

## **Agricultural Structures**

### **Unit I — Working With Plans**

#### **Instructor Guide**

**The instructor should distribute the student handouts at the beginning of the unit and assign the performance-based assessment activities in conjunction with the relevant lesson material as indicated in the instructor guide. Students will complete the activities as they progress through the unit lessons.**

1. Use “AS 1.2 (Student), Drawing a Plan” to assess student competency at preparing a construction plan. Students will use computer-aided drafting (CAD) equipment or pencils and paper to make three elevation drawings of a storage building.
  - a. For a complete description of the activity, see “AS 1.2” (Instructor), p. I-25.
  - b. Answers for the activity are located on p. I-6.
2. Use “AS 2.1, Preparing a Plan of Procedure” to assess student competency at developing a plan of procedure and preparing a cutting bill of materials and purchasing bill of materials. Students will use elevation drawings of a pine workbench to develop a plan of procedure and bills of materials for the project.
  - a. For a complete description of the activity, see “AS 2.1”, pp. I-37–I-38.
  - b. Answers for the activity are located on p. I-32.
3. For additional practice in working with plans and developing bills of materials, see “Unit VI, Project Construction” in *Agricultural Construction Volume I* and “AS 18, Electronic Bill of Materials” in *Computer Applications in Agriculture*. Both are available from the Instructional Materials Laboratory, University of Missouri-Columbia, accessed December 1, 2003, at <http://www.iml.coe.missouri.edu/>. [Link needs update.]
4. The student handout includes checklists based on these activity sheets that students can use to evaluate their work.
5. The student handout and scoring guide can also be adapted for use with students’ class projects, if desired.
6. The final assessment score will be based on the completeness, accuracy, and appearance of the drawings and the overall thoroughness and accuracy of the plan of procedure and bills of materials.
7. **ADDITIONAL ACTIVITY:** Have students determine the time frame for the completion of a project. For a work sheet that could be used for this activity, see “WS 5.1, Time Estimation Sheet,” p. VI-53 of *Agricultural Construction Volume I*.