

# PLS-CADD

## Training Outline

### Tualatin Sweetbrier Inn

### July 15<sup>th</sup> – 18<sup>th</sup>, 2002

- I. General Overview
  - A. PLS Programs
    - PLS-CADD
      - PLS-CADD LITE
    - PLS-POLE
    - TOWER
    - SAPS
    - CAISSON
  - B. Getting Around in PLS Programs
    - 1. View
      - a. Zoom
      - b. Inverse Zoom
      - c. Initial
      - d. Previous
      - e. Redraw
      - f. Distance Between Points
      - g. Scales, Rotations, Panning
      - h. Display Options
      - i. Toolbars
    - 2. Window
      - a. Open Windows
        - Profile
        - Plan
        - 3-d
        - Sheets
      - b. New Window
      - c. Cascade
      - d. Tile Horizontal
      - e. Tile Vertical
      - f. Arrange Icons
      - g. Close All
- II. Survey Data/Terrain Modeling
  - A. Feature Codes
  - B. Survey Data
  - C. Alignment Selection/Modification
  - D. Feature Code Labels and Terrain Comments

- E. Terrain Modeling Parameters
- F. Digital Terrain Modeling Options and Functions
- G. Importing Survey Data in User Defined Formats
- H. User Project
  - 1. Import Survey Data
  - 2. Select Alignment
  - 3. Review Above Concepts

### III. Engineering

- A. Display Options
- B. Design Criteria
  - 1. Notes
  - 2. Weather
  - 3. ASCE Terrain Type
  - 4. Creep Stretch
  - 5. ACSR Cable Model
  - 6. Cable Tensions
  - 7. Automatic Sagging
  - 8. Structure Loads
  - 9. Phase Clearances
  - 10. Galloping
  - 11. Load Criteria
  - 12. Save Criteria
  - 13. Report
- C. Structure Calculations
- D. Section Calculations
- E. Manual Spotting & Stringing
- F. Material List
- G. Automatic Spotting
  - 1. Criteria
  - 2. Available Structure List
  - 3. Constraints
  - 4. Spotting
- H. User Project
  - 1. Create Criteria
  - 2. Create Structures
  - 3. Create Cables
  - 4. Manual Spotting and Stringing
  - 5. Material List
  - 6. Automatic Spotting

### IV. Drafting

- A. Page Size and Layout
- B. Display Options

- C. Scales and Paging Parameters
- D. Importing Drawings into PLS
- E. Exporting Drawings from PLS
- F. User Project
  - 1. Page Size and Layout
  - 2. Display Options
  - 3. Scales and Paging Parameters

## V. PLS-CADD Lite

## VI. Structures

- A. Linking Structures Directly to PLS-CADD and PLS-CADD Lite
- B. Allowable Spans vs. Interaction Diagrams vs. Full Structural Analysis
- C. Modeling Full Structural Analysis Structures
  - 1. PLS-POLE
    - a. General Overview
    - b. Component Libraries
    - c. Modeling Structures
      - Wood Structures
      - Tubular Steel Structures
      - Concrete Structures
      - Modular Mast Structures
    - d. Adding Loads
      - Manual
      - PLS-CADD Developed
    - e. Interpreting Analysis Results
  - 2. Wood Pole Wizard
  - 3. TOWER – Brief Overview