Civil Engineering Department

CE417:Construction Methods and Management Homework(1) Instructor:Eng.Alothman.

Q1 Elevations of the normal ground with respect to a proposed highway are as following: (Assume width of the road= 6m & Shrinkage factor is 0.9)

| Distance along centerline (m) | 0 | 100 | 200 | 300 | 400 | 500 | 600 | 700 | Total volume |
|-------------------------------|---|-----|-----|-----|-----|-----|-----|-----|-----------------|
| Elevation(m) | 0 | -6 | 0 | 10 | 0 | -4 | 3 | 0 | |
| Fill CCM | | | | | | | | | |
| Fill BCM | | | | | | | | | |
| Cut BCM | | | | | | | | | |
| Cumulative Volume (BCM) | | | | | | | | | |

Find the following:

- 1-Draw the highway profile and mass diagram.
- 2-The total volume of a cut , fill , waste or borrow.
- 3- The average length of haul in the balance sections