**CMGT 235 – Electrical and Mechanical Systems**

Department of Construction Management 🏵 California State University, Chico

Homework #16

Points: 20

Due: 10/18/2022

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

1. Determine the number of roof drains required for ideal drainage for a roof area that has a width of 240 feet and a length of 570 feet located in Little Rock, Arkansas. Round drain number up to the next whole number.
2. Use the handout **Roof Drain to Roof Area Sizing Schedule**

Calculate the Roof Area

Rainfall = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Calculate the number of 5" Roof Drains

Calculate the Number of 8" Roof Drains

1. Use **2016 CPC Appendix D – Table D 101.1 and Table 1101.12**

Rainfall = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Calculate the number of 5" Roof Drains

Calculate the Number of 8" Roof Drains

1. For the BMP shown below answer the following:



What is the BMP called? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What BMP objectives does it address?

What is the Standard Symbol used on site drawings? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. For the BMP shown below answer the following:



What is the BMP called? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What BMP objectives does it address?

What is the Standard Symbol used on site drawings? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Using the Web site [www.usclimatedata.com](http://www.usclimatedata.com) complete the following:

|  |  |
| --- | --- |
| City | Portland |
| State | Oregon |
| Total Annual Rainfall (inches) |  |
| Average per month (inches) |  |
| Highest Month (inches) |  |

If rainfall is collected from a 12,500 square foot roof determine the following:

Average Volume of Runoff that can be Captured

Highest Month Volume of Runoff that can be captured