Object: Generating Multiple cross-sections using *TECHNICN*

Problem: Automate the creation of parallel cross-sections with a specified offset from each other.

Procedure:

Step 1.
Create a file called **technicn.prj** and place the following information in the file:

Step 2.
Create a *SECTION* runlog and **PARAMETERIZE** the Scale, Endpoints and the Output file name.

Step 3.
Create a file called **section.tsk** and place the following information in the file:

```
# This is a sample technicn.prj to create cross-sections
# Use the Boland database off the TECHBASE Tutorial disk.
PROJECT Graphics. "Create, View and Plot graphics"
     TASK Section mining section.tsk "Create a series of cross-sections"

# section.tsk is used to create multiple cross-sections offset from one another
# First step is to ask the user to specify the PARAMETERS describing the section

PARAMETER LeftX  =  10000 CI 9000  20000   "Enter Left X (East) Coordinate"
PARAMETER LeftY  =  20000 CI 15000 25000   "Enter Left Y (North) Coordinate"
PARAMETER RightX =  15000 CI 9000  20000   "Enter Right X (East) Coordinate"
PARAMETER RightY =  23000 CI 15000 25000   "Enter Right Y (North) Coordinate"
PARAMETER Off-set  = 100  CI 50    200     "Enter desired off-set for each section"
PARAMETER "No. of sections" = 2 CI 1 50    "How many sections do you want to run"
SAVE graphics.sav

# Set default coordinates for cross-section

SET Scale  =  50            # These SETs can be changed to PARAMETERS
SET Top-elev = 4000         # If you want to give the user a choice
SET Bot-elev = 7000         # Rather than hardwiring them in.

SET projection = {off-set} 2 /
SET count = 1
# Set coordinates for first section
SET LX = {LeftX}
SET LY = {LeftY}
SET RX = {RightX}
SET RY = {RightY}
SET Theta = {RX} {LX} - {RY} {LY} - atan2 1.0000 *

# Calculate plot size of section
SET XSIZE  = {LX} {RX} - ABS {Scale} /
SET YSIZE  = {LY} {RY} - ABS {Scale} /
SET ZSIZE  = {Top-elev} {Bot-elev} - {Scale} /
SET OSIZE  = {XSIZE} 2 ^ {YSIZE} 2 ^ + 2 SQRT
SET LENGTH = {XSIZE} {YSIZE} {OSIZE} max max

MESSAGE "Plot Size:  Width= {ZSIZE}, Length= {LENGTH}. Type ^X to Cancel"
RESTART:
IF {count} > {No. of sections}
   GOTO FIN_Section
```



```
# Now check for direction of the cross-section

IF {LY} = {RY}
    GOTO Y
ELIF {LX} = {RX}
    GOTO X
ELSE
    GOTO OBLIQUE

X:
   SET x-offset = {Off-set}           # Add offset to X-Coordinate
   SET y-offset = 0                   # Leave Y-Coordinate constant
   SET Basename = x                   # Enter base name for output file
   SET firstname = {LeftX}            # Retains first cross-section name
   SET Output = {Basename}{LX}.met    # Combine names for output file
   SAVE graphics.sav
   GOTO Start_sect

Y:
   SET y-offset = {Off-set}           # Add offset to Y-Coordinate
   SET x-offset = 0                   # Leave X-Coordinate constant
   SET Basename = y                   # Enter base name for output file
   SET firstname = {LeftY}            # Retains first cross-section name
   SET Output = {Basename}{LY}.met    # Combine names for output file
   SAVE graphics.sav
   GOTO Start_sect

OBLIQUE:
   SET x-offset = {Off-set} {Theta} cos * -1. *
   SET y-offset = {Off-set} {Theta} sin *
   SET Basename = obl                 # Enter base name for output file
   SET Output = {Basename}{count}.met # Combine names for output file
   SET firstname = 1                  # Retains first cross-section name
   SAVE graphics.sav
   GOTO Start_sect

Start_sect:

TRANSLATE section.std section.inc
RUN section <section.inc

SET count = {count} 1 +
  SET LX = {LX} {x-offset} +
  SET LY = {LY} {y-offset} +
  SET RX = {RX} {x-offset} +
  SET RY = {RY} {y-offset} +
GOTO  RESTART

# When finished reset the count and offsets to last section created
FIN_Section:
SET count = {count} 1 -
  SET LX = {LX} {x-offset} -
  SET LY = {LY} {y-offset} -
  SET RX = {RX} {x-offset} -
  SET RY = {RY} {y-offset} -

MESSAGE "{No. of sections} where created - filenames are {Basename}{first}.met to
{output}"

ERASE section.inc
```

See Also:

Technicn.prj(1tg)
Section(1gr)
Tbcalc(1tb)
Standards(0)

