City of Mansfield

Tim Theaker, Mayor

Bureau of Building Inspections, Licenses and Permits

30 N. Diamond Street - Mansfield, OH 44902 – (419)755-9688 Fax-(419)755-9453

www.ci.mansfield.oh.us

ELECTRICAL SERVICE APPLICATION

APPLICATION MUST ALSO BE MADE TO OHIO EDISON FOR ELECTRICAL SERVICE at 800-633-4766

This application is to be used for projects that are for electrical services only, and other electrical service work as described below. Projects that include building/structural additions, alterations, and other scopes of work shall use the Residential or Commercial Building Plan Approval application. Submit one application for each job site or on-site office trailer. Please print or type. All sections must be completed. Please note that all contractors must be registered in accordance with City Code Part 13, Chapter 1333.

Project Information			**Electrical Contractor Information**		
1	Owner		**9**	Name/Title	
2	Address		**10**	Company	
3	Phone		**11**	Address	
4	Email		**12**	City, State, Zip	
5	City, Zip		**13**	Phone	
6	Parcel ID		**14**	Email	
7	Project located in local flood plain? ☐ Yes ☐ No		**15**	City Contractor Registration #	
8	Estimated Cost of Construction:		**16**	Ohio Edison Work Order #	

Fees are to be paid at the time of application. Fees are charged per the most current fee schedule as adopted by the City of Mansfield. Electrical Services greater than 600 amps or larger require construction documents prepared by an Ohio Registered Design Professional (Architect or Engineer). Design Professional contact information shall be provided on the construction documents.

17. <u>Scope of Work</u> ☐ Residential ☐ Commercial / Non-Residential

Owner Occupied Residence. Is the subject property Owner occupied? ☐ Yes ☐ No
For non-owner occupied residential properties, all work must be performed by a Registered Electrical Contractor

☐ New Electrical Service. Is this inspection for non-required work such as Agricultural Buildings, Sanitary Sewer Lift stations, or other electrical services that would not normally require approval by the building department?

☐ Yes ☐ No If yes, please read and initial below.

This project is of a use (agricultural, sewerage works, etc) as documented by the Owner and is exempt from the scope of the OBC per Section 101.2. The scope of the review was the electrical service construction to the main service disconnecting means so the owner can obtain electrical service from the utility provider. The building construction, electrical installation, beyond the main service disconnecting means (load calculations were not included in the review scope either), and any other systems installed in the structure, tributary to the structure, or accessory to the structure are not considered in the scope of this approval per OBC 101.2.

Applicant Initials _____

☐ Meter Re-Installation. A site plan and single line diagram is not required for meter re-installations. Skip to box 22.

☐ Service Upgrade Size of Existing Service (amps) _____

☐ Service Replacement (no change in amperage or voltage)

☐ Temporary Electrical Service Length of Temporary Service (months) _____

☐ Generator Installation (provide generator specifications, sizing calculations, and anchoring/foundation details)
Generator Provided for: ☐ Legally Required System ☐ Optional Standby System

18. Provide a basic description of what the electrical service will feed (i.e. temp power for construction project, upgrade for repairs or future equipment, power is currently turned off, generator for emergency backup, etc.):

19. **Service Configuration (complete this section for all projects except meter re-installations)**

Phase/Voltage Configuration _____ Amps _____ Overhead Underground

Are other electrical services located on the building? ☐ Yes ☐ No

Does the proposed electrical service feed multiple structures? ☐ Yes ☐ No

Attach the following information:

20. A site plan showing the location of electrical service and related equipment, other utilities, and structures on the property. A Google Map or similar photo is adequate provided the above information can be shown and the plan is properly dimensioned.

21. A single line electrical diagram indicating:
a. Size, Voltage, and Phase Configuration of Electrical Service
b. Details of any transformers installed. Show grounding details
c. The location and size of Electrical Panel and main breaker/OCP.
d. The location and size of Electrical Service Disconnect and main breaker/OCP.
e. Methods of grounding (wire size, frame ground, ground rods , conduit size and specs)
f. How the service entrance and feeder are conductors being protected (rigid conduit, direct burial, etc.)

The following items are commonly missed on electrical service installations. Please review the code sections below to ensure the electrical service and related work is properly installed to code requirements.

- NEC 110.3. Electrical Equipment, Fixtures, Wiring Methods, and Materials are evaluated, labeled or listed for their installation and use.
- NEC 110.15. High-Leg Marking
- NEC 110.16. Arc-Flash Hazard Warning field marked on electrical equipment.
- NEC 110.24. Available Fault Current- Field marking.
- NEC 110.26. Proper working space is provided about the electrical equipment.
- NEC 230.24/NEC 300.5. Overhead clearances and underground cover provided.
- NEC 250.52. All available grounding electrodes (reinforcing steel, ground rods/rings/plates, metal water piping, metal frame of building/structure, etc.) are bonded together.
- NEC 230.72. Electrical service disconnecting means grouped.
- NEC 250.94. Intersystems grounding bar provided.
- NEC 250.104. Bonding of piping systems and exposed structural steel.
- NEC 250.110/250.112. Subpanels bonded properly.
- NEC 300. Wiring Methods and Materials are listed for Wet and Damp Locations
- NEC 300.4. Protection from physical damage.
- NEC 408.4. Switchboards/Panelboards clearly labeled and circuit directory provided.

22. **I hereby certify that I am the ☐ Owner ☐ Agent for the Owner and all information contained in this application is true, accurate, and complete to the best of my knowledge. All official correspondence and approvals in connection with this application should be sent to my attention at the address shown above.**

This application when approved will constitute a Certificate of Plan Approval in accordance with Ohio Building Code Section 105.5. Due to the minor nature of the inspection, an On-Site Inspection record will not be issued.

_____

Applicant Name and Signature Date

CHECK LIST FOR RESIDENTAL ELECTRICAL METER RESETS

The following items are currently not maintained or in violation during a meter reset inspection. Please verify the following items prior to scheduling an inspection.

1. Inspect outside service entrance conductors and meter base.

    a. If conductors or conduits are damaged or not properly secured, they may need to be repaired or replaced.

    b. If meter base is damaged, not properly secured or has openings which have not been properly sealed, it may need to be repaired or replaced.

2. Inspect for proper sizing of Service Entrance Conductors. This table to carry only 100% of the dwelling units diversified load.

    a. 100 amp # 4 copper or #2 aluminum
    b. 150 amp # 1 copper or #2/0 aluminum
    c. 200 amp # 2/0 copper or #4/0 aluminum

3. Verify that all required grounding is in place and properly fastened, with approved connectors. (ground rods, waterlines)

    a. One 5/8" x 8' ground rod must be installed for 100 amps. Two 5/8"x 8' ground rods to be installed for 200 amps, one wire to each rod.

    b. Ground, bond, jump water lines if metal, including water meters, water heater.

    Grounding Conductor Sizes
    100 amp service #8 copper
    150 amp service #6 copper
    200 amp service #4 copper

4. Check that breaker panel is fastened securely to the wall and that all openings in the panels have been properly closed.

5. Check that conductors entering the panel are protected with an approved connector.

6. Check that all breakers have been properly installed and sized correctly for the wire sizes.

    Examples (copper only)

    #14 wire 15 amp breaker
    #12 wire 20 amp breaker
    #10 wire 30 amp breaker
    # 8 wire 40 amp breaker
    # 6 wire 60 amp breaker

7. Inspection fees cover one inspection. Re-inspections fees will be required if more than one inspection is needed. Phone calls that are not answered will require re-scheduling and re-inspection fees to be paid. Please be prepared to answer the phone on the day of inspection.

8. The electrical panel cover must be removed for inspections.

9. **Please be prepared to give the Ohio Edison Work Order Number at the time of application. If not available at the time of application, please be prepated to give the electrical inspector the Ohio Edison Work Order Number at the time of inspection. If no Work Order Number is provided, the inspection may not be able to be completed and re-inspection fees may apply.**