Part 1: Essay (13 pts)
For questions below conduct research using the internet on leadership styles. Provide name of web page and web address. Type question and answer on following line.

Q1. Describe how leadership is often characterized? (Your own description 80 words min) (2 pts)

Q1. Describe the leadership style that would align best with you and why. (Your own description 80 words min) (2 pts)

Q2. Describe a few approaches to evaluate leaders? (Your own description 80 words min) (2 pts)

Q3. A new bicycling route is being proposed along HWY 20 from Albany to Corvallis to promote alternative transportation modes and to facilitate safer cycling routes between the two cities. Why would group (Stakeholders) decision-making be necessary and challenging? (Your own description 80 words min) (2 pts)


Q6. Write the following in proper station format: (2 pts)

2122 -
310 -
76.23 -
7 -

Q7. If you have a line that is 3 inches long how long is it with following scales?

1” = 10’ -
1” = 60’ -
1” = 600’ -
¼” = 1’-0” -
Part II: AutoCAD Drawing – 18 pts

Part A: Plan Drawing, 10 points

Below is a plan view of a road and underground utilities. Using the information given, construct a plan and profile on ANSI B layout. Show all necessary information.

MHA-6: STA 14+25, GRD 82.30’, IE 71.60’
MHA-7: STA 17+50, GRD 85.82’, IE 73.50’
CO: STA 19+40, GRD 88.75’, IE 75.30’

Requirements

- Plan View accurately drawn and Plotted to scale 1” = 50’ on ANSI B (5 pts)
- Border centered and drawing balanced on plot
- Road right-of way = 36 feet (distance between continuous lines)
- Text and Title Block – Text: Romans 0.125, all upper case and centered (1/2 pt)
- Plotted in monochromatic (DWF) (1/2 pt)
- Scaled dimensions: (1pt)
  - Ticks instead of arrows, oblique (1/4 pt)
  - Dimensions horizontal (1/4 pt)
  - Units shown on plot (1/4 pt)
  - Precision to nearest foot (1/4 pt)
- Scaled leader that is splined ( 1/2pt)
- Scaled Breaks at end of road (1/2 pt)
- Scaled manhole symbols and trimmed inside (1/2pt)
- Layers and Lines as specified below: (1 pt)
- Graphic Scale Bars: (1/2 pt)
  - Horizontal graphic scale bar and written scale underneath—verify in paper space 1” = 50’
  - Vertical graphical scale bar and written scale underneath—verify in paper space 1” = 5’
<table>
<thead>
<tr>
<th>LAYER</th>
<th>Line Weight</th>
<th>Line Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road ROW</td>
<td>0.5 mm</td>
<td>Continuous</td>
</tr>
<tr>
<td>Building Footprint</td>
<td>0.5 mm</td>
<td>Continuous</td>
</tr>
<tr>
<td>Road Centerline</td>
<td>0.35 mm</td>
<td>Center (.5x)</td>
</tr>
<tr>
<td>Stormwater Line (plan view)</td>
<td>0.50 mm</td>
<td>Use BREAK command with letter “S”</td>
</tr>
<tr>
<td>Water Line (plan View)</td>
<td>0.35 mm</td>
<td>Use BREAK Command with letter “W”</td>
</tr>
<tr>
<td>Gas Line (plan View)</td>
<td>0.35 mm</td>
<td>Use BREAK command with letter “G”</td>
</tr>
<tr>
<td>Grade (profile view)</td>
<td>0.5 mm</td>
<td>Continuous</td>
</tr>
<tr>
<td>Pipe (profile view)</td>
<td>0.5 mm</td>
<td>Continuous</td>
</tr>
<tr>
<td>Profile Grid (profile view)</td>
<td>0.18 mm</td>
<td>Continuous</td>
</tr>
<tr>
<td>Text</td>
<td>Default</td>
<td></td>
</tr>
<tr>
<td>Dimensions</td>
<td>0.25 mm</td>
<td></td>
</tr>
<tr>
<td>Leaders</td>
<td>0.25 mm</td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>Default</td>
<td>not plotted</td>
</tr>
<tr>
<td>Viewport</td>
<td>Default, not plotted</td>
<td></td>
</tr>
<tr>
<td>BorderTitleblock</td>
<td>0.7 mm</td>
<td></td>
</tr>
</tbody>
</table>

Part B: Profile Drawing, (8 points)

Draw profile grid every 50 feet in horizontal direction and every 5 feet in vertical direction

- Profile grid: label stations every 100 feet and elevations every 5 feet (4 pts)
- Label Manholes, vertically in profile view at STATIONS: (1 pt)
  - MH # (above line)
  - STA # (below line)
  - GRD (below line)
  - IE (below line)
- Draw Stormwater pipe with correct line weight and label along grade. (2 pt)
  - MH stations and pipe invert must be correct in profile view but pipe around these can be estimated.
  - Label each pipe segment between MHs in profile view
    - 8” CSP XX LF (determine length of pipe: LF – linear feet) XX% (determine slope of pipe)
- Draw grade line of ground with correct line weight and label each ground segment between pipes with percent slope (i.e., 2.1%) (1 pt)
Submission format example

Part A: Plan View

Part B: Plan and Profile