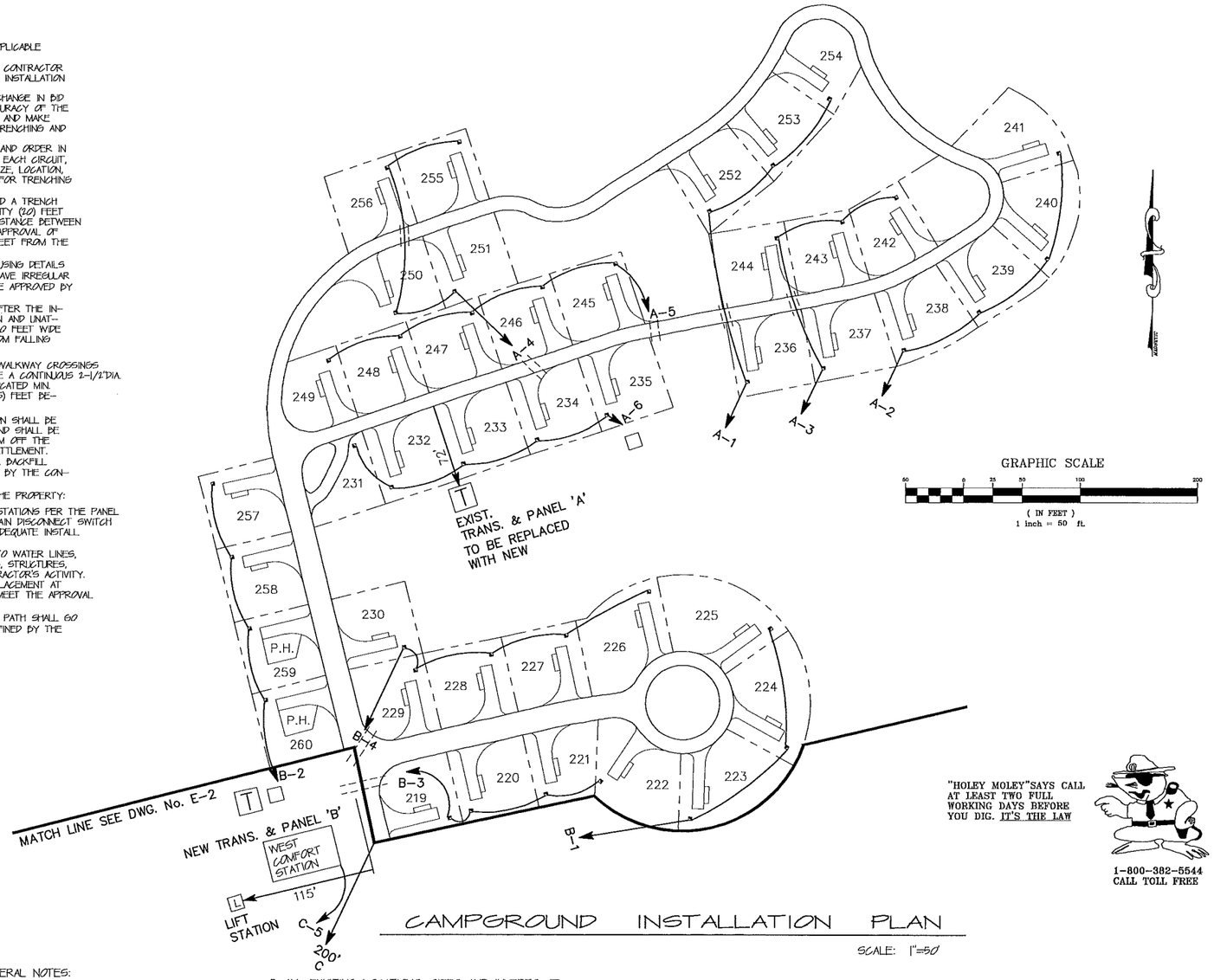
STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENGINEERING

Revisions

Project Number: E030380
Description: Regulations
Designed: REP
Date: 6/27/14
Drawn: JSD
Description: AS NOTED
Quality Approval
Client Approval
File Number: 2-194
Drawing Number: E-2
Sheet: 5 of 6

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 HW 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, LEVELED AND SEEDED. ANY SETTLEMENT OF GROUND SHALL BE RELEVELED AND RE-SEEDED. CONTRACTOR SHALL PROVIDE 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 COMFORT STATIONS PER THE PANEL SCHEDULES SHOWN ON SHEET E-2. IF EXISTING CONDUIT TO MAIN DISCONNECT SWITCH IS ADEQUATE SIZE PER N.E.C., 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, DRAINS 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 PLOWING 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.



CAMPGROUND INSTALLATION PLAN

SCALE: 1"=50'

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

1-800-382-5544
CALL TOLL FREE

GENERAL NOTES:

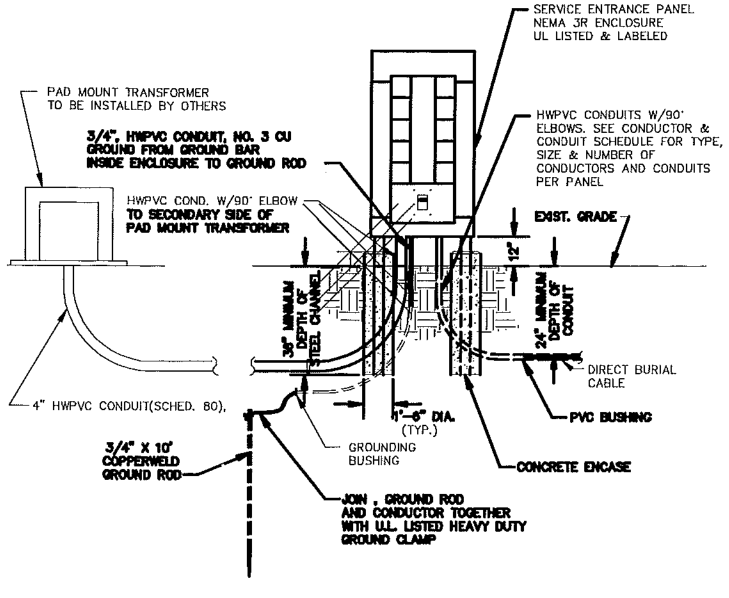
1. ALL CAMPSITE PADS AND ROADS ARE EXISTING PAVED UNLESS OTHERWISE NOTED.
2. LOT LINES ARE FOR REFERENCE ONLY AND DO NOT DEPICT ACTUAL LOT CORNERS.
3. ACCESSIBLE SITES ARE EXISTING ASPHALT BASE.
4. EXISTING ROUTES OF UNDERGROUND ELECTRIC RUNS ARE SHOWN AS APPROXIMATE ONLY AND MAY VARY IN DETAIL IN ORDER 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 RESPONIBLE FOR CONTACTING ALL PERMIT ISSUING AGENCIES WITHIN THE TIME FRAME SPECIFIED BY THAT AGENCY PRIOR TO CONSTRUCTION.
7. NOTIFY UTILITY OF INCREASED CAPACITY SERVICE BEING INSTALLED. PROVIDE AND INSTALL ALL NEW ELECTRICAL GEAR AS PRESCRIBED BY THE UTILITY: PARKE COUNTY REMC.

RONALD G. PETERSON
No. PE80012043
STATE OF INDIANA
PROFESSIONAL ENGINEER

TURKEY RUN S. P. WEST CAMPGROUND
CAMPSITE ELECTRICAL
DEPT. OF NATURAL RESOURCES
811 E PARK ROAD
MARSHALL, INDIANA 47859

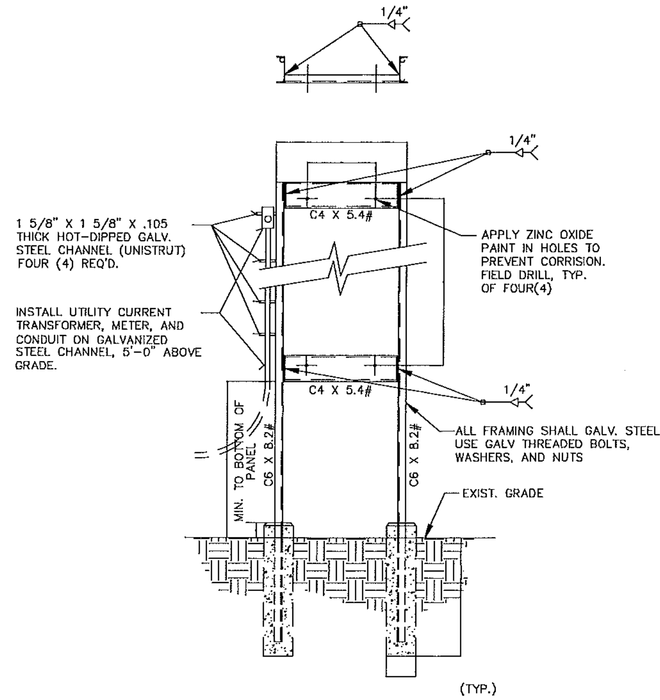
STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENGINEERING

Project Number: E000380
Drawing Status: Regulations
Drawn By: REP
Date: 3/27/14
Checked By: JSP
Scale: AS NOTED
Plan Approved
Date Approved
Work Order Number: 2-194
Drawing Number: E-3
Sheet 4 of 6



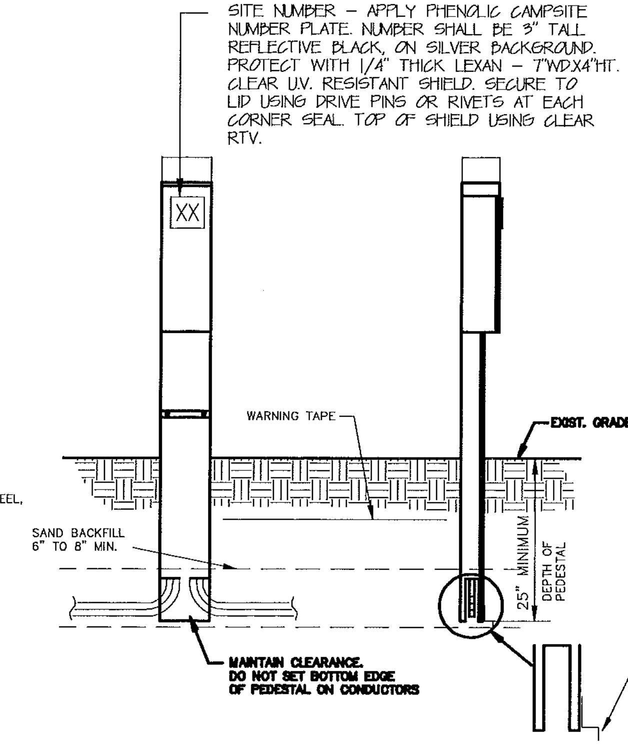
TRANSFORMER & DISTRIBUTION PANEL DETAILS

SCALE: NONE



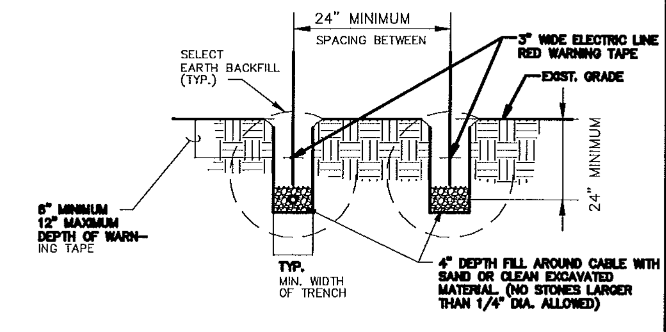
PANEL MOUNTING DETAIL

SCALE: NONE



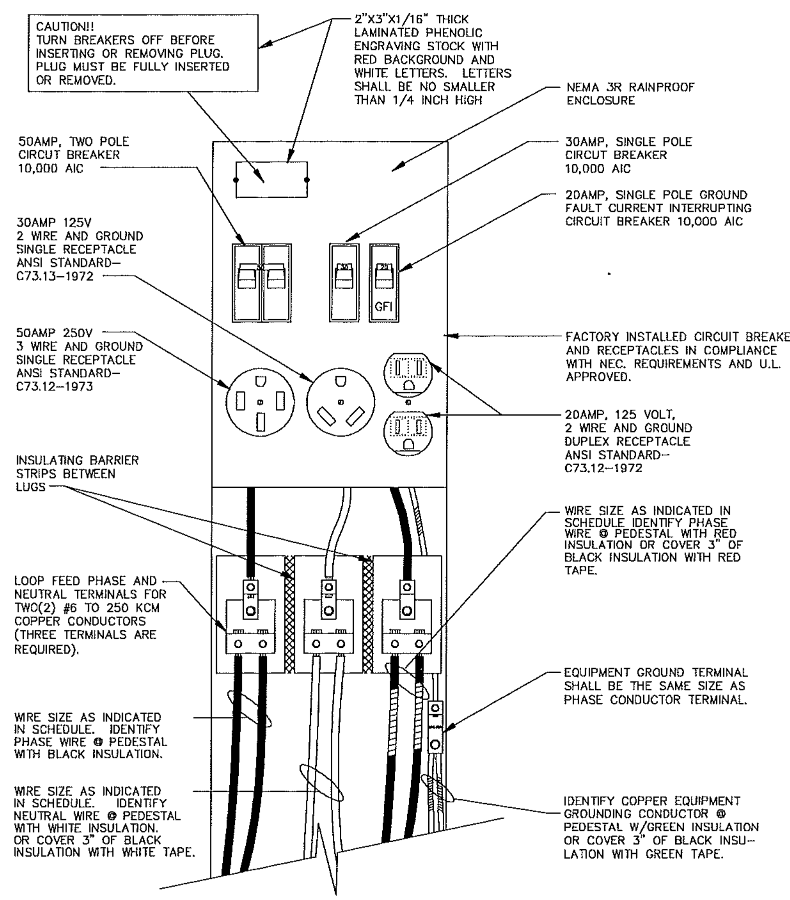
PEDESTAL RISER DETAIL

SCALE: NONE



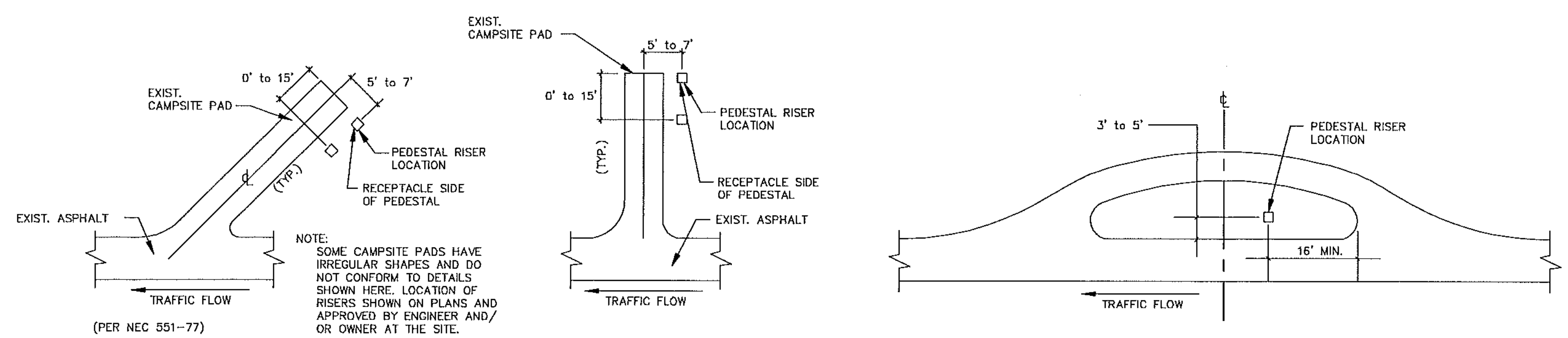
CONDUCTOR TRENCH DETAIL

SCALE: NONE



TYPE 2 PEDESTAL RISER WIRING DETAILS

SCALE: NONE



ELECTRIC PEDESTAL RISER LOCATION DETAILS

SCALE: NONE

NOTE:
SITE #'S SHALL BE INSTALLED ON OUTSIDE COVER OF PEDESTALS – BLACK REFLECTIVE VINYL LETTERING (2") SILVER BACKGROUND.

RONALD G. PETERSON
REGISTERED
No. PE80012045
STATE OF INDIANA
PROFESSIONAL ENGINEER

CAMPGROUND ELECTRICAL RENOVATION
TURKEY RUN STATE PARK
DEPT. OF NATURAL RESOURCES
8121 E PARK ROAD
MARSHALL, INDIANA 47859

STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENGINEERING

RGP	8/27/14
JSD	NO SCALE
	2-194
	E-4
Sheet 5 of 6	

PANELBOARD–"B" SCHEDULE

PANEL # NEW DISTRIBUTION PANEL –"B"

LOCATION: TRANSFORMER "B" NEMA 3R RAINPROOF

PANEL RATING 120/240V 800AMP @ 240V, 42KA SCA

MAIN C/B FRAME: 800A MAIN C/B TRIP: 1000A SUB-FEED C/B FRAME: N/A SUB-FEED C/B TRIP: N/A

☐ MLO ☒ FULLY RATED ☒ BOLT-ON BKRS ☒ BOTTOM FEED

☒ MCB ☐ TOP FED ☐ SIGNAL RATED ☐ PLUG-IN BREAKERS

☐ SINGLE LUG ☒ COPPER BUS ☐ FLUSH MTD. ☒ SOLID NEUTRAL

☐ DOUBLE LUGS ☐ ALUMINUM BUS ☒ SURFACE MTD. ☒ GROUND BAR

DESCRIPTION	CIR.	POLE/AMPS	LOAD (KW)	Ø	LOAD (KW)	POLE/AMPS	CIR.	DESCRIPTION
B–1	1, 3, 5	2P–125A	28.8	BLACK	38.4	2P–175A	2, 4, 6	B–2
				RED				
B–3	7, 9, 11	2P–175A	38.4	BLACK	48.0	2P–200A	8, 10, 12	B–4
				RED				
B–5	13, 15, 17	2P–200A	48.0	BLACK			14, 16, 18	
				RED				
TOTAL LOAD:			115.2	+	86.4	= 201.6		

LOAD BALANCE CHECK: BLACK = 115.2 KW
RED = 86.4 KW

PANELBOARD–"C" SCHEDULE

PANEL # NEW DISTRIBUTION PANEL –"C"

LOCATION: TRANSFORMER "C" NEMA 3R RAINPROOF

PANEL RATING 120/240V 1200AMP @ 240V, 42KA SCA

MAIN C/B FRAME: 1200A MAIN C/B TRIP: 1200A SUB-FEED C/B FRAME: N/A SUB-FEED C/B TRIP: N/A

☐ MLO ☒ FULLY RATED ☒ BOLT-ON BKRS ☒ BOTTOM FEED

☒ MCB ☐ TOP FED ☐ SIGNAL RATED ☐ PLUG-IN BREAKERS

☐ SINGLE LUG ☒ COPPER BUS ☐ FLUSH MTD. ☒ SOLID NEUTRAL

☐ DOUBLE LUGS ☐ ALUMINUM BUS ☒ SURFACE MTD. ☒ GROUND BAR

DESCRIPTION	CIR.	POLE/AMPS	LOAD (KW)	Ø	LOAD (KW)	POLE/AMPS	CIR.	DESCRIPTION
C–1	1, 3, 5	2P–200A	48.0	BLACK	38.4	2P–175A	2, 4, 6	C–2
				RED				
C–3	7, 9, 11	2P–175A	38.4	BLACK	48.0	2P–200A	8, 10, 12	C–4
				RED				
C–5	13, 15, 17	2P–200A	48.0	BLACK	48.0	2P–200A	14, 16, 18	C–6
				RED				
TOTAL LOAD:			134.4	+	134.4	= 268.8 KW		

LOAD BALANCE CHECK: BLACK = 134.4 KW
RED = 134.4 KW

PANELBOARD–"D" SCHEDULE

PANEL # NEW DISTRIBUTION PANEL –"D"

LOCATION: TRANSFORMER "D" NEMA 3R RAINPROOF

PANEL RATING 120/240V 1200AMP @ 240V, 42KA SCA

MAIN C/B FRAME: 1200A MAIN C/B TRIP: 1000A SUB-FEED C/B FRAME: N/A SUB-FEED C/B TRIP: N/A

☐ MLO ☒ FULLY RATED ☒ BOLT-ON BKRS ☒ BOTTOM FEED

☒ MCB ☐ TOP FED ☐ SIGNAL RATED ☐ PLUG-IN BREAKERS

☐ SINGLE LUG ☒ COPPER BUS ☐ FLUSH MTD. ☒ SOLID NEUTRAL

☐ DOUBLE LUGS ☐ ALUMINUM BUS ☒ SURFACE MTD. ☒ GROUND BAR

DESCRIPTION	CIR.	POLE/AMPS	LOAD (KW)	Ø	LOAD (KW)	POLE/AMPS	CIR.	DESCRIPTION
D–1	1, 3, 5	2P–175A	38.4	BLACK	38.4	2P–175A	2, 4, 6	D–2
				RED				
D–3	7, 9, 11	2P–200A	48.0	BLACK	38.4	2P–175A	8, 10, 12	D–4
				RED				
D–5		2P–175A	38.4		38.4	2P–175A		D–6
TOTAL LOAD:			124.8	+	115.2	= 240.0 KW		

LOAD BALANCE CHECK: BLACK = 124.8 KW
RED = 115.2 KW

PANELBOARD–"E" SCHEDULE

PANEL # NEW DISTRIBUTION PANEL –"E"

LOCATION: TRANSFORMER "E" NEMA 3R RAINPROOF

PANEL RATING 120/240V 800AMP @ 240V, 42KA SCA

MAIN C/B FRAME: 800A MAIN C/B TRIP: 1000A SUB-FEED C/B FRAME: N/A SUB-FEED C/B TRIP: N/A

☐ MLO ☒ FULLY RATED ☒ BOLT-ON BKRS ☒ BOTTOM FEED

☒ MCB ☐ TOP FED ☐ SIGNAL RATED ☐ PLUG-IN BREAKERS

☐ SINGLE LUG ☒ COPPER BUS ☐ FLUSH MTD. ☒ SOLID NEUTRAL

☐ DOUBLE LUGS ☐ ALUMINUM BUS ☒ SURFACE MTD. ☒ GROUND BAR

DESCRIPTION	CIR.	POLE/AMPS	LOAD (KW)	Ø	LOAD (KW)	POLE/AMPS	CIR.	DESCRIPTION
E–1	1, 3, 5	2P–175A	38.4	BLACK	38.4	2P–175A	2, 4, 6	E–2
				RED				
E–3	7, 9, 11	2P–175A	38.4	BLACK	38.4	2P–175A	8, 10, 12	E–4
				RED				
E–5	13, 15, 17	2P–175A	38.4	BLACK	76.8		14, 16, 18	
				RED				
TOTAL LOAD:			115.2	+	76.8	= 192.0		

LOAD BALANCE CHECK: BLACK = 76.8 KW
RED = 115.2 KW

PANELBOARD–"A" SCHEDULE

PANEL # NEW DISTRIBUTION PANEL –"F"

LOCATION: TRANSFORMER "F" NEMA 3R RAINPROOF

PANEL RATING 120/240V 1200AMP @ 240V, 42KA SCA

MAIN C/B FRAME: 1200A MAIN C/B TRIP: 1000A SUB-FEED C/B FRAME: N/A SUB-FEED C/B TRIP: N/A

☐ MLO ☒ FULLY RATED ☒ BOLT-ON BKRS ☒ BOTTOM FEED

☒ MCB ☐ TOP FED ☐ SIGNAL RATED ☐ PLUG-IN BREAKERS

☐ SINGLE LUG ☒ COPPER BUS ☐ FLUSH MTD. ☒ SOLID NEUTRAL

☐ DOUBLE LUGS ☐ ALUMINUM BUS ☒ SURFACE MTD. ☒ GROUND BAR

DESCRIPTION	CIR.	POLE/AMPS	LOAD (KW)	Ø	LOAD (KW)	POLE/AMPS	CIR.	DESCRIPTION
A–1	1, 3, 5	2P–175A	38.4	BLACK	38.4	2P–175A	2, 4, 6	A–2
				RED				
A–3	7, 9, 11	2P–175A	38.4	BLACK	38.4	2P–175A	8, 10, 12	A–4
				RED				
A–5		2P–200A	48.0	BLACK	48.0	2P–200A	14, 16, 18	A–6
				RED				
TOTAL LOAD:			124.8	+	124.8	= 249.6		

LOAD BALANCE CHECK: BLACK = 124.8 KW
RED = 124.8 KW

GENERAL NOTES

1. CONTRACTOR SHALL INSTALL TYPE 2 50AMP 240VOLT PEDESTAL (COPPER INTERIOR) WITH GFCI CIRCUIT BREAKER.

2. 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:

1. (3)– 1/C, TYPE USE WIRE, (#&N): UL LISTED, ANNEALED CU, WITH VULCANIZED INTERLOCKED POLYETHYLENE INSULATION (600V): DIRECT BURIAL.
(1)– 1/C, GROUND WIRE: BARE OR INSULATED (GREEN) CU, SOFT DRAWN, STANDARD PER ASTM CLASS "B" OR "C", DIRECT BURIAL.

CONDUCTOR SCHEDULE

CIR.	NO. & TYPE OF CONDUCTOR	RISER	CONDUIT	FROM	TO	SERVICE	VOLTS / COND. AMP RATING
A–1	3/0 CU./PH. & N #6 CU. GROUNDING	2" MIN. DIA.	DIRECT BURIAL	DISTRIBUTION PANEL–"C"	SITES 254,253,252&236	REC. VEHICLE SITE POWER	120/240V 200AMP
A–2	3/0 CU./PH. & N #6 CU. GROUNDING	2" MIN. DIA.	↓	↓	SITES 241,240,239&238	↓	120/240V 200AMP
A–3	3/0 CU./PH. & N #6 CU. GROUNDING	2" MIN. DIA.	↓	↓	SITES 242,243,244&237	↓	120/240V 200AMP
A–4	2/0 CU./PH. & N #6 CU. GROUNDING	2" MIN. DIA.	↓	↓	SITES 255,256,250&251	↓	120/240V 175AMP
A–5	3/0 CU./PH. & N #6 CU. GROUNDING	2" MIN. DIA.	↓	↓	SITES 249,248,247,246,&245	↓	120/240V 200AMP
A–6	3/0 CU./PH. & N #6 CU. GROUNDING	2" MIN. DIA.	↓	↓	SITES 231,232,233,234&235	↓	120/240V 200AMP
B–1	2/0 CU./PH. & N #6 CU. GROUNDING	2"MIN. DIA.	DIRECT BURIAL	DISTRIBUTION PANEL–"B"	SITES 225,224,&223	REC. VEHICLE SITE POWER	120/240V 175AMP
B–2	2/0 CU./PH. & N #6 CU. GROUNDING	2"MIN. DIA.	↓	↓	SITES 257,258,259&260	↓	120/240V 175AMP
B–3	2/0 CU./PH. & N #6 CU. GROUNDING	2"MIN. DIA.	↓	↓	SITES 222,221,220&219	↓	120/240V 175AMP
B–4	3/0 CU./PH. & N #6 CU. GROUNDING	2"MIN. DIA.	↓	↓	SITES 226,227,228,229&230	↓	120/240V 200AMP
B–5	3/0 CU./PH. & N #6 CU. GROUNDING	2"MIN. DIA.	↓	↓	SITES 225,224&223	↓	120/240V 200AMP
C–1	250 KCMIL #6 CU. GROUNDING	2" MIN. DIA.	DIRECT BURIAL	DISTRIBUTION PANEL–"D"	SITES 202,204,206,208&210	REC. VEHICLE SITE POWER	120/240V 250AMP
C–2	4/0 CU./PH. & N #6 CU. GROUNDING	2" MIN. DIA.	↓	↓	SITES 201,203,205&207	↓	120/240V 230AMP
C–3	2/0 CU./PH. & N #6 CU. GROUNDING	2" MIN. DIA.	↓	↓	SITES 213,212,211&209	↓	120/240V 175AMP
C–4	3/0 CU./PH. & N #6 CU. GROUNDING	2" MIN. DIA.	↓	↓	SITES 270,269,268,267&266	↓	120/240V 200AMP
C–5	3/0 CU./PH. & N #6 CU. GROUNDING	2" MIN. DIA.	↓	↓	COMFORT STATION PANEL	↓	120/240V 200AMP
C–6	3/0 CU./PH. & N #6 CU. GROUNDING	2" MIN. DIA.	↓	↓	SITES 265,264,263,262&261	↓	120/240V 200AMP
D–1	2/0 CU./PH. & N #6 CU. GROUNDING	2" MIN. DIA.	DIRECT BURIAL	DISTRIBUTION PANEL–"D"	SITES 198,196,194&192	REC. VEHICLE SITE POWER	120/240V 175AMP
D–2	2/0 CU./PH. & N #6 CU. GROUNDING	2" MIN. DIA.	↓	↓	SITES 184,186,188&190	↓	120/240V 175AMP
D–3	3/0 CU./PH. & N #6 CU. GROUNDING	2" MIN. DIA.	↓	↓	SITES 185,187,189,191&193	↓	120/240V 200AMP
D–4	4/0 CU./PH. & N #6 CU. GROUNDING	2" MIN. DIA.	↓	↓	SITES 200,199,197&195	↓	120/240V 230AMP
D–5	2/0 CU./PH. & N #6 CU. GROUNDING	2" MIN. DIA.	↓	↓	SITES 174,173,171,&172	↓	120/240V 175AMP
D–6	2/0 CU./PH. & N #6 CU. GROUNDING	2" MIN. DIA.	↓	↓	SITES 156,157,158&159	↓	120/240V 175AMP
E–1	2/0 CU./PH. & N #6 CU. GROUNDING	2" MIN. DIA.	DIRECT BURIAL	DISTRIBUTION PANEL–"E"	SITES 175,176,177&178	REC. VEHICLE SITE POWER	120/240V 175AMP
E–2	2/0 CU./PH. & N #6 CU. GROUNDING	2" MIN. DIA.	↓	↓	SITES 182,181,180&179	↓	120/240V 175AMP
E–3	2/0 CU./PH. & N #6 CU. GROUNDING	2" MIN. DIA.	↓	↓	SITES 168,169,170&183	↓	120/240V 175AMP
E–4	2/0 CU./PH. & N #6 CU. GROUNDING	2" MIN. DIA.	↓	↓	SITES 163,162,161,&160	↓	120/240V 175AMP
E–5	2/0 CU./PH. & N #6 CU. GROUNDING	2" MIN. DIA.	↓	↓	SITES 164,165,166,&167	↓	120/240V 175AMP
NEW	(2) 1250 KCMIL CU. / PH. & N	(2) 4"MIN. DIA.	(2) 4" PVC	TRANSFORMER "A" 167 KVA	PANEL – "A" 1200 AMP		
NEW	(2) 600 KCMIL CU. / PH. & N	(2) 4"MIN. DIA.	(2) 4" PVC	TRANSFORMER "B" 75 KVA	PANEL – "B" 800 AMP		
NEW	(2) 1250 KCMIL CU. / PH. & N	(2) 4"MIN. DIA.	(2) 4" PVC	TRANSFORMER "C" 167 KVA	PANEL – "C" 1200 AMP		
NEW	(2) 1250 KCMIL CU. / PH. & N	(2) 4"MIN. DIA.	(2) 4" PVC	TRANSFORMER "D" 167 KVA	PANEL – "D" 1200 AMP		
NEW	(2) 600 KCMIL CU. / PH. & N	(2) 4"MIN. DIA.	(2) 4" PVC	TRANSFORMER "E" 100 KVA	PANEL – "E" 800 AMP		

RONALD G. PETERSON — REGISTERED — No. PE80012045 — STATE OF INDIANA — PROFESSIONAL ENGINEER

CAMPGROUND ELECTRICAL RENOVATION
TURKEY RUN STATE PARK
DEPT. OF NATURAL RESOURCES
9411 E PARK ROAD
MARSHALL, INDIANA 47859

STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENGINEERING
402 W. WASHINGTON STREET, ROOM W256
INDIANAPOLIS, INDIANA 46204
PH: 317-232-4105, FAX: 317-233-4579

Revisions

Project Number: E000080
Drawing Status: Regulations
Drawn By: REP
Date: 8/27/14
Checked By: JSP
Scale: NO SCALE
Field Approval
Client Approval
File Number: 2-194
Drawing Number: E-5
Sheet 6 of 6