Overview

- Introduction
- Site Layout
- Grading
- Existing Utilities
- Erosion and Sediment Control
- Conclusion
- Questions
Existing Site Layout

- 13.6 acres
- Undeveloped
  - Lot coverage
- Location: Ashburn, Virginia
- PDIP zoned
- Special Exception
- Transportation access points
General Requirements

- Driving Range must face East
- Open space requirement
- Building Design
- Set backs
Road

NOT TO SCALE

0.50'

2.00%

2.00'

15.00'

Entry Road PROFILE

PROFILE SCALE
HORIZONTAL SCALE

0 50 100 200
1' = 100'

VERTICAL SCALE

0 5 10 20
1' = 10'

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Building Pad
Existing Utilities
Pre and Post Development Peak Flows

10 year and 24 hour Rainfall Storm Runoff analysis

<table>
<thead>
<tr>
<th>Pre Development Peak Flow</th>
<th>Post Development Peak Flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>21 cfs</td>
<td>77 cfs</td>
</tr>
<tr>
<td>Pre Development Time of Concentration</td>
<td>Post Development Time of Concentration</td>
</tr>
<tr>
<td>22.41 minutes</td>
<td>5.13 minutes</td>
</tr>
</tbody>
</table>
Storm Sewer Design: Overall
Road and Parking Lot
Water System Design

Tie In PROFILE

PROFILE SCALE
HORIZONTAL SCALE
0' 50' 100' 200'
1" = 100'

VERTICAL SCALE
0' 5' 10' 15'
1" = 10'

Water Main PROFILE

Station

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WATER DESIGN

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Sanitary Sewer PROFILE

Station

- Station 1: RIM: 237.17
  - In: 226.96 8" PVC
  - Out: 226.96 8" PVC

- Station 2: RIM: 231.20
  - In: 226.25 8" PVC
  - Out: 225.25 8" PVC

- Station 3: RIM: 235.05
  - In: 222.76 8" PVC
  - Out: 222.76 8" PVC

- Station 4: RIM: 240.07
  - In: 236.07 8" PVC @ 1.00%
  - Out: 240.07 8" PVC @ 1.00%

- Station 5: RIM: 243.19
  - In: 239.19 8" PVC @ 1.85%

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Sanitary Design

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Utilities Overview

Loudoun County EDM:
- Cover: 36”
- Vertical: 18”
- Horizontal: 10’
E&SC Phase I
E&SC: Phase II
Conclusion

- Cost
  - Site Work: $955,732.25
  - Wet Utilities: $241,012.65
  - Asphalt: $726,365.50
  - Concrete: $17,276.91
  - E&SC: $50,438.00
  - TOTAL: $2,127,853.25
Thank you, Kevin, Jessie, Jessie and Pete!
Questions?!