

## NO RTEC JOB SPECIFIC SKILLS COMPETENCY

### SURVEYOR HELPER

DOT: 869.567-010 / O\*NET-SOC: 17-1022.00 SVP 4

**Job Description:** Assists Surveyor in taking measurements of land surfaces, elevations and other features. *Physical Demands* - Active w/medium lifting, carrying, or moving (up to 50 lbs); *General Educational Development* - R3 M1 R2; *Aptitudes* - Average Manual Dexterity.

### CORE SKILL COMPETENCIES/INDICATORS:

1. Can demonstrate familiarity with the U.S. section system and land law. (IN, S)
  2. Can demonstrate familiarity with surveyor reference tools. (R, S, T)
  3. Can demonstrate basic understanding of surveying terminology. (IN, S)
  4. Can demonstrate ability to appropriately position and hold stadia rods and/or levels to assist survey team in determining elevations and laying out stakes for map reading, construction, mining, land and other surveys. (R, I, S, T)
  5. Can demonstrate ability to call out readings or record station numbers and readings in notebook in an accurate manner. (I, IN, S)
  6. Can demonstrate ability to appropriately mark points of measurement with elevation, station number, or other identifying mark. (R, I, S, T)
  7. Can demonstrate ability to accurately measure distance between survey points, using steel or cloth tape or surveyors chain. (R, I, IN, S, T)
  8. Can demonstrate ability to accurately mark measuring points with Keel (marking crayon), paint sticks, scratches, tacks or stakes. (R, I, T)
  9. Can demonstrate ability to correctly position wooden or metal stakes at survey points and drive them into ground at specified elevations using hammer or hatchet. (R, T)
  10. Can demonstrate ability to safely cut and clear brush and trees from line of survey using brush hook, knife, ax, chainsaw or other cutting tools. (R, T)
  11. Can demonstrate proper technique used to stake property lines. (R, IN, S, T)
  12. Can demonstrate an understanding of the different types of nails, wood, staking, etc. utilized for surveying purposes. (R, IN, T)
  13. Can demonstrate knowledge of different plants and trees to use as reference points for surveying notes. (R, IN, S, T)
  14. Can demonstrate proper procedure for the maintenance of surveying equipment, including tripods, bi-pods, satellite receivers, cutting tools, center punches, and others. (R, S, T)
  15. Can demonstrate a basic understanding of mathematics, including geometry. (IN, S)
  16. Can demonstrate ability to compute measurements in 1/10ths of a foot, rather than angles - to determine angle measurements. (R, IN, S, T)
  17. Can demonstrate ability to draw accurate maps under direction of surveyor or surveyor technician. (IN, S)
  18. Can demonstrate ability to use compass and bearings to determine locations. (R, IN, S, T)
  19. Can demonstrate safe procedures for lifting and carrying required equipment. (R, S, T)
  20. Can demonstrate ability to appropriately set up traffic warnings and flag vehicles, as directed. (R, I, S)
-