

ELECTRICAL SERVICE CHECKLIST

- 1) If your service has been disconnected you may need to obtain a permit from Johnson County before any of the providers will reconnect.**
- 2) You will need an electrician, licensed with Johnson County to perform the work.**
- 3) Contact 811 “Call before you dig” prior to any excavation.**
- 4) Follow the recommended installation procedures included in the packet.**
- 5) Call Johnson County Planning and Zoning to schedule an inspection.**
- 6) Call your electrical service provider to schedule an appointment to reconnect once the meter has been “tagged” and a successful inspection has been completed.**



JOHNSON COUNTY DEPARTMENT OF PLANNING AND ZONING ELECTRICAL SERVICE PERMIT APPLICATION

LOCATION OF WORK:

ADDRESS: _____

TOWNSHIP: _____

(IF APP.) SUBDIVISION: _____

SECTION: _____ LOT #: _____

ELECTRICAL CONTRACTOR:

NAME: _____

ADDRESS: _____

TELEPHONE : _____

LICENSE #: _____

EMAIL: _____

PROPERTY OWNER:

NAME: _____

ADDRESS: _____

TELEPHONE: _____

EMAIL: _____

NATURE OF WORK: SPECIFY OVERHEAD OR UNDERGROUND☐ NEW SERVICE _____☐ UP GRADE _____☐ RECONNECT _____**SIZE OF SERVICE**☐ 200 AMP☐ 400 AMP☐ >400 AMP**UTILITY COMPANY (check one):**☐ DUKE☐ REMC☐ IPL☐ BARGERSVILLE☐ EDINBURGH UTILITIES☐ RUSHSHELBY☐ SOUTH CENTRAL REMC

APPROX. VALUE OF PROJECT: \$ _____

I CERTIFY THAT THE INFORMATION CONTAINED ON THIS FORM AND ATTACHED TO THIS FORM IS COMPLETE AND ACCURATE UNDER PENALTY OF PERJURY. I WILL PERFORM THE WORK, AFTER RECEIVING THE BUILDING PERMIT AT THE DEPARTMENT OF PLANNING AND ZONING, ACCORDING TO THE CURRENTLY ADOPTED CODES, ORDINANCES, CONDITIONS, AND GRANT JOHNSON COUNTY OFFICIALS THE RIGHT TO ENTER ONTO THE PROPERTY FOR THE PURPOSE OF INSPECTING THE WORK PERMITTED & POSTING NOTICES.

Your Name: _____

*Signature of Applicant**Name Printed/Typed**Date***DEPARTMENT USE ONLY (DO NOT WRITE BELOW THIS LINE)**

RECEIVED (Date/Time) _____

SECTION: _____

TOWNSHIP: _____

RANGE: _____

PLAT MAP #: _____

ZONING: _____

LAND USE VERIFIED:

☐ YES ☐ NO

FEMA FLOOD HAZARD:

☐ YES ☐ NO

F.I.R.M.# _____

LOCALIZED FLOOD:

☐ YES ☐ NO

MODEL HOME

☐ YES ☐ NO

APPROVED BY: _____

State Release #: _____

PERMIT #: _____

PERMIT FEE: _____

RECEIPT #: _____

CASH: _____ CHECK #: _____

DATE RELEASED: _____

CL # _____ Current? ☐ YES☐ NO**RELEASED FOR CONSTRUCTION:**

_____ SITE PLAN per _____

_____ BUILDING per _____

APPLICATION DENIED: _____

Permanent Underground Service



Permanent Underground Service		Meter Base Guidelines	
Service Type—120/240 volt, single phase 3-wire		Manufacturers	
Residential Overhead/Underground 200 amp service, 1 meter position		Milbank, Durham/Square D Landis & Gyr, T&B/Anchor	
Residential Underground 320 amp service, 1 meter position		Milbank, Durham/Square D, Landis & Gyr, T&B/Anchor	

The meter base should be located on the structure at the point closest to the supply of power to avoid additional charges.

Meter base 200 amp or larger – Install with the center 5 ft. 6 in. above final grade, porches, decks, etc.

Meter base cannot be located on the back of home.

Customer is responsible to protect shrubs, trees, grass and other landscaping during construction.

Do not allow pavement or concrete to come in direct contact with the conduit. This will prevent damage to the conduit due to freezing and thawing.

Duke Energy will backfill and mound trench route.

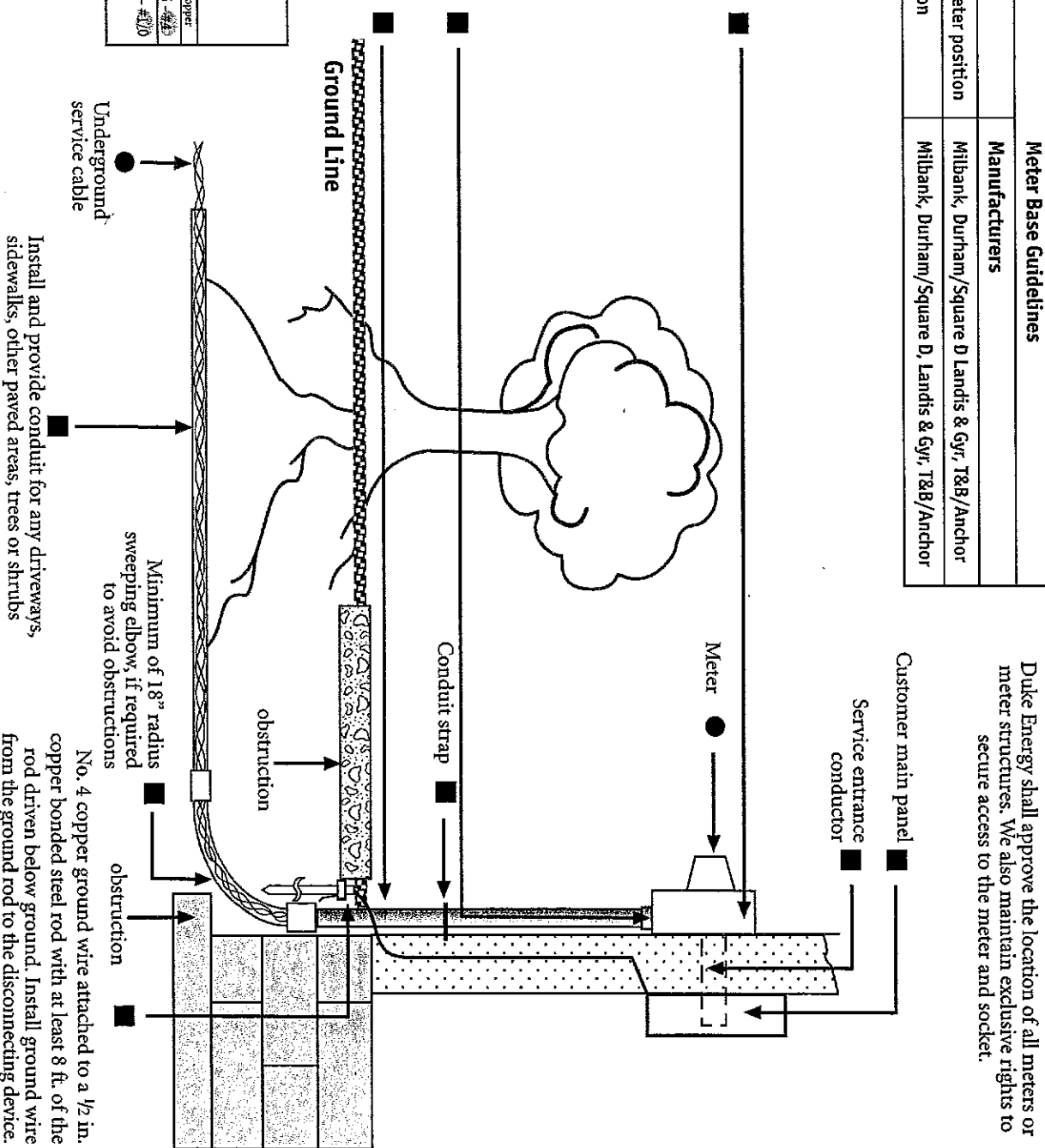
Fittings to connect conduit to meter base
Please notify Duke Energy of any driveways, sidewalks, other paved areas, trees or shrubs.
Schedule 80 plastic, rigid steel or intermediate metallic conduit with a minimum diameter of 2 in. and a maximum diameter of 3 in., extended a minimum of 18 in. below grade

Breaker Size	Customer Wire Sizes	
	(H) Minimum Line Conductor	(N) Neutral Conductor
200 AMP	#4/0	#2/0
400 AMP	600kcmil	400kcmil
	500kcmil	400kcmil

Indicates recommended size

- (H) Hot wires
- (N) Neutral Wires
- Items you supply and install
- Items Duke Energy supplies and installs

All equipment must be in good condition and installed to meet National Electrical Code requirements.



Duke Energy shall approve the location of all meters or meter structures. We also maintain exclusive rights to secure access to the meter and socket.

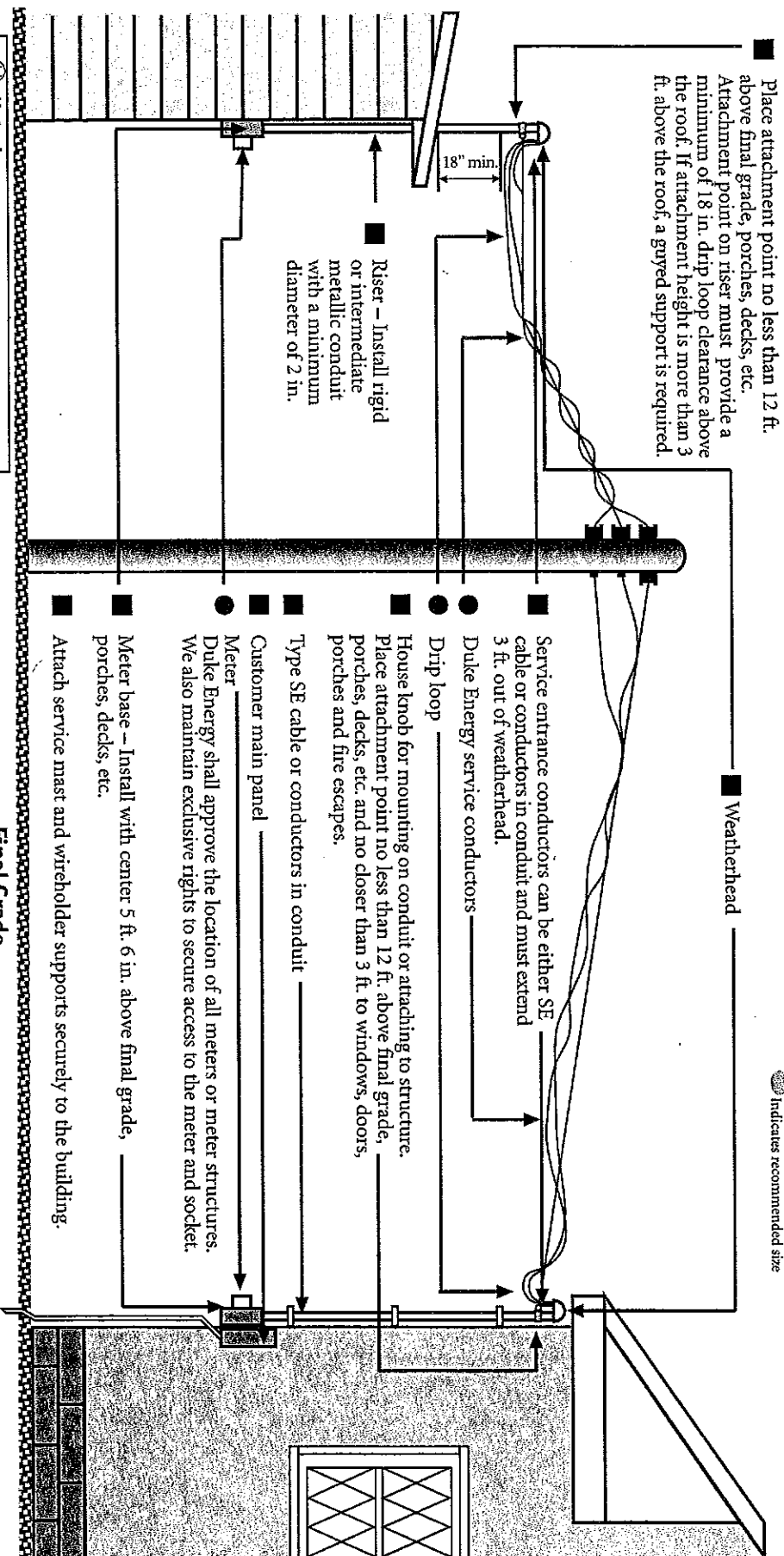
in Indiana 800-382-5544 "call before you dig"

Permanent Overhead Service

Permanent Overhead Service			Meter Base Guidelines	
Service Type—120/240 volt, single phase 3-wire	Manufacturers			
Residential Overhead 100 amp service, 1 meter position	Milbank, Durham/Square D Landis & Gyr, T&B/Anchor			
Residential Overhead/Underground 200 amp service, 1 meter position	Milbank, Durham/Square D, Landis & Gyr, T&B/Anchor			
Residential Overhead/Underground 320 amp service, 1 meter position	Milbank, Durham/Square D, Landis & Gyr, T&B/Anchor			

Breaker Size		Customer Wire Sizes					
		(H) Minimum Line Conductor		(N) Neutral Conductor		Ground Wire	
100 AMP	#2	Alum. #2	Copper #2	Alum. #6	Copper #4	Alum. #6	Copper #4
200 AMP	#4/0	Alum. #4/0	Copper #3	Alum. #2 - #2/0	Copper #1 - #1/0	Alum. #2	Copper #1 - #1/0
400 AMP	#600kcmil	Alum. #600kcmil	Copper #400kcmil - 500kcmil	Alum. #3 - #2/0	Copper #2 - #1/0	Alum. #3/0	Copper #2 - #1/0

Indicates recommended size



- ⊕ Hot wires
- Ⓝ Neutral Wires
- Items you supply and install
- Items Duke Energy supplies and installs

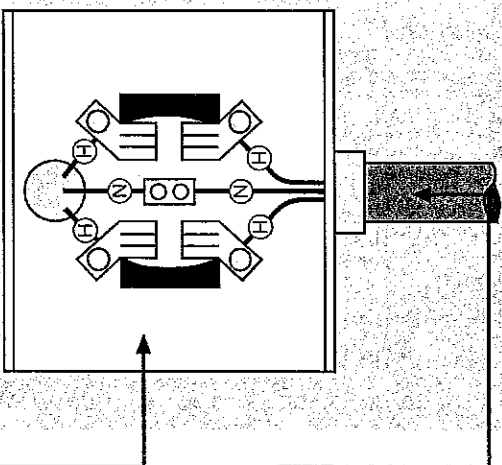
All equipment must be in good condition and installed to meet National Electrical Code requirements.

in Indiana 800-382-5544 "call before you dig"

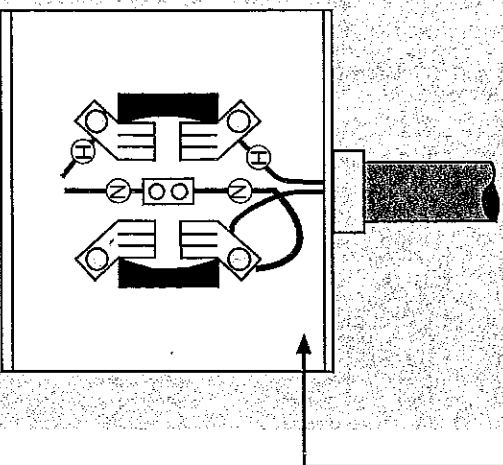
Single phase panels from a single meter base



Overhead Service - 3 wire 120/240 volt



Overhead Service - 2 wire 120 volt - non preferred



- Ⓜ Hot wires
- Ⓝ Neutral Wires
- Items you supply and install
- Items Duke Energy supplies and installs

Breaker Size	Customer Wire Sizes					
	Ⓜ Minimum Line Conductor	Ⓝ Neutral Conductor	Ground Wire			
100 AMP	Alum. #2	Copper #2	Alum. #6	Copper #8 - #10	Alum. #6	Copper #8 - #10
200 AMP	Alum. #4/0	Copper #2/0	Alum. #2/0	Copper #4 - #6	Alum. #2	Copper #6 - #4

Indicates recommended size

Conductors in conduit or service entrance cable to weatherhead. Size all customer service entrance conductors to rated ampacity of the main breaker or the fused disconnect.

Meter base - This is for installation of a single set of service entrance conductors. For other applications, please contact Duke Energy.

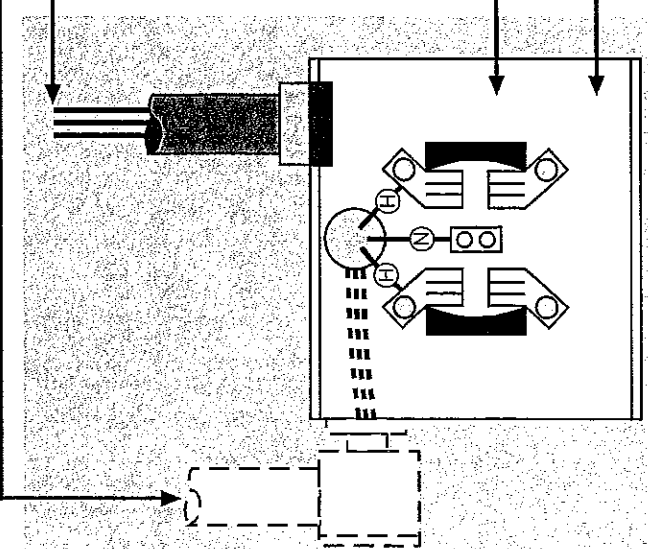
Underground meter base must be minimum 200AMP

The ground wire from your main panel to the ground rod must be continuous. Duke Energy recommends that the ground wire not be routed through the meter base. If it is routed through the meter base, however, please be sure that:

- a) the ground wire is not connected to the meter base, and
- b) the ground wire is installed in a conduit from meter base to ground in accordance with National Electric Code requirements. For more information, please refer to NEC Article 250-92.

- Duke Energy's service conductors
- Alternate route for service entrance conductors

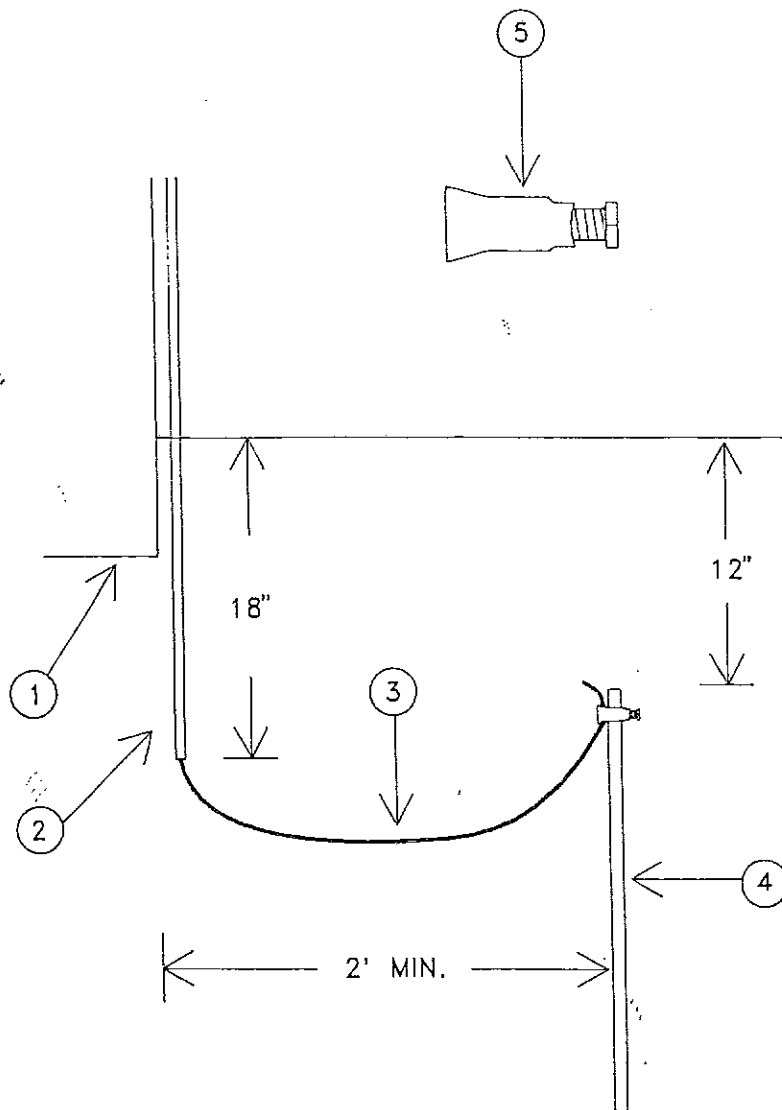
Underground Service - 3 wire 120/240 volt



All equipment must be in good condition and installed to meet National Electrical Code requirements.

in Indiana 800-382-5544 "call before you dig"

GROUNDING ELECTRODE DETAIL



GROUNDING ELECTRODE DETAIL

ITEMS AS SHOWN:

1. Footer or foundation.
2. Ground wire sleeve.
3. Ground wire.
4. Ground rod.
5. Approved direct burial clamp.

*Ground rod may be above ground for inspection. Enough ground wire slack must be provided to allow the REMC to drive rod to proper depth.