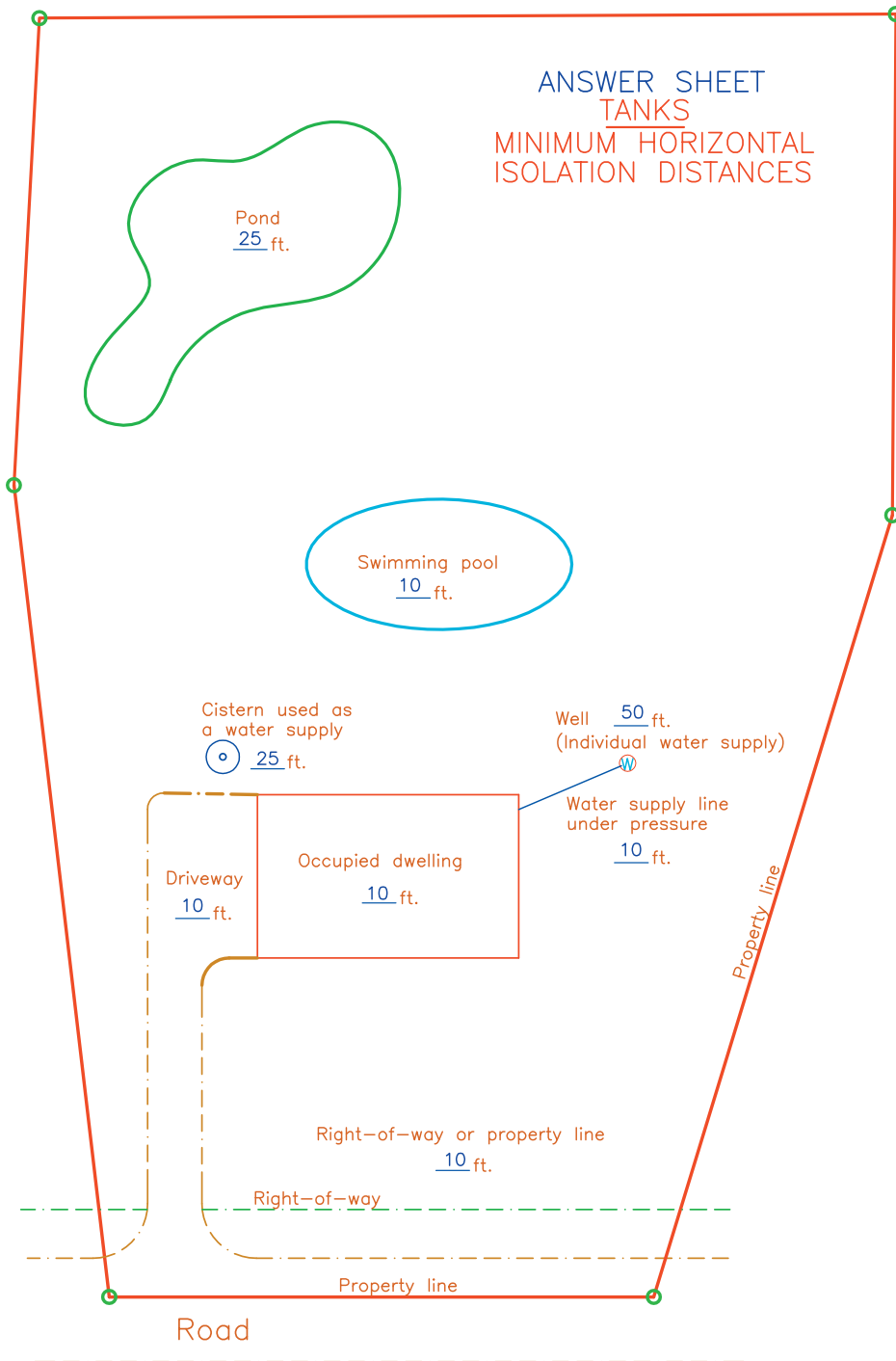
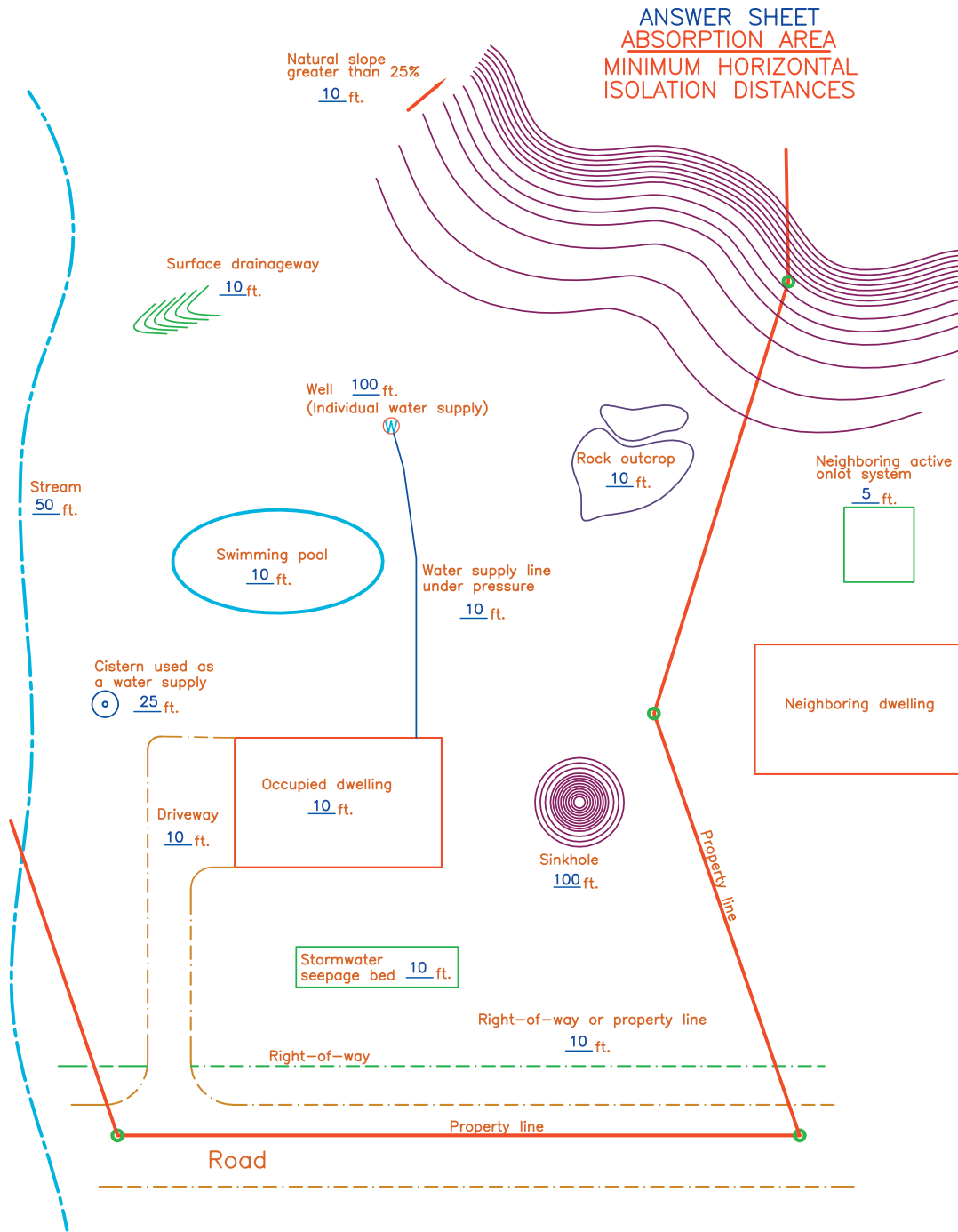


ORIENTATION

Chapter O-3 Answer Sheets

O-3a—EXERCISE: Minimum Horizontal Isolation Distances





O-3b—EXERCISE: Slope

8; 12; 25; 4; 12; 25

O-3c—REVIEW: Minimum Horizontal Isolation Distances and Slope

1. False. The regulations provide a wide range of manmade and natural features from which minimum horizontal isolation distances must be maintained.
2. A, B.
3. B, C.

O-3d—EXERCISE: What Is the Limiting Zone?

- i. high water
- ii. open joints
- iii. slowly permeable

O-3e—EXERCISE: What Is a Qualified Soil Scientist?

certified; two; soils; bachelor of science; certification

O-3f—REVIEW: Soils Analysis

1. renovates
2. limiting zone
3. i) seasonal high water table
ii) rock with insufficient soil
iii) bedrock or other slowly permeable stratum
4. soil test probe

- 5. soil profile description
- 6. A, B, C.
- 7. B.
- 8. A.
- 9. C.
- 10. A, C, E.

O-3g—EXERCISE: Chapter Review

- 1. False. Although a consultant may do the on-site testing, the SEO must be present at some point during the consultant’s testing to observe the tests and confirm the accuracy of the results. Therefore, it is critical that an SEO know how to conduct on-site testing.
- 2. A, B, C. The SEO must be present at some point during the testing to observe the tests and confirm the results.
- 3. True.
- 4. 3 Soil analyzed and evaluated
 4 Percolation test or soil morphological assessment conducted
 2 Slope of land measured
 1 Isolation distances measured
- 5. B, C.
- 6. False. DEP has not yet approved an absorption area that would properly renovate the effluent on a site with a slope steeper than 25 percent.
- 7. D.
- 8. 8% In-ground seepage bed absorption area
 25% In-ground trench absorption area
 12% Elevated sand mound bed absorption area
 12% Elevated sand mound trench absorption area

9. C.
10. A, C, D, E.
11. A, B, C, D.
12. C. The probe must be located within 10 feet of the proposed absorption area.
13. B, C, D.
14. A, B, C.
15. *In-ground absorption area (seepage bed or standard trench)* —
60 inches
- IRSIS* — 10 inches to seasonal high water table,
 16 inches to rock
- Elevated sand mound* — 20 inches
- Drip irrigation* — 20 inches
- Shallow limiting zone at-grade absorption area* —
 10 inches to seasonal high water table,
 16 inches to rock
16. B.
17. *IRSIS* _____ None _____
- Elevated sand mound* _____ 3-180 minutes per inch _____
- At-grade absorption area* _____ 3-180 minutes per inch _____
- Shallow limiting zone at-grade absorption area* _____ None _____
- In-ground absorption area (seepage bed or standard trench)*
 _____ 6-90 minutes per inch _____
- Drip irrigation absorption area* _____ None _____