**CMGT 235 – Electrical and Mechanical Systems**

Department of Construction Management 🏵 California State University, Chico

Homework #12

Points: 25

Due: 10/12/2017

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

**Solution**

1. Using a green, pink, and blue highlighter complete the following for the drawing provide (2-Story House)

Step 1: Mains – highlight green

Step 2: Hot Water – highlight pink

Step 3: Cold Water – highlight blue

1. Determine the Total Building Load for the fixtures shown in the drawing provided. Assign WSFU to each fixture by placing a circle with the WSFU value next to each fixture. Use 2016 California Plumbing Code.

Complete each of the following tables:

**Second Floor**

|  |  |
| --- | --- |
| **Fixture** | **WSFU** |
| 2 - SHW | 4.0 |
| 2 – LAV | 2.0 |
| 2 – TUB | 8.0 |
| 2 – WC FT | 6.0 |
| Total for Second Floor | 20.0 |

**First Floor**

|  |  |
| --- | --- |
| **Fixture** | **WSFU** |
| 1 - LAV | 1.0 |
| 1 –WC FT | 3.0 |
| 1 – KS | 1.5 |
| 1 – DW | 1.5 |
| 1 - HB | 2.5 |
| Total for First Floor | 9.5 |

**Basement Level**

|  |  |
| --- | --- |
| **Fixture** | **WSFU** |
| 1 – CW | 4.0 |
| 1 – LS | 1.5 |
| Total for Basement Level | 5.5 |

**35.0**

**Total Building Load = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**22 gpm**

**Total Demand in GPM = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**