

IOWA DEPARTMENT OF NATURAL RESOURCES

CONSTRUCTION DOCUMENTS

FOR

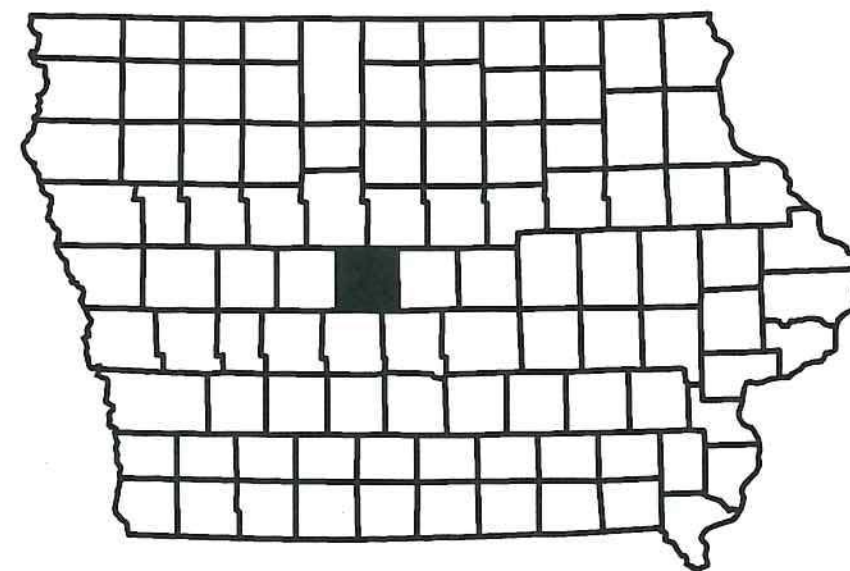
LEDGES STATE PARK

CAMPGROUND RENOVATION AND

ENTRANCE PORTAL

BOONE COUNTY, IOWA

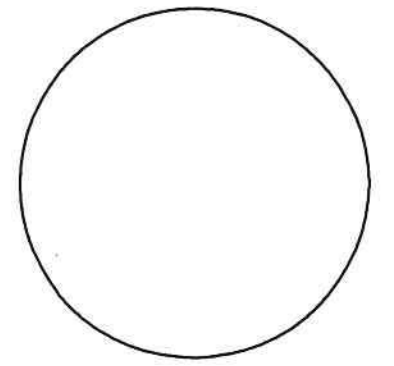
PROJECT # 17-02-08-02



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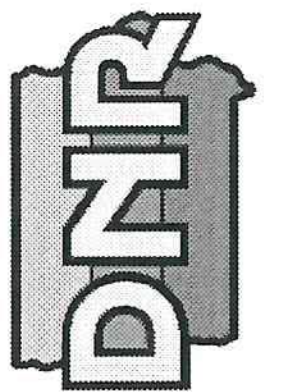
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CONSULTANT:



IOWA DEPARTMENT OF NATURAL RESOURCES

ENGINEERING SERVICES - WALLACE BUILDING
502 E. 9TH ST., DES MOINES, IA 50319-0034



COVER SHEET

CAMPGROUND RENOVATION AND ENTRANCE PORTAL FOR:

LEDGES STATE PARK

BOONE COUNTY

NO. DATE REVISION

DRAWN BY: PROJECT NUMBER:
CHKD BY: DATE: 17-02-08-02

SHEET NO:

A.01

DIRECTORY

PROJECT MANAGER		CONSTRUCTION INSPECTOR	
COMPANY	IOWA DEPARTMENT OF NATURAL RESOURCES	COMPANY	IOWA DEPARTMENT OF NATURAL RESOURCES
ADDRESS	502 EAST 9TH STREET	ADDRESS	
CITY, STATE, ZIP	DES MOINES, IA, 50319	CITY, STATE, ZIP	
CONTACT	TROY DUFF	CONTACT	DON LABATE
TELEPHONE	515-250-3715	TELEPHONE	515-250-3714
FAX	515-725-8458	FAX	
EMAIL	troy.duff@dnr.iowa.gov	EMAIL	don.labate@dnr.iowa.gov

PROJECT DESCRIPTION

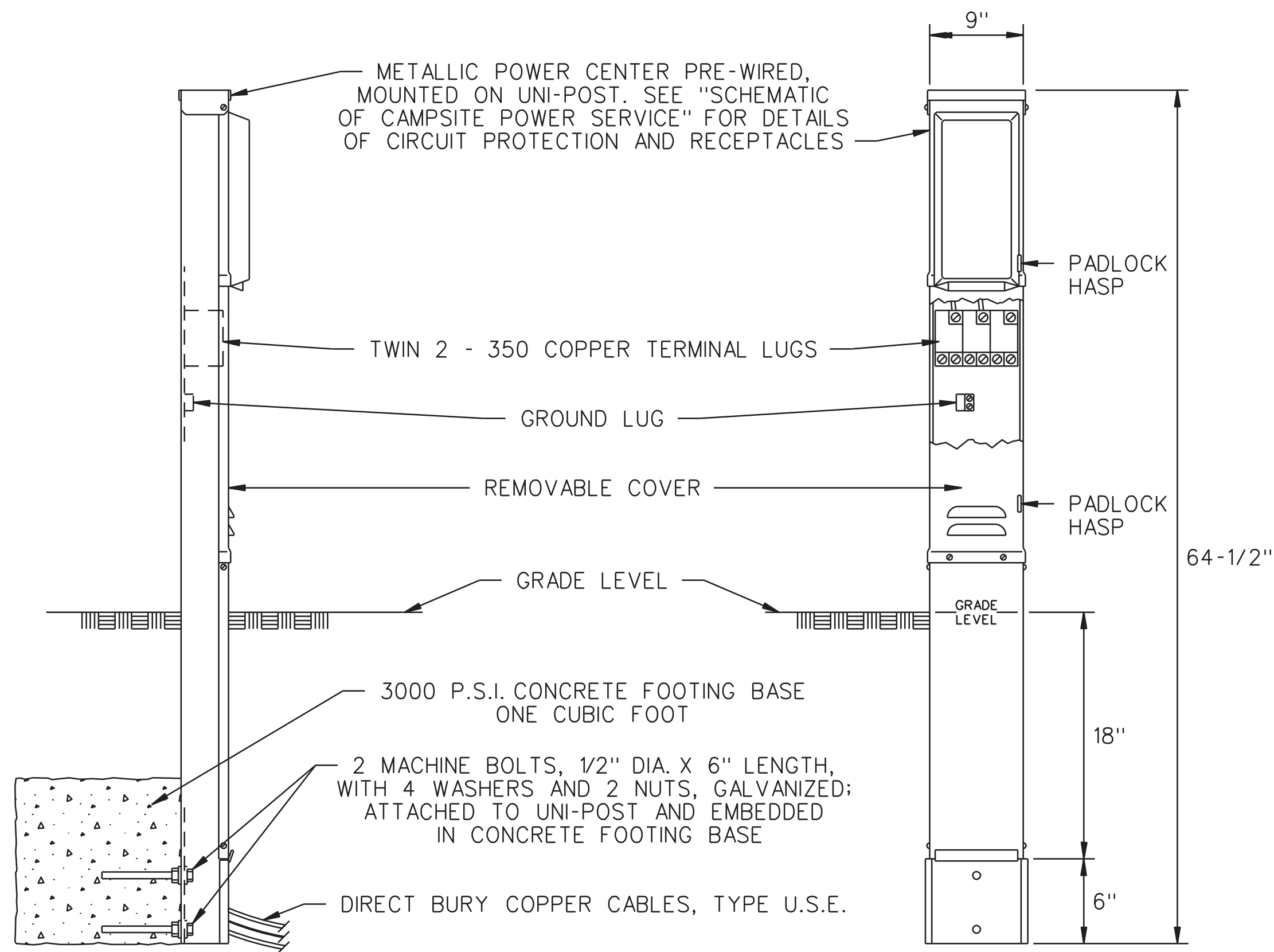
THIS PROJECT CONSISTS OF RENOVATING THE CAMPGROUND. IT INCLUDES WIDENING 1000 FEET OF ROADWAY, ADDING APPROXIMATELY 1000 FEET OF 12' WIDE ROADWAY, REPLACING 4 DISTRIBUTION PANELS, INSTALLING 50 AMP SERVICE PANELS FOR 70 CAMPSITES, CONSTRUCTION OF AN ENTRANCE PORTAL, AND OTHER INCIDENTAL WORK AS REQUIRED BY THE DNR CONSTRUCTION INSPECTOR.

AUTHORIZATION TO BID

AUTHORIZATION - PARKS | WILDLIFE | FISHERIES | LAW ENFORCEMENT | FORESTRY | DATE

ENGINEERING BUREAU CHIEF

DATE

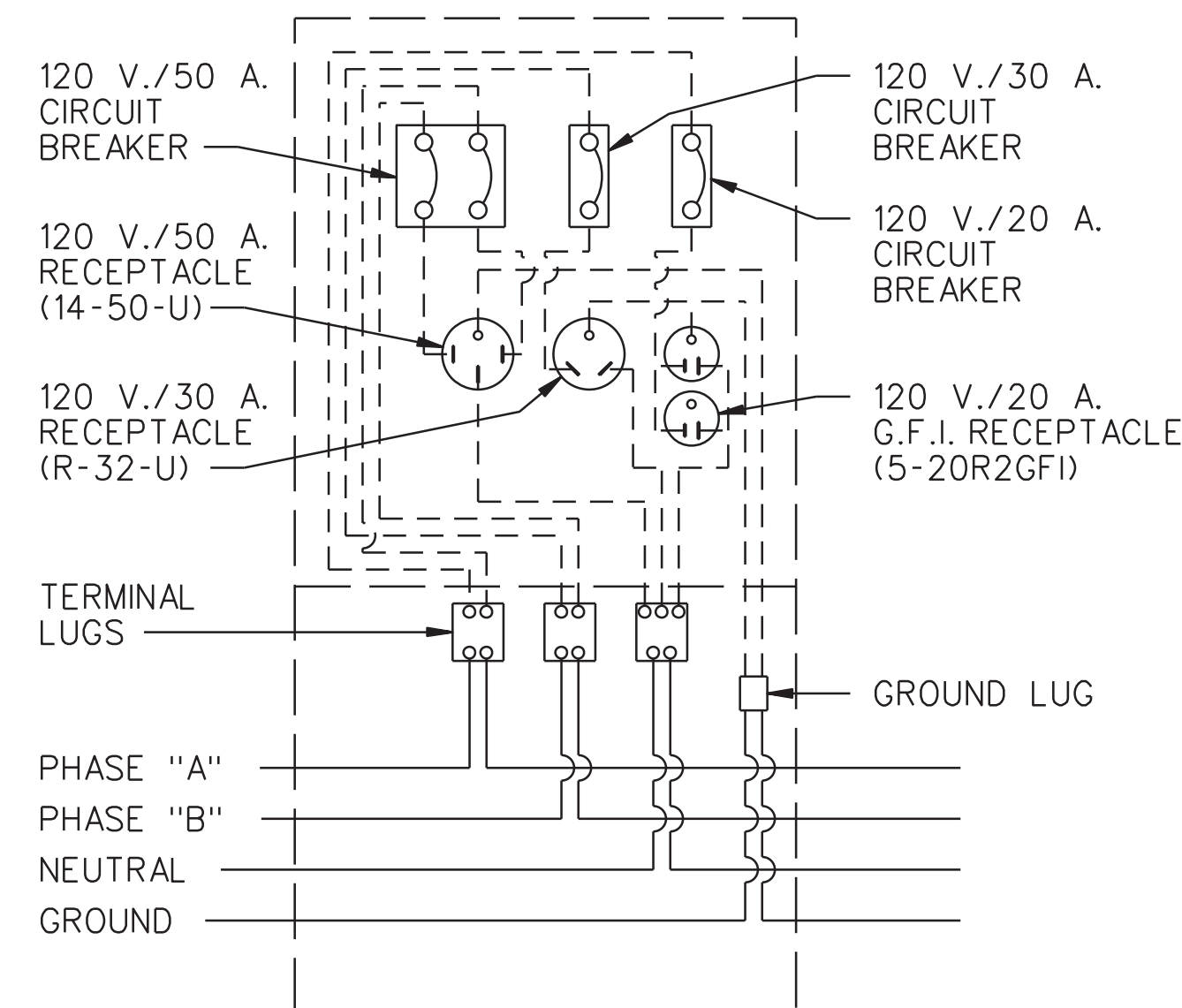


SIDE VIEW

FRONT VIEW

NOTES:

1. A "SINGLE CAMPSITE OUTLET POST-50 AMP" SHALL HAVE THE FOLLOWING CONFIGURATION: AN UNMETERED, POST MOUNTED CABINET WITH A 5-20R2GF1 20 AMP DUPLEX RECEPTACLE, A R32U 30 AMP RECEPTACLE, A 14-50R 50 AMP RECEPTACLE, A SINGLE POLE 20 AMP CIRCUIT BREAKER, A SINGLE POLE 30 AMP CIRCUIT BREAKER, AND A DOUBLE POLE 50 AMP CIRCUIT BREAKER; MIDWEST MODEL UO75CP6010, MILLBANK U5200-XL-75, OR APPROVED EQUAL, SHALL BE USED FOR SINGLE CAMPSITE OUTLET POST WITH METALLIC POWER CENTER.
2. SEE TRENCH DETAILS, STANDARD DRAWING NO. TS-1, FOR DETAILS OF INSTALLATION OF DIRECT BURY COPPER CABLES TO CAMPSITE OUTLET POST.
3. THE CONDUCTOR SIZES AND THE PLAN ARRANGEMENT OF THE LOADS ON EACH CIRCUIT SHALL BE SELECTED TO LIMIT THE MAXIMUM CIRCUIT VOLTAGE DROP, FROM THE TRANSFORMER TO THE FURTHEST CAMPSITE OUTLET ON THE CIRCUIT, TO 3% (3.6 VOLTS ON EACH 120 V. PHASE). ADJUST CONDUCTOR SIZE BASED ON ACTUAL ROUTING WITH NO ADDITIONAL COMPENSATION.
4. PROVIDE ONE EXTRA COMPLETE OUTLET POSTS AND TURN OVER TO OWNER.

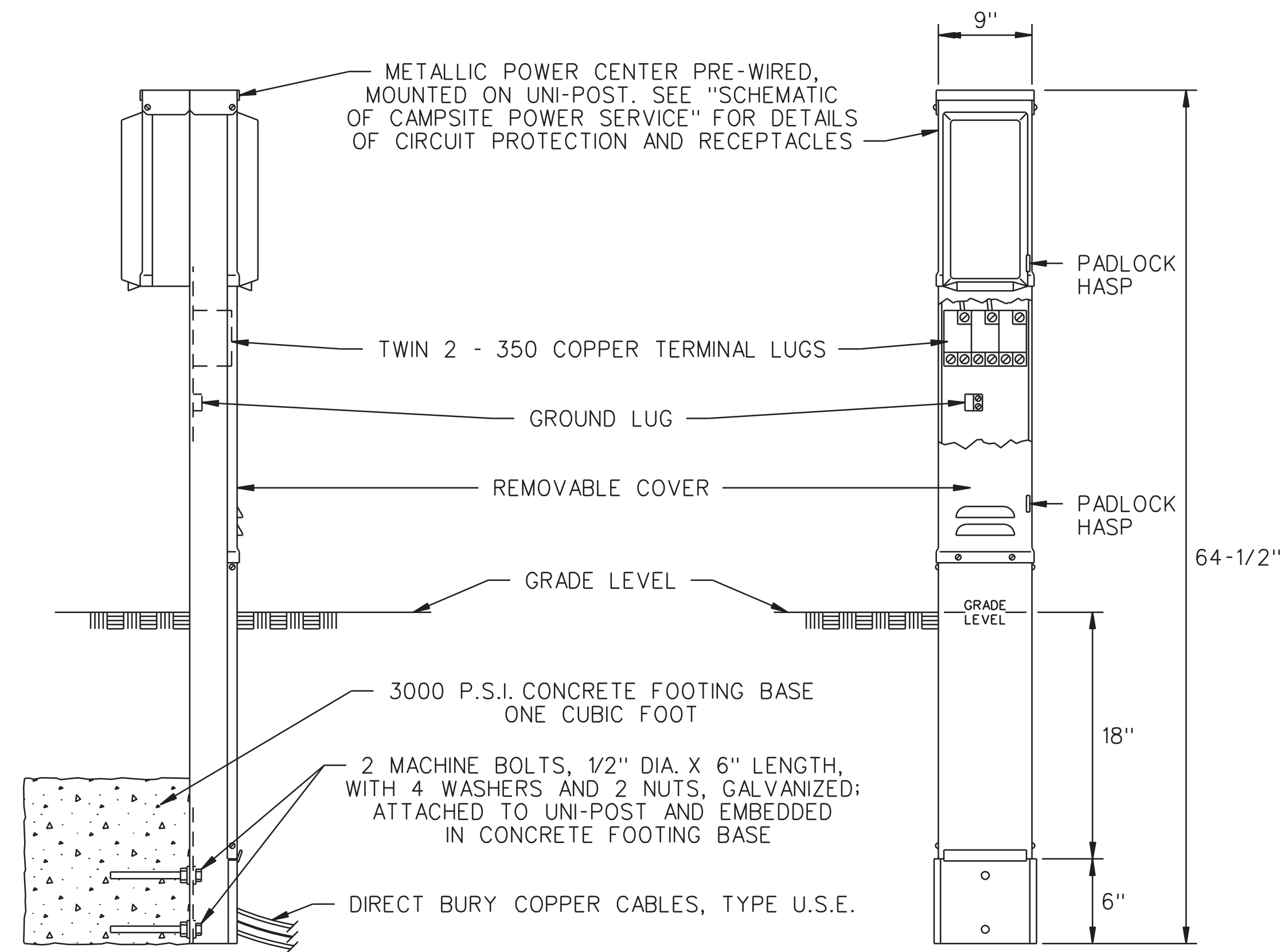


SCHMATIC OF CAMPSITE 50 AMP POWER SERVICE

CAMPGROUND ELECTRICAL SYSTEM
STANDARD DRAWING NO. SC-1

DETAILS OF
CAMPSITE OUTLET POST

REVISION DATE 5/25/17 SHEET 10 OF 10

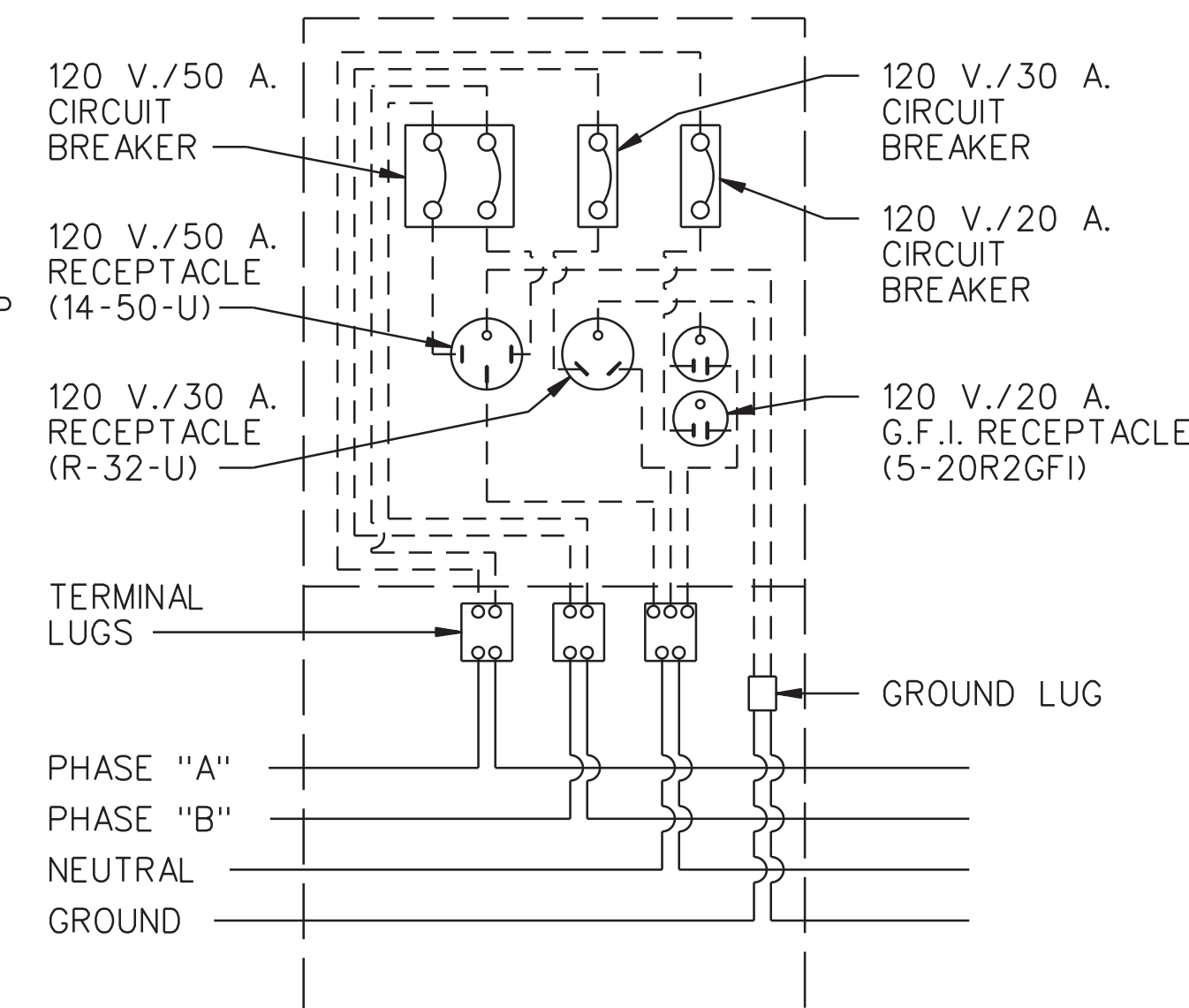


SIDE VIEW

FRONT VIEW

NOTES:

1. A "DOUBLE CAMPSITE OUTLET POST-50 AMP" SHALL HAVE THE FOLLOWING CONFIGURATION: AN UNMETERED, POST MOUNTED CABINET WITH EACH SIDE HAVING A 5-20R2GF1 20 AMP DUPLEX RECEPTACLE, A R32U 30 AMP RECEPTACLE, 14-50R 50 AMP RECEPTACLE, SINGLE POLE 20 AMP CIRCUIT BREAKER, A SINGLE POLE 30 AMP CIRCUIT BREAKER, AND A DOUBLE POLE 50 AMP CIRCUIT BREAKER; MIDWEST MODEL UO75GB6, MILLBANK U5220-XL-75, OR APPROVED EQUAL, SHALL BE USED FOR SINGLE CAMPSITE OUTLET POST WITH METALLIC POWER CENTER.
2. SEE TRENCH DETAILS, STANDARD DRAWING NO. TS-1, FOR DETAILS OF INSTALLATION OF DIRECT BURY COPPER CABLES TO CAMPSITE OUTLET POST.
3. THE CONDUCTOR SIZES AND THE PLAN ARRANGEMENT OF THE LOADS ON EACH CIRCUIT SHALL BE SELECTED TO LIMIT THE MAXIMUM CIRCUIT VOLTAGE DROP, FROM THE TRANSFORMER TO THE FURTHEST CAMPSITE OUTLET ON THE CIRCUIT, TO 3% (3.6 VOLTS ON EACH 120 V. PHASE). ADJUST CONDUCTOR SIZE BASED ON ACTUAL ROUTING WITH NO ADDITIONAL COMPENSATION.
4. PROVIDE ONE EXTRA COMPLETE OUTLET POSTS AND TURN OVER TO OWNER.



SCHMATIC OF CAMPSITE 50 AMP POWER SERVICE

CAMPGROUND ELECTRICAL SYSTEM
STANDARD DRAWING NO. DC-1

DETAILS OF DOUBLE
CAMPSITE OUTLET POST

REVISION DATE 5/25/17 SHEET 10 OF 10

CONSULTANT:

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ELECTRIC DETAILS

CAMPGROUND RENOVATION AND ENTRANCE PORTAL FOR:

LEDGES STATE PARK

BOONE COUNTY

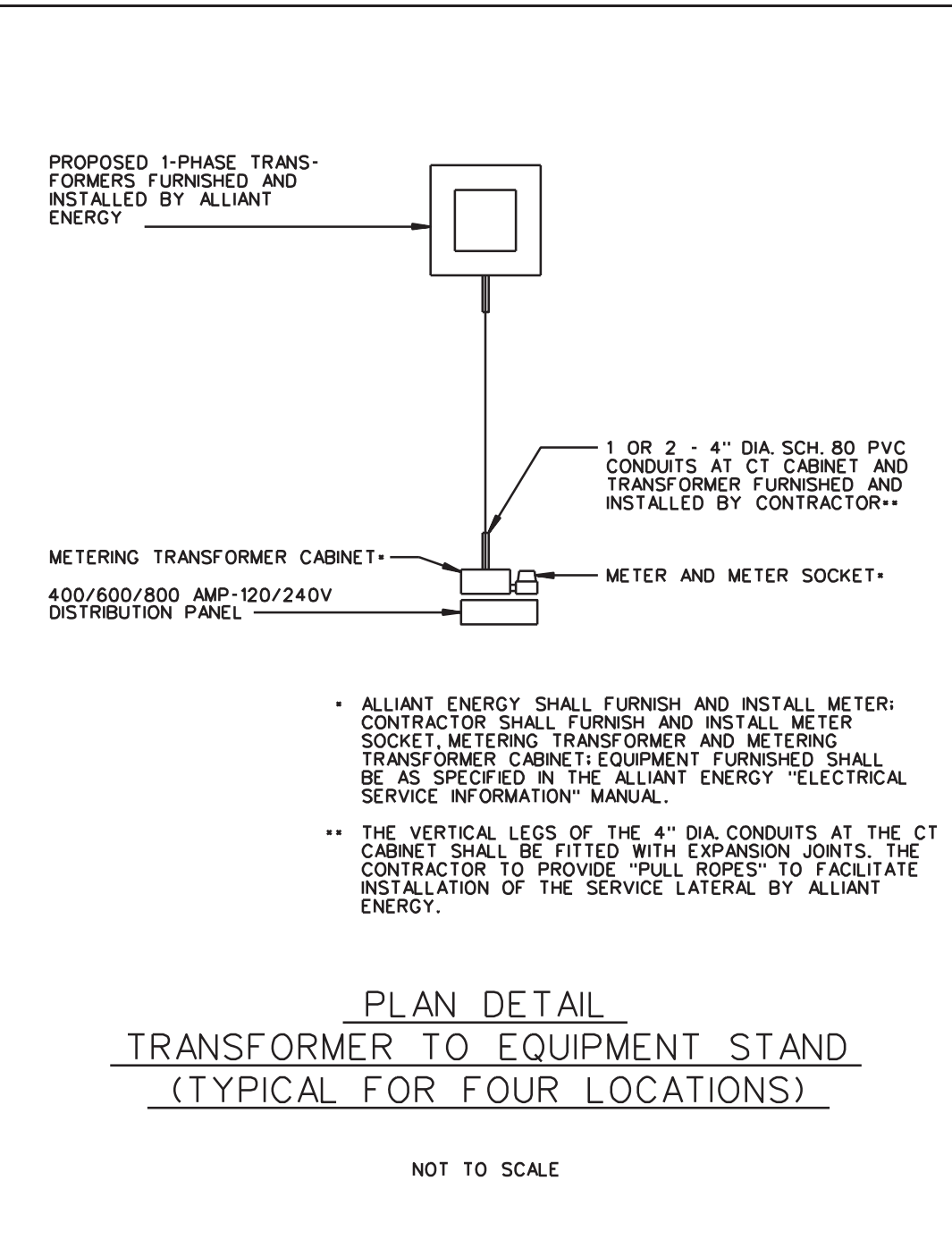
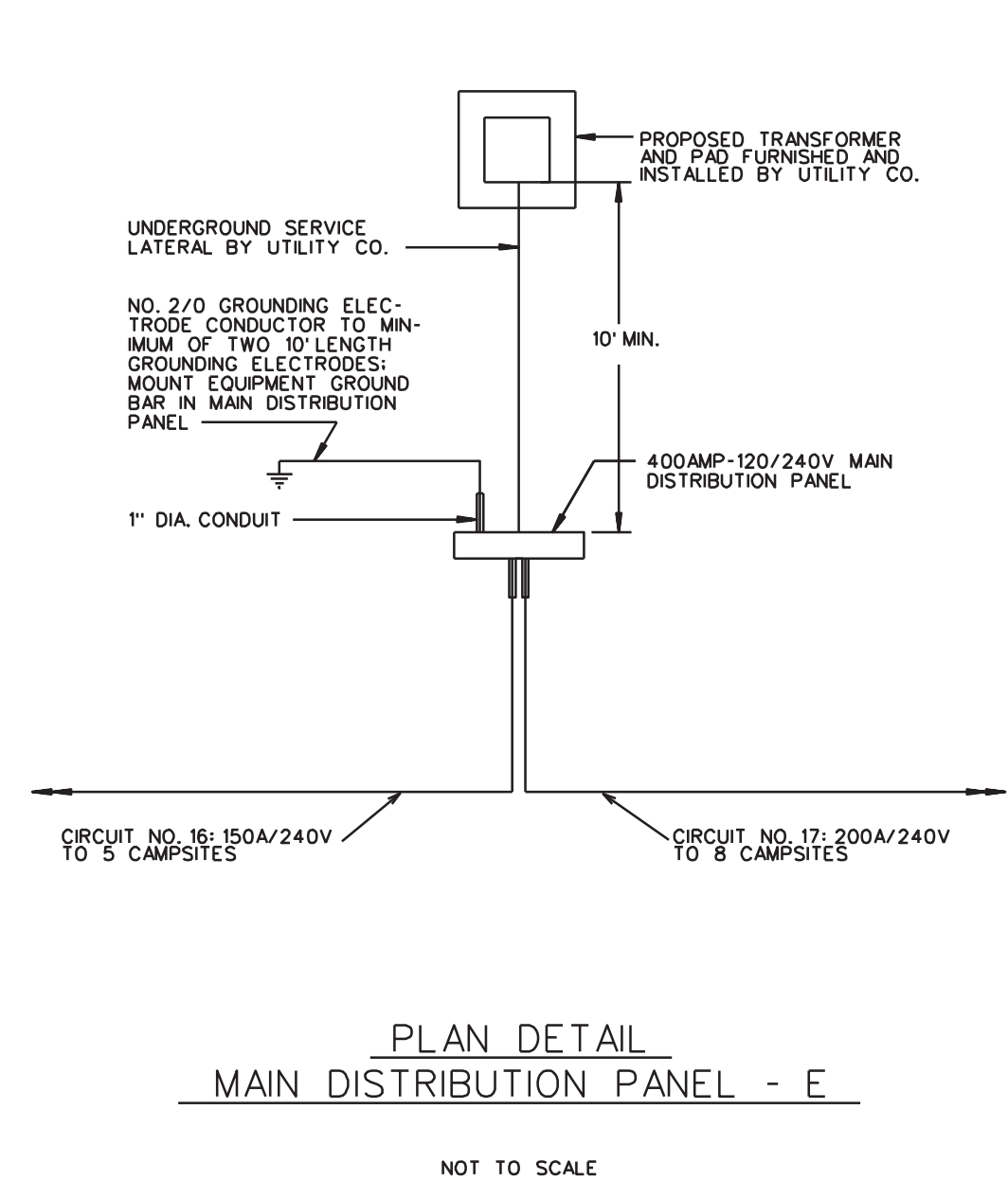
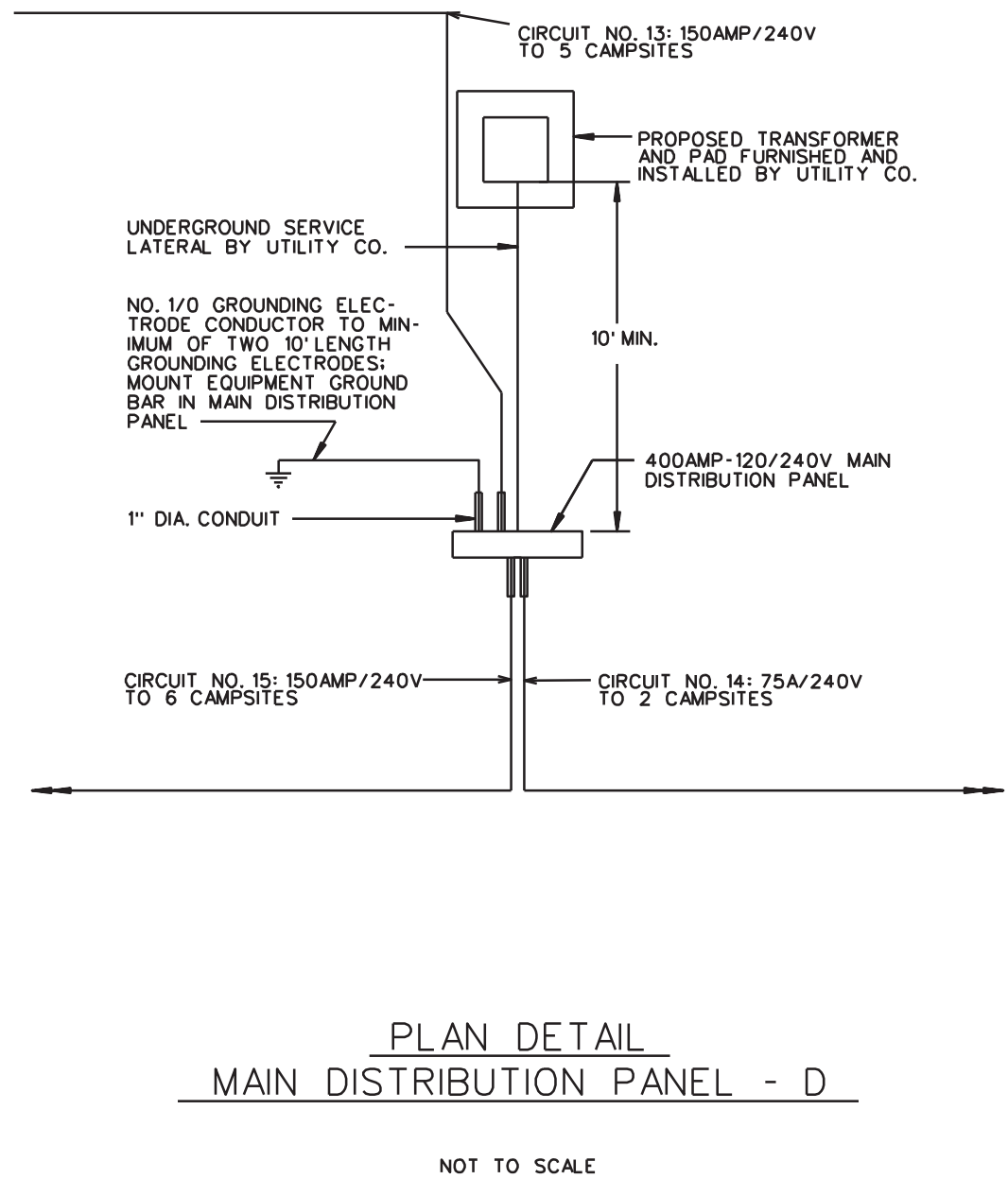
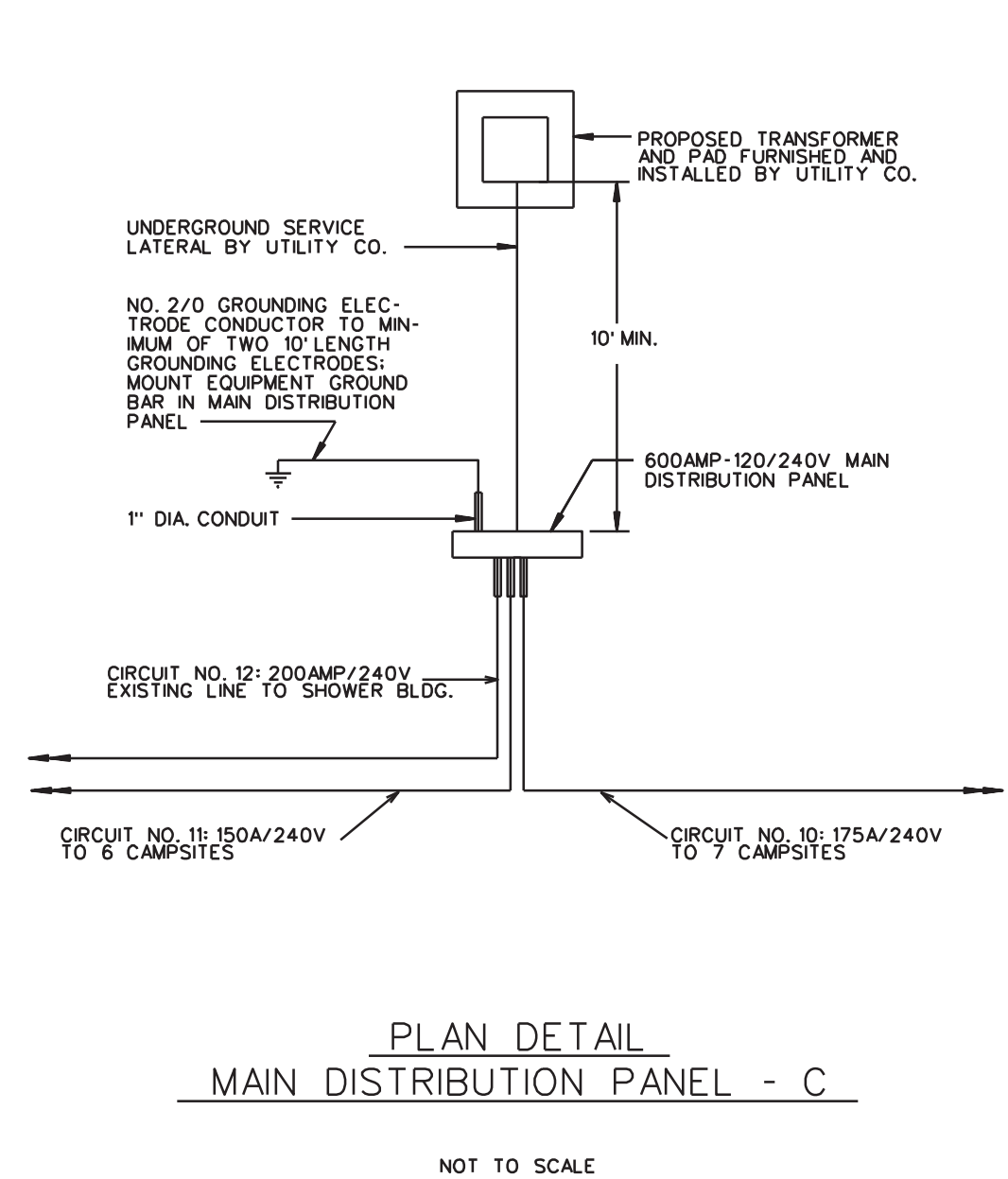
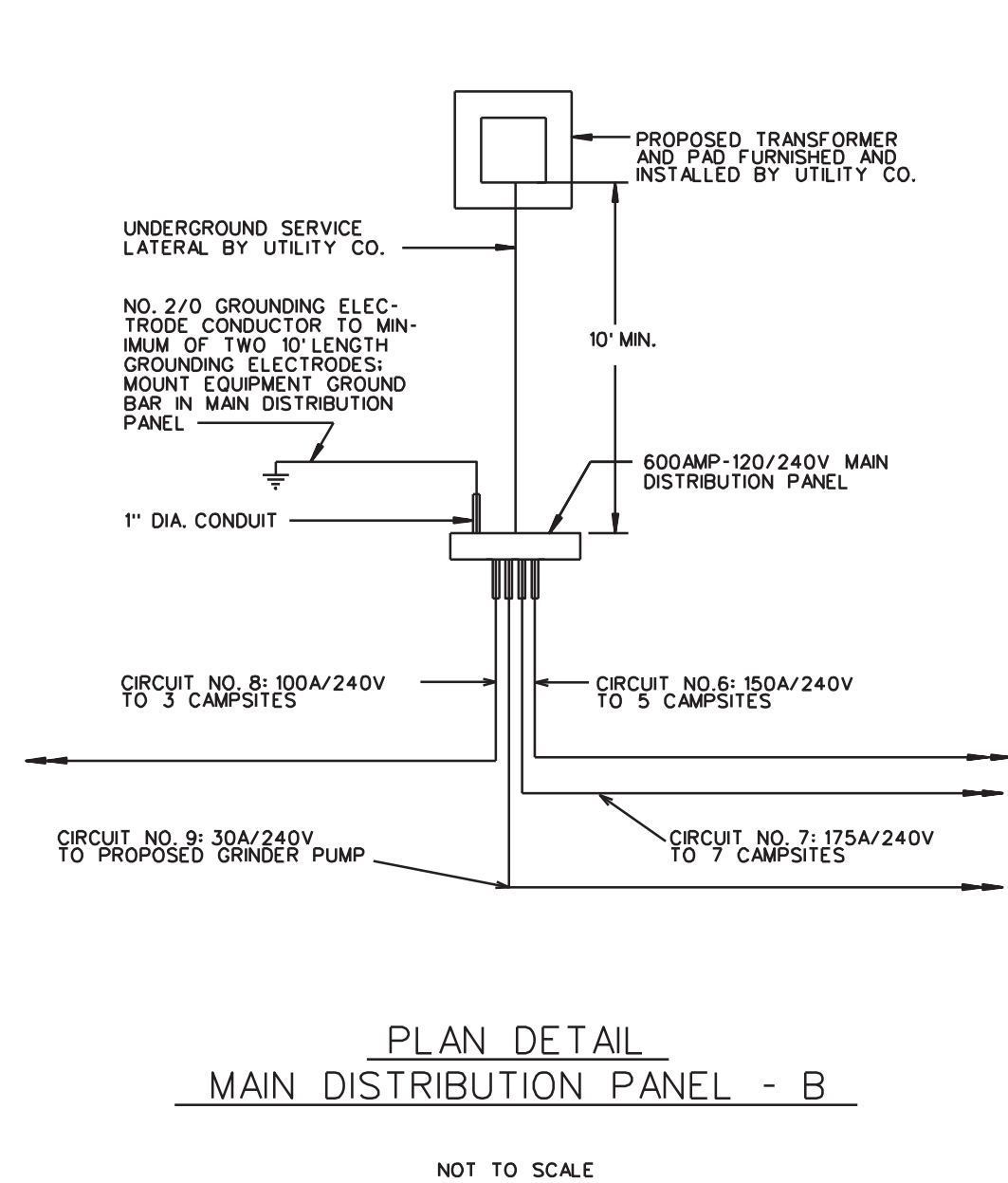
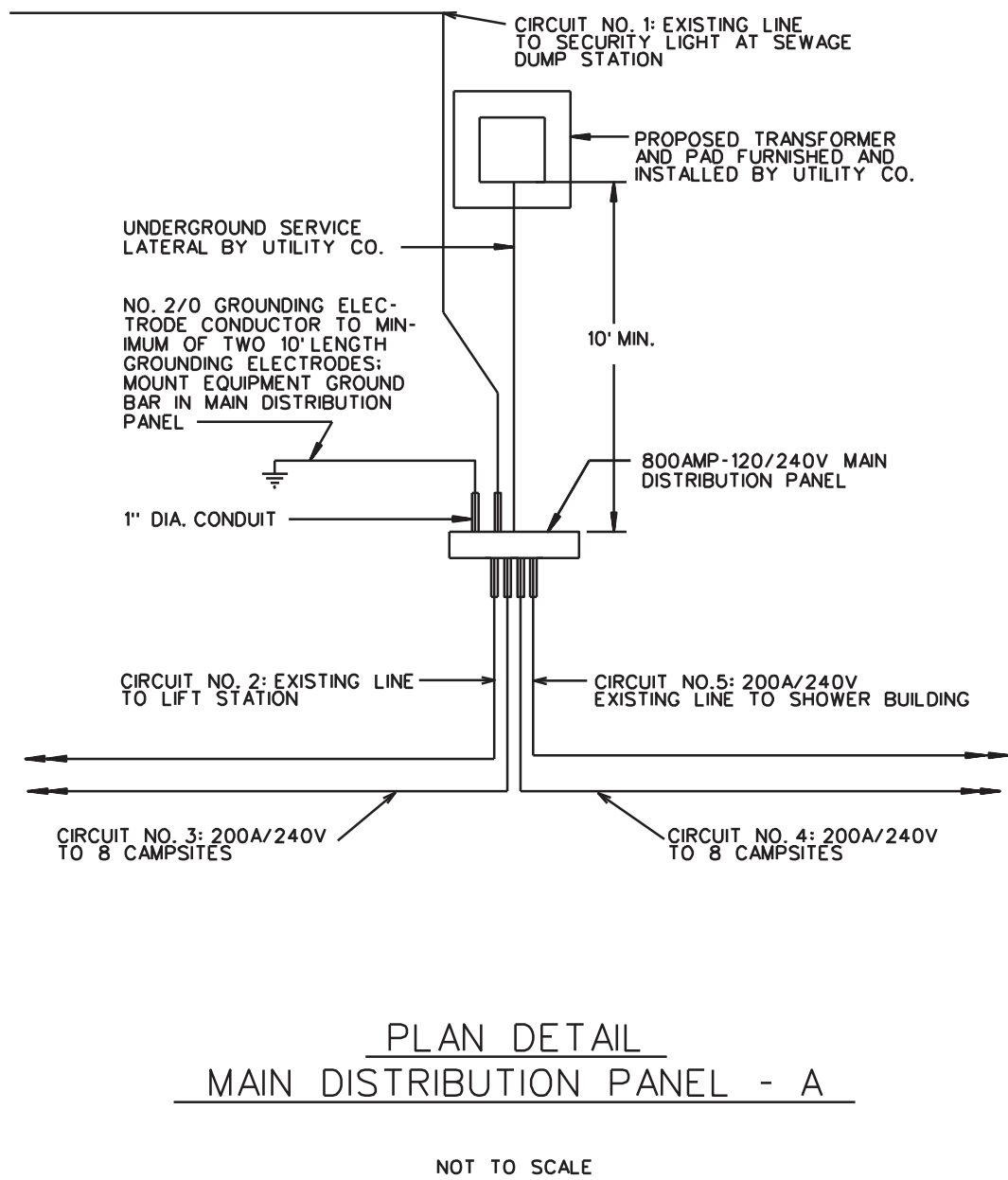
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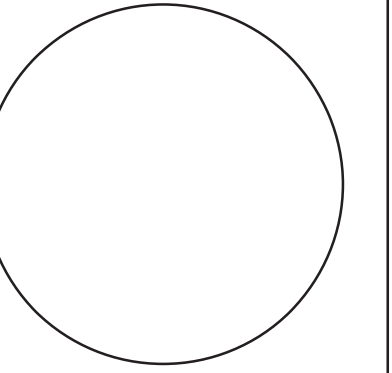
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CONSULTANT:



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ELECTRIC DETAILS

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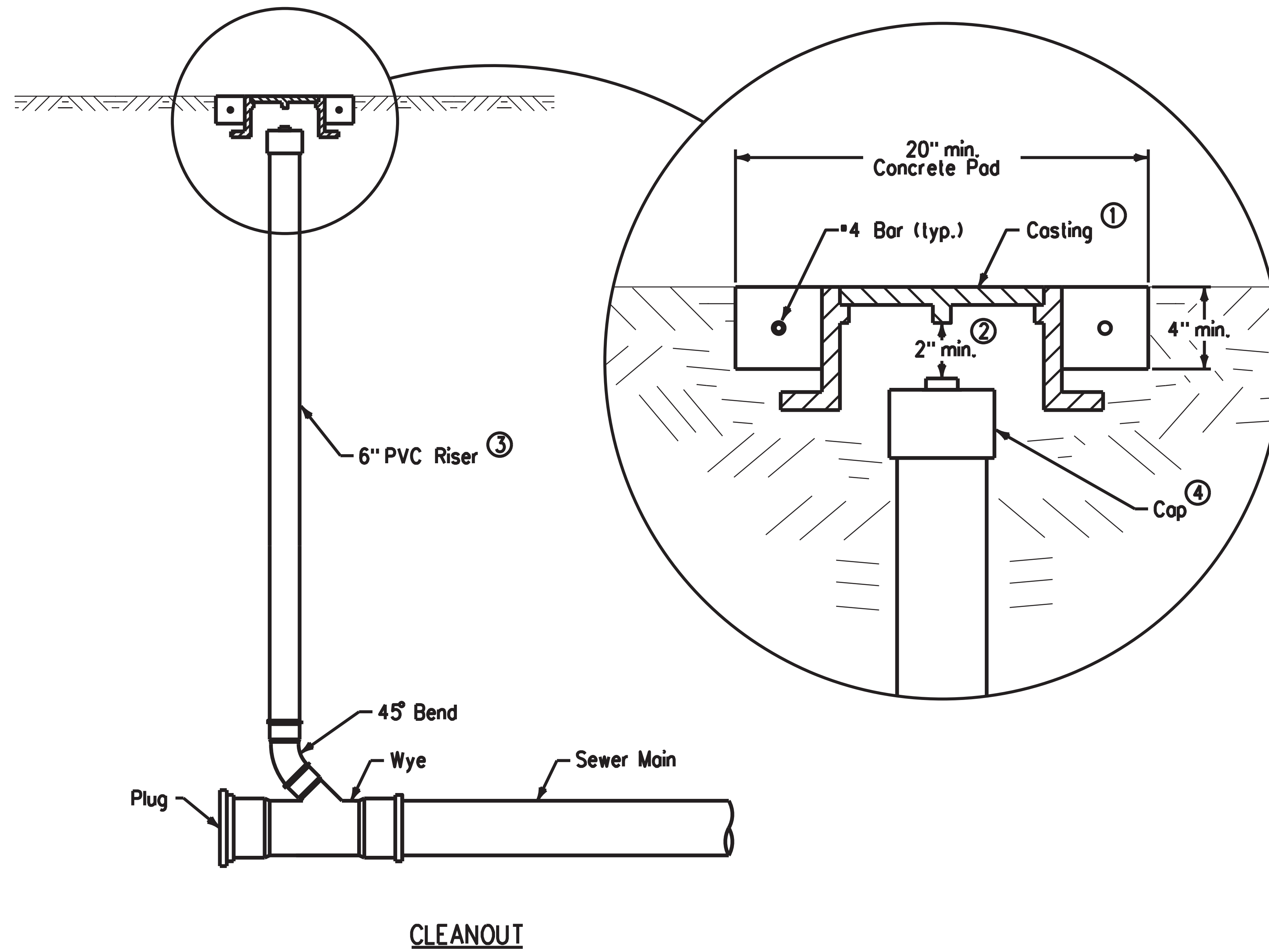
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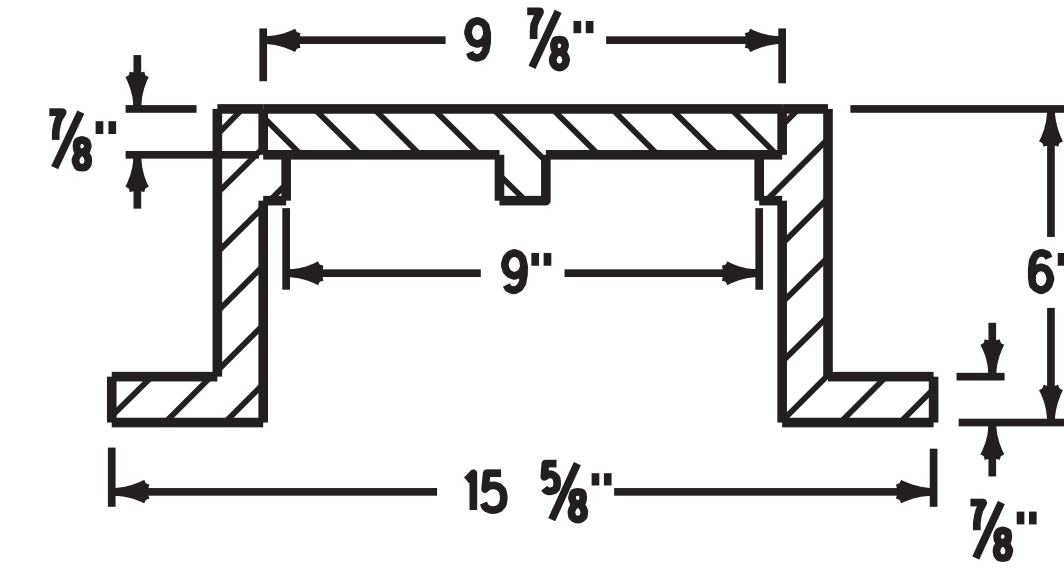
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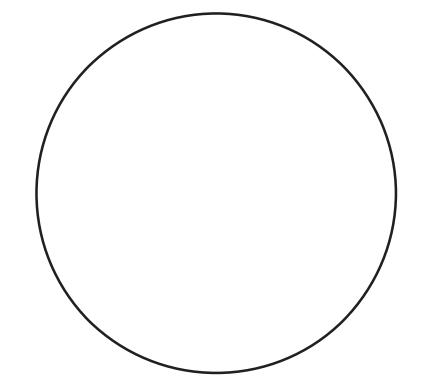


- ① Standard duty casting complying with AASHTO M 306. Mark lid with "Sanitary" or "Sanitary C.O."
- ② Do not allow casting to bear on top of riser pipe.
- ③ 6-inch PVC Service Pipe
- ④ Threaded PVC cap or iron body ferrule with brass screw plug



CASTING ①
(Dimensions are nominal)

CONSULTANT:



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SEWER CLEANOUT DETAILS

CAMPGROUND RENOVATION AND ENTRANCE PORTAL FOR:

LEDGES STATE PARK

BOONE COUNTY

NO.	BY	REVISION

DRAWN BY: PROJECT NUMBER:
17-02-08-02

CHK'D BY: DATE:

SHEET No:

B.05

