

**ELECTRICAL NOTES**

## 1. RELATED REQUIREMENTS

- A. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE WORK OF OTHER TRADES AND MAKE REASONABLE MODIFICATIONS REQUIRED TO PREVENT CONFLICT AND FOR PROPER EXECUTION OF THE WORK AS DIRECTED BY THE ENGINEER, WITHOUT EXTRA COST TO THE OWNER.
- B. THE ELECTRICAL CONTRACTOR SHALL BE LICENSED IN THE VILLAGE OF NEW MIDDLETOWN.

## 2. INSPECTION

- A. ALL WORK SHALL BE INSPECTED BY THE AUTHORITY HAVING JURISDICTION.
- B. UPON COMPLETION OF THE WORK, THIS CONTRACTOR SHALL FURNISH TO THE ENGINEER A CERTIFICATE OF INSPECTION AND APPROVAL FROM SAID AUTHORITY BEFORE FINAL PAYMENT ON THE CONTRACT WILL BE ALLOWED.
- C. FEE FOR THE INSPECTION SHALL BE A PART OF THE CONTRACT, THE COST OF WHICH SHALL BE INCLUDED IN THE CONTRACTOR'S BID.

## 3. CODES

- A. PERFORM ALL WORK IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE, NATIONAL ELECTRICAL SAFETY CODE, AND ANY STATE AND LOCAL CODES OR ORDINANCES.

## 4. SHOP DRAWINGS

- A. THE CONTRACTOR SHALL SUBMIT COMPLETE DETAILED SHOP DRAWINGS COVERING ALL ITEMS OF EQUIPMENT AND BROCHURES OF ALL LIGHTING FIXTURES. NO EQUIPMENT SHALL BE PUT INTO MANUFACTURED OR ORDERED UNTIL THESE SHOP DRAWINGS OR BROCHURES HAVE BEEN APPROVED BY THE ENGINEER.

## 5. MATERIALS &amp; EQUIPMENT

- A. ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND OF THE TYPE LISTED BY UNDERWRITERS LABORATORIES, INC. AND SHALL BE IN STRICT CONFORMITY WITH THE LATEST STANDARDS OF THE FOLLOWING WHERE SUCH STANDARDS NORMALLY APPLY:
  - 1. UNDERWRITERS LABORATORIES, INC.
  - 2. NATIONAL FIRE PROTECTION ASSOCIATION
  - 3. ILLUMINATING ENGINEERS SOCIETY
- B. WHERE MATERIALS, EQUIPMENT, APPARATUS OR OTHER PRODUCTS ARE SPECIFIED BY BRAND NAME, TYPE OR CATALOG NUMBER, SUCH DESIGNATION IS TO ESTABLISH STANDARDS OF DESIRED QUALITY AND STYLE AND SHALL BE THE BASIS OF THE BID. MATERIALS SO SPECIFIED SHALL BE FURNISHED UNDER THE CONTRACT. WHERE TWO OR MORE DESIGNATIONS ARE LISTED, CHOICE SHALL BE OPTIONAL TO THE CONTRACTOR.
- C. ONLY THOSE MATERIALS SPECIFIED ON THE "FIRST ENERGY APPROVED MATERIALS LIST" MAY BE USED ON THIS PROJECT.

## 6. CUTTING AND REPAIRING

- A. THE GENERAL CONTRACTOR SHALL DO ALL PAVEMENT CUTTING, TRENCHING, EXCAVATION, BACKFILL AND PATCHING REQUIRED TO PERFORM THE ELECTRICAL SCOPE AS INDICATED ON THE DRAWINGS OR AS PER ODOT 2008 SPECIFICATIONS.

## 7. SCOPE OF WORK

- A. THE ELECTRICAL CONTRACTOR SHALL INCLUDE ALL LABOR, MATERIAL, SUPERVISION, TOOLS AND EQUIPMENT NECESSARY TO PERFORM THE ELECTRICAL WORK AS SHOWN ON THE DRAWINGS AND/OR DESCRIBED IN THIS SPECIFICATION TO COMPLETE THE PROJECT. A COMPLETE SET OF AS-BUILT DRAWINGS SHALL BE FURNISHED TO THE OWNER UPON COMPLETION OF PROJECT.

**ELECTRICAL NOTES**

## 8. CONDUIT

- A. ALL WIRING SHALL BE INSTALLED IN RIGID METAL CONDUIT WHERE EXPOSED. ALL CONDUITS SHALL BEAR THE U.L. LABEL.
- B. MINIMUM CONDUIT SHALL BE 3/4" TRADE SIZE.
- C. CONDUIT SHALL BE GALVANIZED RIGID CONDUIT.

## 9. CABLE

- A. CABLE FOR THE STREET LIGHTING CIRCUIT SHALL BE A #2 AL XLPE CABLE.
- B. CABLE SHALL BE 2/C #10 UF SOLID COPPER FROM THE HANDHOLE JUNCTION BOX TO THE LIGHTING FIXTURE.

## 10. BOXES

- A. FURNISH AND INSTALL ALL NECESSARY BOXES, FITTINGS, SUPPORTS AND ANCHORS TO MAKE A COMPLETE RACEWAY SYSTEM.
- B. HANDHOLE JUNCTION BOXES SHALL BE PLASTIC WITH A HIGH DENSITY ULTRAVIOLET STABILIZED MOLDED POLYETHYLENE COVER

## 11. LIGHTING FIXTURES

- A. ALL LUMINAIRES AND LIGHTING EQUIPMENT SHALL BE COMPLETE WITH ACCESSORIES, LAMPS, WIRING, ETC. AND SHALL CONFORM TO THE SPECIFICATIONS PROVIDED BY OHIO EDISON. OHIO EDISON SPECIFICATIONS ARE INCLUDED WITHIN THE PROJECT BID BOOK.

## 12. GUARANTEE

- A. THE CONTRACTOR SHALL GUARANTEE HIS WORKMANSHIP AND MATERIAL (LAMPS EXCEPTED) FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE AND LEAVE HIS WORK IN PERFECT ORDER AT COMPLETION. SHOULD DEFECTS DEVELOP WITHIN THE GUARANTEE PERIOD, THE CONTRACTOR SHALL, UPON NOTICE OF SAME, REMEDY THE DEFECTS AND HAVE ALL DAMAGES TO OTHER WORK OR FURNISHINGS CAUSED BY THE DEFECTS OR THE WORK OF CORRECTING SAME, REPAIRED AND/OR REPLACED AT HIS OWN EXPENSE, TO THE CONDITION BEFORE SUCH DAMAGE.

**LIGHTING GENERAL NOTES**

MAH-170-4.80

CALCULATED
MJT
CHECKED
DTB