

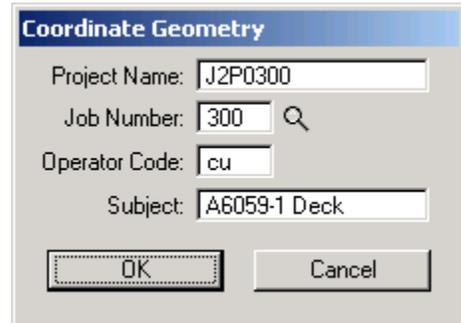
Exercise 11-2

1. Open the MicroStation file **t:\br-proj\A_geopak\d2\j2p0300\data\plan_j2p0300.dgn**.

2. Enter **Coordinate Geometry** by selecting the first icon in the tool pallet upper right corner of the Road tools.

Enter Coordinate Geometry with the following settings:

Project Name: **J2P0300**
 Job Number: **300**
 Operator Code: **cu**
 Subject: **A6059-1 Deck**



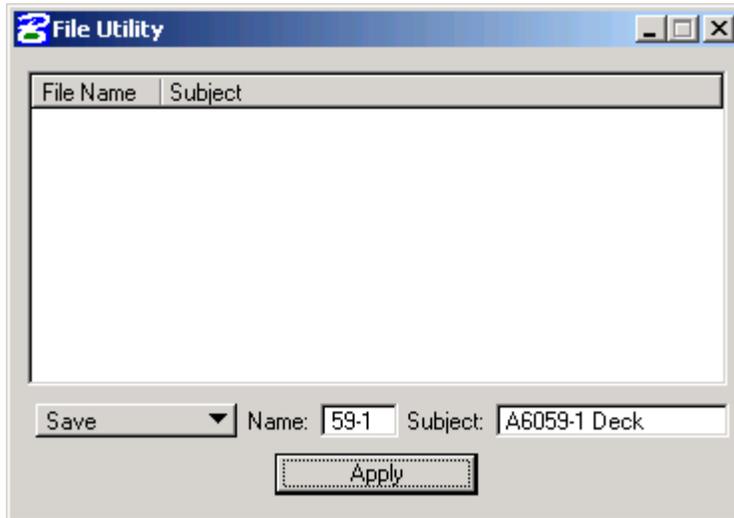
3. Use Bridge deck commands to find the quarter point elevations for the first span for Bridge A6059.

Bridge Name: **A6059.**
 Profile: **RTE6PR.**
 Tie: **0.**
 Cross Slope: **-2% (Normal Crown)**
 Alignment: **RTE6.**
 Pier Direction Rt. to Lt.: **N 13 56 34 W.**
 Back Sta. CL Bearing: **1288+26.4434.**
 Ahead Sta. CL Bearing: **1288+70.9850.**
 Roadway Width: **36'.**
 Beam Spacing: **8'-2".**

The needed COGO commands are given below:

```
BRIDGE A6059
PROFILE RTE6PR
TIE 0
SE 1288+00 LT -2 12 -2 RT -2 12 -2
ALI RTE6
PIER BK N 13 56 34 W AH N 13 56 34 W
SPAN 1 128826.4434 128870.9850 4 + P
FC -19.333333 19.333333
GU -18 18
BEAM OFF -16.333333 -8.166667 0 8.166667 16.333333
END SPAN
```

- Save the COGO commands (**File > File Utility**) as an input file. Name it **59-1** and give it the description: **A6059-1 Deck** as shown in the following screen capture of the File Utility dialog.



Click **Apply** to create the file.

- Use Ultra-Edit to view the file:

t:\br-proj\a_geopak\d2\j2p0300\data\a6059-1.txt.

Your results should be identical to those shown below. If not, use the COGO Editor (**Edit > Editor**) to correct your input file. Once it is corrected, do a **Restore/Read**. Save the corrected input file.

```

Bridge Deck Elevation.
-----
Bridge A6059
Span A6059-1  1288+26.44 R 1 to 1288+70.99 R 1

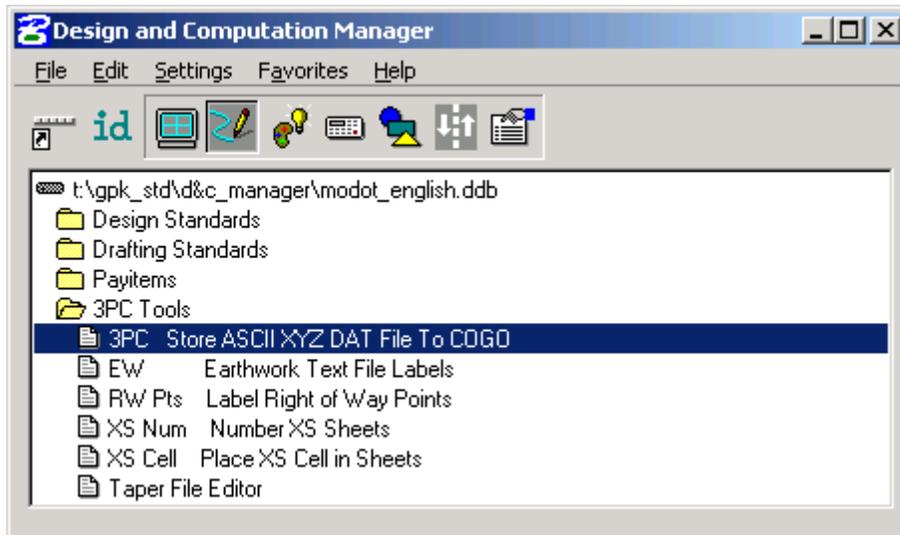
          000          001          002          003          004
-----
LFC      799.1341  799.1173  799.1133  799.1133  799.1133
LGT      799.1591  799.1433  799.1400  799.1400  799.1400
BM   1  799.1906  799.1758  799.1733  799.1733  799.1733
BM   2  799.3461  799.3369  799.3367  799.3367  799.3367
BM   3  799.5039  799.5000  799.5000  799.5000  799.5000
BM   4  799.3375  799.3367  799.3367  799.3367  799.3367
BM   5  799.1733  799.1733  799.1733  799.1733  799.1733
RGT      799.1400  799.1400  799.1400  799.1400  799.1400
RFC      799.1133  799.1133  799.1133  799.1133  799.1133
PGL      799.5039  799.5000  799.5000  799.5000  799.5000
    
```

The following steps store COGO points at the deck elevations locations. These are created from the XYZ file, which is created when the deck elevations are calculated.

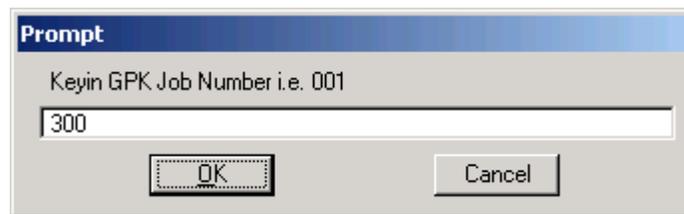
6. Launch the Store ASCII XYZ DAT File to COGO 3PC application from the **Design and Computation Manager** by double clicking on the following path:

3PC\Store ASCII XYZ DAT File to COGO.

It is the entry highlighted in the following dialog:



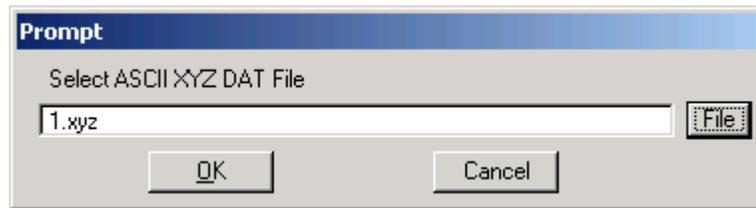
7. **Enter** the GPK Job Number **300** for (job300.gpk) and click **OK**. The points are added to this GPK file.



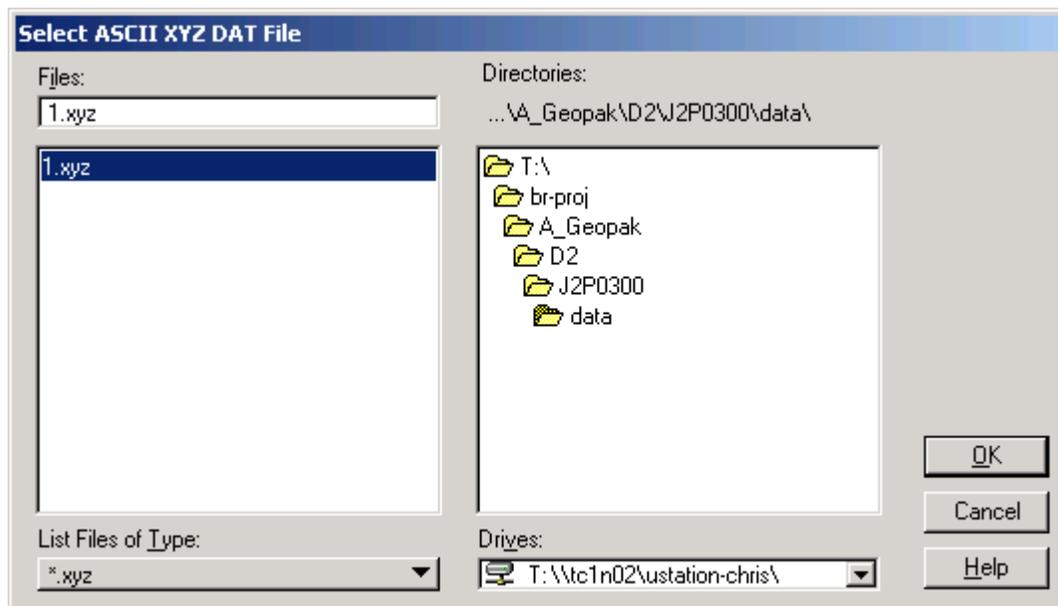
8. Set **Redefine** to **Off** and click **OK**. This prevents the points stored from overwriting any previously stored COGO points.



9. Specify the file containing the XYZ data by clicking on **File** button in the following prompt.



Select the file **1.xyz**, which is highlighted in the dialog below, and click **OK** for both dialogs.



10. Enter **1000** as the name for the first COGO point stored and click **OK**.



11. To identify the points stored as being deck elevation points enter “**Deck Elevations**” as the point description and click **OK**. View the points stored using the COGO Navigator.

