**CMGT 235 – Electrical and Mechanical Systems**

Department of Construction Management 🏵 California State University, Chico

Homework #21 – Electrical Fundamentals

Points: 20

Due: 11/3/2022

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Complete Table 1 – Meter Base and Main Disconnect Switch, Table 2 – Panelboards, and Table 3 – Transformers

Project: Broward Northside Climate Controlled Storage

Drawings: E-03 and E-04

See the in-class example - Waste Management Hauling Facility

* List all TRIP/POLES as largest to smallest
* List FEEDERS (conductors) as smallest to largest

**Table 1 – Meter Base and Main Disconnect Switch**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **EQUIPMENT** | **AMPS** | **VOLTAGE** | Ø **WIRES** | **NEMA** | **FEEDERS-QTY** |
| Meter Base | POWER COMPANY REVENUE METER AND C.T. CABINET |  |
| Main Disconnect Switch |  |  |  |  |  |

**Table 2 - Panelboards**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Panel** | **AMPS** | **VOLTAGE** | Ø **WIRES** | **MLO/MCB** | **CKTS** | **TRIP/POLES -QTY** | **FEEDERS-QTY** |
| PNL H1 |  |  |  |  |  |  |  |
| PNL HM |  |  |  |  |  |  |  |
| PNL HA |  |  |  |  |  |  |  |
| PNL L1 (1 OF 2) |  |  |  |  |  |  |  |
| PNL L1 (2 OF 2) |  |  |  |  |  |  |  |

**Table 3 - Transformers**

|  |  |  |
| --- | --- | --- |
| **EQUIPMENT** | **SPECIFICATIONS** | **FEEDERS-QTY** |
| Transformer (XFMR) |  |  |