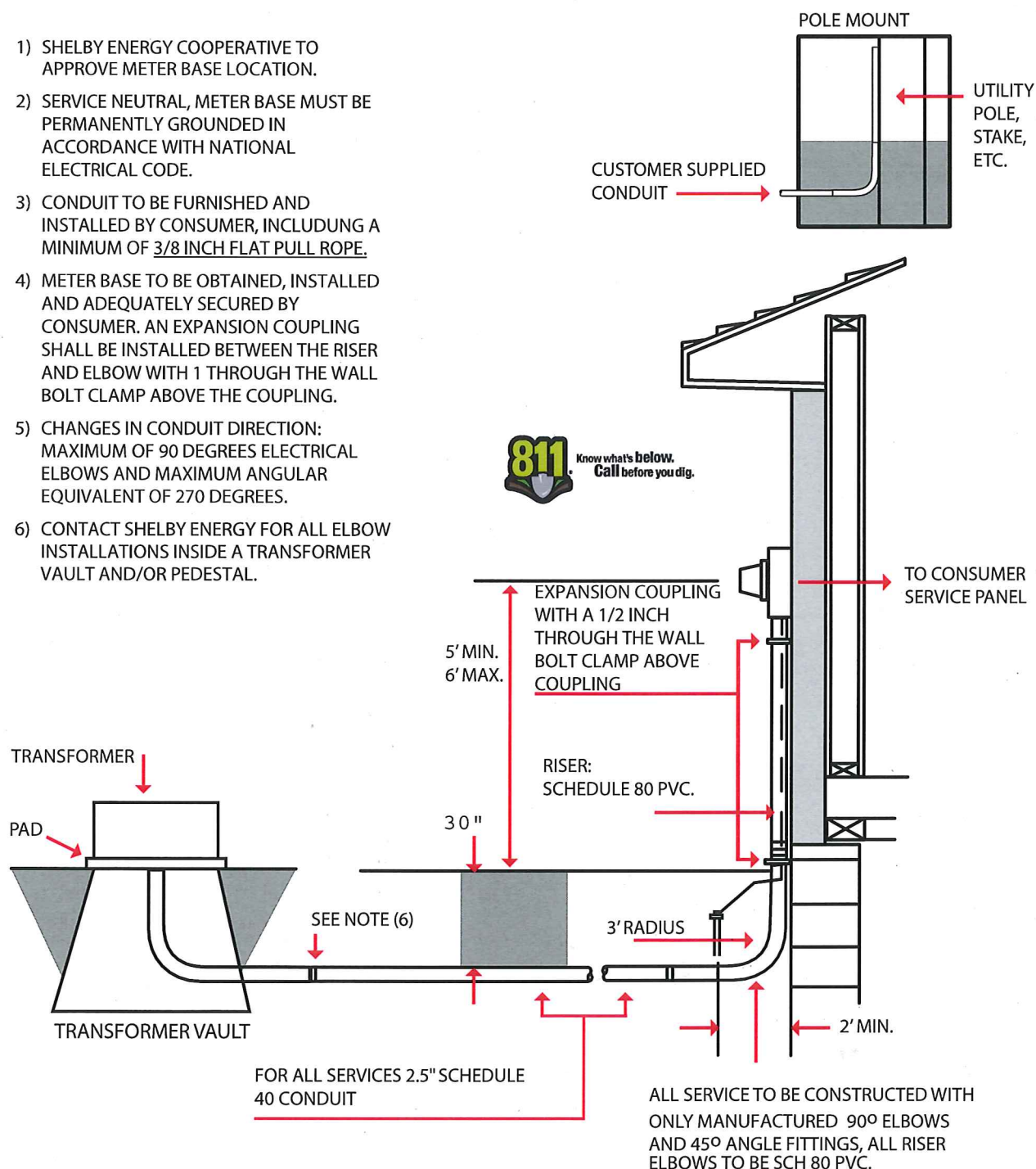


# SPECIFICATIONS AND MEASUREMENTS

## UNDERGROUND SERVICE

- 1) SHELBY ENERGY COOPERATIVE TO APPROVE METER BASE LOCATION.
- 2) SERVICE NEUTRAL, METER BASE MUST BE PERMANENTLY GROUNDED IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE.
- 3) CONDUIT TO BE FURNISHED AND INSTALLED BY CONSUMER, INCLUDING A MINIMUM OF  $\frac{3}{8}$  INCH FLAT PULL ROPE.
- 4) METER BASE TO BE OBTAINED, INSTALLED AND ADEQUATELY SECURED BY CONSUMER. AN EXPANSION COUPLING SHALL BE INSTALLED BETWEEN THE RISER AND ELBOW WITH 1 THROUGH THE WALL BOLT CLAMP ABOVE THE COUPLING.
- 5) CHANGES IN CONDUIT DIRECTION: MAXIMUM OF 90 DEGREES ELECTRICAL ELBOWS AND MAXIMUM ANGULAR EQUIVALENT OF 270 DEGREES.
- 6) CONTACT SHELBY ENERGY FOR ALL ELBOW INSTALLATIONS INSIDE A TRANSFORMER VAULT AND/OR PEDESTAL.



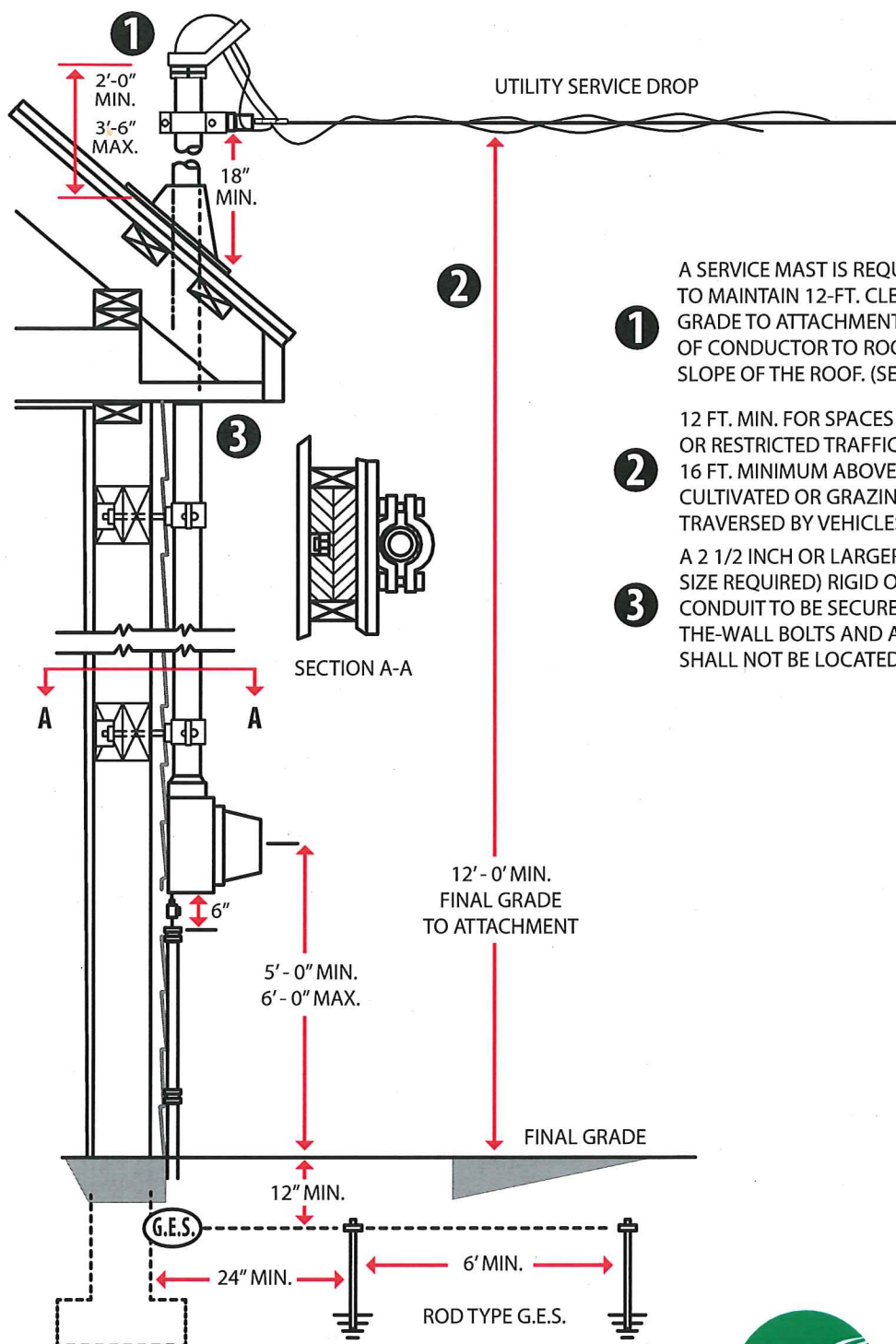
**IMPORTANT:** SHOULD TRENCH LENGTH EXCEED 150' OR SERVICE ENTRANCE SIZE BE LARGER THAN 400 AMP, CONSULT WITH SHELBY ENERGY COOPERATIVE FOR SPECIAL DESIGN.



**Shelby Energy Cooperative**

® A Touchstone Energy Cooperative

# OVERHEAD SERVICE ABOVE ROOF



A SERVICE MAST IS REQUIRED WHEN IT IS NOT POSSIBLE TO MAINTAIN 12-FT. CLEARANCE FROM FINISHED GRADE TO ATTACHMENT POINT. VERTICAL CLEARANCE OF CONDUCTOR TO ROOF SURFACE DEPENDS ON THE SLOPE OF THE ROOF. (SEE NEC 230 -24 (A))

12 FT. MIN. FOR SPACES AND WAYS SUBJECT TO PEDESTRIAN OR RESTRICTED TRAFFIC.

16 FT. MINIMUM ABOVE DRIVEWAYS, PARKING LOTS, ALLEYS, CULTIVATED OR GRAZING AREAS, OR OTHER LAND TRAVERSED BY VEHICLES.

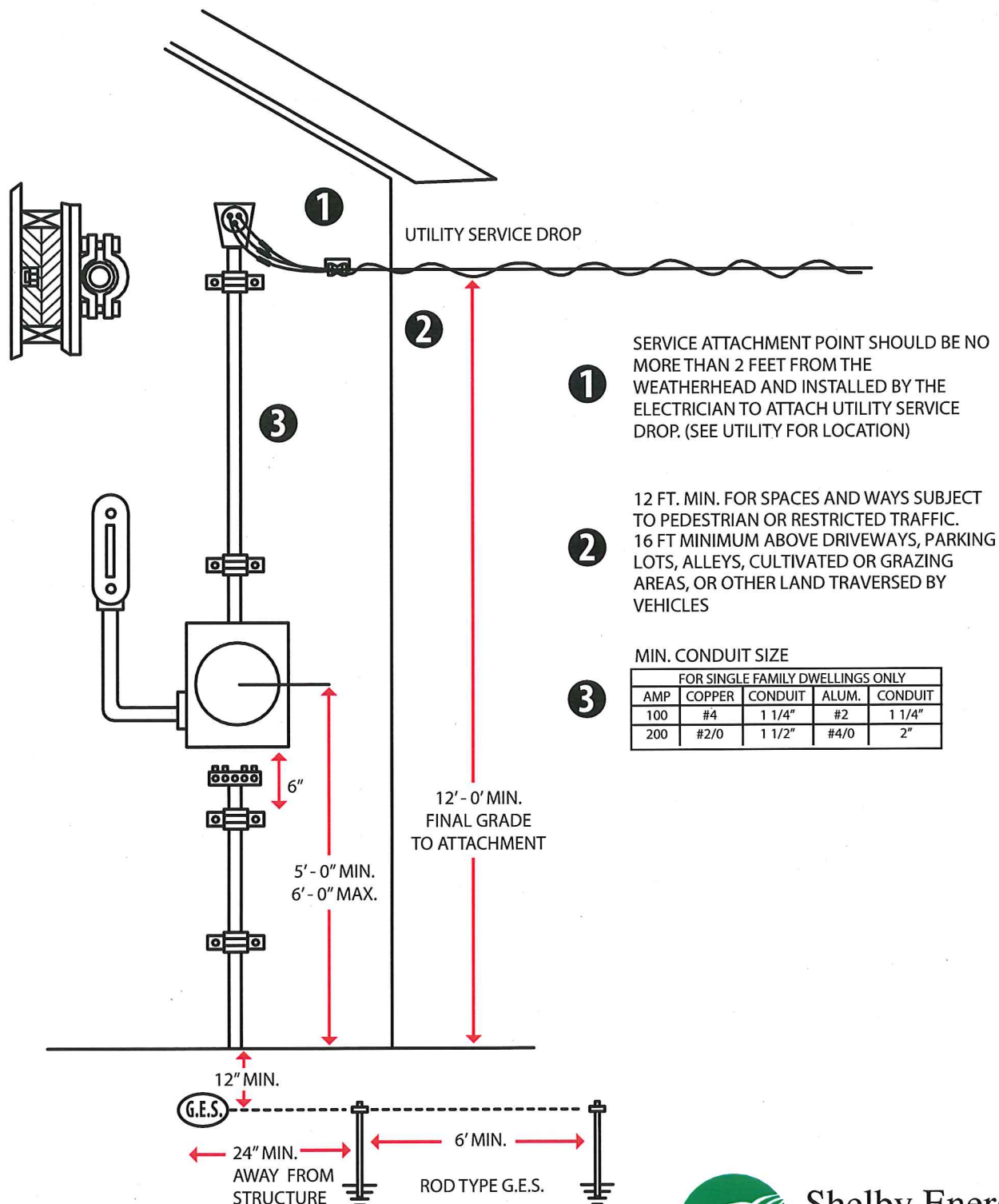
A 2 1/2 INCH OR LARGER (CONTACT LOCAL UTILITY FOR MIN. SIZE REQUIRED) RIGID OR INTERMEDIATE GRADE STEEL CONDUIT TO BE SECURED WITH TWO OR MORE, THROUGH-WALL BOLTS AND APPROVED MAST CLAMPS (BOLTS SHALL NOT BE LOCATED INSIDE PANELBOARD)



**Shelby Energy  
Cooperative**

® A Touchstone Energy Cooperative

# OVERHEAD SERVICE BELOW ROOF

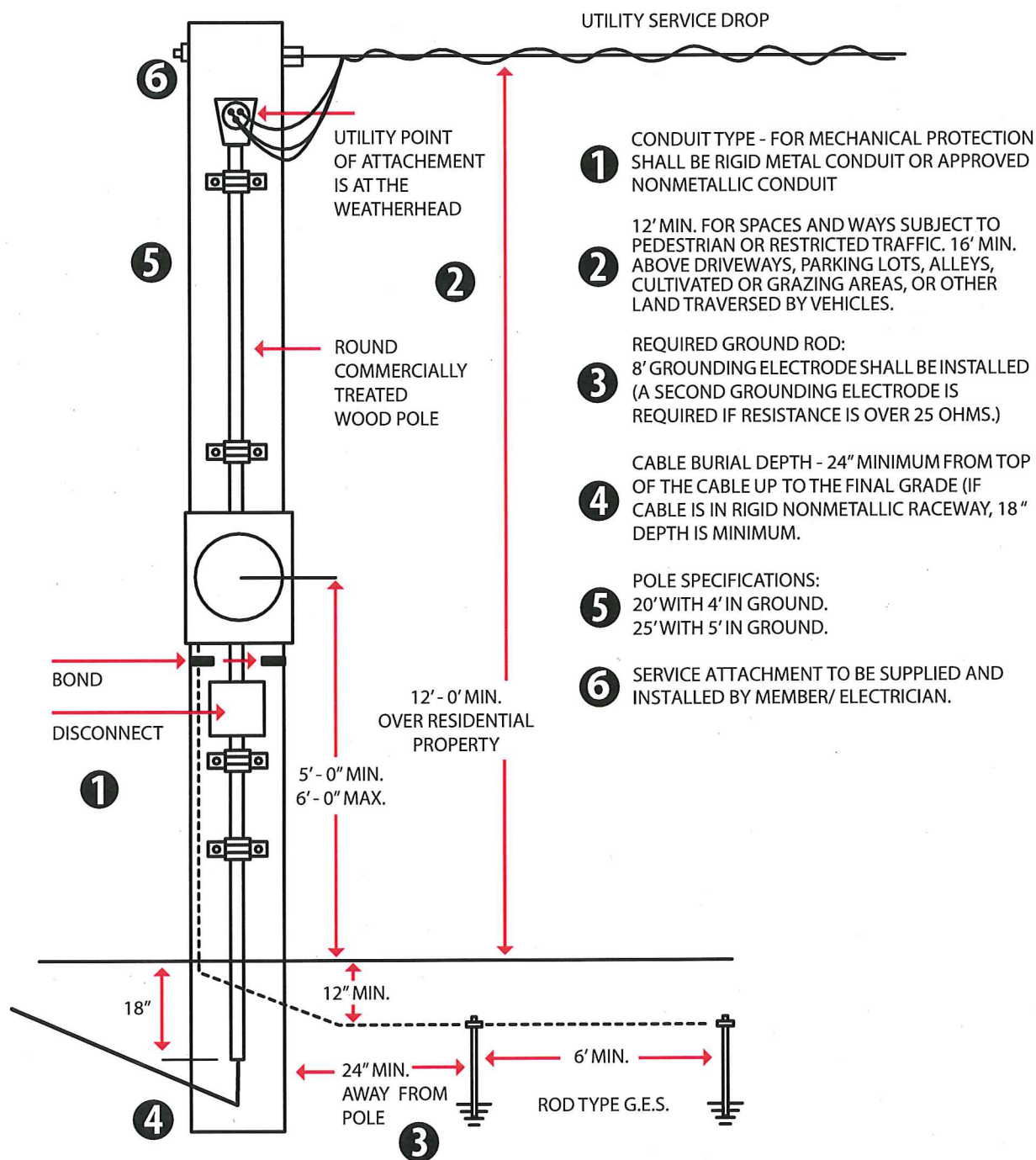


**Shelby Energy  
Cooperative**

® A Touchstone Energy Cooperative

# METER POLE SERVICE

## Direct Wire Type to Service Pole



Shelby Energy  
Cooperative

® A Touchstone Energy Cooperative



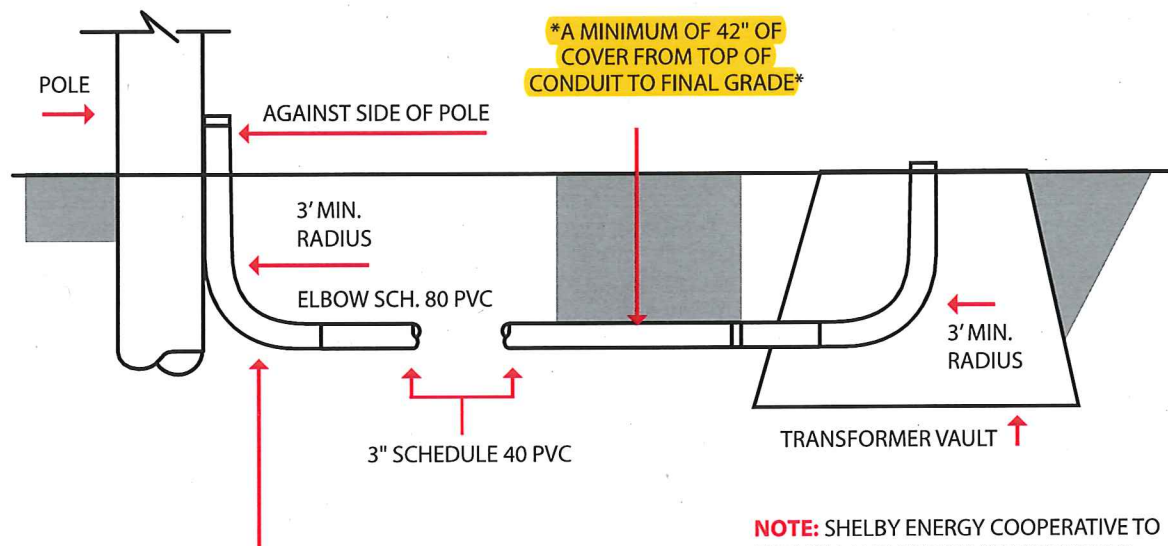


# UNDERGROUND PRIMARY

- 1) SHELBY ENERGY COOPERATIVE TO APPROVE PADMOUNT TRANSFORMER AND/OR PULL BOX LOCATIONS.
- 2) CONDUIT TO BE FURNISHED AND INSTALLED BY CONSUMER, INCLUDING A 3/8 INCH FLAT ROPE.
- 3) TRENCH TO BE LEFT OPEN FOR SHELBY ENERGY COOPERATIVE TO INSPECT. PLEASE REFER TO TRENCHING AND CONDUIT SPECIFICATIONS BELOW.



Know what's below.  
Call before you dig.



ALL PRIMARY TO BE CONSTRUCTED WITH ONLY ELECTRICAL 90° ELBOWS and 45° ANGLE FITTINGS, SHALL BE NO MORE THAN 3-90° ELBOWS OR COMBINATION THEREOF. FOR EXAMPLE, 1-90 AT THE HOUSE, 1-90 AT THE POLE OR TRANSFORMER, 1-90 or 2-45's CAN BE INSTALLED IN THE REMAINING CONDUIT. ALL RISER ELBOWS TO BE SCH. 80 PVC.

**IMPORTANT:** SHOULD TRENCH LENGTH EXCEED 500' AND/OR HAVE CHANGES IN TERRAIN, AND DIRECTION THAT PREVENTS ADEQUATE INSTALLATION OF COOPERATIVE FACILITIES, THEN FEED-THRU/PULL BOXES MAY BE ADDED INTERMITTENTLY ALONG TRENCH ROUTE AS DETERMINED BY YOUR SHELBY ENERGY COOPERATIVE.

**NOTE:** SHELBY ENERGY COOPERATIVE TO FURNISH AND INSTALL TRANSFORMER VAULT AND/OR FEED-THRU PULL BOXES, AFTER CONDUIT HAS BEEN INSTALLED.

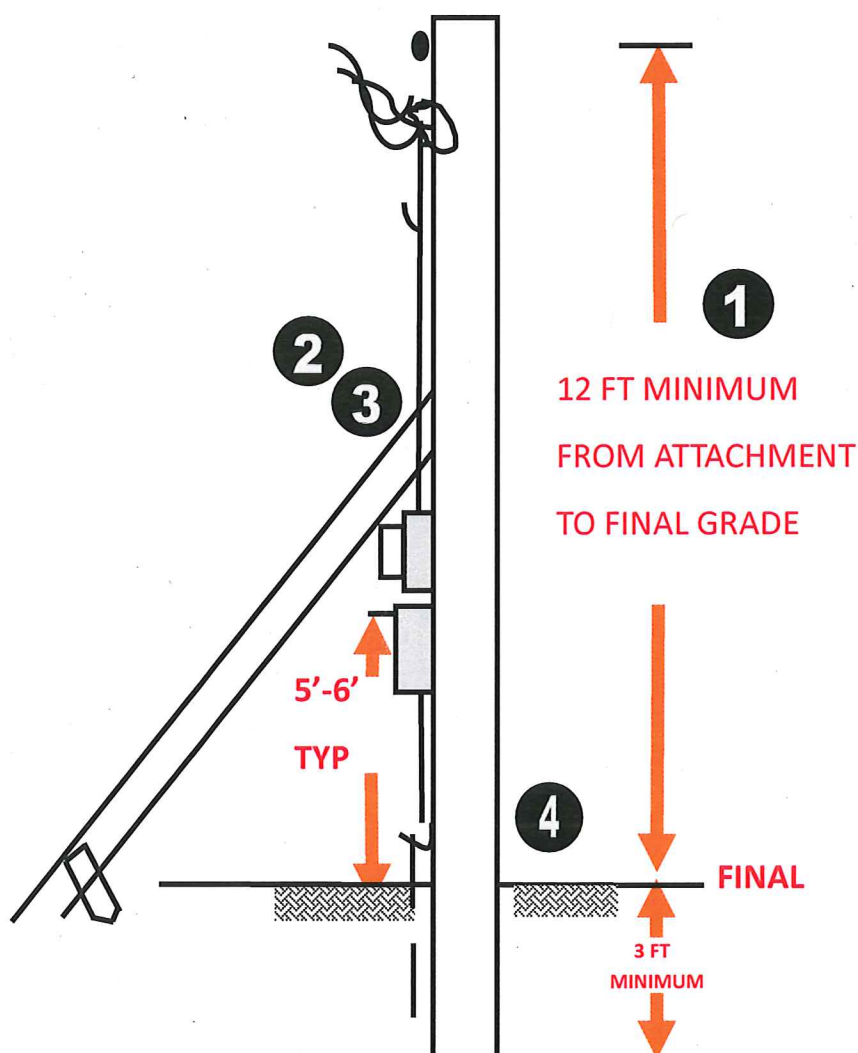


Shelby Energy  
Cooperative


® A Touchstone Energy Cooperative

# TEMPORARY METER POLE

- 1** 12 FT. TRAFFIC. 16 FT. MINIMUM CLEARANCE ABOVE DRIVEWAYS, PARKING LOTS, ALLEYS, CULTIVATED OR GRAZING, OR OTHER LAND TRAVERSED BY VEHICLES.
- 2** TEMPORARY POLE TO BE CONSTRUCTED OUT OF TWO - 2"X 6" X 16' FORMING A TEE OR ONE—4" X 4" X 16' POST. IF THE TEMPORARY SERVICE IS TO BE LONGER THAN 50 FT, A 6"X 6" X 16' POST WILL BE REQUIRED. NO TEMPORARY SERVICE SHALL EXCEED 75 FT. IN LENGTH.
- 3** REQUIRED MATERIALS MUST BE FURNISHED BY THE CONSUMER AND/OR ELECTRICIAN AND MUST BE INSTALLED PER THE NATIONAL ELECTRIC CODE AND SHALL BE INSPECTED BY THE COUNTY APPOINTED STATE ELECTRICAL INSPECTOR.
- 4** TEMPORARY METER POLE MUST BE INSTALLED AT THE LOCATION DESIGNATED AND STAKED BY A SHELBY ENERGY REPRESENTATIVE.

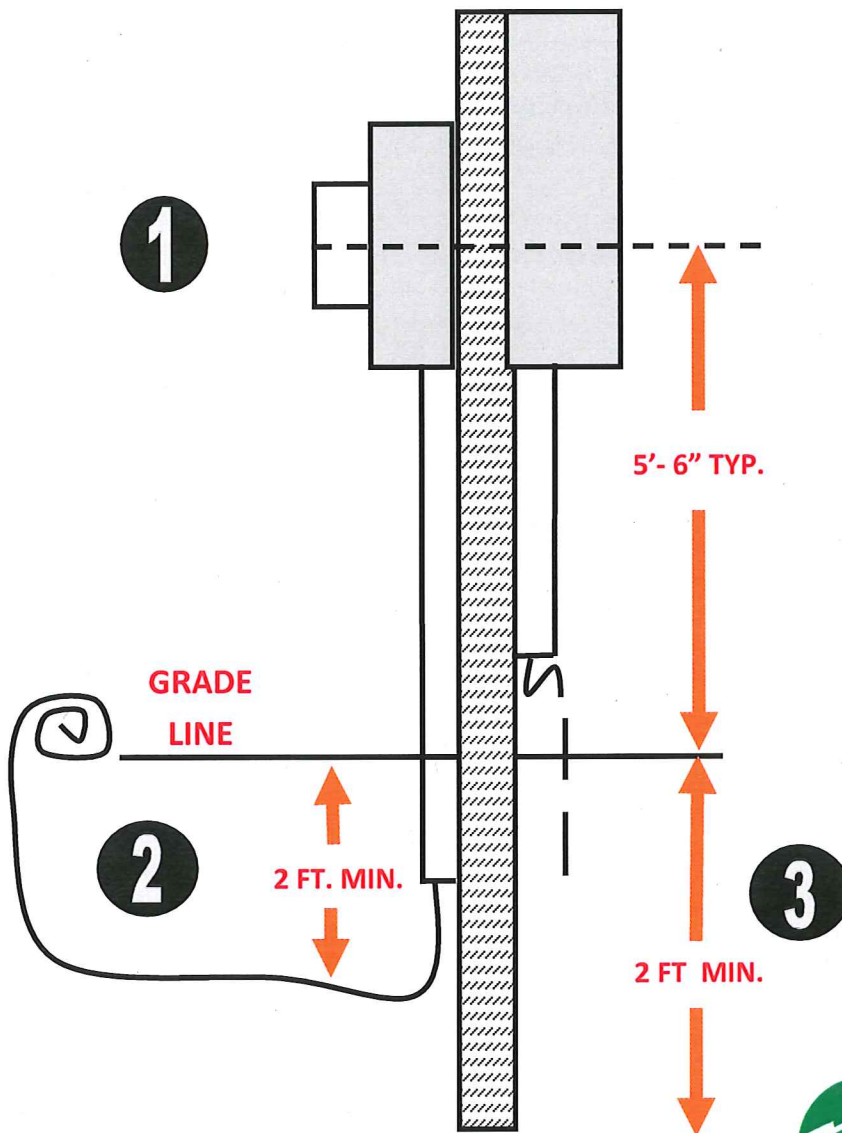


**Shelby Energy  
Cooperative**

® A Touchstone Energy Cooperative 

# UG TEMPORARY SERVICE

- 1 TEMPORARY METER POLE IS TO BE LOCATED WITHIN 24" OF PADMOUNT TRANSFORMER/ SECONDARY PEDESTAL. IT SHALL BE LOCATED ON THE RIGHT SIDE OF THE TRANSFORMER/ PEDESTAL. (RIGHT SIDE IF FACING THE LOCK) THERE SHOULD BE A MINIMUM OF 6' OF CABLE FOR SHELBY ENERGY TO MAKE THE CONNECTION.
- 2 REQUIRED MATERIALS MUST BE FURNISHED BY THE CONSUMER/ ELECTRICIAN AND MUST BE INSTALLED PER THE NATIONAL ELECTRIC CODE AND SHALL BE INSPECTED BY THE APPOINTED STATE ELECTRICAL INSPECTOR.. CONDUIT SHALL EXTEND 2 FEET BELOW GRADE.
- 3 ALL MATERIALS ARE TO BE MOUNTED TO A 2"X6"X8' OR A 4"X4"X8" POST.



**Shelby Energy  
Cooperative**

® A Touchstone Energy Cooperative



# UNDERGROUND METER PEDESTAL

1

CONSTRUCTED WITH 2) 6"X6" TREATED POSTS, BOLTED TOGETHER AND SET IN THE GROUND 3 FEET. MATERIALS ARE TO BE PROVIDED AND INSTALLED BY THE MEMBER/ ELECTRICIAN PER THE NATIONAL ELECTRIC CODE AND THE SERVICE ENTRANCE MUST BE INSPECTED BY THE COUNTY APPOINTED STATE ELECTRICAL INSPECTOR.

2

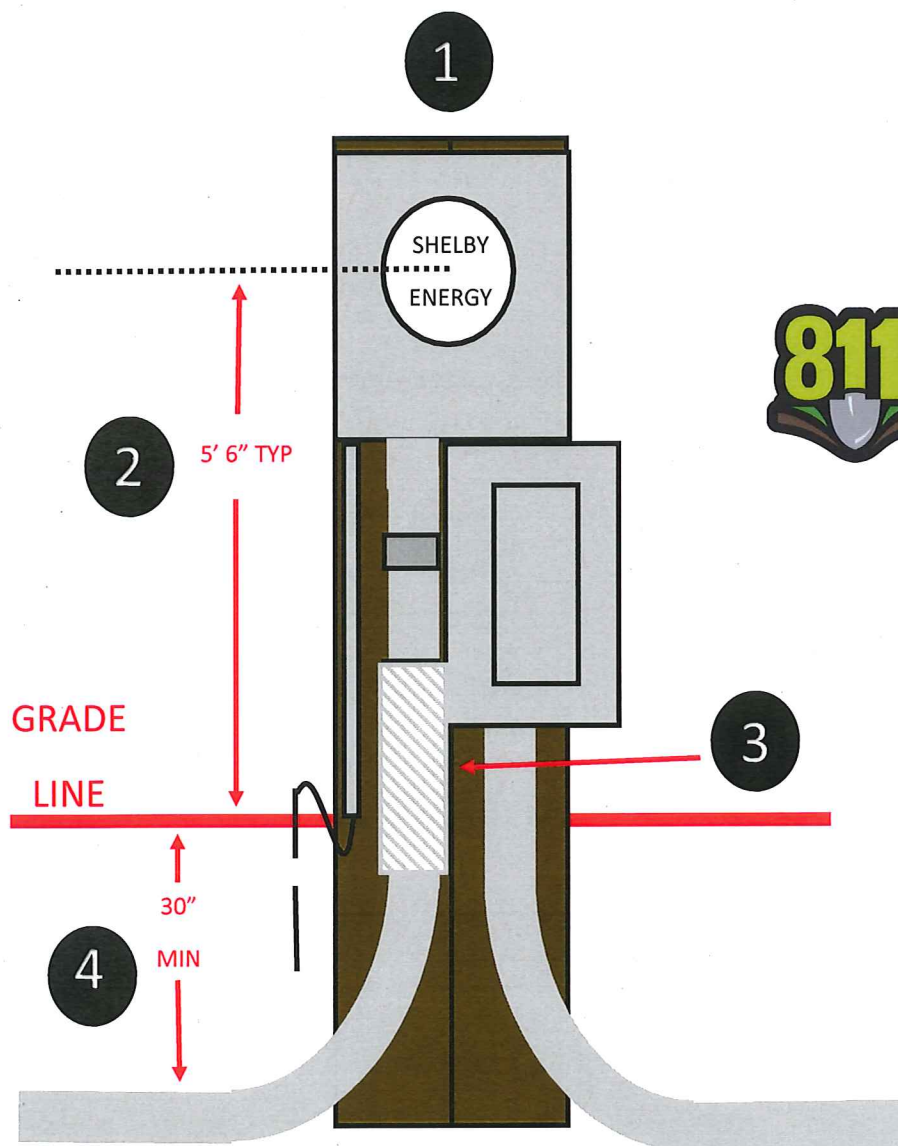
METER BASE SHOULD BE MINIMUM OF 5 FEET ABOVE GROUND WITH MAXIMUM OF 6 FEET ABOVE GROUND. DISCONNECT/ BREAKER PANEL CAN BE MOUNTED BELOW OR ON OPPOSITE SIDE OF PEDESTAL.

3

AN EXPANSION COUPLING SHALL BE USED WITH ON THE SUPPLY CONDUIT WITH A THROUGH THE WALL BOLT CLAMP ABOVE THE COUPLING.

4

SUPPLY CONDUIT MUST BE A MINIMUM OF 30" DEEP FROM FINAL GRADE. REFER TO THE UNDERGROUND SERVICE SPECIFICATION SHEET FOR CORRECT LAYOUT OF SUPPLY CONDUIT. CONTACT SHELBY ENERGY FOR EXCEPTIONS.



**811** Know what's below.  
Call before you dig.



**Shelby Energy  
Cooperative**

® A Touchstone Energy Cooperative