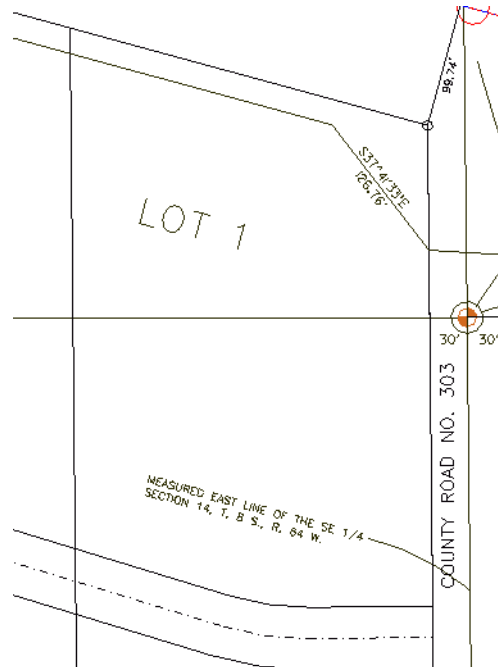


LAB 12 - Parcel Creation by Deed

Lot number 1 lies at the Northeast corner of the Summit Business Park plat. Right of way acquisition will occur along the northerly limits of the plat. A parcel needs to be created from the deed information for lot 1.

Chapter Objectives:

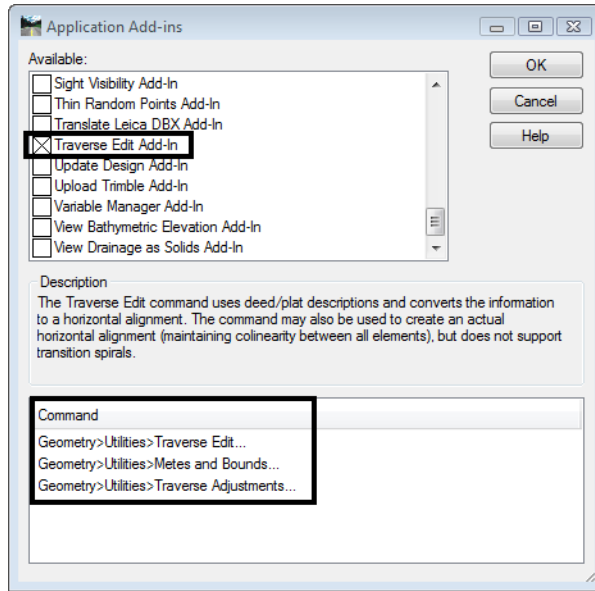
- Create a closed parcel
- Use Traverse Edit Add-In application



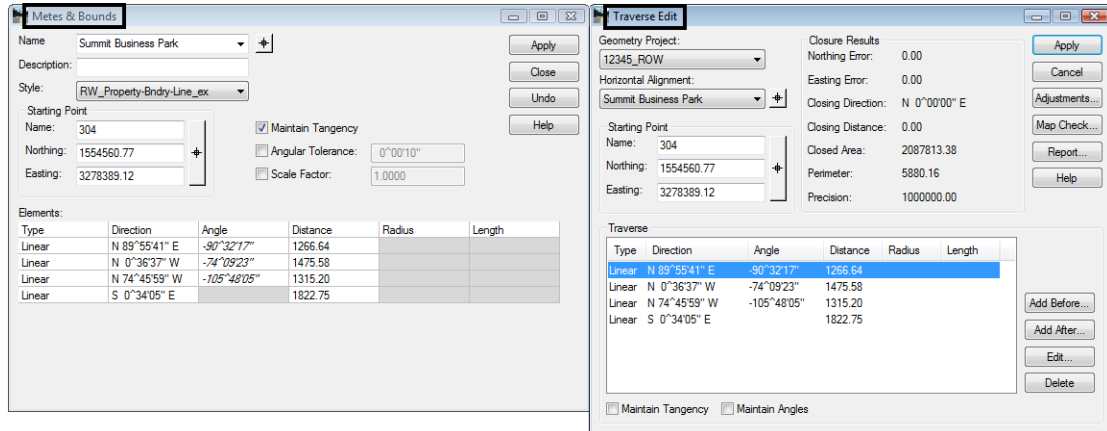
To create the parcel (closed alignment) for lot 1, the InRoads command **Geometry > Traverse** could be used. Another solution is to use the Traverse Edit command. Traverse Edit is an Application ADD-In command and must be enabled. In addition to allowing traversing, the traverse edit command reports on parcel closure and provides adjustment commands. Additionally a Mets and Bounds command could be used.

1. Using **InRoads**, select: **Tools > Application ADD-Ins...**
2. Toggle **On** the **Traverse Edit Add-in**

3. <D> OK



Note: When enabling the Traverse Edit Add-In, the Metes & Bounds and Traverse Adjustments command are also enabled.



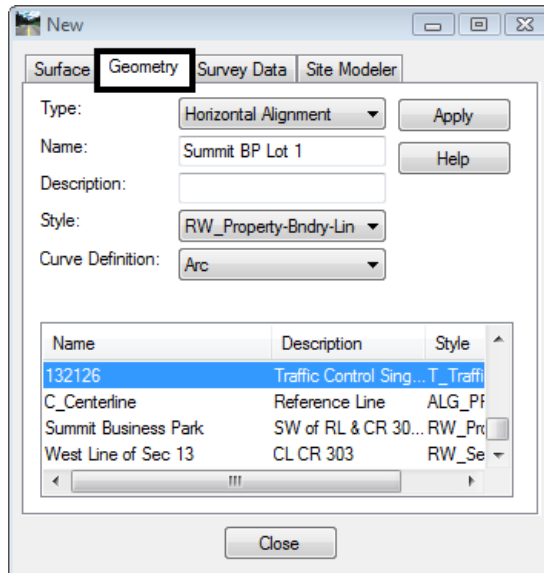
These commands provide similar functions. The Metes & Bounds dialog is presented in a table format and edits can be accomplished directly in the dialog. Traverse adjustment can be accomplished by selecting Geometry > Utilities > Traverse adjustment. The Traverse edit dialog provides input, edits, and adjustment in a single dialog.

Note: The Traverse edit command will be used in this lab and requires an alignment to exist prior to populating the alignment. The Metes & Bounds dialog allows creation of an alignment in the dialog.

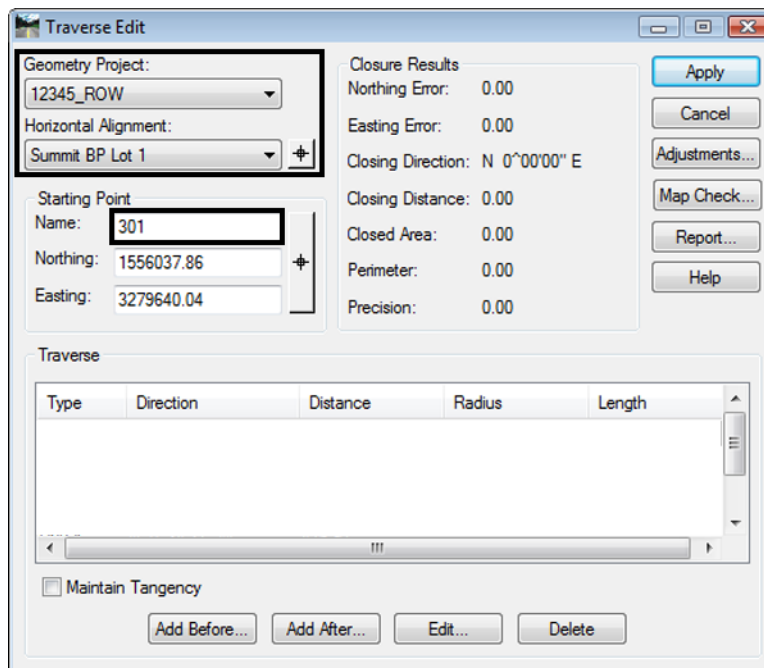
Create an alignment to store Lot number 1.

4. File > New > [Geometry], Select the Geometry tab and input:
5. Type: **Horizontal Alignment**

6. **Name: Summit BP Lot 1**
7. **Description: Lot 1 of Summit Business Park**
8. **Style: RW_Property-Bndry-Line_ex**
9. **<D> Apply**



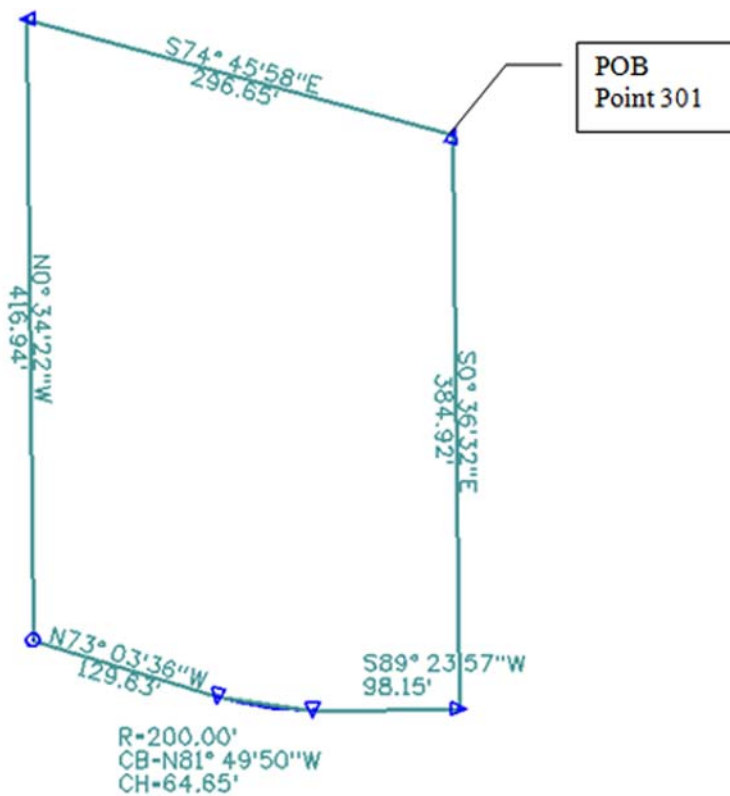
10. Select **Geometry > Utilities > Traverse Edit** to open the Traverse Edit dialog box.
11. Set the fields for the **Geometry Project** and **Horizontal Alignment**.
12. Key-in: **301** for the **Starting Point** (Cogo point 301 is located at the NE corner of lot 1).



13. **Lot 1 is described as:**

Commencing at the West ¼ corner of Section 13, Township 8 South., Range 64 West. Thence along said section line N 0-37-05 W, 154.14 feet. Thence departing from said section line S 89-22-55 W, 30.00 feet to the westerly right-of-way line of County Road 33 and the Point of Beginning.

1. Thence S 0-36-32 E, to the northerly right of way line of Summit Business Park Road, 384.92 feet.
2. Thence along said right of way line, S 89-23-57 W, 98.15 to a point of curvature.
3. Thence N 81-49-50 W, 64.65 feet along the chord of said curve, having a 200.00' radius to the right.
4. Thence N 73-03-36''W, 129.63 feet. Thence departing from Summit Business Park Road, N 0-34-22 W to the southerly right of way line of S.H. 86, 416.94 feet.
5. Thence along said right of way line, S 74-45-58 E, 296.65 to the point of beginning.



14. <D> the **Add After** button on the Traverse Edit dialog.

15. Set *Type: Linear*

16. Input the **Direction** and **Distance** for the first course as shown.

Add Element After

Type: **Linear** Apply

Linear

Direction: S 0°36'32" E + - Cancel

Distance: 384.92 + - Help

Circular

Parameter	Value
Chord Direction	N 0°00'00" E + -
Radius	0.00 + -
Length	0.00 + -

17. **<D> Apply** - the course is added to the alignment.

Traverse

Type	Direction	Distance	Radius	Length
Linear	S 0°36'32" E	384.92		

Maintain Tangency

Add Before... Add After... Edit... Delete

18. **Input** the second Course.

Add Element After

Type: **Linear** Apply

Linear

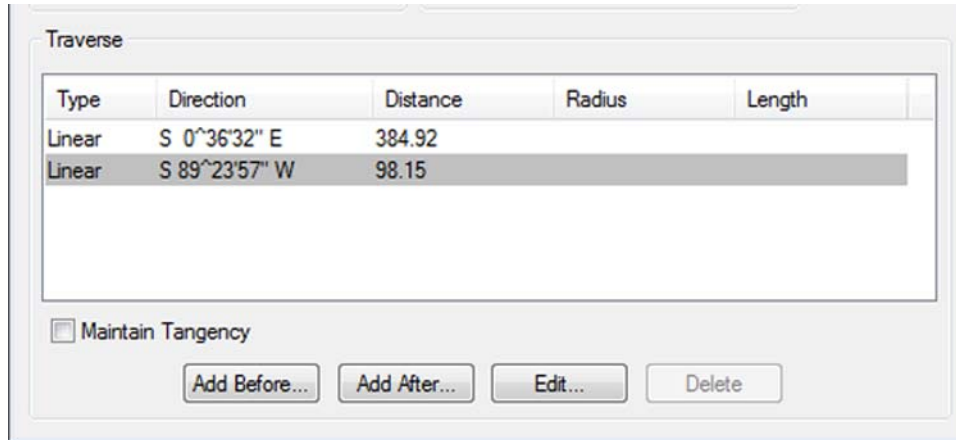
Direction: S 89°23'57" W + - Cancel

Distance: 98.15 + - Help

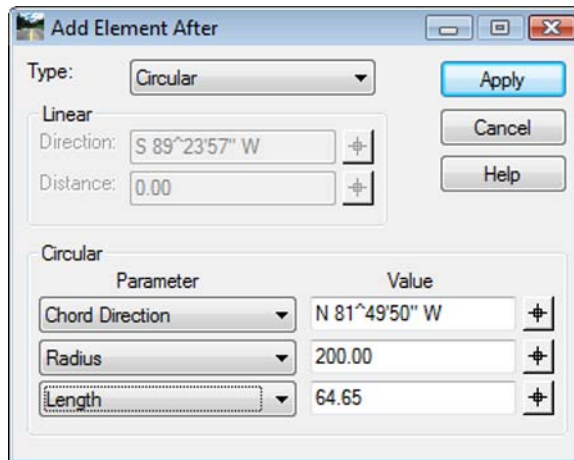
Circular

Parameter	Value
Chord Direction	N 0°00'00" E + -
Radius	0.00 + -
Length	0.00 + -

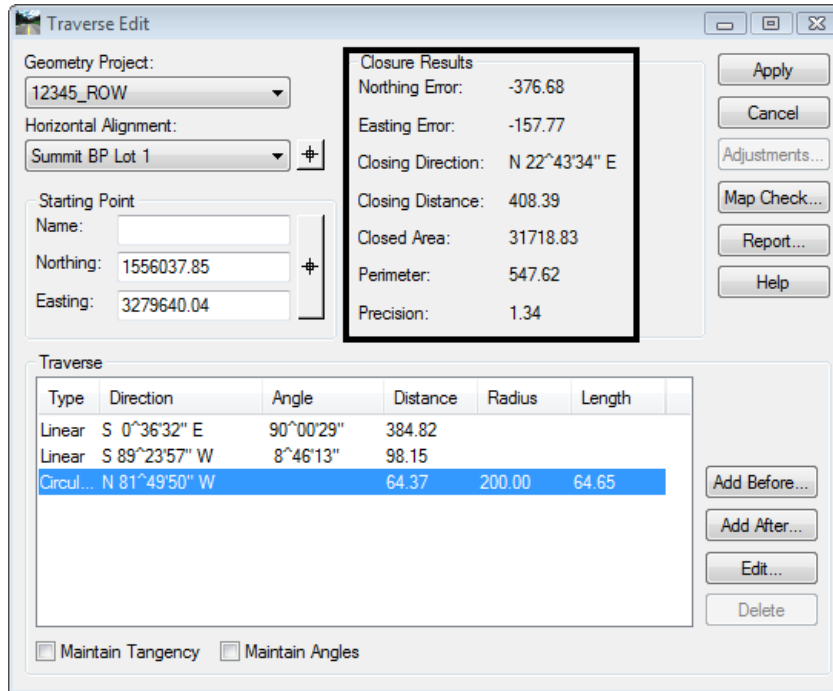
19. <D> **Apply** - the second course is added to the alignment.



20. **Input** the third course – change *Type*: Circular

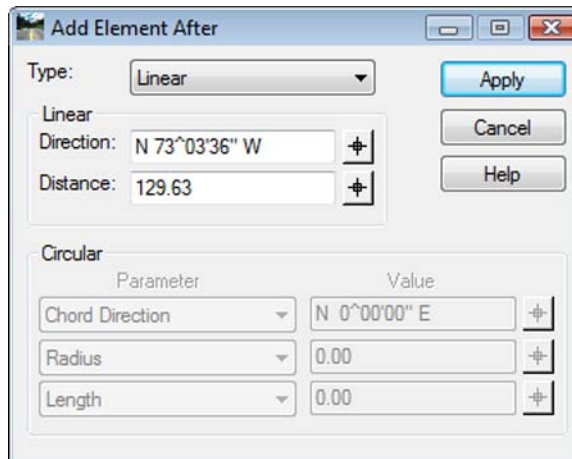


21. <D> **Apply** - the third course is added to the alignment.



Note: As courses are entered, the parent dialog displays closure results.

22. **Input** the fourth course and <D> **Apply**



23. **Input** the fifth course and <D> **Apply**

The screenshot shows the 'Add Element After' dialog box with the following settings:

- Type: Linear
- Linear Direction: N 0°34'22" W
- Linear Distance: 416.94
- Circular Chord Direction: N 0°00'00" E
- Circular Radius: 0.00
- Circular Length: 0.00

Buttons: Apply, Cancel, Help

24. **Input** the sixth and final course and <D> **Apply**

The screenshot shows the 'Add Element After' dialog box with the following settings:

- Type: Linear
- Linear Direction: S 74°45'58" E
- Linear Distance: 296.65
- Angle: 0°00'00"
- Circular Chord Direction: N 0°00'00" E
- Circular Radius: 0.00
- Circular Length: 0.00

Buttons: Apply, Cancel, Help

25. Review Closure Results in the parent dialog.

The Traverse Edit dialog box displays the following information:

Geometry Project: 12345_ROW
 Horizontal Alignment: Summit BP Lot 1
 Starting Point Name: [Empty]
 Northing: 1556037.85
 Easting: 3279640.04

Closure Results:
 Nothing Error: 0.06
 Easting Error: 0.28
 Closing Direction: S 77°45'41" W
 Closing Distance: 0.29
 Closed Area: 117518.56
 Perimeter: 1390.84
 Precision: 4823.08

Type	Direction	Angle	Distance	Radius	Length
Linear	S 0°36'32" E	90°00'29"	384.82		
Linear	S 89°23'57" W	8°46'13"	98.15		
Circul...	N 81°49'50" W	8°46'14"	64.37	200.00	64.65
Linear	N 73°03'36" W	72°29'14"	129.63		
Linear	N 0°34'22" W	105°48'24"	416.94		
Linear	S 74°45'58" E		296.65		

Buttons: Apply, Cancel, Adjustments..., Map Check..., Report..., Help, Add Before..., Add After..., Edit..., Delete

Options: Maintain Tangency Maintain Angles

26. <D> **Apply** to create the alignment.

Note: The Report button on the dialog can be used to summarize the alignment. The report can be written to a text file.

The Adjustments button on the Traverse Edit dialog is dithered. If the alignment contains circular elements, adjustments are not enabled.

Challenge Lab:

- ◆ Edit the record containing the curve by <D> on it and selecting **Edit**
- ◆ Change the record type to **Linear**
- ◆ Input the chord Direction and an the chord distance (which is incorrect) <D> **Apply**

The Edit Element dialog box shows the following settings:

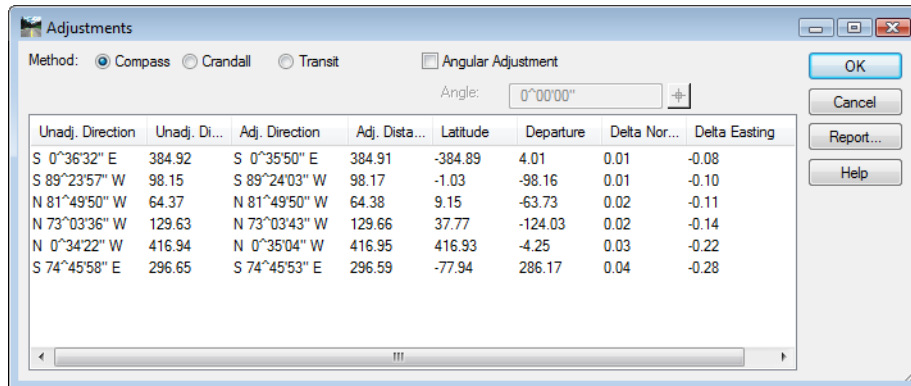
Type: Linear
 Linear Direction: N 81°49'50" W
 Distance: 64.37

Circular Parameters:

Parameter	Value
Chord Direction	N 81°49'50" W
Radius	200.00
Length	64.93

Buttons: Apply, Cancel, Help

- ◆ Close the *Edit Element* dialog
- ◆ <D> on the *Adjustments* button



Select the appropriate Method

<D> OK to apply the selected adjustment

Note: The columns for Unadjusted and Adjusted values. As the various radio buttons for method are selected, the adjusted values update providing a preview of potential solutions.