

**GPS SURVEY**  
**REPORT**  
**LORAIN COUNTY, OHIO**

**2005**

**Performed by: KS Associates, Inc.**  
**For: Lorain County Auditor**

# **GPS CONTROL SURVEY REPORT**

## **Lorain County, Ohio**

### **INTRODUCTION**

KS Associates, Inc. (KS) an Elyria, Ohio company was selected to perform the required surveying and GPS field work to establish new geodetic survey monuments in Lorain County. KS teamed with Geodetic Consulting Services to provide these services.

Seventy (70) new monuments were established in Columbia, Eaton, Grafton, Pittsfield, Russia and Wellington Townships. The monuments were set in November of 2005 by augering a 12" diameter hole to a depth of 48". Pre-mixed concrete was poured directly into each hole from a cement truck. A 5/8" rebar 36" long was placed in each hole. The standard bronze disk was then set in the wet concrete and the surface finished to a smooth texture. The monuments set for two (2) months before the survey was performed to allow for an possible settling. The GPS observations were performed in February of 2006. A goal of the project was to establish "intervisible" control monuments for convention "ground" surveys. The "intervisible" monuments would be positioned so that one (1) monument would be directly visible to another.

A total of eighty-six (86) points were occupied in this network. Control was established on each new monument utilizing the Global Positioning System (GPS) in a "Static" mode with ASHTECH dual frequency receivers. All GPS work was performed as per FGCS Guidelines and Procedures. The Geodetic coordinates are adjusted in the NAD-83 1995 system. All grid values are listed in the Ohio State Plane Coordinates (North Zone) in meters and feet, and elevations are shown NAVD'88 meters and feet.

### **CONTROL**

"LORPORT" (NGS PID No. MC1562) Horizontal Order "B", Vertical 1<sup>st</sup> Order; "IG1 A" (NGS PID No. AB6034) Horizontal Order "B"; "ZOB B" (NGS PID No. AA3881) Horizontal Order "A", Vertical 1<sup>st</sup> Order; "LV07" (NGS PID No. DF7219) Horizontal 1<sup>st</sup> Order and Lorain County Control Stations "LC107", "99-08", "2002-58", "2002-62", "2004-07", "2004-14", "2004-54", "2004-59", "2004-60", "2004-61" and "2004-62" were used to constrain the network.

### **LEAST SQUARES ADJUSTMENT**

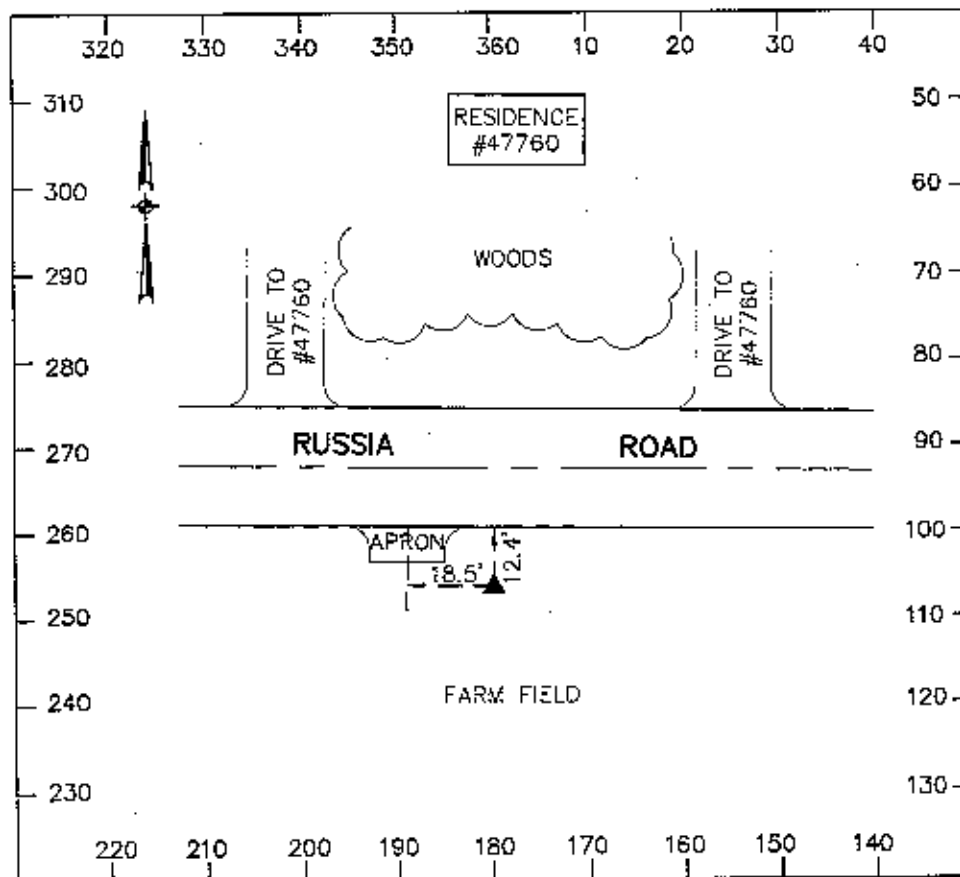
A Least Squares Statistical Adjustment was performed on the entire Geodetic network using the StarNet program. The fifteen (15) previous existing control points were held fixed for this adjustment. The Geoid 03 profile was incorporated into the adjustment. All data output was translated into Ohio North Zone NAD83-95 State Plane in U.S. feet for the coordinates and NAVD '88 U.S. feet for the elevation. See the GPS Residual Summary for details of the network accuracy.

# Lorain County Auditor's Office

## Geodetic Survey Marker

Station Name: 2005-01	Alias: None
USGS Quad: Kipton	Township: Russia
Type of Mark: Bronze Disk	Set By: KS Associates, Inc.
Stamping on Mark: 2005-01	Survey By: KS Associates, Inc.
Horizontal Datum: NAD83(1995)	Horizontal Order: First      Method: GPS
Latitude: 41-20-17.860218	Longitude: 82-15-04.460297
North (y) Meters: 185658.642	East (x) Meters: 620821.114
North (y) USFeet: 609115.062	East (x) USFeet: 2036810.604
Convergence: 0-09-48.33	Combined Scale Factor: 0.99991839
State Plane Coordinate System Zone: Ohio North (3401)	
Vertical Datum: NAVD88	Vertical Order: Second
Elevation (z) Meters: 237.778	Elevation (z) USFeet: 780.111

Location: To reach the monument, commence at the intersection of Russia Road and Quarry Road in Russia Township and travel East on Russia Road 0.3 miles more or less to the station on the right. The station is a bronze disk in concrete.



# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-02

USGS Quad: Kipton

Type of Mark: Bronze Disk

Stamping on Mark: 2005-02

Horizontal Datum: NAD83(1995)

Latitude: 41-20-18.097142

North (y) Meters: 185664.697

North (y) USFeet: 609134.925

Convergence: 0-09-35.76

State Plane Coordinate System Zone: Ohio North (3401)

Vertical Datum: NAVD88

Elevation (z) Meters: 240.878

Location: The station is located at the Southeast corner of the intersection of Russia Road and Quarry Road in Russia Township. The station is a bronze disk in concrete.

Alias: None

Township: Russia

Set By: KS Associates, Inc.

Survey By: KS Associates, Inc.

Horizontal Order: First Method: GPS

Longitude: 82-15-23.582383

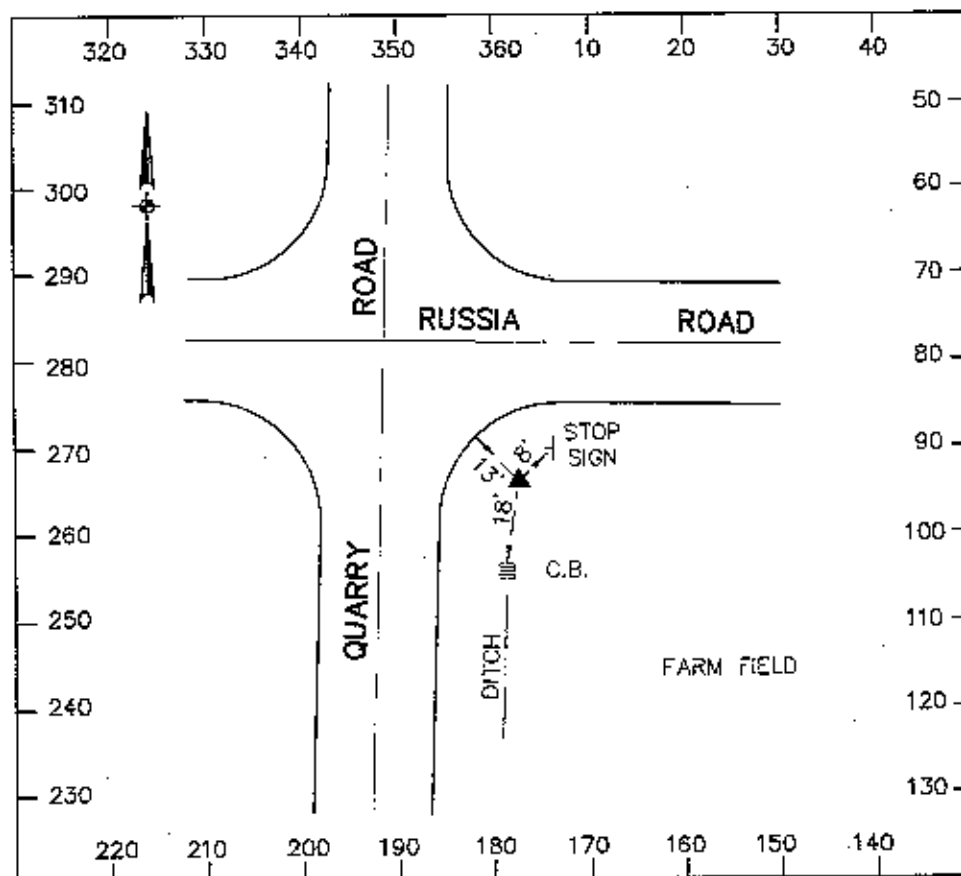
East (x) Meters: 620376.510

East (x) USFeet: 2035351.933

Combined Scale Factor: 0.99991791

Vertical Order: Second

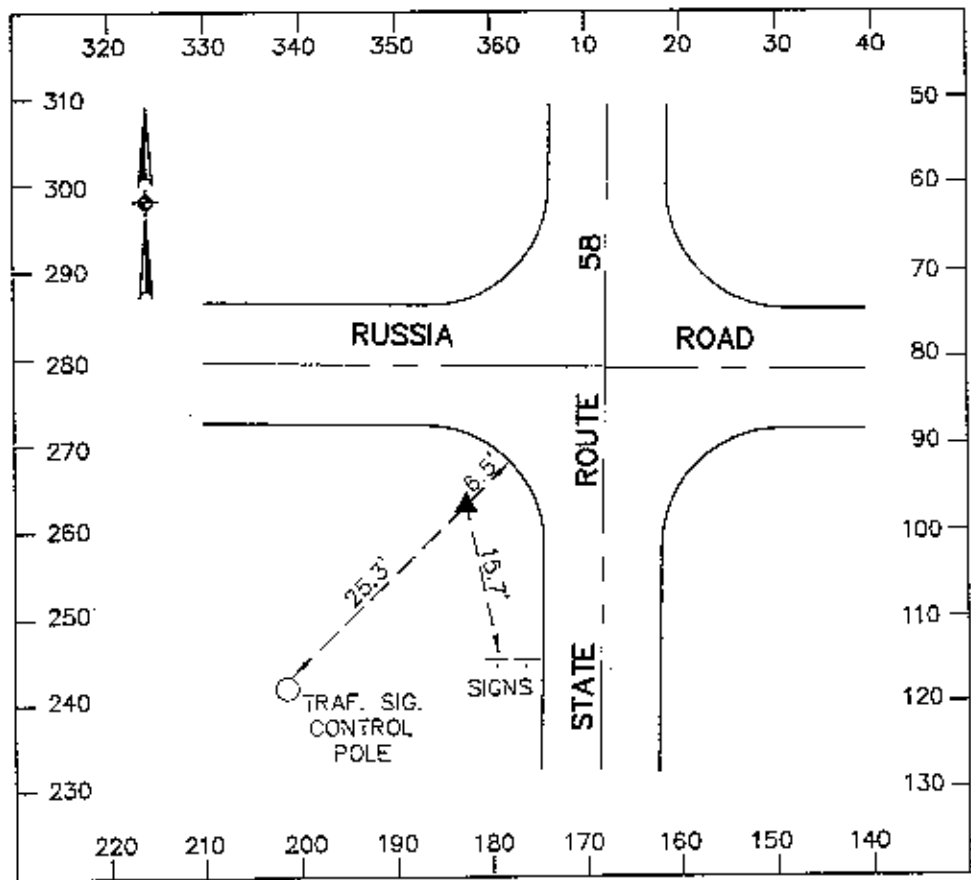
Elevation (z) USFeet: 790.282



# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-03 USGS Quad: Oberlin Type of Mark: Bronze Disk Stamping on Mark: 2005-03 Horizontal Datum: NAD83(1995) Latitude: 41-20-16.116593 North (y) Meters: 185613.811 North (y) USFeet: 608967.978 Convergence: 0-11-11.22 State Plane Coordinate System Zone: Ohio North (3401) Vertical Datum: NAVD88 Elevation (z) Meters: 240.699	Alias: None Township: Russia Set By: KS Associates, Inc. Survey By: KS Associates, Inc. Horizontal Order: First      Method: GPS Longitude: 82-12-58.285329 East (x) Meters: 623754.821 East (x) USFeet: 2046435.609 Combined Scale Factor: 0.99991788 Vertical Order: Second Elevation (z) USFeet: 789.694
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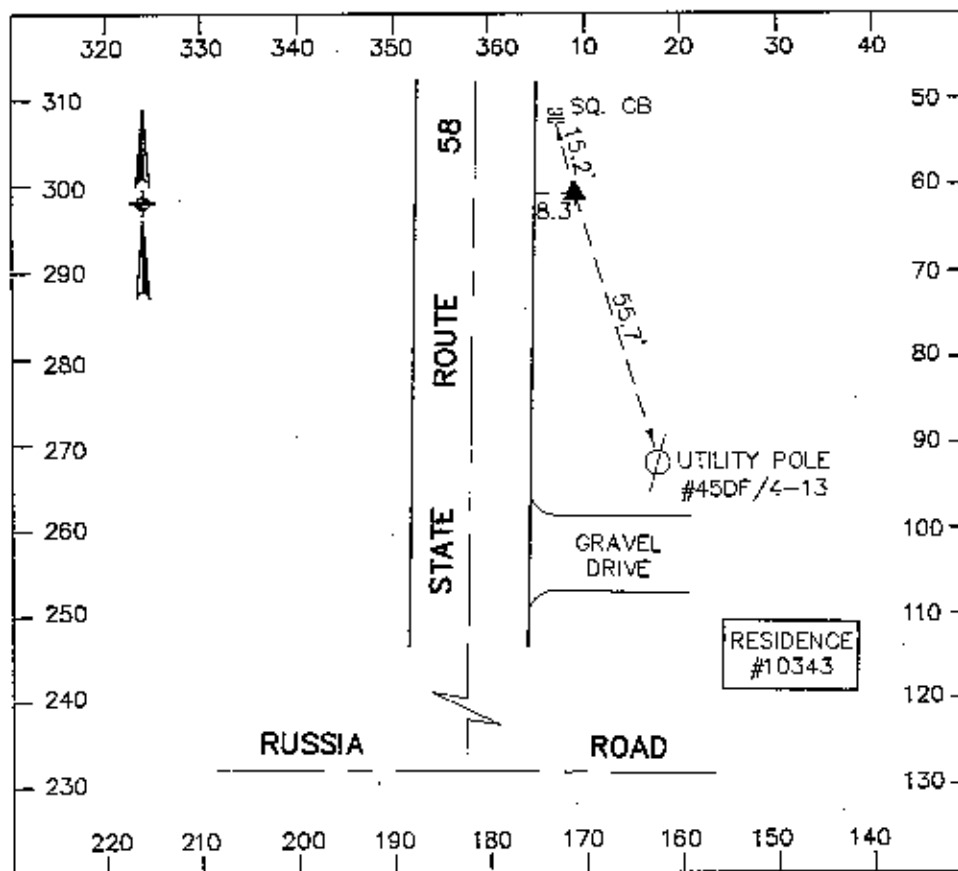
Location: The station is located at the Southwest corner of the intersection of Russia Road and State Route 58 in Russia Township. The station is a bronze disk in concrete.



# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-04	Alias: None
USGS Quad: Oberlin	Township: Russia
Type of Mark: Bronze Disk	Set By: KS Associates, Inc.
Stamping on Mark: 2005-04	Survey By: KS Associates, Inc.
Horizontal Datum: NAD83(1995)	Horizontal Order: First      Method: GPS
Latitude: 41-20-26.485160	Longitude: 82-12-57.184081
North (y) Meters: 185933.748	East (x) Meters: 623779.383
North (y) USFeet: 610017.640	East (x) USFeet: 2046516.192
Convergence: 0-11-11.94	Combined Scale Factor: 0.99991860
State Plane Coordinate System Zone: Ohio North (3401)	
Vertical Datum: NAVD88	Vertical Order: Second
Elevation (z) Meters: 237.615	Elevation (z) USFeet: 779.574

Location: To reach the monument, commence at the intersection of Russia Road and State Route 58 in Russia Township and travel North on State Route 58 0.2 miles more or less to the station on the right. The station is a bronze disk in concrete.

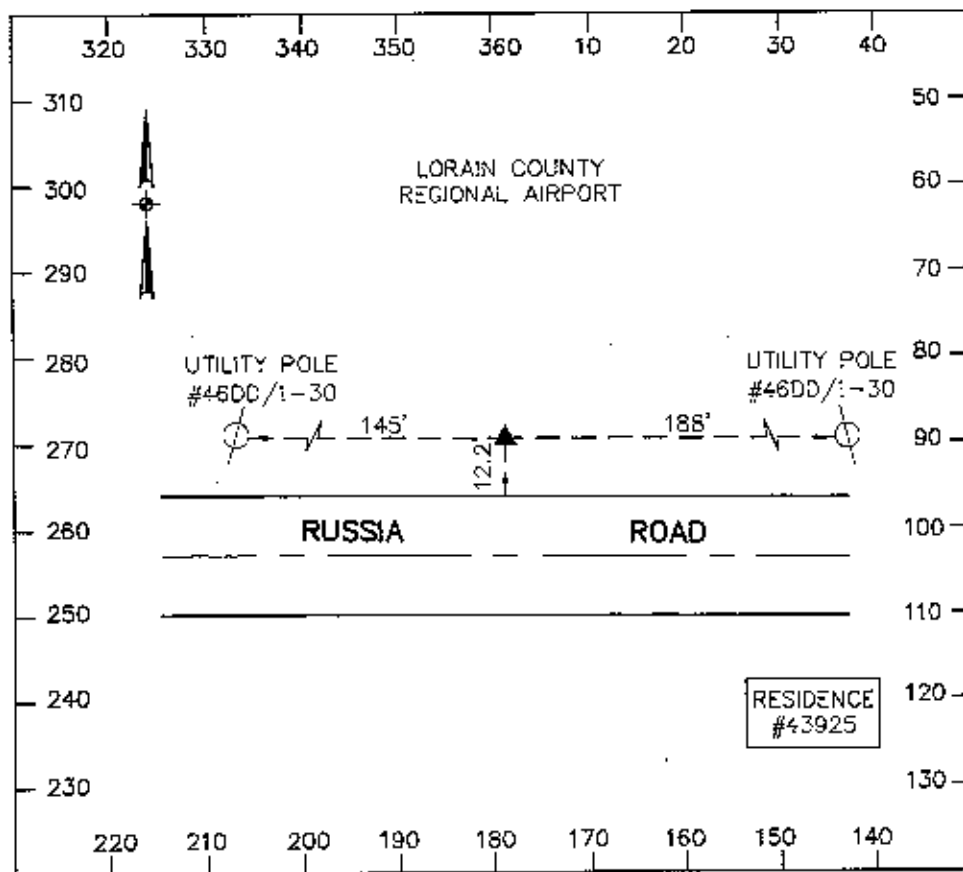


# Lorain County Auditor's Office

## Geodetic Survey Marker

Station Name: 2005-05	Alias: None
USGS Quad: Oberlin	Township: Russia
Type of Mark: Bronze Disk	Set By: KS Associates, Inc.
Stamping on Mark: 2005-05	Survey By: KS Associates, Inc.
Horizontal Datum: NAD83(1995)	Horizontal Order: First      Method: GPS
Latitude: 41-20-15.387915	Longitude: 82-10-30.702798
North (y) Meters: 185603.305	East (x) Meters: 627186.177
North (y) USFeet: 608933.509	East (x) USFeet: 2057693.316
Convergence: 0-12-48.17	Combined Scale Factor: 0.99991795
State Plane Coordinate System Zone: Ohio North (3401)	
Vertical Datum: NAVD88	Vertical Order: Second
Elevation (z) Meters: 240.125	Elevation (z) USFeet: 787.811

Location: To reach the monument, commence at the intersection of Russia Road and Oberlin Road in Russia Township and travel East on Russia Road 1.1 miles more or less to the station on the left. The station is a bronze disk in concrete.

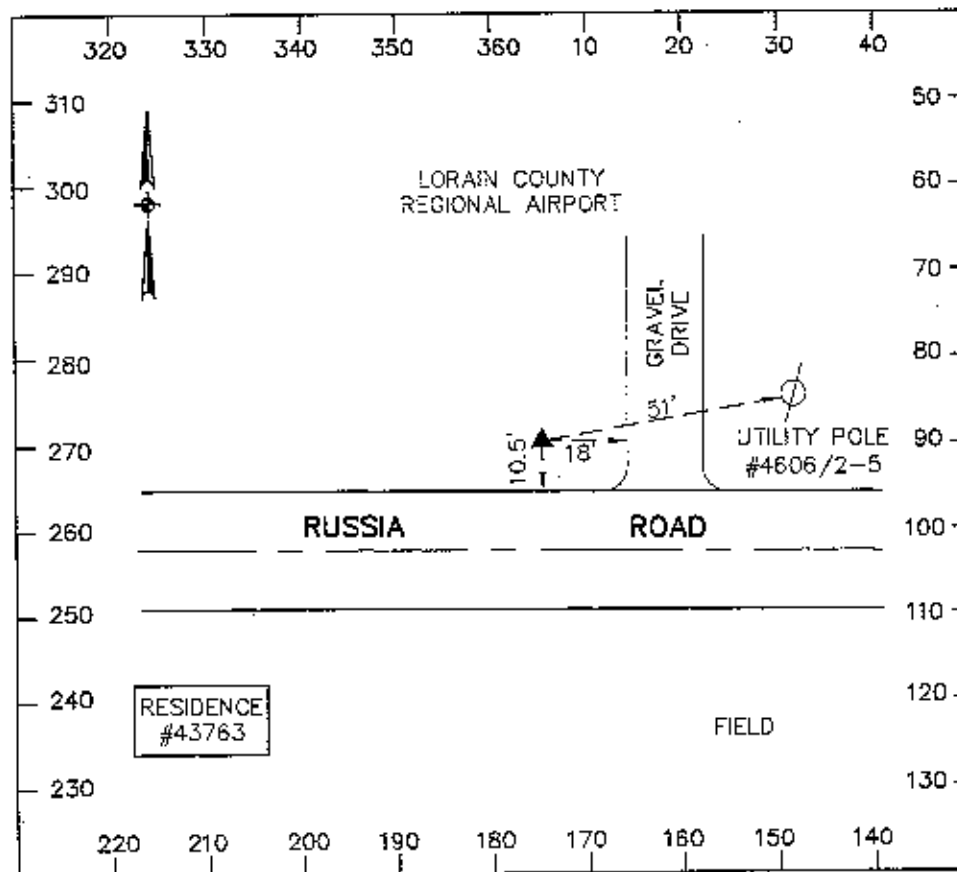


# Lorain County Auditor's Office

## Geodetic Survey Marker

Station Name: 2005-06	Alias: None
USGS Quad: Oberlin	Township: Russia
Type of Mark: Bronze Disk	Set By: KS Associates, Inc.
Stamping on Mark: 2005-06	Survey By: KS Associates, Inc.
Horizontal Datum: NAD83(1995)	Horizontal Order: First      Method: GPS
Latitude: 41-20-15.211926	Longitude: 82-10-11.113747
North (y) Meters: 185599.586	East (x) Meters: 627641.641
North (y) USFeet: 608921.309	East (x) USFeet: 2059187.618
Convergence: 0-13-01.04	Combined Scale Factor: 0.99991814
State Plane Coordinate System Zone: Ohio North (3401)	
Vertical Datum: NAVD88	Vertical Order: Second
Elevation (z) Meters: 238.865	Elevation (z) USFeet: 783.677

Location: To reach the monument, commence at the intersection of Russia Road and Oberlin Road in Russia Township and travel East on Russia Road 1.4 miles more or less to the station on the left. The station is a bronze disk in concrete.





# Lorain County Auditor's Office

## Geodetic Survey Marker

Station Name: 2005-07

USGS Quad: Kipton

Type of Mark: Bronze Disk

Stamping on Mark: 2005-07

Horizontal Datum: NAD83(1995)

Latitude: 41-18-59.477951

North (y) Meters: 183239.196

North (y) USFeet: 601177.264

Convergence: 0-09-33.48

State Plane Coordinate System Zone: Ohio North (3401)

Vertical Datum: NAVD88

Elevation (z) Meters: 242.764

Location: The station is located at the Northeast corner of the intersection of Garfield Road and Quarry Road in Russia Township. The station is a bronze disk in concrete.

Alias: None

Township: Russia

Set By: KS Associates, Inc.

Survey By: KS Associates, Inc.

Horizontal Order: First Method: GPS

Longitude: 82-15-27.055031

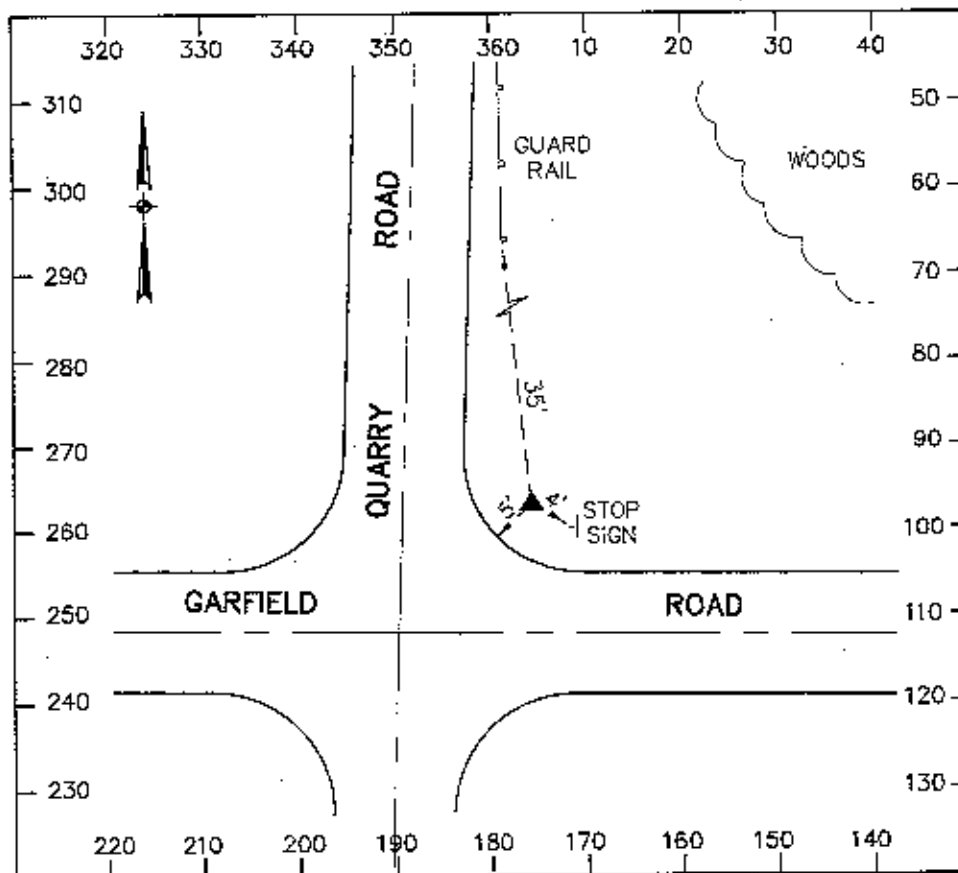
East (x) Meters: 620302.515

East (x) USFeet: 2035109.168

Combined Scale Factor: 0.99991588

Vertical Order: Second

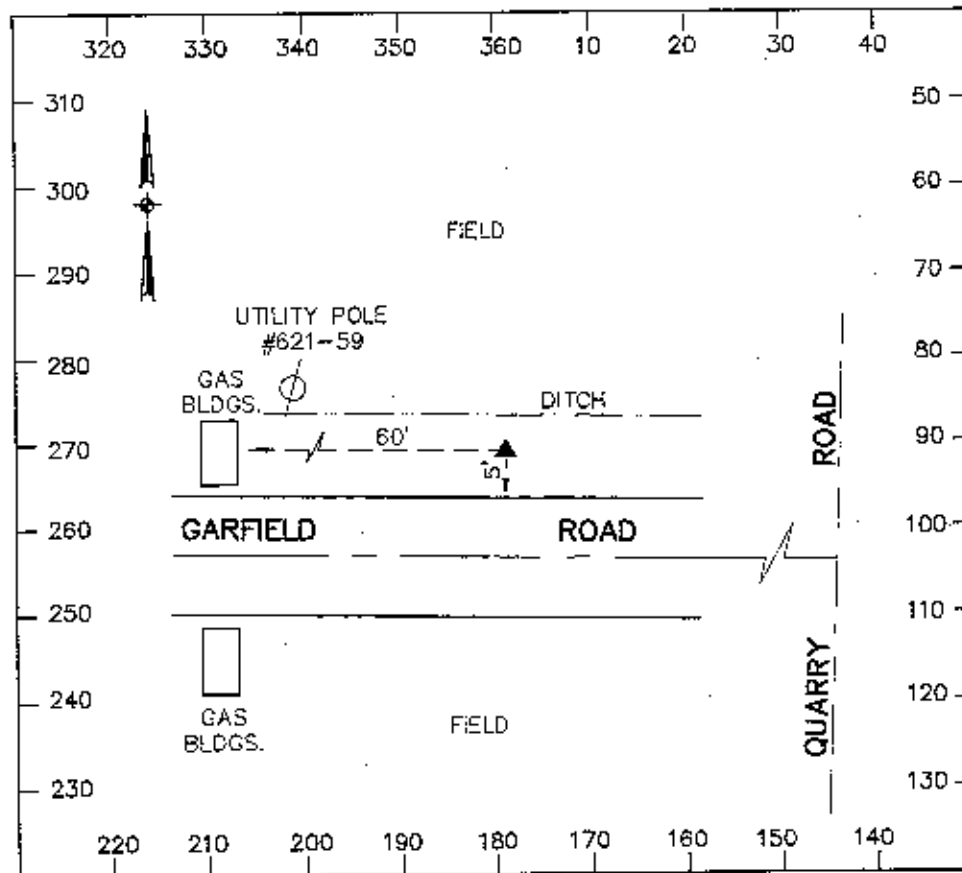
Elevation (z) USFeet: 796.467



# Lorain County Auditor's Office

## Geodetic Survey Marker

Station Name: 2005-08 USGS Quad: Kipton Type of Mark: Bronze Disk Stamping on Mark: 2005-08 Horizontal Datum: NAD83(1995) Latitude: 41-18-59.725804 North (y) Meters: 183245.560 North (y) USFeet: 601198.140 Convergence: 0-09-20.30 State Plane Coordinate System Zone: Ohio North (3401) Vertical Datum: NAVD88 Elevation (z) Meters: 246.983 Location: To reach the monument, commence at the intersection of Garfield Road and Quarry Road in Russia Township and travel West on Garfield Road 0.3 miles more or less to the station on the right. The station is a bronze disk in concrete.	Alias: None Township: Russia Set By: KS Associates, Inc. Survey By: KS Associates, Inc. Horizontal Order: First      Method: GPS Longitude: 82-15-47.122098 East (x) Meters: 619835.786 East (x) USFeet: 2033577.906 Combined Scale Factor: 0.99991522 Vertical Order: Second Elevation (z) USFeet: 810.311
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# Lorain County Auditor's Office

## Geodetic Survey Marker

Station Name: 2005-09

USGS Quad: Oberlin

Type of Mark: Bronze Disk

Stamping on Mark: 2005-09

Horizontal Datum: NAD83(1995)

Latitude: 41-19-40.422592

North (y) Meters: 184512.695

North (y) USFeet: 605355.401

Convergence: 0-11-11.10

State Plane Coordinate System Zone: Ohio North (3401)

Vertical Datum: NAVD88

Elevation (z) Meters: 243.210

Alias: None

Township: Russia

Set By: KS Associates, Inc.

Survey By: KS Associates, Inc.

Horizontal Order: First Method: GPS

Longitude: 82-12-58.463119

East (x) Meters: 623754.270

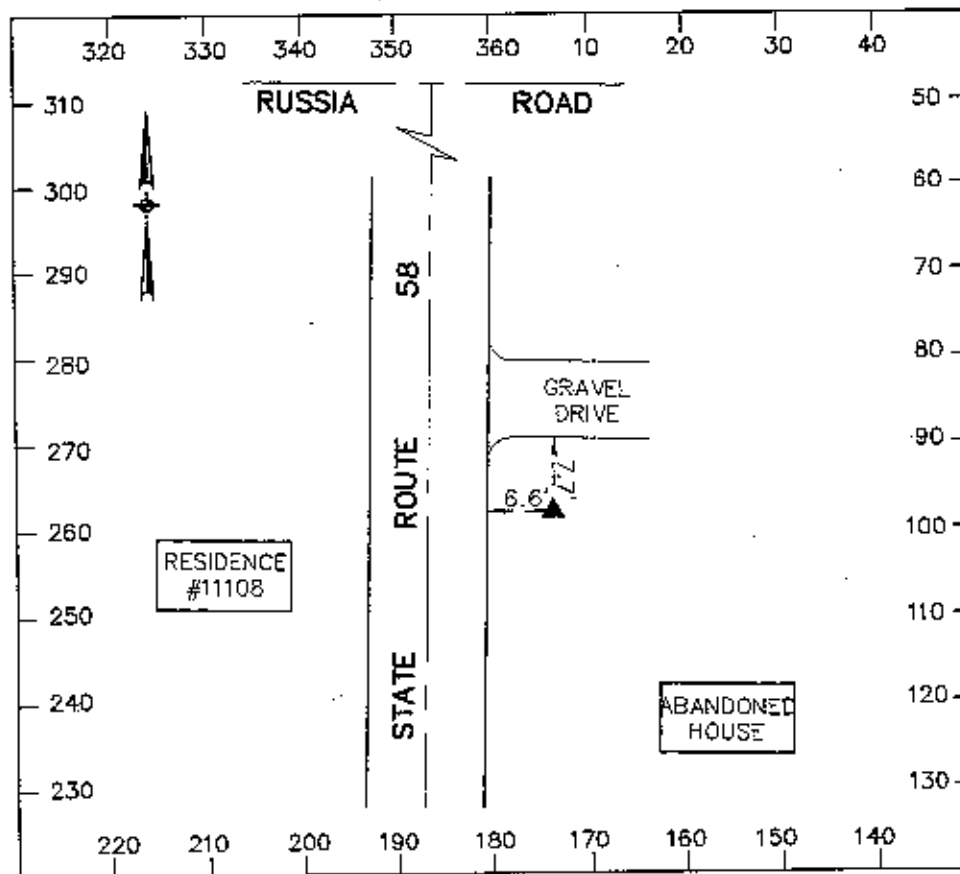
East (x) USFeet: 2046433.801

Combined Scale Factor: 0.99991668

Vertical Order: Second

Elevation (z) USFeet: 797.933

Location: To reach the monument, commence at the intersection of Russia Road and State Route 58 in Russia Township and travel South on State Route 58 0.7 miles more or less to the station on the left. The station is a bronze disk in concrete.

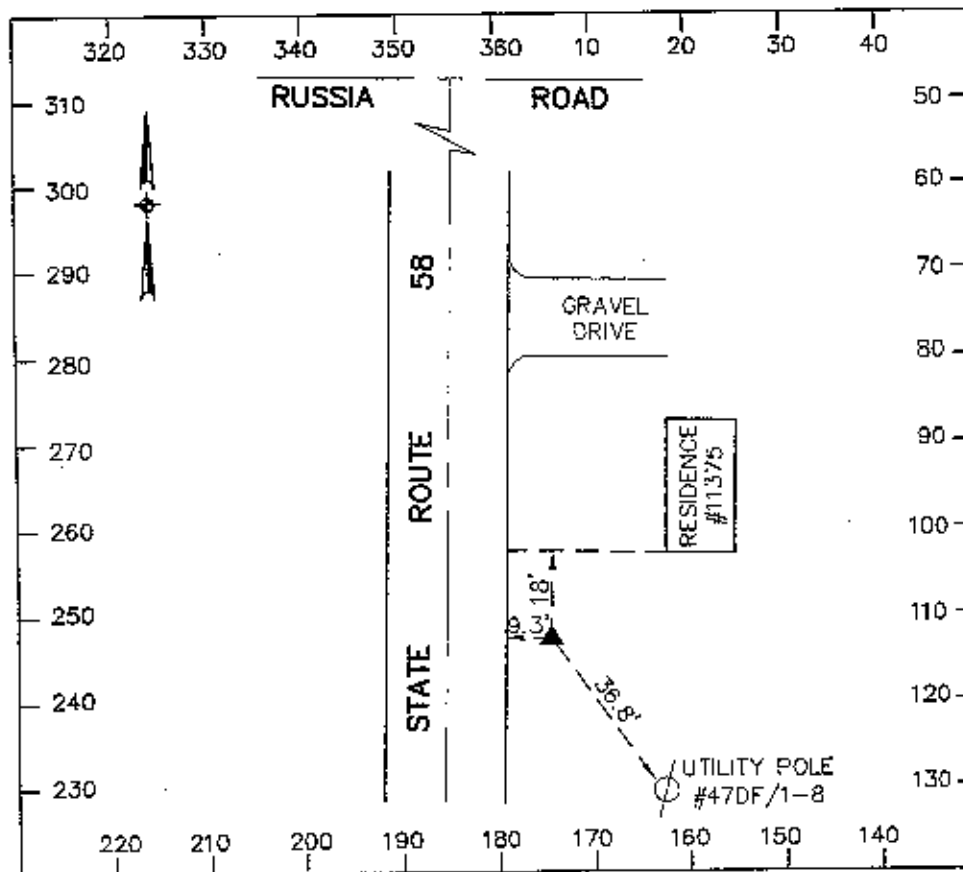


# Lorain County Auditor's Office

## Geodetic Survey Marker

<p>Station Name: 2005-10          USGS Quad: Oberlin          Type of Mark: Bronze Disk          Stamping on Mark: 2005-10          Horizontal Datum: NAD83(1995)          Latitude: 41-19-26.303195          North (y) Meters: 184077.109          North (y) USFeet: 603926.314          Convergence: 0-11-10.87          State Plane Coordinate System Zone: Ohio North (3401)          Vertical Datum: NAVD88          Elevation (z) Meters: 243.878</p>	<p>Alias: None          Township: Russia          Set By: KS Associates, Inc.          Survey By: KS Associates, Inc.          Horizontal Order: First    Method: GPS          Longitude: 82-12-58.817600          East (x) Meters: 623747.444          East (x) USFeet: 2046411.405          Combined Scale Factor: 0.99991627          Vertical Order: Second          Elevation (z) USFeet: 800.122</p>
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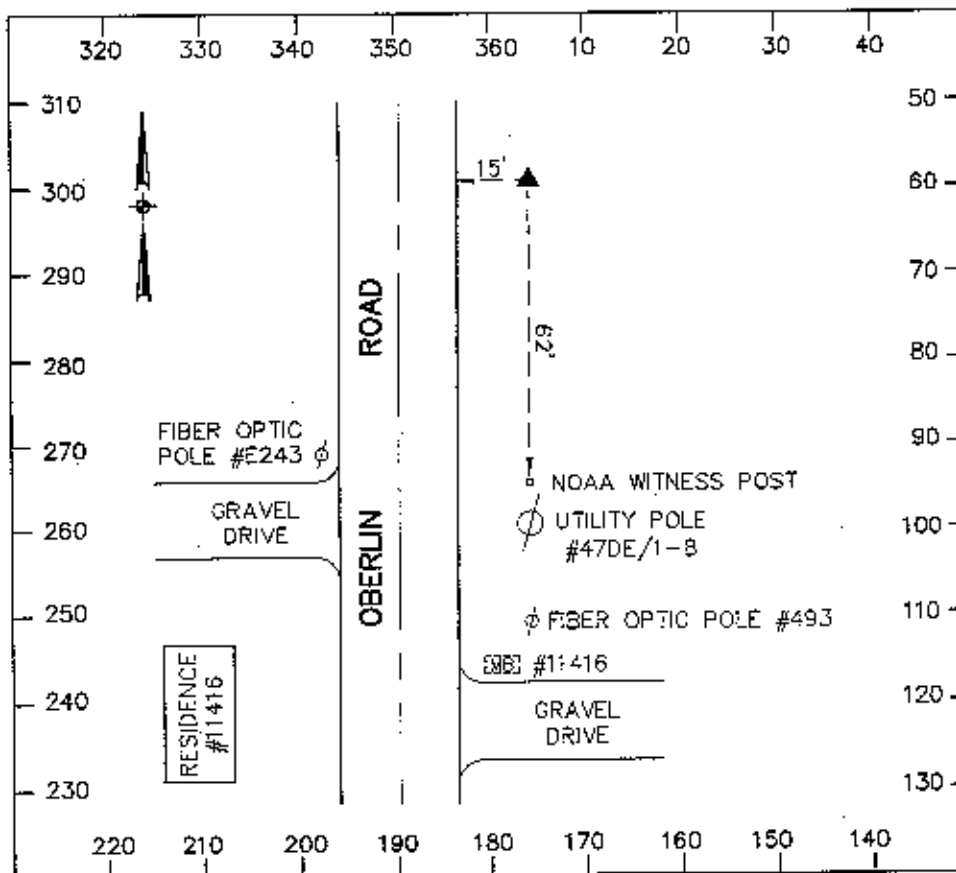
Location: To reach the monument, commence at the intersection of Russia Road and State Route 58 in Russia Township and travel South on State Route 58 1.0 miles more or less to the station on the left. The station is a bronze disk in concrete.



# Lorain County Auditor's Office Geodetic Survey Marker

<p>Station Name: 2005-11          USGS Quad: Oberlin          Type of Mark: Bronze Disk          Stamping on Mark: 2005-11          Horizontal Datum: NAD83(1995)          Latitude: 41-19-24.266007          North (y) Meters: 184019.963          North (y) USFeet: 603738.830          Convergence: 0-11-58.66          State Plane Coordinate System Zone: Ohio North (3401)          Vertical Datum: NAVD88          Elevation (z) Meters: 242.703</p>	<p>Alias: None          Township: Russia          Set By: KS Associates, Inc.          Survey By: KS Associates, Inc.          Horizontal Order: First    Method: GPS          Longitude: 82-11-46.067018          East (x) Meters: 625439.460          East (x) USFeet: 2051962.628          Combined Scale Factor: 0.99991641          Vertical Order: Second          Elevation (z) USFeet: 796.267</p>
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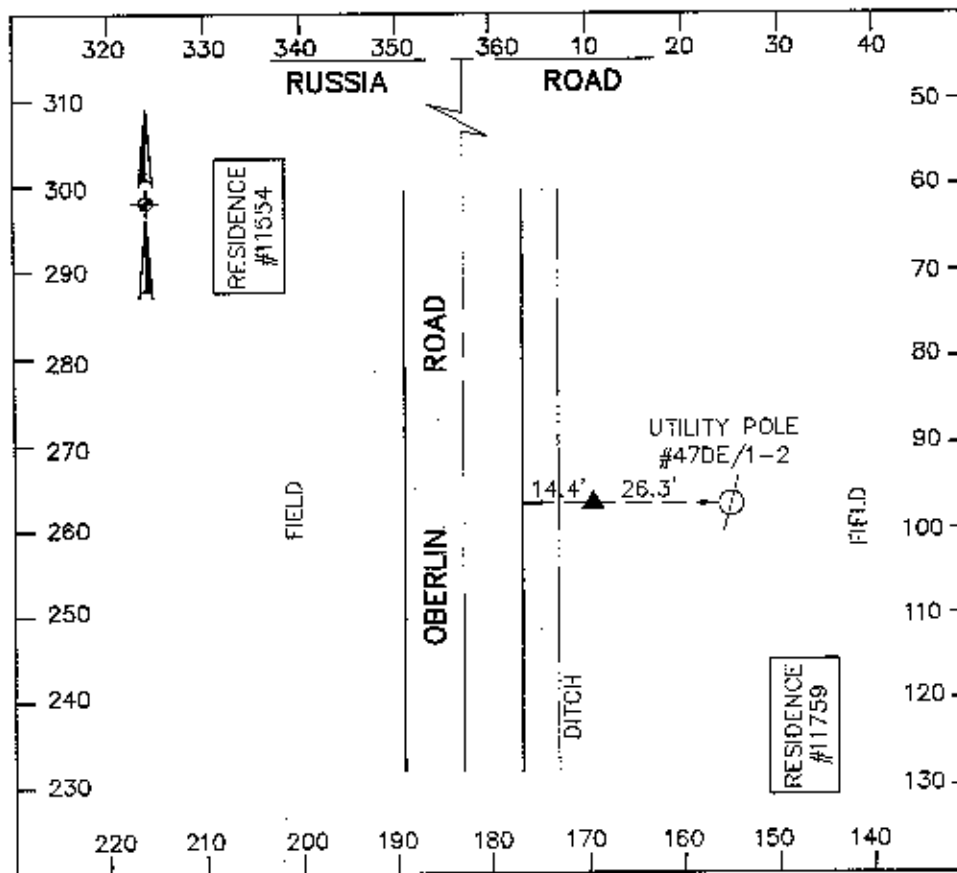
Location: To reach the monument, commence at the intersection of Russia Road and Oberlin Road in Russia Township and travel South on Oberlin Road 1.0 miles more or less to the station on the left. The station is a bronze disk in concrete.



# Lorain County Auditor's Office

## Geodetic Survey Marker

Station Name: 2005-12 USGS Quad: Oberlin Type of Mark: Bronze Disk Stamping on Mark: 2005-12 Horizontal Datum: NAD83(1995) Latitude: 41-19-11.000493 North (y) Meters: 183610.734 North (y) USFeet: 602396.217 Convergence: 0-11-58.57 State Plane Coordinate System Zone: Ohio North (3401) Vertical Datum: NAVD88 Elevation (z) Meters: 242.941 Location: To reach the monument, commence at the intersection of Russia Road and Oberlin Road in Russia Township and travel South on Oberlin Road 1.2 miles more or less to the station on the left. The station is a bronze disk in concrete.	Alias: None Township: Russia Set By: KS Associates, Inc. Survey By: KS Associates, Inc. Horizontal Order: First      Method: GPS Longitude: 82-11-46.202723 East (x) Meters: 625437.730 East (x) USFeet: 2051956.952 Combined Scale Factor: 0.99991608 Vertical Order: Second Elevation (z) USFeet: 797.050
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# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-13  
USGS Quad: Oberlin  
Type of Mark: Bronze Disk  
Stamping on Mark: 2005-13  
Horizontal Datum: NAD83(1995)  
Latitude: 41-18-30.664548  
North (y) Meters: 182364.665  
North (y) USFeet: 598308.071  
Convergence: 0-11-44.01

Alias: None  
Township: Russia  
Set By: KS Associates, Inc.  
Survey By: KS Associates, Inc.  
Horizontal Order: First Method: GPS  
Longitude: 82-12-08.364076  
East (x) Meters: 624926.587  
East (x) USFeet: 2050279.976  
Combined Scale Factor: 0.99991515

State Plane Coordinate System Zone: Ohio North (3401)

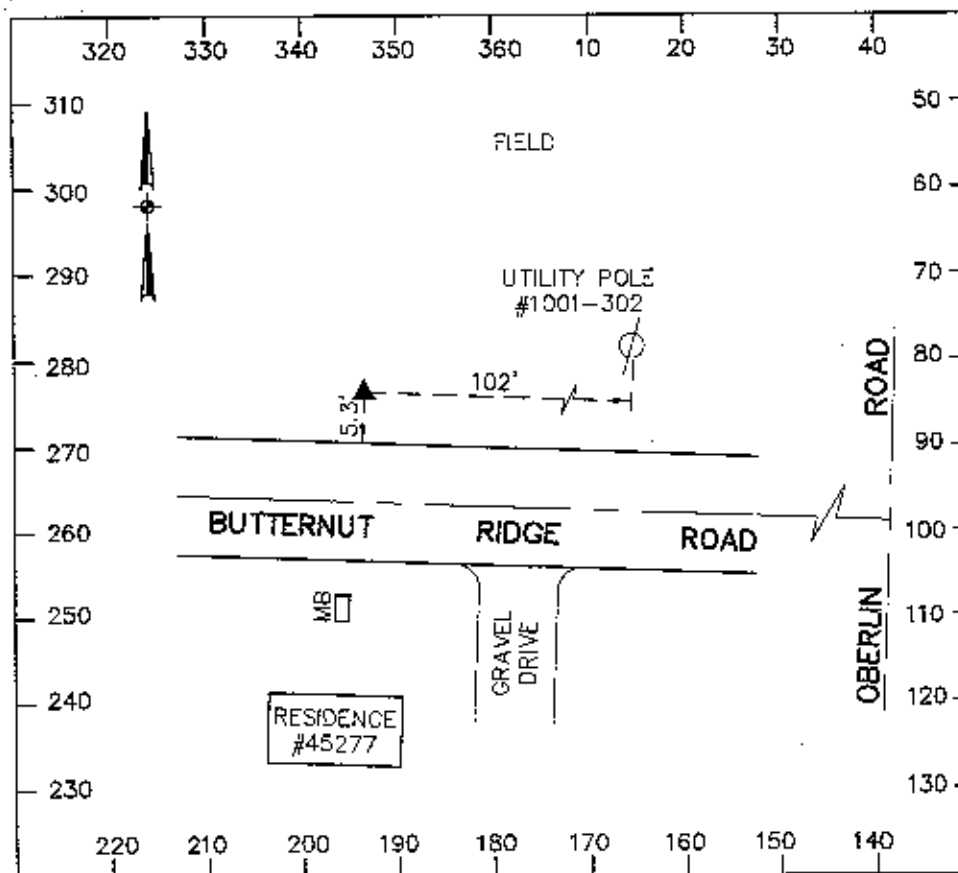
Vertical Datum: NAVD88

Vertical Order: Second

Elevation (z) Meters: 243.495

Elevation (z) USFeet: 798.866

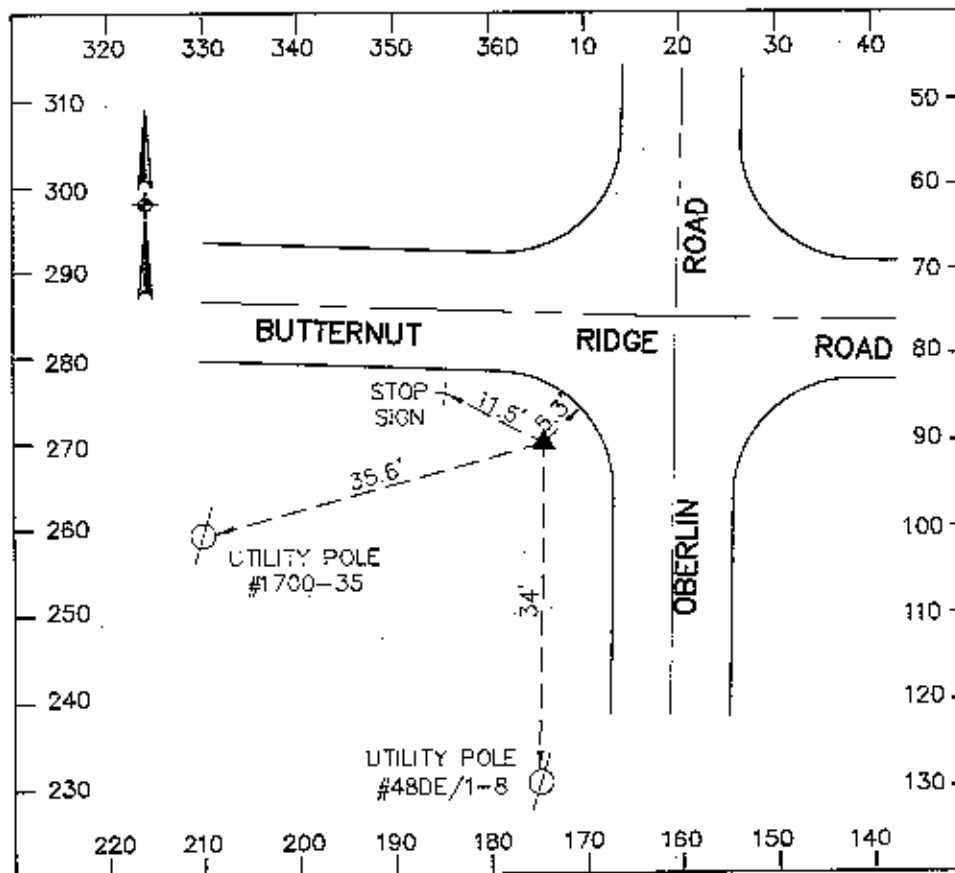
Location: To reach the monument, commence at the intersection of Butternut Ridge Road and Oberlin Road in Russia Township and travel West on Butternut Ridge Road 0.3 miles more or less to the station on the right. The station is a bronze disk in concrete.



# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-14	Alias: None
USGS Quad: Oberlin	Township: Russia
Type of Mark: Bronze Disk	Set By: KS Associates, Inc.
Stamping on Mark: 2005-14	Survey By: KS Associates, Inc.
Horizontal Datum: NAD83(1995)	Horizontal Order: First      Method: GPS
Latitude: 41-18-29.651710	Longitude: 82-11-48.481005
North (y) Meters: 182335.014	East (x) Meters: 625389.180
North (y) USFeet: 598210.790	East (x) USFeet: 2051797.668
Convergence: 0-11-57.07	Combined Scale Factor: 0.99991527
State Plane Coordinate System Zone: Ohio North (3401)	
Vertical Datum: NAVD88	Vertical Order: Second
Elevation (z) Meters: 242.639	Elevation (z) USFeet: 796.058

Location: The station is located at the Southwest corner of the intersection of Butternut Ridge Road and Oberlin Road in Russia Township. The station is a bronze disk in concrete.





# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-15  
USGS Quad: Kipton  
Type of Mark: Bronze Disk  
Stamping on Mark: 2005-15  
Horizontal Datum: NAD83(1995)  
Latitude: 41-17-40.339248  
North (y) Meters: 180797.695  
North (y) USFeet: 593167.105  
Convergence: 0-09-31.31

Alias: None  
Township: Russia  
Set By: KS Associates, Inc.  
Survey By: KS Associates, Inc.  
Horizontal Order: First Method: GPS  
Longitude: 82-15-30.359444  
East (x) Meters: 620232.425  
East (x) USFeet: 2034879.213  
Combined Scale Factor: 0.99991305

State Plane Coordinate System Zone: Ohio North (3401)

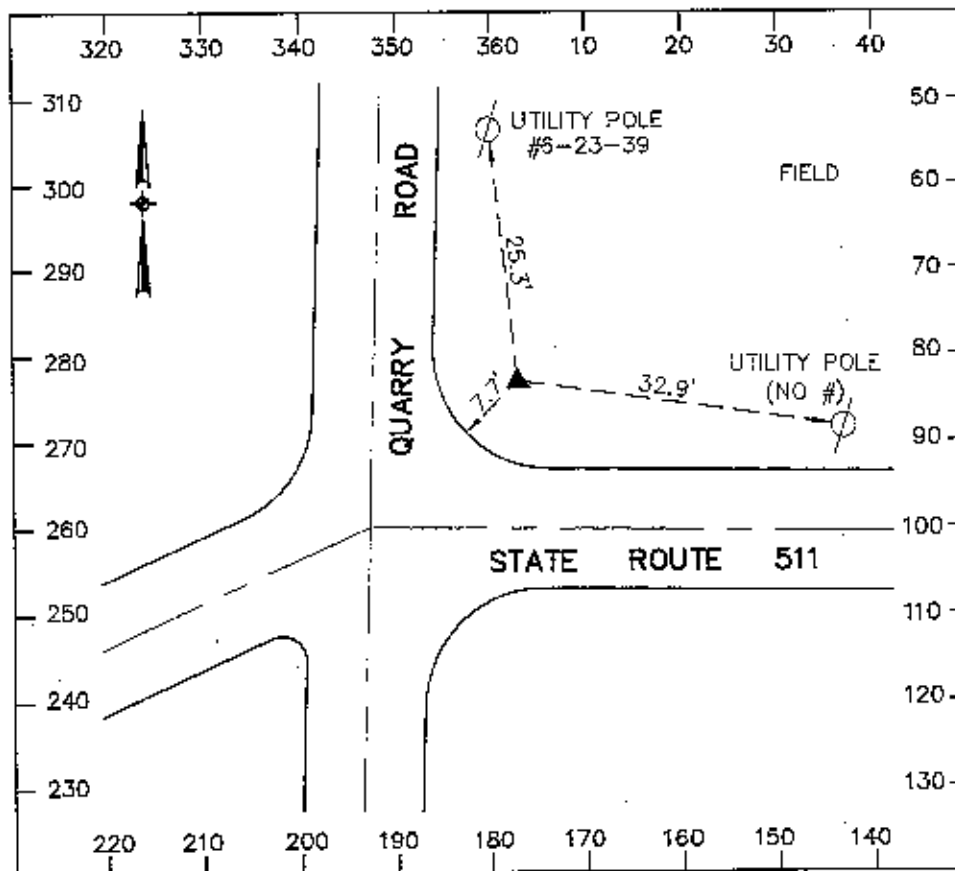
Vertical Datum: NAVD88

Vertical Order: Second

Elevation (z) Meters: 250.610

Elevation (z) USFeet: 822.208

Location: The station is located at the Northeast corner of the intersection of State Route 511 and Quarry Road in Russia Township. The station is a bronze disk in concrete.

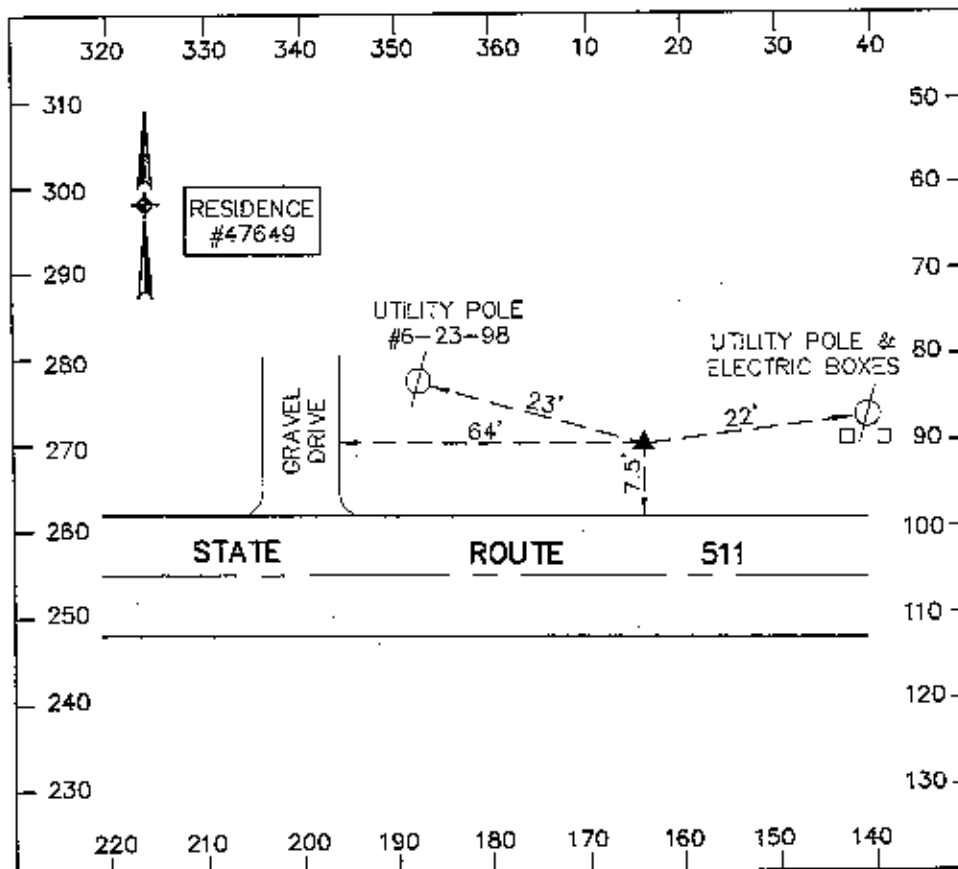


# Lorain County Auditor's Office

## Geodetic Survey Marker

Station Name: 2005-16	Alias: None
USGS Quad: Kipton	Township: Russia
Type of Mark: Bronze Disk	Set By: KS Associates, Inc.
Stamping on Mark: 2005-16	Survey By: KS Associates, Inc.
Horizontal Datum: NAD83(1995)	Horizontal Order: First      Method: GPS
Latitude: 41-17-39.593298	Longitude: 82-15-06.090774
North (y) Meters: 180776.270	East (x) Meters: 620797.106
North (y) USFeet: 593096.811	East (x) USFeet: 2036731.838
Convergence: 0-09-47.25	Combined Scale Factor: 0.99991334
State Plane Coordinate System Zone: Ohio North (3401)	
Vertical Datum: NAVD88	Vertical Order: Second
Elevation (z) Meters: 248.643	Elevation (z) USFeet: 815.756

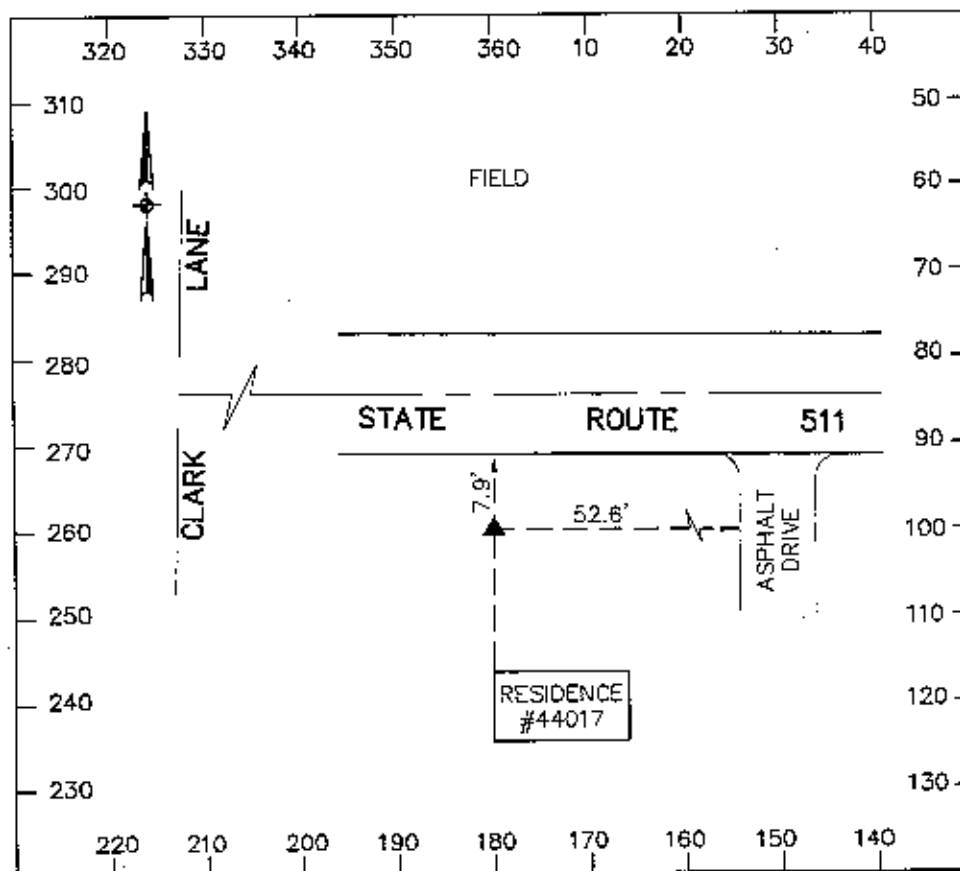
Location: To reach the monument, commence at the intersection of State Route 511 and Quarry Road in Russia Township and travel East on State Route 511 0.4 miles more or less to the station on the left. The station is a bronze disk in concrete.



# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-17	Alias: None
USGS Quad: Oberlin	Township: Russia
Type of Mark: Bronze Disk	Set By: KS Associates, Inc.
Stamping on Mark: 2005-17	Survey By: KS Associates, Inc.
Horizontal Datum: NAD83(1995)	Horizontal Order: First      Method: GPS
Latitude: 41-17-37.508874	Longitude: 82-10-37.628626
North (y) Meters: 180732.422	East (x) Meters: 627043.183
North (y) USFeet: 592952.954	East (x) USFeet: 2057224.176
Convergence: 0-12-43.62	Combined Scale Factor: 0.99991468
State Plane Coordinate System Zone: Ohio North (3401)	
Vertical Datum: NAVD88	Vertical Order: Second
Elevation (z) Meters: 239.783	Elevation (z) USFeet: 786.689

Location: To reach the monument, commence at the intersection of State Route 511 and Clark Lane in Russia Township and travel East on State Route 511 0.1 miles more or less to the station on the right. The station is a bronze disk in concrete.



# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-18  
USGS Quad: Oberlin  
Type of Mark: Bronze Disk  
Stamping on Mark: 2005-18  
Horizontal Datum: NAD83(1995)  
Latitude: 41-17-37.239868  
North (y) Meters: 180725.622  
North (y) USFeet: 592930.646  
Convergence: 0-12-54.97

Alias: None  
Township: Russia  
Set By: KS Associates, Inc.  
Survey By: KS Associates, Inc.  
Horizontal Order: First      Method: GPS  
Longitude: 82-10-20.358329  
East (x) Meters: 627445.015  
East (x) USFeet: 2058542.519  
Combined Scale Factor: 0.99991486

State Plane Coordinate System Zone: Ohio North (3401)

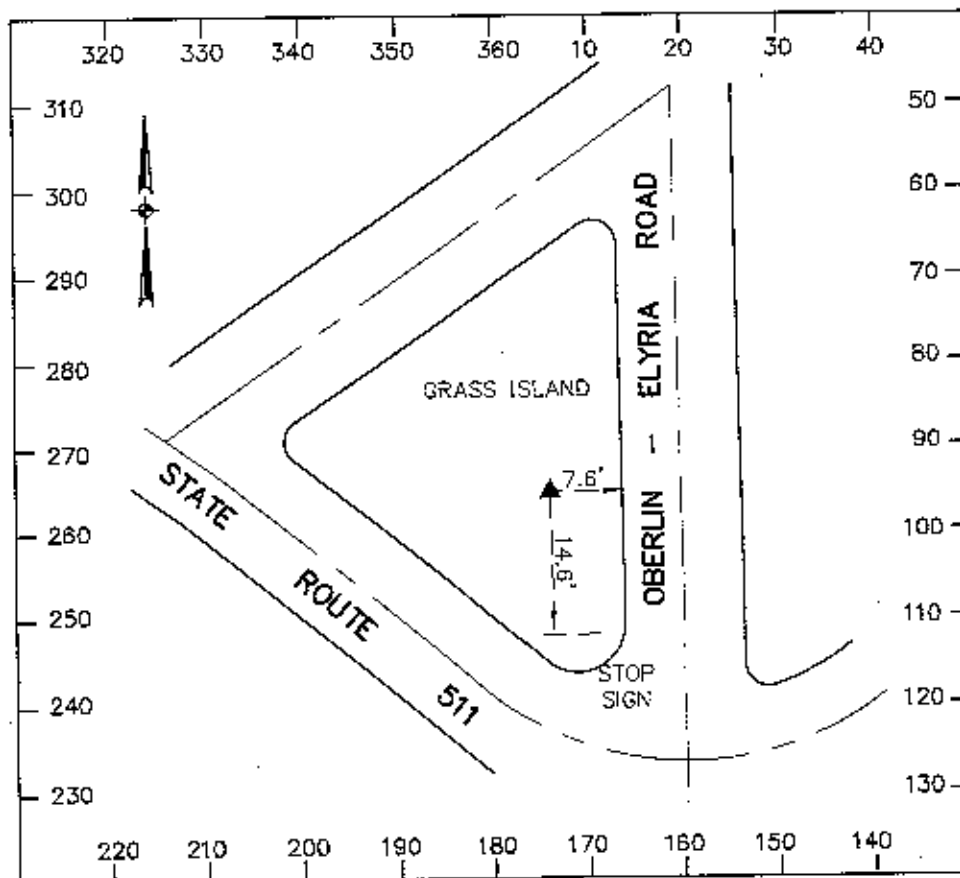
Vertical Datum: NAVD88

Vertical Order: Second

Elevation (z) Meters: 238.601

Elevation (z) USFeet: 782.810

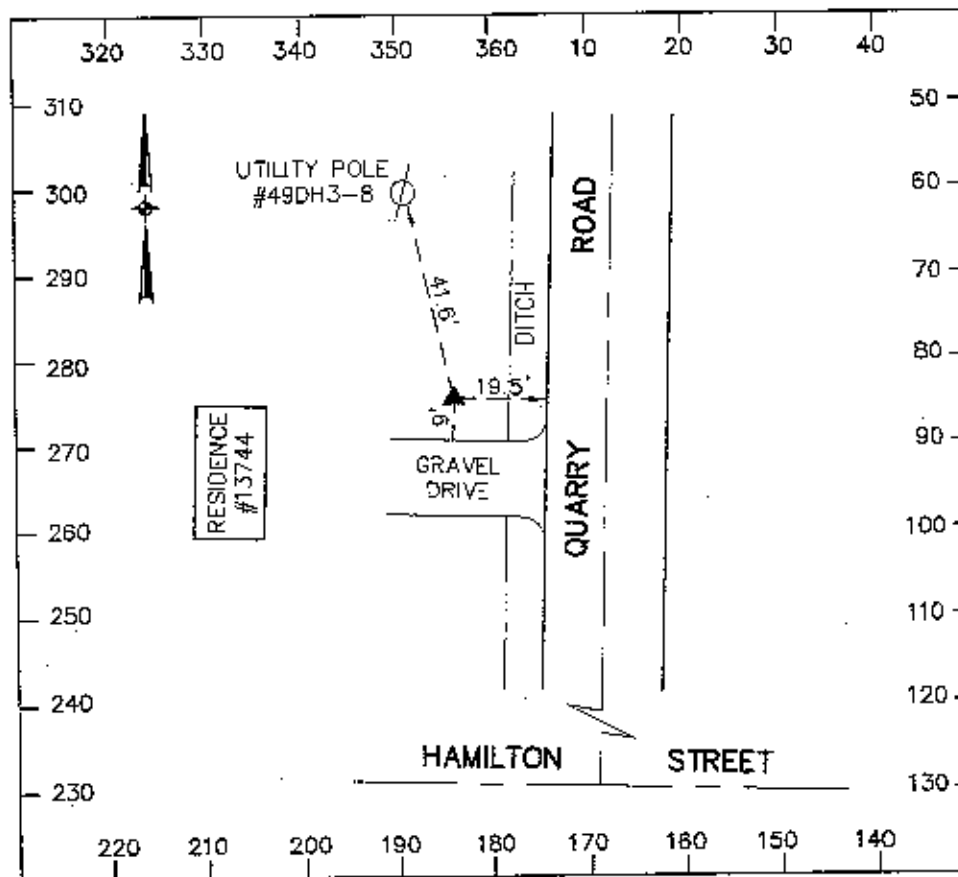
Location: The station is located at the Northwest corner of the intersection of State Route 511 and Oberlin Elyria Road in Russia Township. The station is a bronze disk in concrete.



# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-19	Alias: None
USGS Quad: Kipton	Township: Russia
Type of Mark: Bronze Disk	Set By: KS Associates, Inc.
Stamping on Mark: 2005-19	Survey By: KS Associates, Inc.
Horizontal Datum: NAD83(1995)	Horizontal Order: First      Method: GPS
Latitude: 41-17-03.279743	Longitude: 82-15-32.696886
North (y) Meters: 179654.329	East (x) Meters: 620181.201
North (y) USFeet: 589415.912	East (x) USFeet: 2034711.158
Convergence: 0-09-29.78	Combined Scale Factor: 0.99991192
State Plane Coordinate System Zone: Ohio North (3401)	
Vertical Datum: NAVD88	Vertical Order: Second
Elevation (z) Meters: 253.384	Elevation (z) USFeet: 831.310

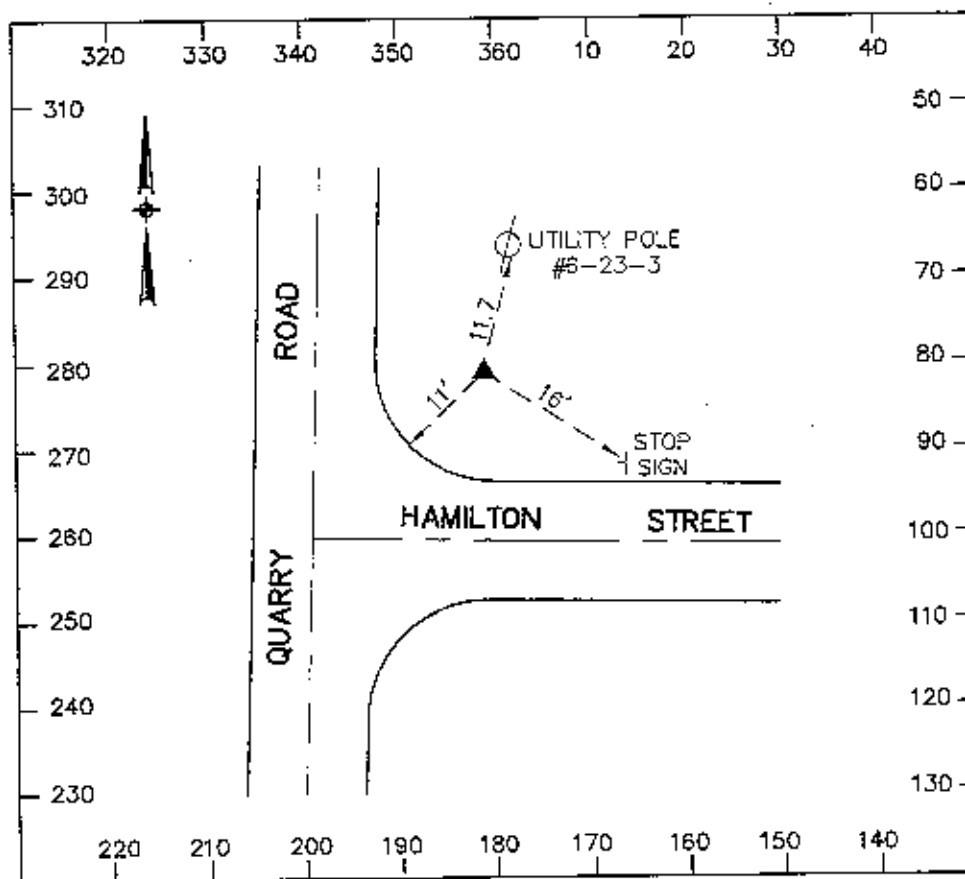
Location: To reach the monument, commence at the intersection of Hamilton Street and Quarry Road in Russia Township and travel North on Quarry Road 0.3 miles more or less to the station on the left. The station is a bronze disk in concrete.



# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-20	Alias: None
USGS Quad: Kipton	Township: Russia
Type of Mark: Bronze Disk	Set By: KS Associates, Inc.
Stamping on Mark: 2005-20	Survey By: KS Associates, Inc.
Horizontal Datum: NAD83(1995)	Horizontal Order: First      Method: GPS
Latitude: 41-16-48.129497	Longitude: 82-15-32.600507
North (y) Meters: 179186.980	East (x) Meters: 620184.735
North (y) USFeet: 587882.617	East (x) USFeet: 2034722.752
Convergence: 0-09-29.84	Combined Scale Factor: 0.99991180
State Plane Coordinate System Zone: Ohio North (3401)	
Vertical Datum: NAVD88	Vertical Order: Second
Elevation (z) Meters: 252.364	Elevation (z) USFeet: 827.964

Location: The station is located at the Northeast corner of the intersection of Hamilton Street and Quarry Road in Russia Township. The station is a bronze disk in concrete.



# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-21  
USGS Quad: Oberlin  
Type of Mark: Bronze Disk  
Stamping on Mark: 2005-21  
Horizontal Datum: NAD83(1995)  
Latitude: 41-16-52.330512  
North (y) Meters: 179338.230  
North (y) USFeet: 588378.843  
Convergence: 0-12-39.57

Alias: None  
Township: Russia  
Set By: KS Associates, Inc.  
Survey By: KS Associates, Inc.  
Horizontal Order: First    Method: GPS  
Longitude: 82-10-43.799550  
East (x) Meters: 626904.746  
East (x) USFeet: 2056769.987  
Combined Scale Factor: 0.99991404

State Plane Coordinate System Zone: Ohio North (3401)

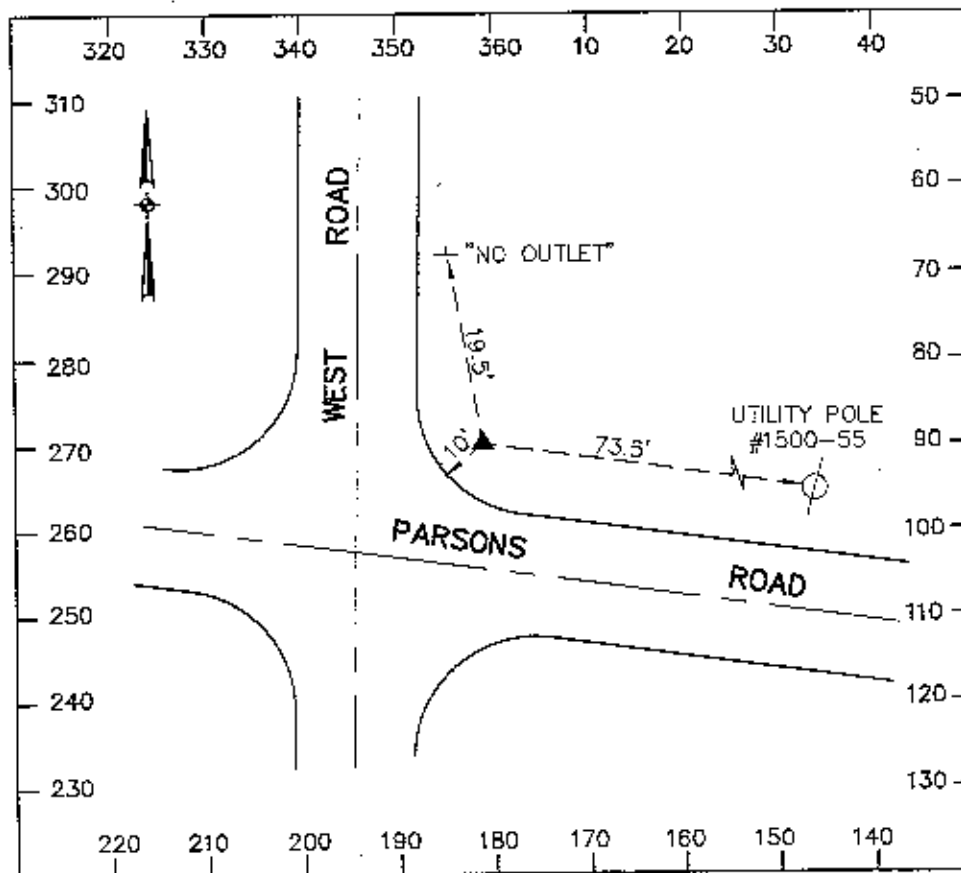
Vertical Datum: NAVD88

Vertical Order: Second

Elevation (z) Meters: 238.500

Elevation (z) USFeet: 782.477

Location: The station is located at the Northeast corner of the intersection of Parsons Road and West Road in Russia Township. The station is a bronze disk in concrete.



# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-22

USGS Quad: Oberlin

Type of Mark: Bronze Disk

Stamping on Mark: 2005-22

Horizontal Datum: NAD83(1995)

Latitude: 41-16-37.036214

North (y) Meters: 178866.346

North (y) USFeet: 586830.670

Convergence: 0-12-38.90

State Plane Coordinate System Zone: Ohio North (3401)

Vertical Datum: NAVD88

Elevation (z) Meters: 238.171

Location: To reach the monument, commence at the intersection of West Road and Parsons Road in Russia Township and travel South on West Road 0.3 miles more or less to the station on the right. The station is a bronze disk in concrete.

Alias: None

Township: Russia

Set By: KS Associates, Inc.

Survey By: KS Associates, Inc.

Horizontal Order: First Method: GPS

Longitude: 82-10-44.811975

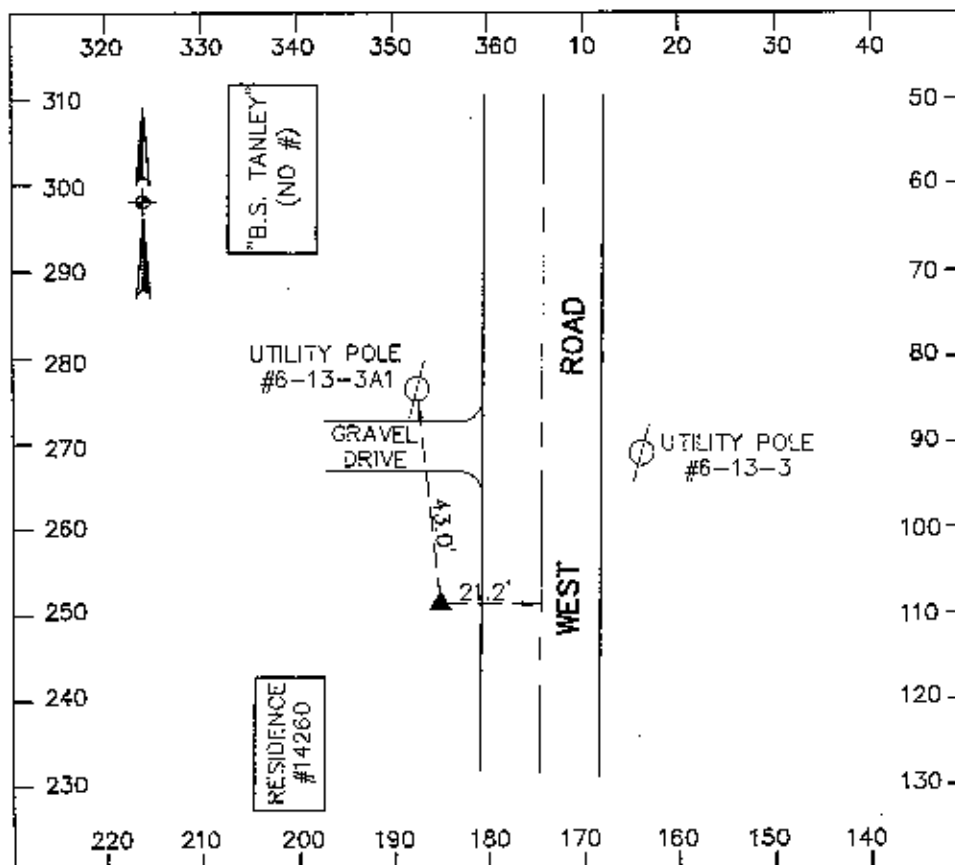
East (x) Meters: 626882.923

East (x) USFeet: 2056698.389

Combined Scale Factor: 0.99991381

Vertical Order: Second

Elevation (z) USFeet: 781.399





# Lorain County Auditor's Office Geodetic Survey Marker

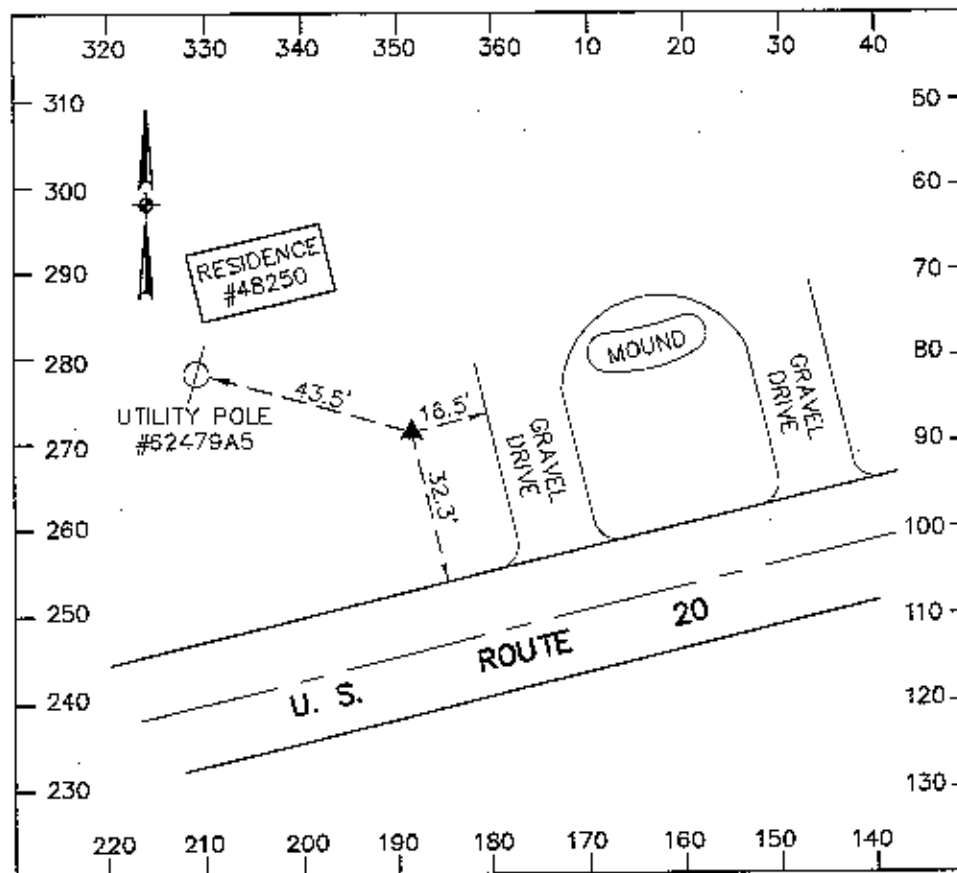
Station Name: 2005-23  
USGS Quad: Kipton  
Type of Mark: Bronze Disk  
Stamping on Mark: 2005-23  
Horizontal Datum: NAD83(1995)  
Latitude: 41-15-52.438619  
North (y) Meters: 177468.543  
North (y) USFeet: 582244.712  
Convergence: 0-09-24.85  
State Plane Coordinate System Zone: Ohio North (3401)

Alias: None  
Township: Pittsfield  
Set By: KS Associates, Inc.  
Survey By: KS Associates, Inc.  
Horizontal Order: First Method: GPS  
Longitude: 82-15-40.197175  
East (x) Meters: 620012.663  
East (x) USFeet: 2034158.211  
Combined Scale Factor: 0.99990988

Vertical Datum: NAVD88  
Elevation (z) Meters: 258.454

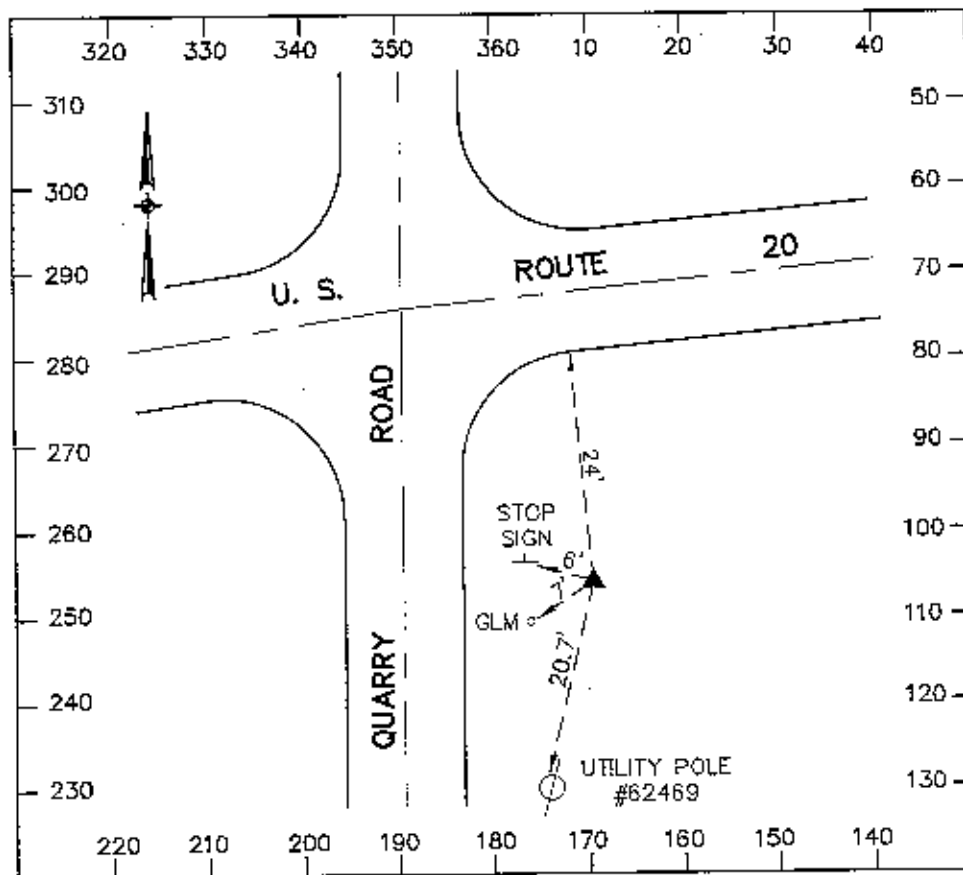
Vertical Order: Second  
Elevation (z) USFeet: 847.945

Location: To reach the monument, commence at the intersection of U.S. 20 and Quarry Road in Pittsfield Township and travel West on U.S. 20 0.3 miles more or less to the station on the right. The station is a bronze disk in concrete.



# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-24 USGS Quad: Kipton Type of Mark: Bronze Disk Stamping on Mark: 2005-24 Horizontal Datum: NAD83(1995) Latitude: 41-15-53.815554 North (y) Meters: 177512.218 North (y) USFeet: 582388.001 Convergence: 0-09-37.07 State Plane Coordinate System Zone: Ohio North (3401) Vertical Datum: NAVD88 Elevation (z) Meters: 256.674 Location: The station is located at the Southeast corner of the intersection of U.S. 20 and Quarry Road in Pittsfield Township. The station is a bronze disk in concrete.	Alias: None Township: Pittsfield Set By: KS Associates, Inc. Survey By: KS Associates, Inc. Horizontal Order: First    Method: GPS Longitude: 82-15-21.590191 East (x) Meters: 620445.637 East (x) USFeet: 2035578.726 Combined Scale Factor: 0.99991018 Vertical Order: Second Elevation (z) USFeet: 842.105
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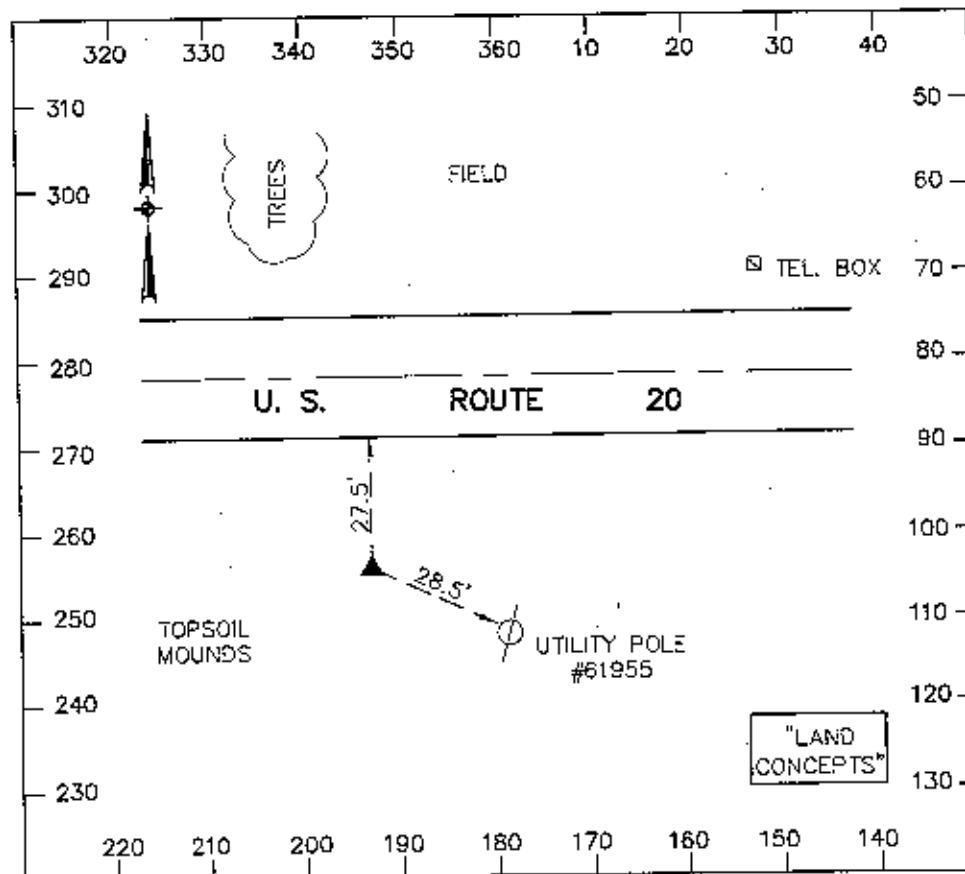


# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-25  
USGS Quad: Oberlin  
Type of Mark: Bronze Disk  
Stamping on Mark: 2005-25  
Horizontal Datum: NAD83(1995)  
Latitude: 41-15-54.652119  
North (y) Meters: 177546.368  
North (y) USFeet: 582500.041  
Convergence: 0-10-55.87  
State Plane Coordinate System Zone: Ohio North (3401)  
Vertical Datum: NAVD88  
Elevation (z) Meters: 250.309

Alias: None  
Township: Pittsfield  
Set By: KS Associates, Inc.  
Survey By: KS Associates, Inc.  
Horizontal Order: First Method: GPS  
Longitude: 82-13-21.647118  
East (x) Meters: 623237.309  
East (x) USFeet: 2044737.739  
Combined Scale Factor: 0.99991119  
Vertical Order: Second  
Elevation (z) USFeet: 821.222

Location: To reach the monument, commence at the intersection of U.S. 20 and S.R. 58 in Pittsfield Township and travel West on U.S. 20 0.3 miles more or less to the station on the left. The station is a bronze disk in concrete.

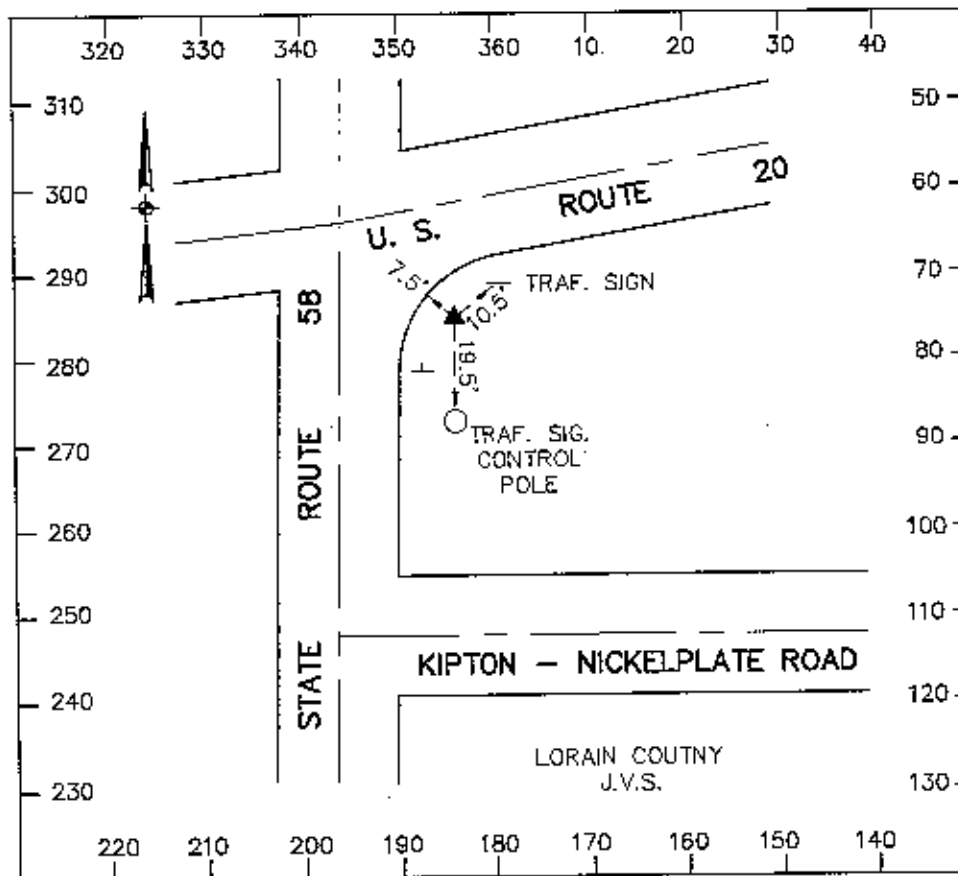


# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-26  
USGS Quad: Oberlin  
Type of Mark: Bronze Disk  
Stamping on Mark: 2005-26  
Horizontal Datum: NAD83(1995)  
Latitude: 41-15-55.563602  
North (y) Meters: 177575.955  
North (y) USFeet: 582597.112  
Convergence: 0-11-08.79  
State Plane Coordinate System Zone: Ohio North (3401)  
Vertical Datum: NAVD88  
Elevation (z) Meters: 247.932

Alias: None  
Township: Pittsfield  
Set By: KS Associates, Inc.  
Survey By: KS Associates, Inc.  
Horizontal Order: First      Method: GPS  
Longitude: 82-13-01.981646  
East (x) Meters: 623694.943  
East (x) USFeet: 2046239.159  
Combined Scale Factor: 0.99991157  
Vertical Order: Second  
Elevation (z) USFeet: 813.424

Location: The station is located at the Southeast corner of the intersection of U.S. 20 and S.R. 58 in Pittsfield Township. The station is a bronze disk in concrete.



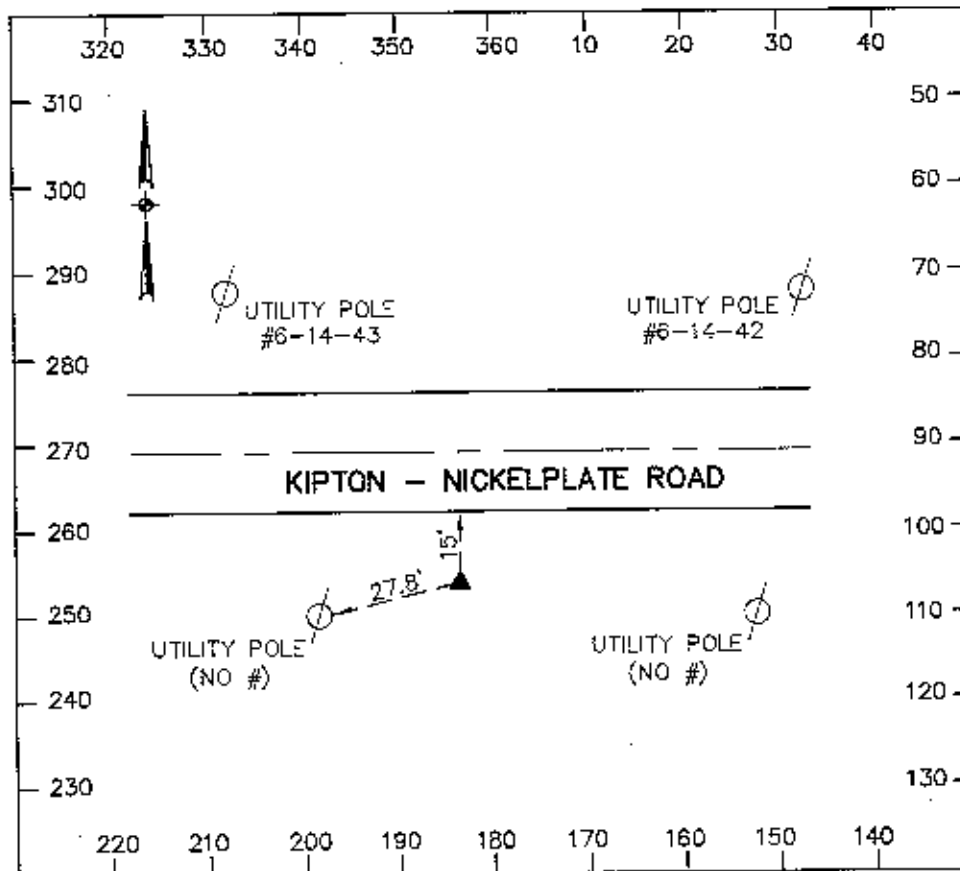
# Lorain County Auditor's Office

## Geodetic Survey Marker

Station Name: 2005-27  
USGS Quad: Oberlin  
Type of Mark: Bronze Disk  
Stamping on Mark: 2005-27  
Horizontal Datum: NAD83(1995)  
Latitude: 41-15-54.471238  
North (y) Meters: 177551.314  
North (y) USFeet: 582516.269  
Convergence: 0-12-23.45  
State Plane Coordinate System Zone: Ohio North (3401)

Alias: None  
Township: Pittsfield  
Set By: KS Associates, Inc.  
Survey By: KS Associates, Inc.  
Horizontal Order: First Method: GPS  
Longitude: 82-11-08.326740  
East (x) Meters: 626340.435  
East (x) USFeet: 2054918.576  
Combined Scale Factor: 0.99991430  
Vertical Order: Second  
Elevation (z) USFeet: 755.952

Vertical Datum: NAVD88  
Elevation (z) Meters: 230.415  
Location: To reach the monument, commence at the intersection of West Road and Kipton Nickel Plate Road in Pittsfield Township and travel West on Kipton Nickel Plate Road 0.3 miles more or less to the station on the left. The station is a bronze disk in concrete.



# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-28

USGS Quad: Oberlin

Type of Mark: Bronze Disk

Stamping on Mark: 2005-28

Horizontal Datum: NAD83(1995)

Latitude: 41-15-54.852616

North (y) Meters: 177564.761

North (y) USFeet: 582560.386

Convergence: 0-12-36.51

State Plane Coordinate System Zone: Ohio North (3401)

Vertical Datum: NAVD88

Elevation (z) Meters: 230.612

Alias: None

Township: Pittsfield

Set By: KS Associates, Inc.

Survey By: KS Associates, Inc.

Horizontal Order: First Method: GPS

Longitude: 82-10-48.449807

East (x) Meters: 626803.038

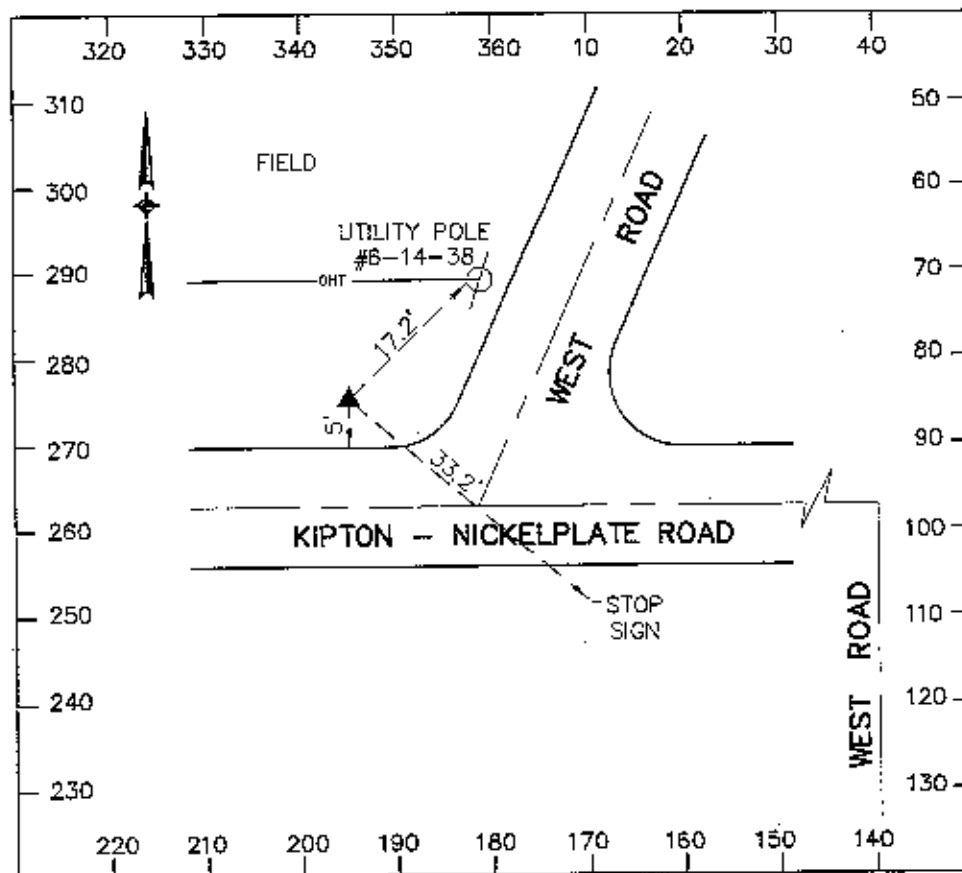
East (x) USFeet: 2056436.301

Combined Scale Factor: 0.99991427

Vertical Order: Second

Elevation (z) USFeet: 756.598

Location: The station is located at the Northwest corner of the intersection of Kipton Nickel Plate Road and West Road in Pittsfield Township. The station is a bronze disk in concrete.

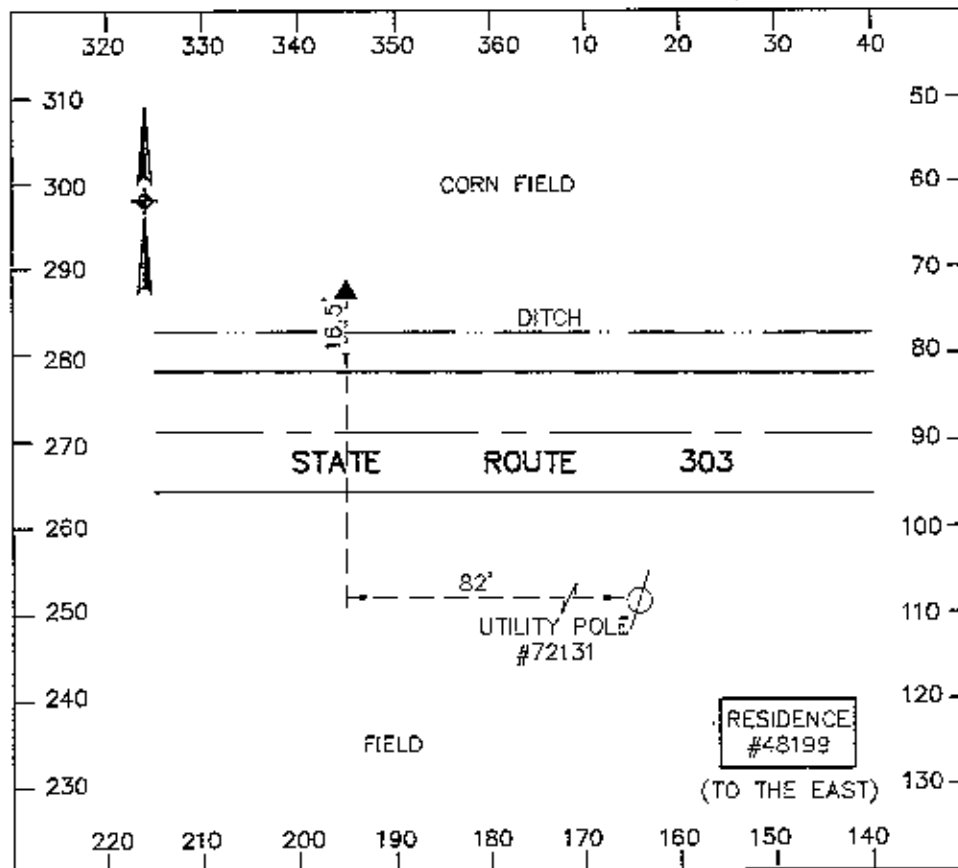


# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-29  
USGS Quad: Brighton  
Type of Mark: Bronze Disk  
Stamping on Mark: 2005-29  
Horizontal Datum: NAD83(1995)  
Latitude: 41-14-14.076322  
North (y) Meters: 174434.212  
North (y) USFeet: 572289.577  
Convergence: 0-09-24.14  
State Plane Coordinate System Zone: Ohio North (3401)  
Vertical Datum: NAVD88  
Elevation (z) Meters: 258.337

Alias: None  
Township: Pittsfield  
Set By: KS Associates, Inc.  
Survey By: KS Associates, Inc.  
Horizontal Order: First Method: GPS  
Longitude: 82-15-41.274588  
East (x) Meters: 619995.884  
East (x) USFeet: 2034103.162  
Combined Scale Factor: 0.99990837  
Vertical Order: Second  
Elevation (z) USFeet: 847.560

Location: To reach the monument, commence at the intersection of S.R. 303 and Quarry Road in Pittsfield Township and travel West on S.R. 303 0.3 miles more or less to the station on the right. The station is a bronze disk in concrete.



# Lorain County Auditor's Office

## Geodetic Survey Marker

Station Name: 2005-30

USGS Quad: Brighton

Type of Mark: Bronze Disk

Stamping on Mark: 2005-30

Horizontal Datum: NAD83(1995)

Latitude: 41-14-13.496251

North (y) Meters: 174417.564

North (y) USFeet: 572234.959

Convergence: 0-09-36.85

State Plane Coordinate System Zone: Ohio North (3401)

Vertical Datum: NAVD88

Elevation (z) Meters: 256.494

Location: The station is located at the Southeast corner of the intersection of S.R. 303 and Quarry Road in Pittsfield Township. The station is a bronze disk in concrete.

Alias: None

Township: Pittsfield

Set By: KS Associates, Inc.

Survey By: KS Associates, Inc.

Horizontal Order: First Method: GPS

Longitude: 82-15-21.925248

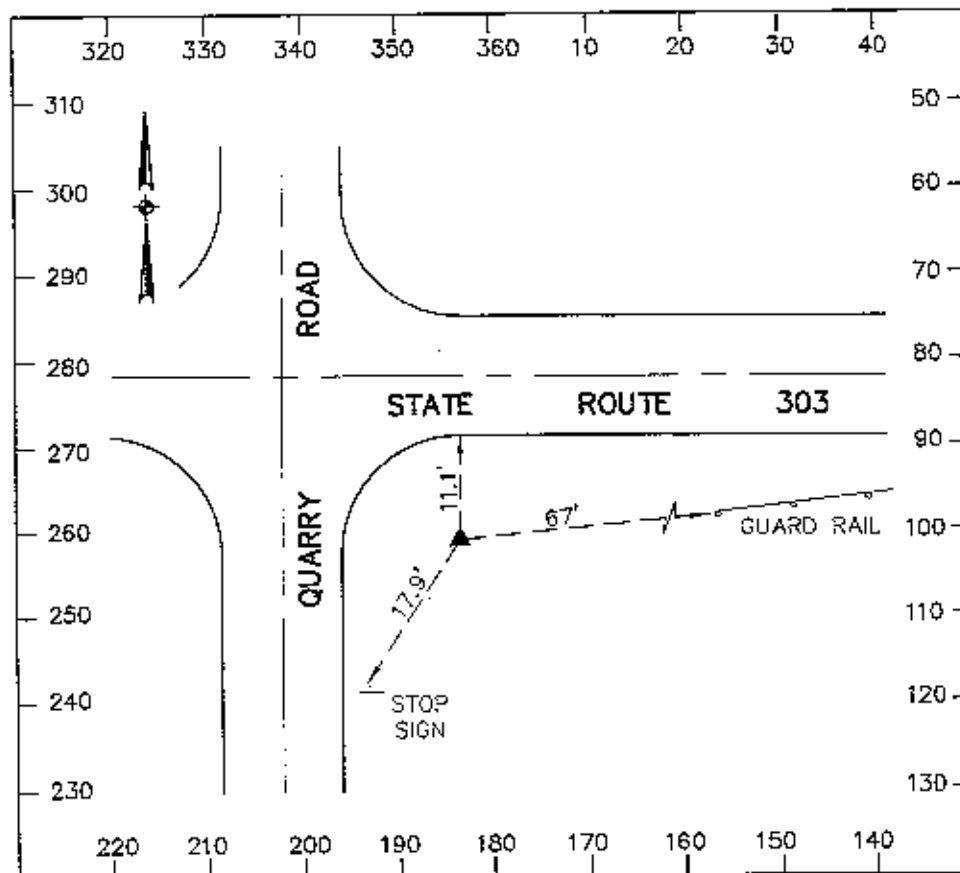
East (x) Meters: 620446.493

East (x) USFeet: 2035581.534

Combined Scale Factor: 0.99990865

Vertical Order: Second

Elevation (z) USFeet: 841.514



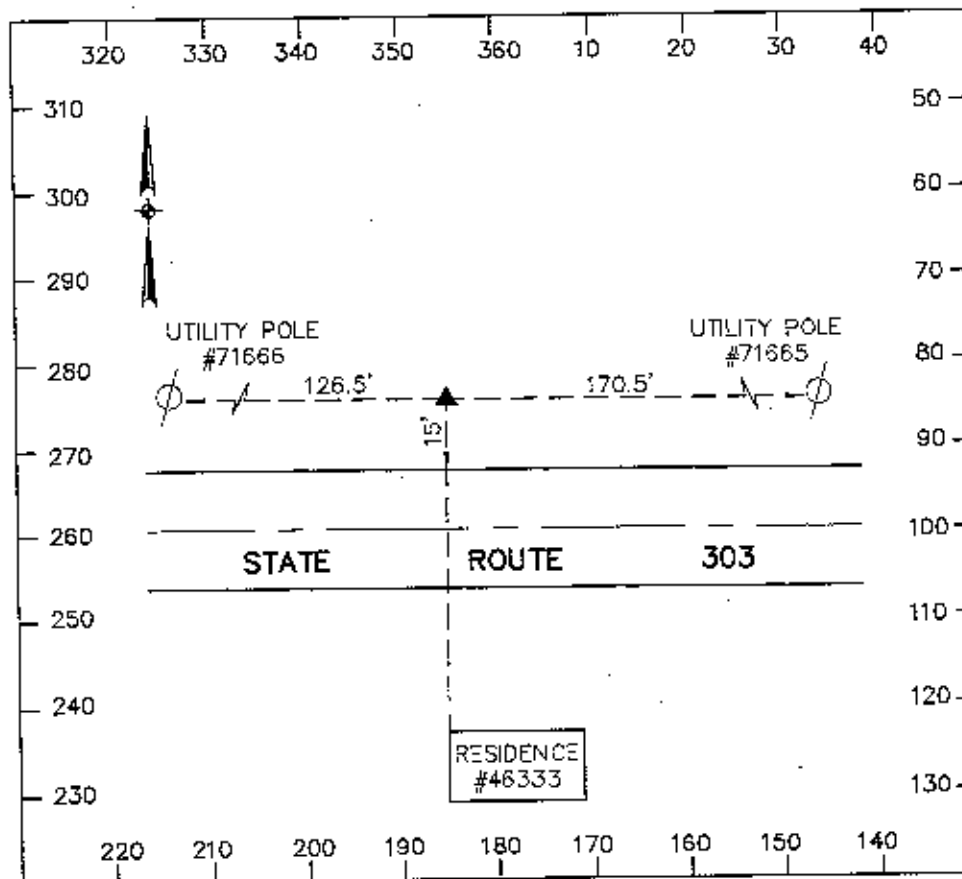


# Lorain County Auditor's Office

## Geodetic Survey Marker

Station Name: 2005-31	Alias: None
USGS Quad: Wellington	Township: Pittsfield
Type of Mark: Bronze Disk	Set By: KS Associates, Inc.
Stamping on Mark: 2005-31	Survey By: KS Associates, Inc.
Horizontal Datum: NAD83(1995)	Horizontal Order: First      Method: GPS
Latitude: 41-14-13.129601	Longitude: 82-13-26.551172
North (y) Meters: 174414.261	East (x) Meters: 623133.074
North (y) USFeet: 572224.122	East (x) USFeet: 2044395.760
Convergence: 0-10-52.65	Combined Scale Factor: 0.99990964
State Plane Coordinate System Zone: Ohio North (3401)	
Vertical Datum: NAVD88	Vertical Order: Second
Elevation (z) Meters: 250.108	Elevation (z) USFeet: 820.564

Location: To reach the monument, commence at the intersection of S.R. 303 and S.R. 58 in Pittsfield Township and travel West on S.R. 303 0.3 miles more or less to the station on the right. The station is a bronze disk in concrete.



# Lorain County Auditor's Office

## Geodetic Survey Marker

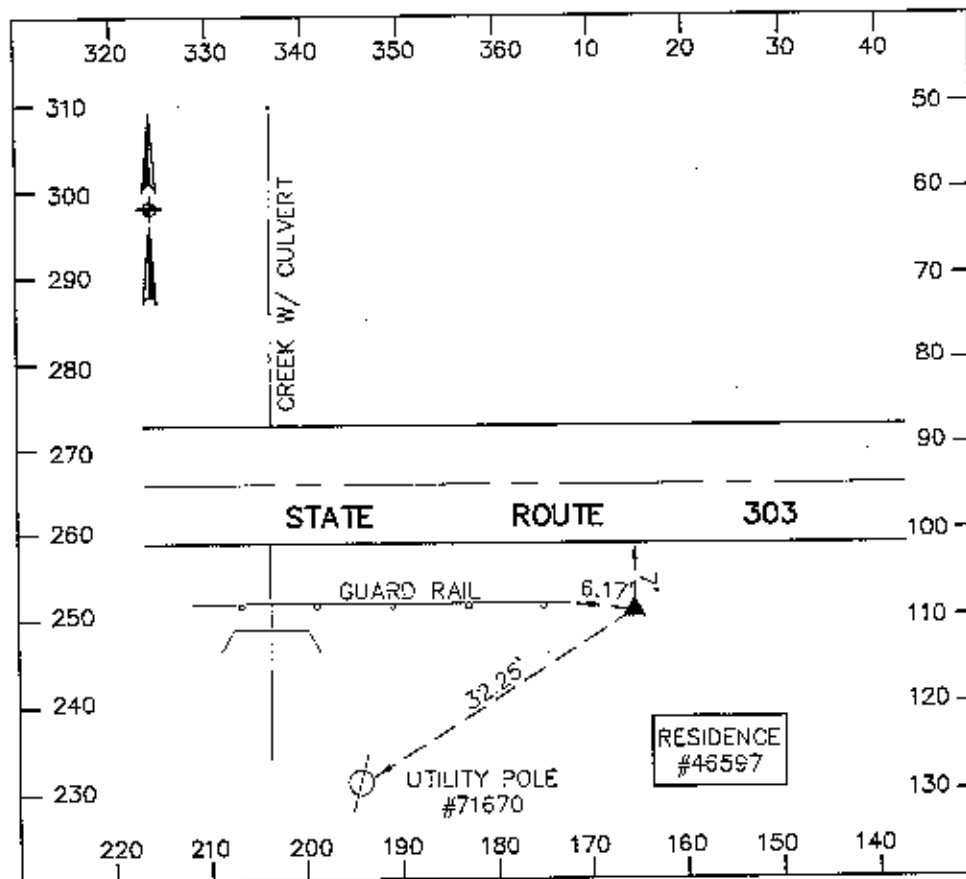
Station Name: 2005-32  
USGS Quad: Wellington  
Type of Mark: Bronze Disk  
Stamping on Mark: 2005-32  
Horizontal Datum: NAD83(1995)  
Latitude: 41-14-12.926324  
North (y) Meters: 174406.775  
North (y) USFeet: 572199.562  
Convergence: 0-10-41.72  
State Plane Coordinate System Zone: Ohio North (3401)

Alias: None  
Township: Pittsfield  
Set By: KS Associates, Inc.  
Survey By: KS Associates, Inc.  
Horizontal Order: First      Method: GPS  
Longitude: 82-13-43.183747  
East (x) Meters: 622745.795  
East (x) USFeet: 2043125.162  
Combined Scale Factor: 0.99990969

Vertical Datum: NAVD88  
Elevation (z) Meters: 249.791

Vertical Order: Second  
Elevation (z) USFeet: 819.522

Location: To reach the monument, commence at the intersection of S.R. 303 and S.R. 58 in Pittsfield Township and travel West on S.R. 303 0.6 miles more or less to the station on the left. The station is a bronze disk in concrete.

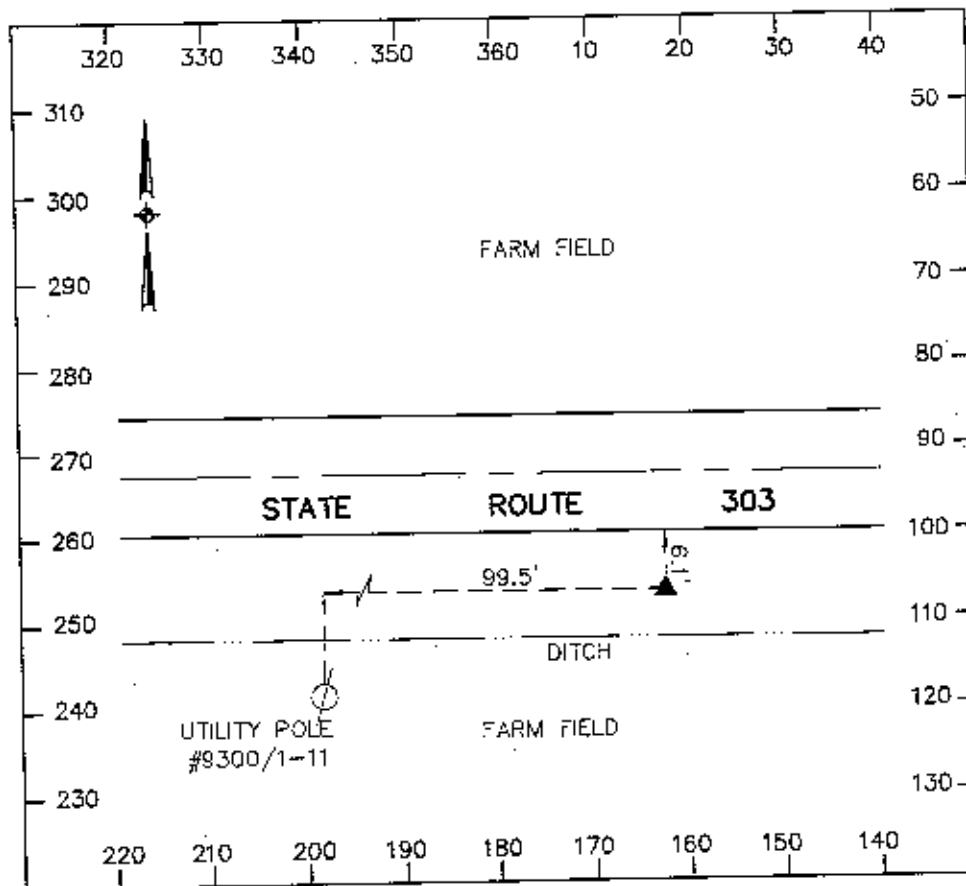


# Lorain County Auditor's Office

## Geodetic Survey Marker

Station Name: 2005-33	Alias: None
USGS Quad: Wellington	Township: Pittsfield
Type of Mark: Bronze Disk	Set By: KS Associates, Inc.
Stamping on Mark: 2005-33	Survey By: KS Associates, Inc.
Horizontal Datum: NAD83(1995)	Horizontal Order: First      Method: GPS
Latitude: 41-14-14.920853	Longitude: 82-10-28.942250
North (y) Meters: 174483.773	East (x) Meters: 627268.584
North (y) USFeet: 572452.177	East (x) USFeet: 2057963.680
Convergence: 0-12-49.33	Combined Scale Factor: 0.99991083
State Plane Coordinate System Zone: Ohio North (3401)	
Vertical Datum: NAVD88	Vertical Order: Second
Elevation (z) Meters: 242.611	Elevation (z) USFeet: 795.965

Location: To reach the monument, commence at the intersection of S.R. 303 and West Road in Pittsfield Township and travel East on S.R. 303 0.3 miles more or less to the station on the right. The station is a bronze disk in concrete.



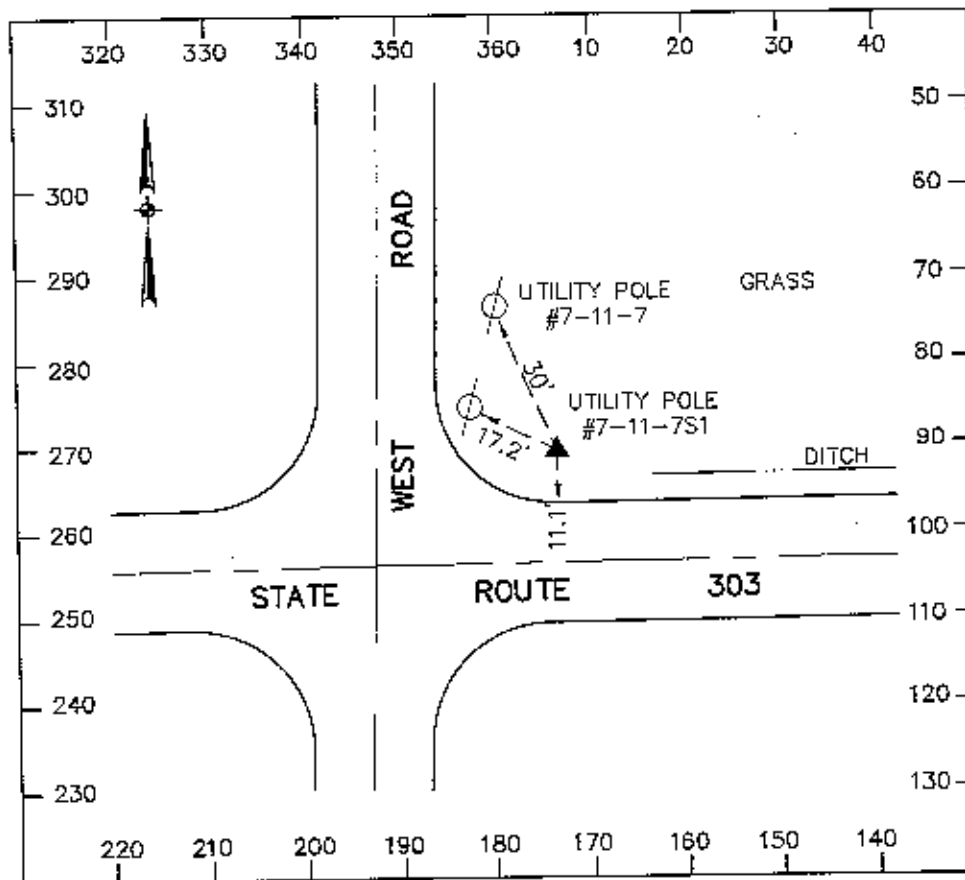
# Lorain County Auditor's Office

## Geodetic Survey Marker

Station Name: 2005-34  
 USGS Quad: Wellington  
 Type of Mark: Bronze Disk  
 Stamping on Mark: 2005-34  
 Horizontal Datum: NAD83(1995)  
 Latitude: 41-14-15.253953  
 North (y) Meters: 174492.345  
 North (y) USFeet: 572480.300  
 Convergence: 0-12-36.33  
 State Plane Coordinate System Zone: Ohio North (3401)  
 Vertical Datum: NAVD88  
 Elevation (z) Meters: 242.709

Alias: None  
 Township: Pittsfield  
 Set By: KS Associates, Inc.  
 Survey By: KS Associates, Inc.  
 Horizontal Order: First      Method: GPS  
 Longitude: 82-10-48.722853  
 East (x) Meters: 626807.949  
 East (x) USFeet: 2056452.412  
 Combined Scale Factor: 0.99991082  
 Vertical Order: Second  
 Elevation (z) USFeet: 796.289

Location: The station is located at the Northeast corner of the intersection of S.R. 303 and West Road in Pittsfield Township. The station is a bronze disk in concrete.

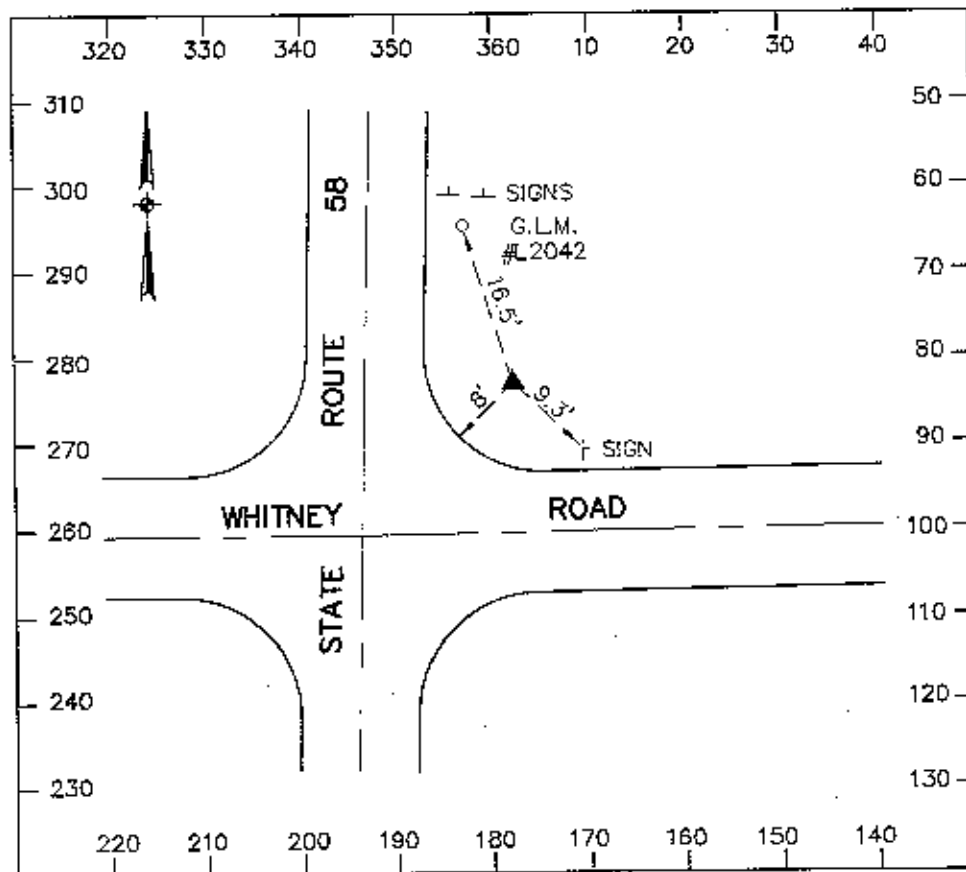


# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-35  
 USGS Quad: Wellington  
 Type of Mark: Bronze Disk  
 Stamping on Mark: 2005-35  
 Horizontal Datum: NAD83(1995)  
 Latitude: 41-13-24.750063  
 North (y) Meters: 172923.278  
 North (y) USFeet: 567332.456  
 Convergence: 0-11-05.11  
 State Plane Coordinate System Zone: Ohio North (3401)  
 Vertical Datum: NAVD88  
 Elevation (z) Meters: 247.894

Alias: None  
 Township: Pittsfield  
 Set By: KS Associates, Inc.  
 Survey By: KS Associates, Inc.  
 Horizontal Order: First      Method: GPS  
 Longitude: 82-13-07.575794  
 East (x) Meters: 623579.738  
 East (x) USFeet: 2045861.191  
 Combined Scale Factor: 0.99990931  
 Vertical Order: Second  
 Elevation (z) USFeet: 813.298

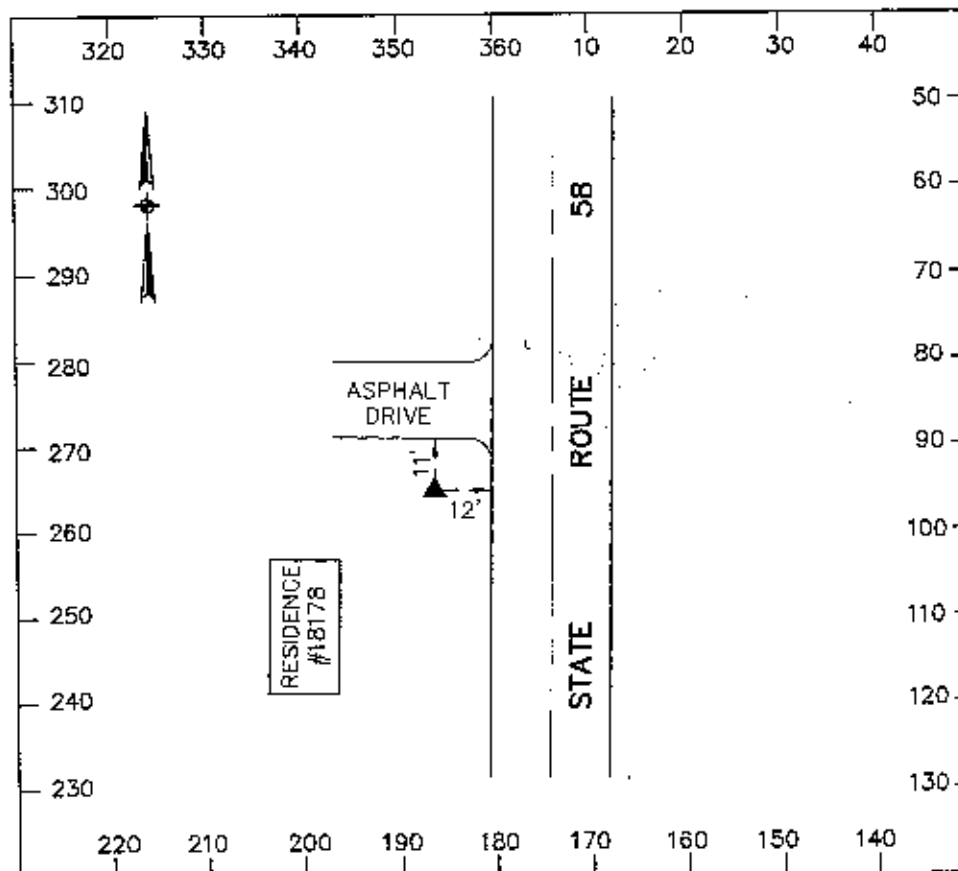
Location: The station is located at the Northeast corner of the intersection of Whitney Road and S.R. 58 in Pittsfield Township. The station is a bronze disk in concrete.



# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-36	Alias: None
USGS Quad: Wellington	Township: Pittsfield
Type of Mark: Bronze Disk	Set By: KS Associates, Inc.
Stamping on Mark: 2005-36	Survey By: KS Associates, Inc.
Horizontal Datum: NAD83(1995)	Horizontal Order: First      Method: GPS
Latitude: 41-13-13.576725	Longitude: 82-13-08.679314
North (y) Meters: 172578.525	East (x) Meters: 623555.147
North (y) USFeet: 566201.378	East (x) USFeet: 2045780.511
Convergence: 0-11-04.39	Combined Scale Factor: 0.99990957
State Plane Coordinate System Zone: Ohio North (3401)	
Vertical Datum: NAVD88	Vertical Order: Second
Elevation (z) Meters: 245.310	Elevation (z) USFeet: 804.820

Location: To reach the monument, commence at the intersection of Whitney Road and S.R. 58 in Pittsfield Township and travel South on S.R. 58 0.3 miles more or less to the station on the right. The station is a bronze disk in concrete.

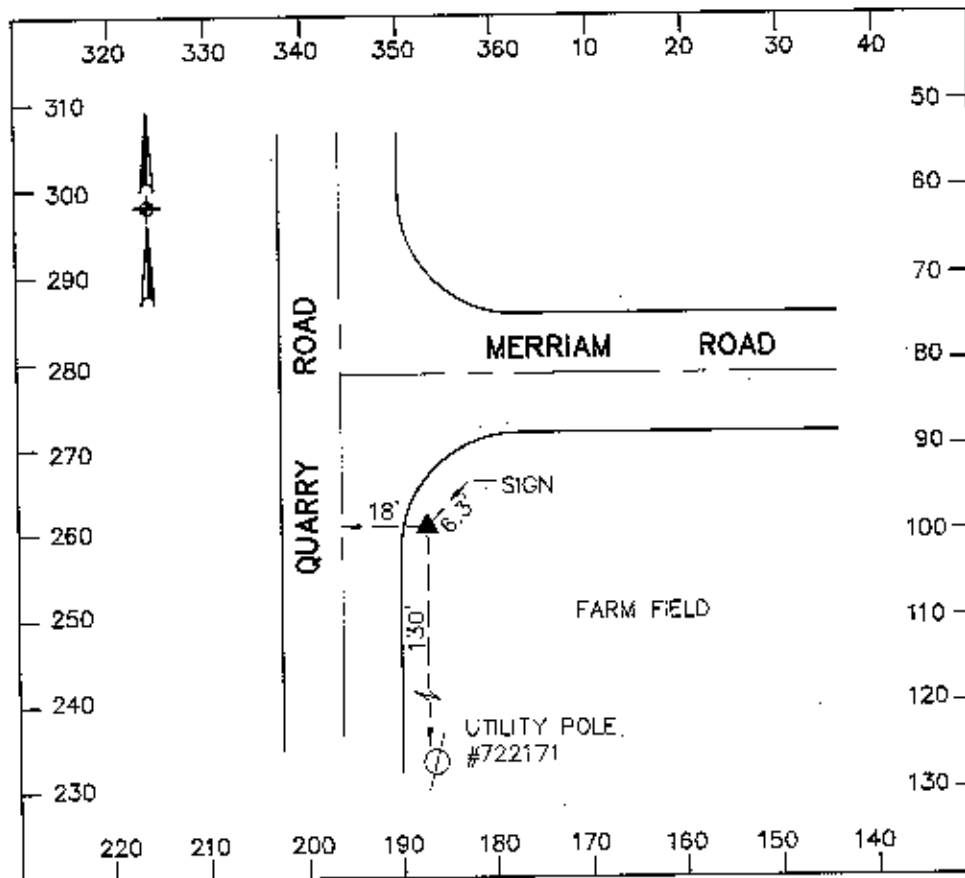


# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-37  
USGS Quad: Brighton  
Type of Mark: Bronze Disk  
Stamping on Mark: 2005-37  
Horizontal Datum: NAD83(1995)  
Latitude: 41-12-36.020761  
North (y) Meters: 171409.319  
North (y) USFeet: 562365.407  
Convergence: 0-09-22.99  
State Plane Coordinate System Zone: Ohio North (3401)  
Vertical Datum: NAVD88  
Elevation (z) Meters: 261.022

Alias: None  
Township: Pittsfield  
Set By: KS Associates, Inc.  
Survey By: KS Associates, Inc.  
Horizontal Order: First      Method: GPS  
Longitude: 82-15-43.026630  
East (x) Meters: 619963.343  
East (x) USFeet: 2033996.400  
Combined Scale Factor: 0.99990665  
Vertical Order: Second  
Elevation (z) USFeet: 856.370

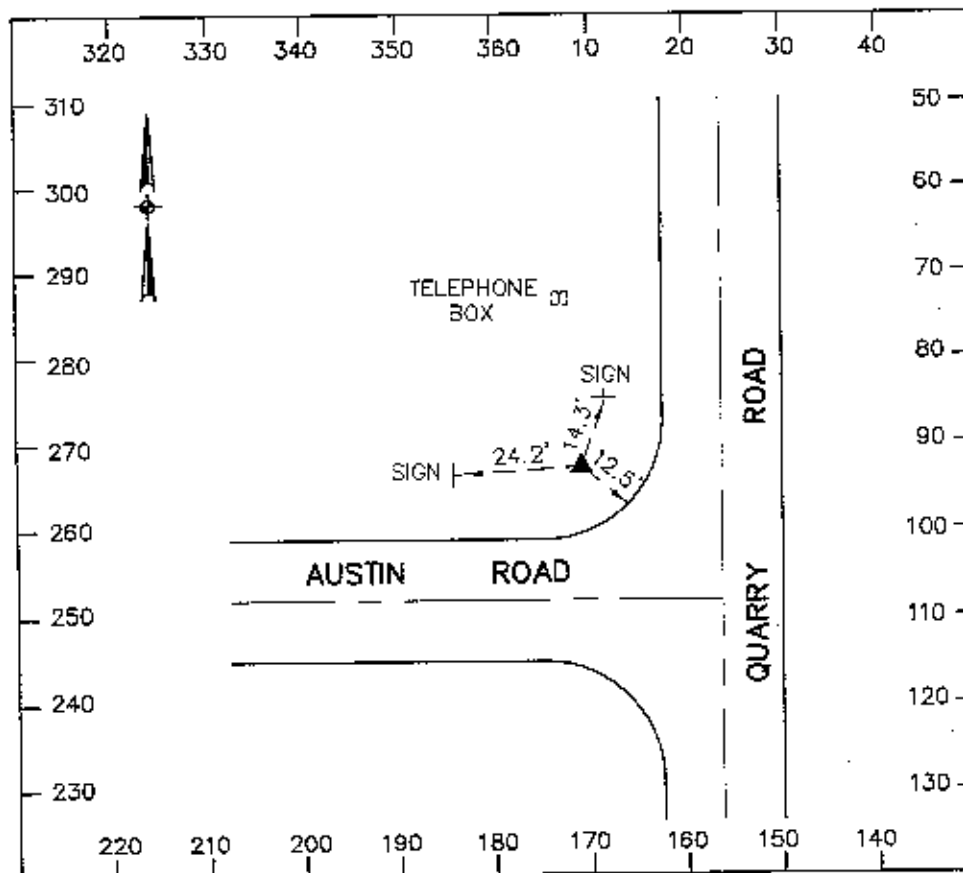
Location: The station is located at the Southeast corner of the intersection of Merriam Road and Quarry Road in Pittsfield Township. The station is a bronze disk in concrete.



# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-38	Alias: None
USGS Quad: Brighton	Township: Pittsfield
Type of Mark: Bronze Disk	Set By: KS Associates, Inc.
Stamping on Mark: 2005-38	Survey By: KS Associates, Inc.
Horizontal Datum: NAD83(1995)	Horizontal Order: First      Method: GPS
Latitude: 41-12-16.963988	Longitude: 82-15-55.898481
North (y) Meters: 170820.652	East (x) Meters: 619665.072
North (y) USFeet: 560434.090	East (x) USFeet: 2033017.823
Convergence: 0-09-14.53	Combined Scale Factor: 0.99990619
State Plane Coordinate System Zone: Ohio North (3401)	
Vertical Datum: NAVD88	Vertical Order: Second
Elevation (z) Meters: 262.503	Elevation (z) USFeet: 861.230

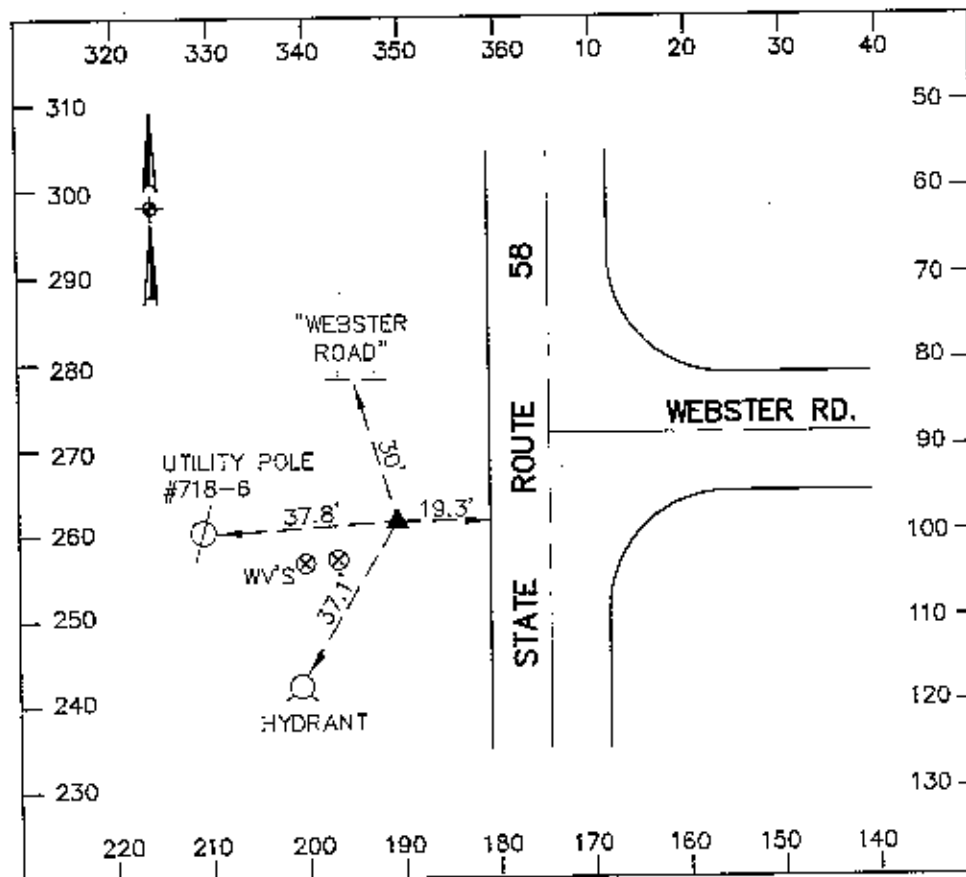
Location: The station is located at the Northwest corner of the intersection of Austin Road and Quarry Road in Pittsfield Township. The station is a bronze disk in concrete.





# Lorain County Auditor's Office Geodetic Survey Marker

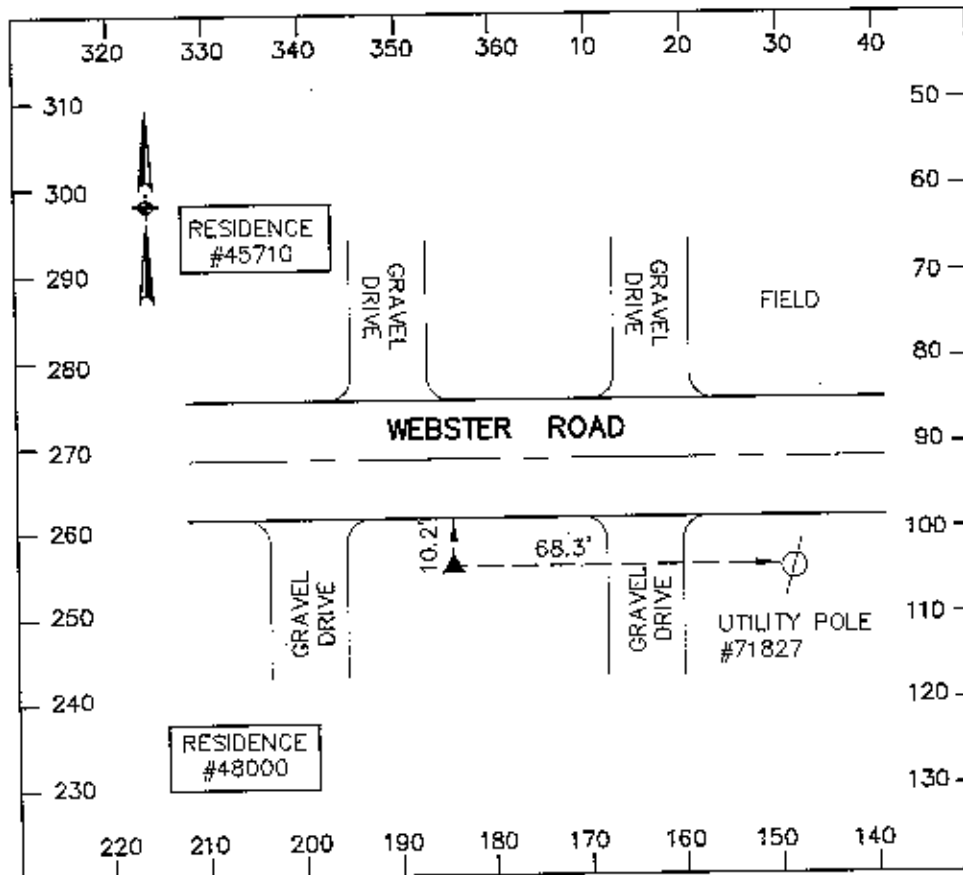
Station Name: 2005-39 USGS Quad: Wellington Type of Mark: Bronze Disk Stamping on Mark: 2005-39 Horizontal Datum: NAD83(1995) Latitude: 41-11-59.841511 North (y) Meters: 170304.595 North (y) USFeet: 558740.994 Convergence: 0-11-09.77 State Plane Coordinate System Zone: Ohio North (3401) Vertical Datum: NAVD88 Elevation (z) Meters: 249.129 Location: The station is located at the Southwest corner of the intersection of S.R. 58 and Webster Road in Wellington Township. The station is a bronze disk in concrete.	Alias: None Township: Wellington Set By: KS Associates, Inc. Survey By: KS Associates, Inc. Horizontal Order: First    Method: GPS Longitude: 82-13-00.491582 East (x) Meters: 623753.236 East (x) USFeet: 2046430.410 Combined Scale Factor: 0.99990808 Vertical Order: Second Elevation (z) USFeet: 817.351
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# Lorain County Auditor's Office Geodetic Survey Marker

<p>Station Name: 2005-40          USGS Quad: Wellington          Type of Mark: Bronze Disk          Stamping on Mark: 2005-40          Horizontal Datum: NAD83(1995)          Latitude: 41-11-59.787279          North (y) Meters: 170304.387          North (y) USFeet: 558740.309          Convergence: 0-11-22.36          State Plane Coordinate System Zone: Ohio North (3401)          Vertical Datum: NAVD88          Elevation (z) Meters: 251.562</p>	<p>Alias: None          Township: Wellington          Set By: KS Associates, Inc.          Survey By: KS Associates, Inc.          Horizontal Order: First      Method: GPS          Longitude: 82-12-41.315667          East (x) Meters: 624200.014          East (x) USFeet: 2047896.214          Combined Scale Factor: 0.99990769          Vertical Order: Second          Elevation (z) USFeet: 825.333</p>
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Location: To reach the monument, commence at the intersection of Webster Road and S.R. 58 in Wellington Township and travel East on Webster Road 0.3 miles more or less to the station on the right. The station is a bronze disk in concrete.

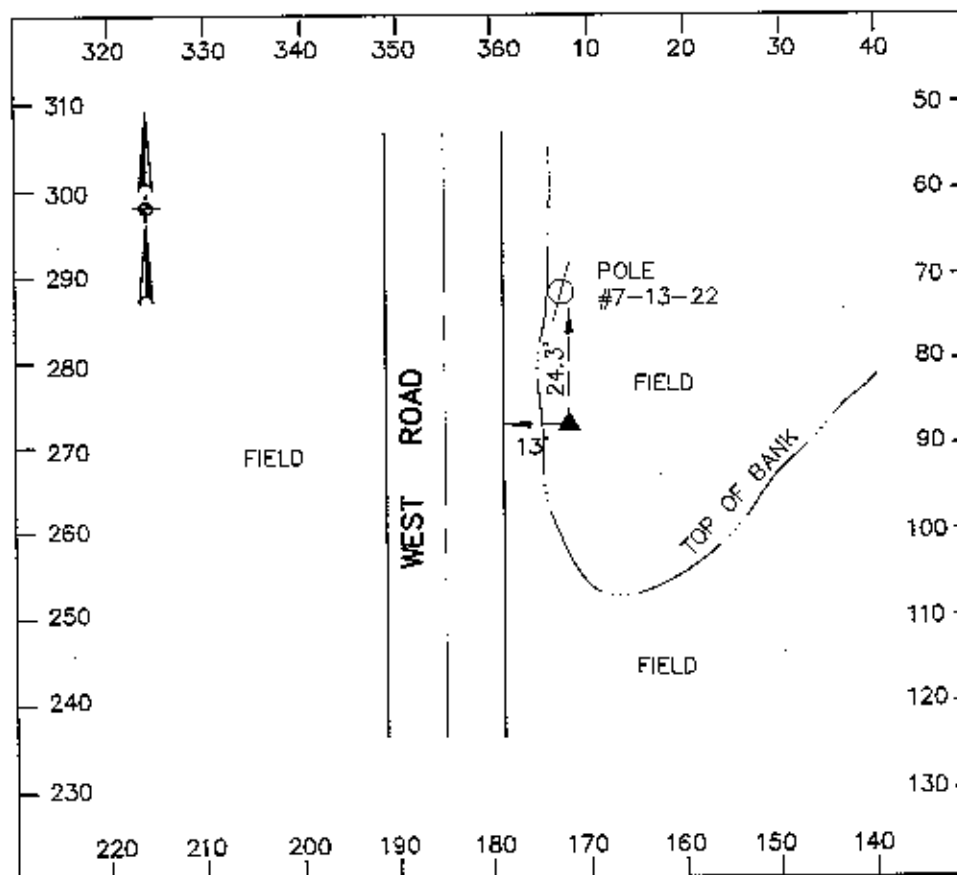


# Lorain County Auditor's Office

## Geodetic Survey Marker

Station Name: 2005-41	Alias: None
USGS Quad: Wellington	Township: Pittsfield
Type of Mark: Bronze Disk	Set By: KS Associates, Inc.
Stamping on Mark: 2005-41	Survey By: KS Associates, Inc.
Horizontal Datum: NAD83(1995)	Horizontal Order: First      Method: GPS
Latitude: 41-12-14.367537	Longitude: 82-10-51.116501
North (y) Meters: 170763.094	East (x) Meters: 626765.857
North (y) USFeet: 560245.252	East (x) USFeet: 2056314.317
Convergence: 0-12-34.76	Combined Scale Factor: 0.99990810
State Plane Coordinate System Zone: Ohio North (3401)	
Vertical Datum: NAVD88	Vertical Order: Second
Elevation (z) Meters: 250.024	Elevation (z) USFeet: 820.288

Location: To reach the monument, commence at the intersection of Webster Road and West Road in Pittsfield Township and travel North on West Road 0.3 miles more or less to the station on the right. The station is a bronze disk in concrete.



# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-42  
USGS Quad: Wellington  
Type of Mark: Bronze Disk  
Stamping on Mark: 2005-42  
Horizontal Datum: NAD83(1995)  
Latitude: 41-11-59.304024  
North (y) Meters: 170298.415  
North (y) USFeet: 558720.717  
Convergence: 0-12-34.69

Alias: None  
Township: Wellington  
Set By: KS Associates, Inc.  
Survey By: KS Associates, Inc.  
Horizontal Order: First      Method: GPS  
Longitude: 82-10-51.221438  
East (x) Meters: 626765.113  
East (x) USFeet: 2056311.874  
Combined Scale Factor: 0.99990773

State Plane Coordinate System Zone: Ohio North (3401)

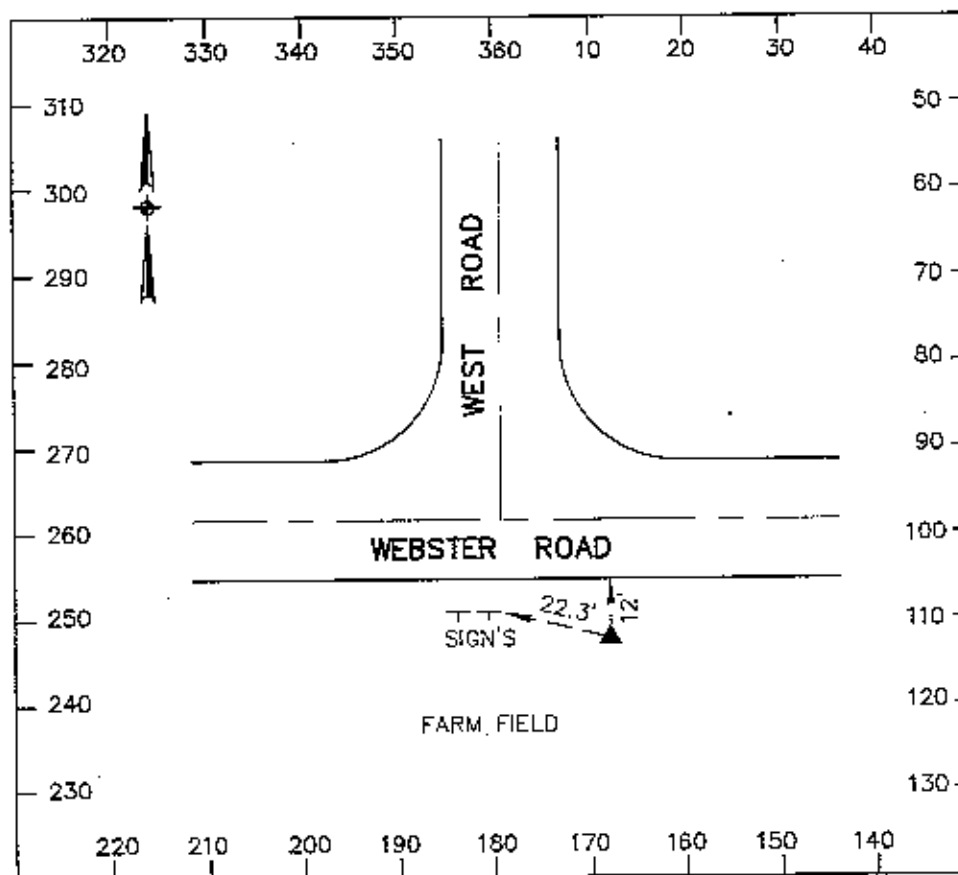
Vertical Datum: NAVD88

Vertical Order: Second

Elevation (z) Meters: 251.239

Elevation (z) USFeet: 824.274

Location: The station is located at the Southeast corner of the intersection of West Road and Webster Road in Wellington Township. The station is a bronze disk in concrete.



# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-43

USGS Quad: Grafton

Type of Mark: Bronze Disk

Stamping on Mark: 2005-43

Horizontal Datum: NAD83(1995)

Latitude: 41-18-39.962822

North (y) Meters: 182728.328

North (y) USFeet: 599501.190

Convergence: 0-19-39.33

State Plane Coordinate System Zone: Ohio North (3401)

Vertical Datum: NAVD88

Elevation (z) Meters: 245.504

Location: The station is located at the Southeast corner of the intersection of East Road and Island Road in Eaton Township. The station is a bronze disk in concrete.

Alias: None

Township: Eaton

Set By: KS Associates, Inc.

Survey By: KS Associates, Inc.

Horizontal Order: First Method: GPS

Longitude: 82-00-04.842307

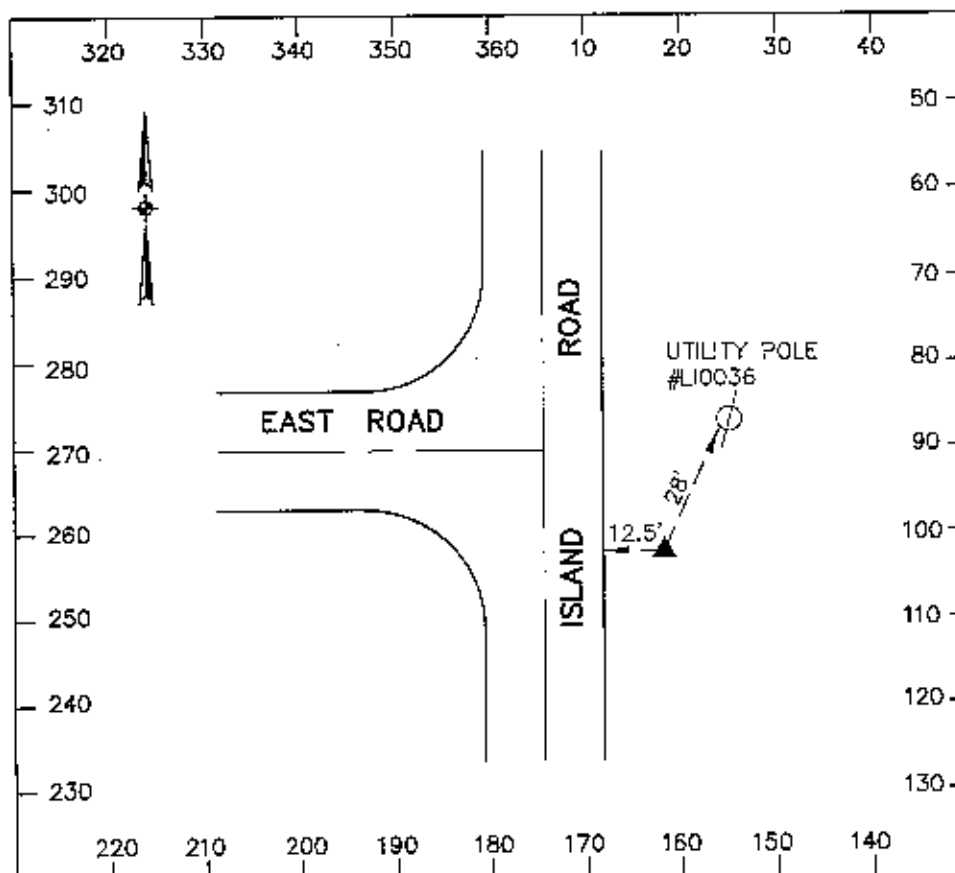
East (x) Meters: 641754.143

East (x) USFeet: 2105488.383

Combined Scale Factor: 0.99991499

Vertical Order: Second

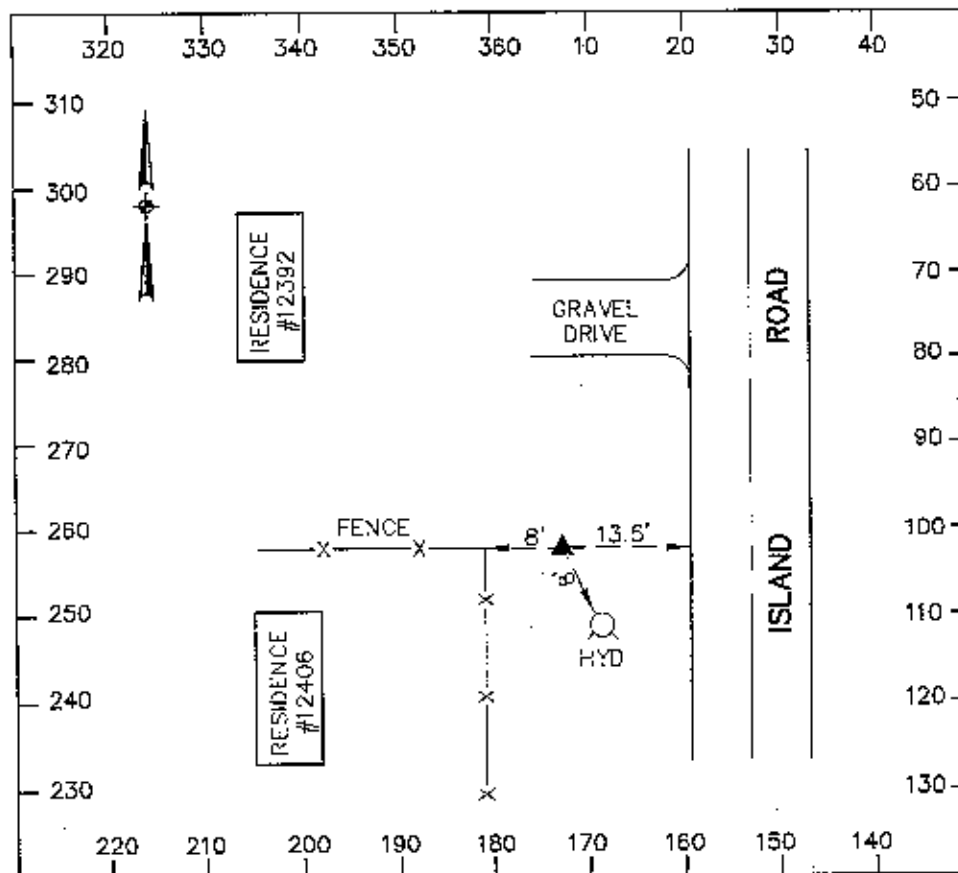
Elevation (z) USFeet: 805.457



# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-44	Alias: None
USGS Quad: Grafton	Township: Eaton
Type of Mark: Bronze Disk	Set By: KS Associates, Inc.
Stamping on Mark: 2005-44	Survey By: KS Associates, Inc.
Horizontal Datum: NAD83(1995)	Horizontal Order: First      Method: GPS
Latitude: 41-18-23.314862	Longitude: 82-00-05.482337
North (y) Meters: 182214.689	East (x) Meters: 641742.191
North (y) USFeet: 597816.026	East (x) USFeet: 2105449.173
Convergence: 0-19-38.91	Combined Scale Factor: 0.99991453
State Plane Coordinate System Zone: Ohio North (3401)	
Vertical Datum: NAVD88	Vertical Order: Second
Elevation (z) Meters: 246.259	Elevation (z) USFeet: 807.935

Location: To reach the monument, commence at the intersection of S.R. 82 and Island Road in Eaton Township and travel South on Island Road 0.5 miles more or less to the station on the right. The station is a bronze disk in concrete.



# Lorain County Auditor's Office

## Geodetic Survey Marker

Station Name: 2005-45

USGS Quad: Grafton

Type of Mark: Bronze Disk

Stamping on Mark: 2005-45

Horizontal Datum: NAD83(1995)

Latitude: 41-18-09.267559

North (y) Meters: 181758.814

North (y) USFeet: 596320.376

Convergence: 0-17-41.68

State Plane Coordinate System Zone: Ohio North (3401)

Vertical Datum: NAVD88

Elevation (z) Meters: 240.291

Location: The station is located at the Northwest corner of the intersection of Capel Road and Durkee Road in Eaton Township. The station is a bronze disk in concrete.

Alias: None

Township: Eaton

Set By: KS Associates, Inc.

Survey By: KS Associates, Inc.

Horizontal Order: First Method: GPS

Longitude: 82-03-03.931575

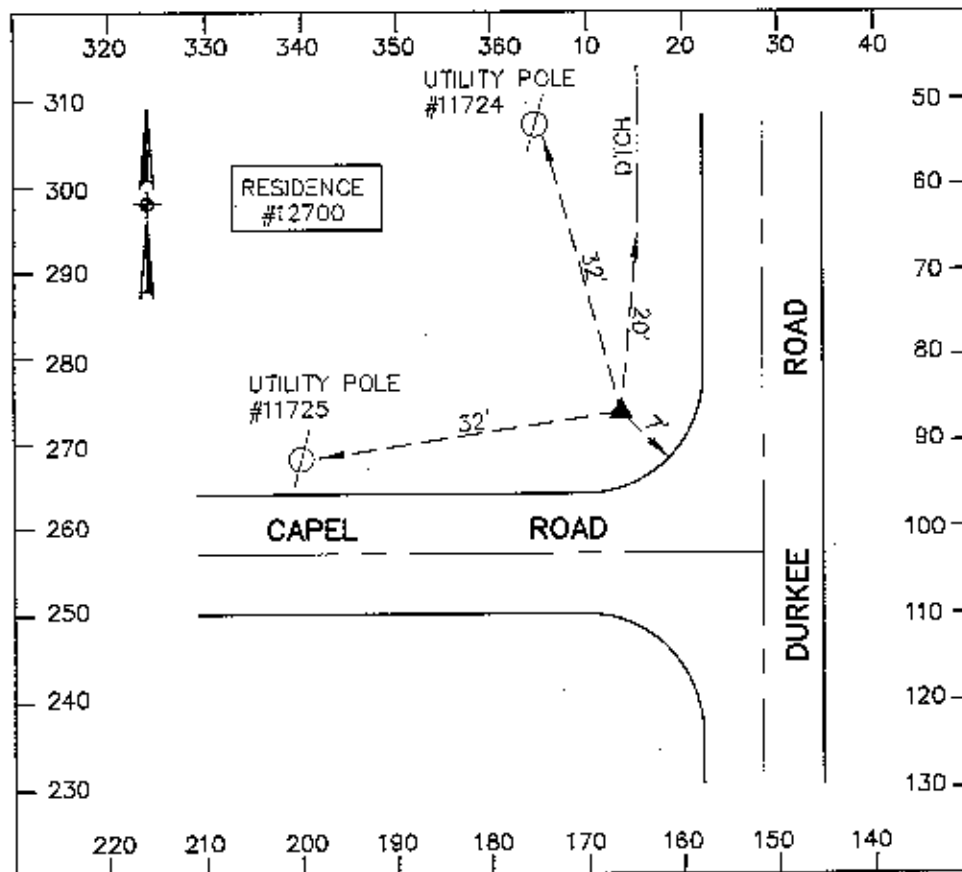
East (x) Meters: 637593.561

East (x) USFeet: 2091838.209

Combined Scale Factor: 0.99991519

Vertical Order: Second

Elevation (z) USFeet: 788.356



# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-46

USGS Quad: Grafton

Type of Mark: Bronze Disk

Stamping on Mark: 2005-46

Horizontal Datum: NAD83(1995)

Latitude: 41-17-50.687204

North (y) Meters: 181185.760

North (y) USFeet: 594440.281

Convergence: 0-17-42.28

State Plane Coordinate System Zone: Ohio North (3401)

Vertical Datum: NAVD88

Elevation (z) Meters: 240.865

Location: The station is located at the Southeast corner of the intersection of Capel Road and Durkee Road in Eaton Township. The station is a bronze disk in concrete.

Alias: None

Township: Eaton

Set By: KS Associates, Inc.

Survey By: KS Associates, Inc.

Horizontal Order: First Method: GPS

Longitude: 82-03-03.008323

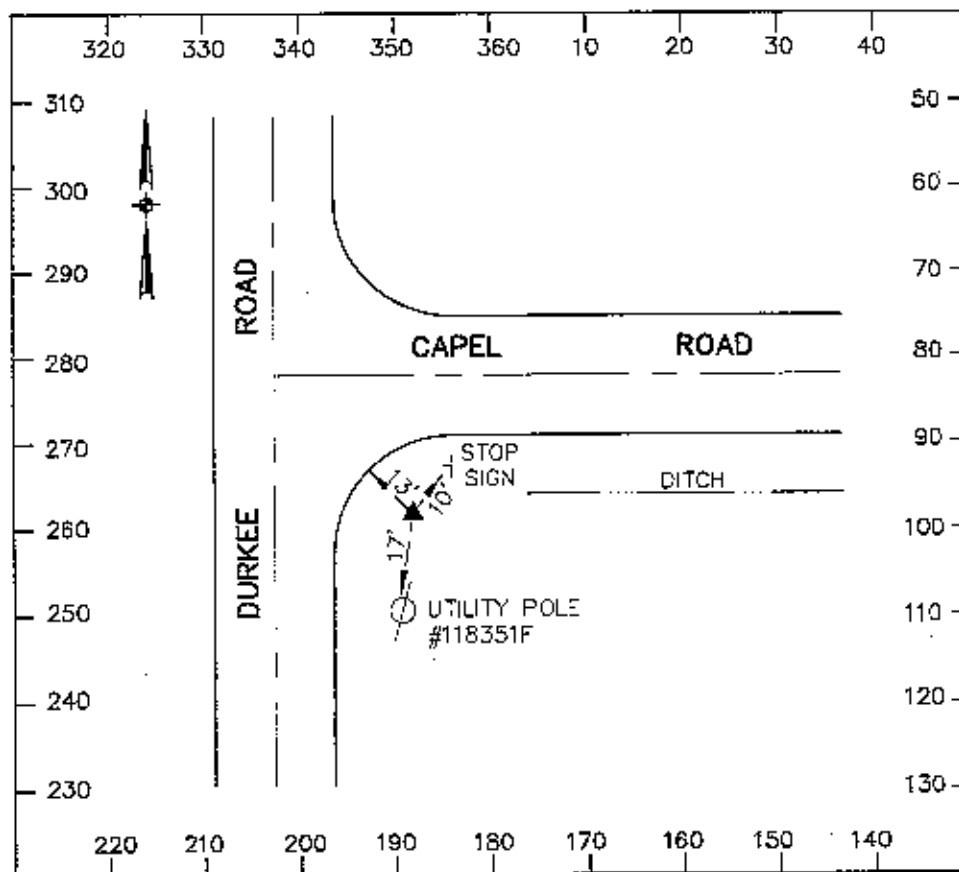
East (x) Meters: 637617.990

East (x) USFeet: 2091918.355

Combined Scale Factor: 0.99991474

Vertical Order: Second

Elevation (z) USFeet: 790.237



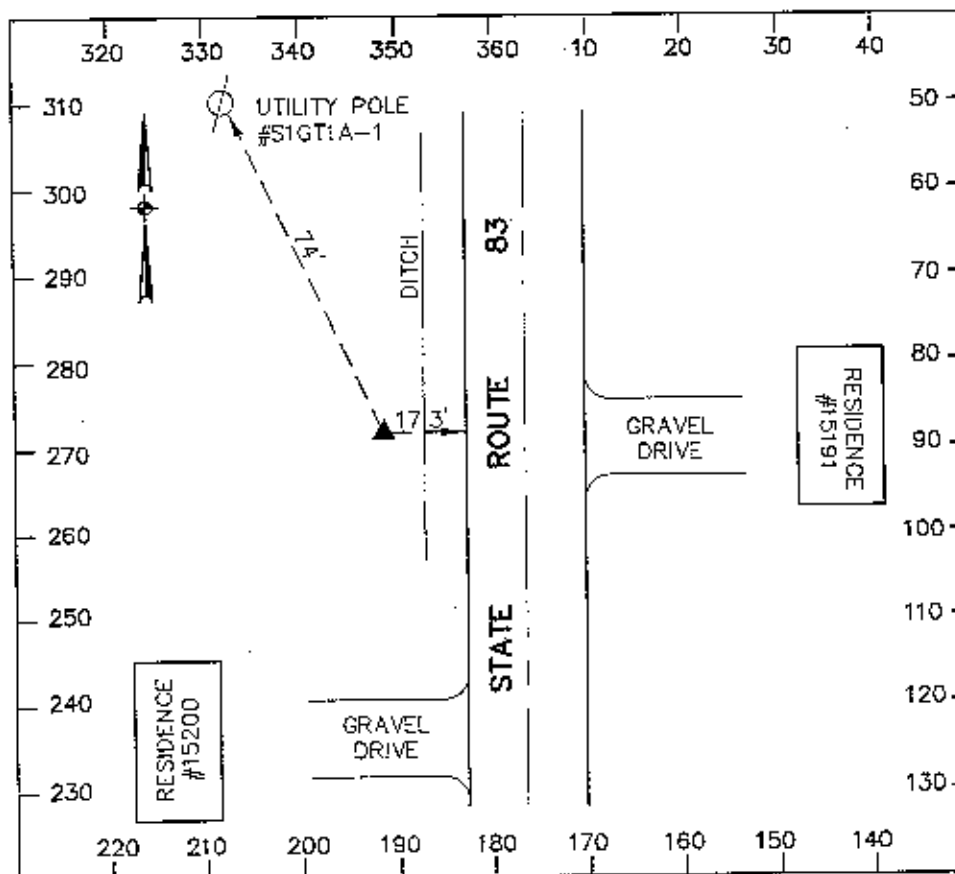


# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-47  
USGS Quad: Grafton  
Type of Mark: Bronze Disk  
Stamping on Mark: 2005-47  
Horizontal Datum: NAD83(1995)  
Latitude: 41-15-52.401199  
North (y) Meters: 177549.580  
North (y) USFeet: 582510.579  
Convergence: 0-18-49.62  
State Plane Coordinate System Zone: Ohio North (3401)  
Vertical Datum: NAVD88  
Elevation (z) Meters: 254.291

Alias: None  
Township: Grafton  
Set By: KS Associates, Inc.  
Survey By: KS Associates, Inc.  
Horizontal Order: First Method: GPS  
Longitude: 82-01-20.510809  
East (x) Meters: 640022.471  
East (x) USFeet: 2099807.057  
Combined Scale Factor: 0.99991048  
Vertical Order: Second  
Elevation (z) USFeet: 834.285

Location: To reach the monument, commence at the intersection of S.R. 83 and Grafton Eastern Road in Grafton Township and travel North on S.R. 83 0.3 miles more or less to the station on the left. The station is a bronze disk in concrete.



# Lorain County Auditor's Office

## Geodetic Survey Marker

Station Name: 2005-48

USGS Quad: Grafton

Type of Mark: Bronze Disk

Stamping on Mark: 2005-48

Horizontal Datum: NAD83(1995)

Latitude: 41-15-36.713738

North (y) Meters: 177065.703

North (y) USFeet: 580923.062

Convergence: 0-18-49.84

State Plane Coordinate System Zone: Ohio North (3401)

Vertical Datum: NAVD88

Elevation (z) Meters: 252.325

Location: The station is located at the Southeast corner of the intersection of S.R. 83 and Grafton Eastern Road in Grafton Township. The station is a bronze disk in concrete.

Alias: None

Township: Grafton

Set By: KS Associates, Inc.

Survey By: KS Associates, Inc.

Horizontal Order: First Method: GPS

Longitude: 82-01-20.169012

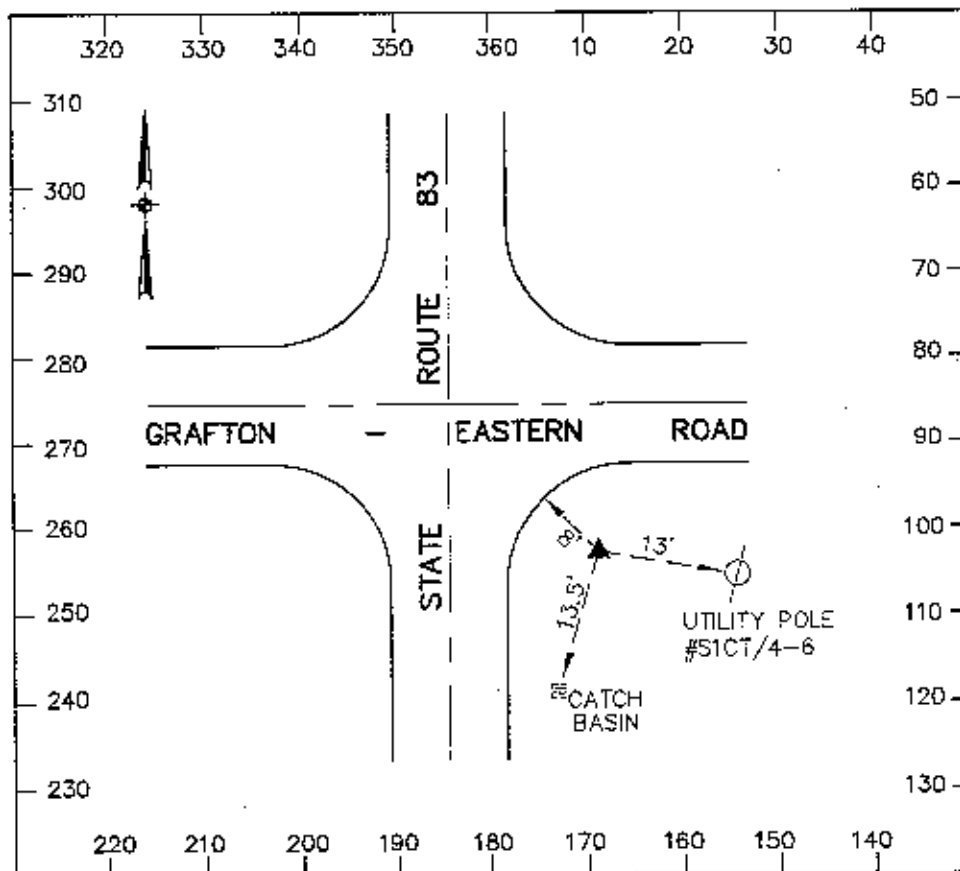
East (x) Meters: 640033.077

East (x) USFeet: 2099841.854

Combined Scale Factor: 0.99991053

Vertical Order: Second

Elevation (z) USFeet: 827.835

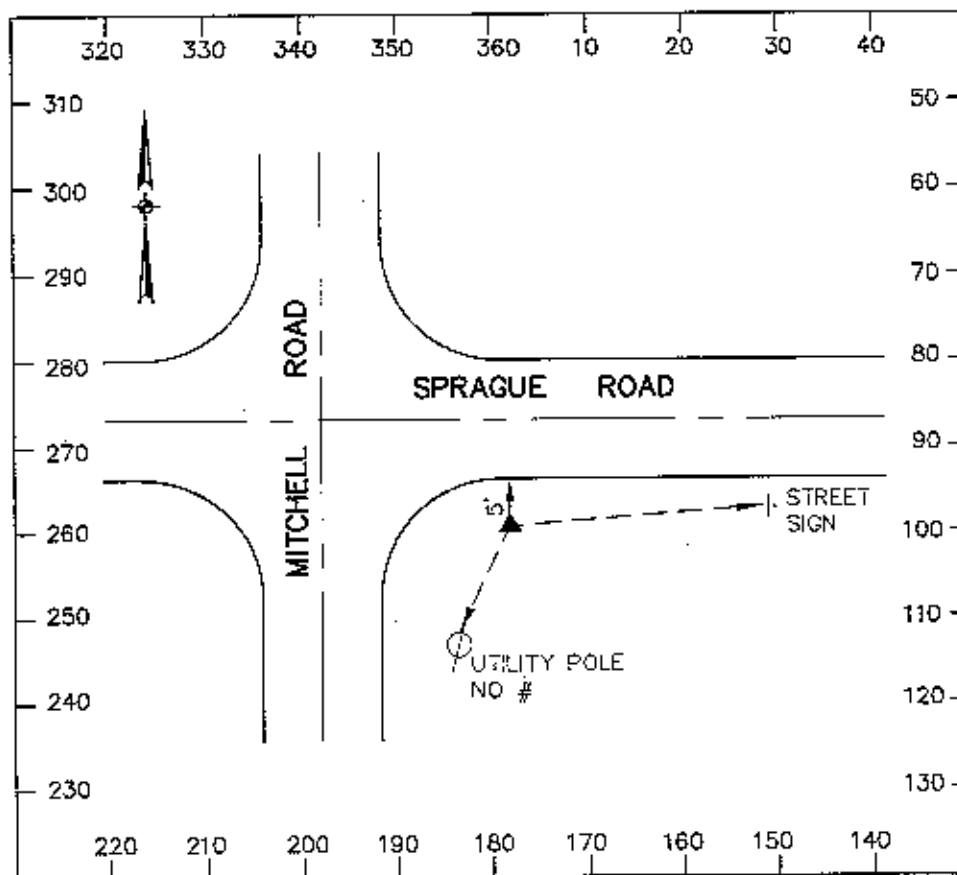


# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-49  
USGS Quad: West View  
Type of Mark: Bronze Disk  
Stamping on Mark: 2005-49  
Horizontal Datum: NAD83(1995)  
Latitude: 41-21-04.053941  
North (y) Meters: 187195.581  
North (y) USFeet: 614157.502  
Convergence: 0-21-24.95  
State Plane Coordinate System Zone: Ohio North (3401)  
Vertical Datum: NAVD88  
Elevation (z) Meters: 241.595

Alias: None  
Township: Columbia  
Set By: KS Associates, Inc.  
Survey By: KS Associates, Inc.  
Horizontal Order: First      Method: GPS  
Longitude: 81-57-24.062069  
East (x) Meters: 645466.044  
East (x) USFeet: 2117666.514  
Combined Scale Factor: 0.99991881  
Vertical Order: Second  
Elevation (z) USFeet: 792.632

Location: The station is located at the Southeast corner of the intersection of Mitchell Road and Sprague Road in Columbia Township. The station is a bronze disk in concrete.

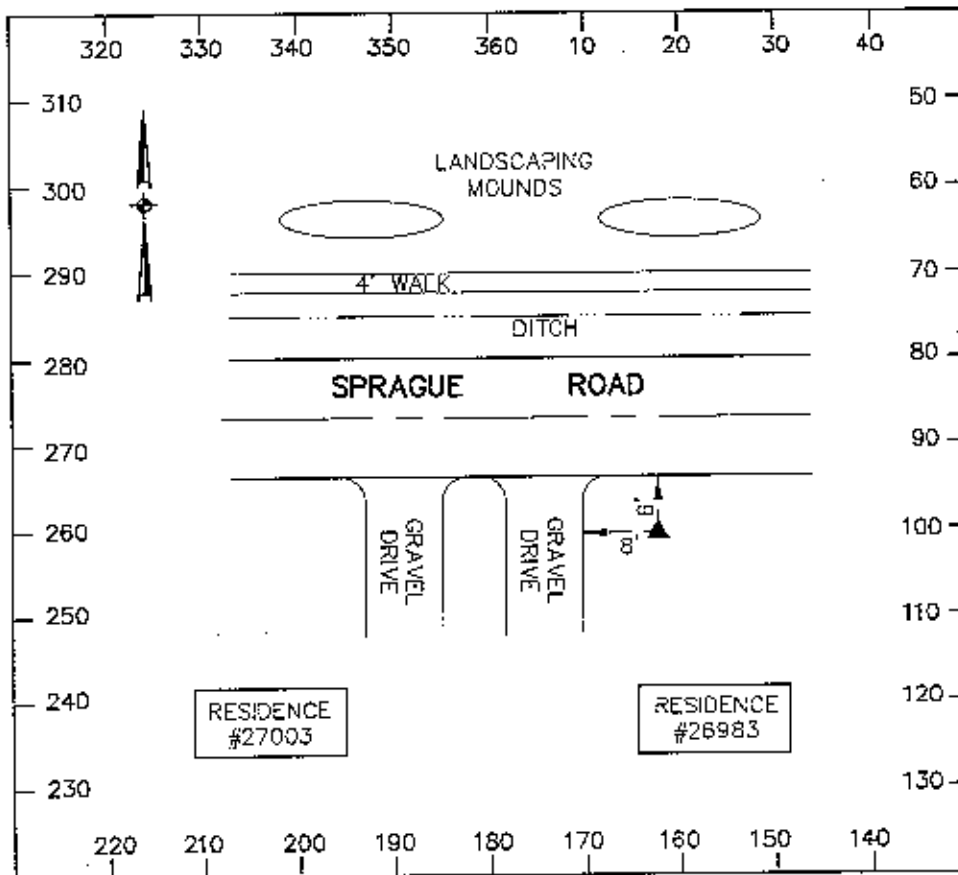


# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-50  
 USGS Quad: West View  
 Type of Mark: Bronze Disk  
 Stamping on Mark: 2005-50  
 Horizontal Datum: NAD83(1995)  
 Latitude: 41-21-03.899171  
 North (y) Meters: 187193.359  
 North (y) USFeet: 614150.212  
 Convergence: 0-21-36.48  
 State Plane Coordinate System Zone: Ohio North (3401)  
 Vertical Datum: NAVD88  
 Elevation (z) Meters: 242.839

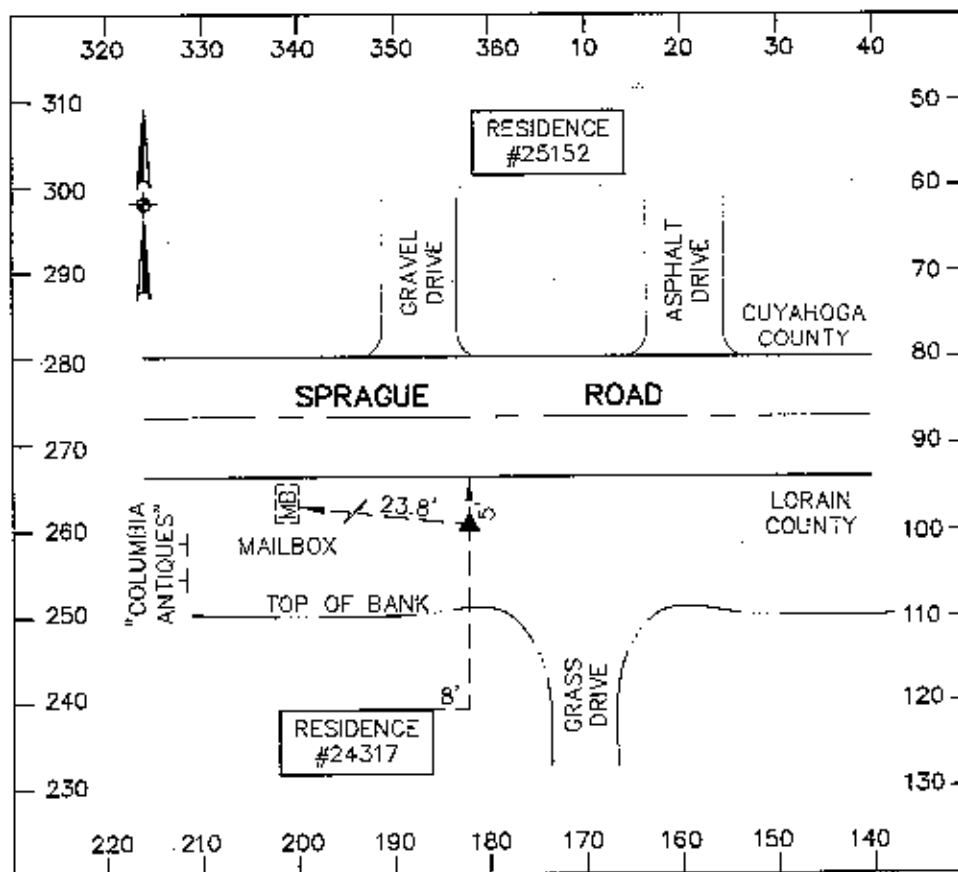
Alias: None  
 Township: Columbia  
 Set By: KS Associates, Inc.  
 Survey By: KS Associates, Inc.  
 Horizontal Order: First      Method: GPS  
 Longitude: 81-57-06.514942  
 East (x) Meters: 645873.954  
 East (x) USFeet: 2119004.799  
 Combined Scale Factor: 0.99991861  
 Vertical Order: Second  
 Elevation (z) USFeet: 796.714

**Location:** To reach the monument, commence at the intersection of Mitchell Road and Sprague Road in Columbia Township and travel East on Sprague Road 0.3 miles more or less to the station on the right. The station is a bronze disk in concrete.



# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-51 USGS Quad: West View Type of Mark: Bronze Disk Stamping on Mark: 2005-51 Horizontal Datum: NAD83(1995) Latitude: 41-21-02.664280 North (y) Meters: 187183.250 North (y) USFeet: 614117.046 Convergence: 0-23-36.73 State Plane Coordinate System Zone: Ohio North (3401) Vertical Datum: NAVD88 Elevation (z) Meters: 232.594 Location: To reach the monument, commence at the intersection of S.R. 252 and Sprague Road in Columbia Township and travel East on Sprague Road 0.1 miles more or less to the station on the right. The station is a bronze disk in concrete.	Alias: None Township: Columbia Set By: KS Associates, Inc. Survey By: KS Associates, Inc. Horizontal Order: First      Method: GPS Longitude: 81-54-03.468568 East (x) Meters: 650129.092 East (x) USFeet: 2132965.197 Combined Scale Factor: 0.99992018 Vertical Order: Second Elevation (z) USFeet: 763.103
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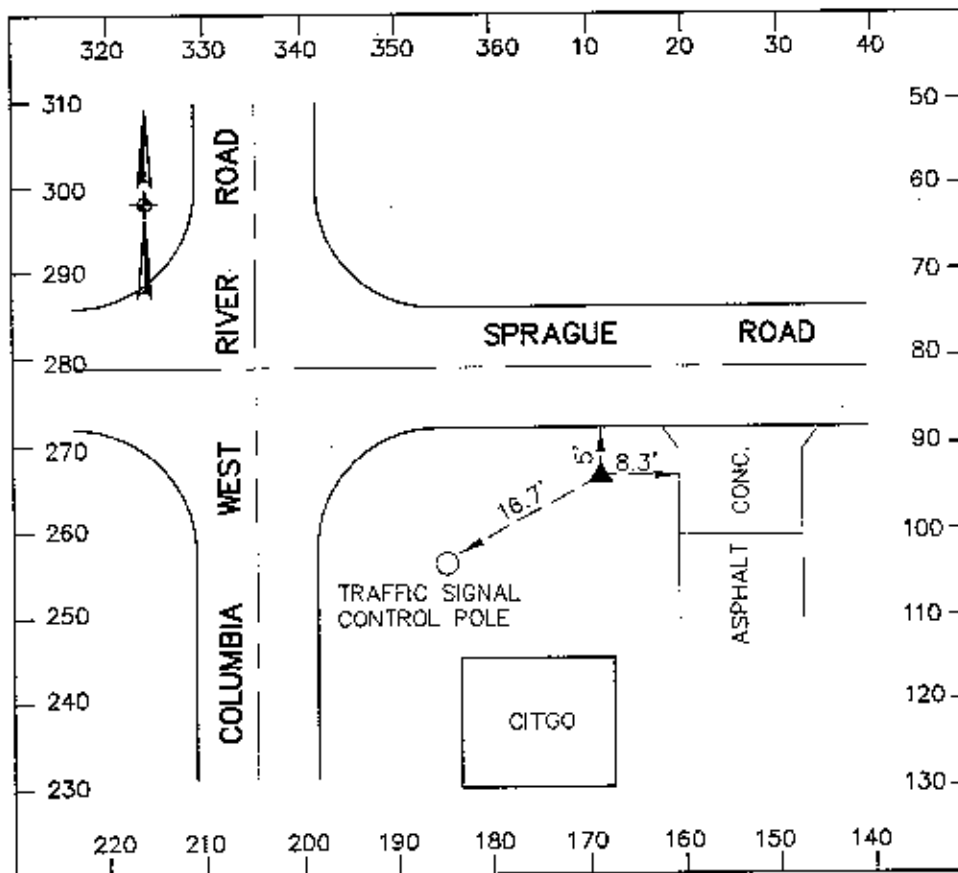


# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-52  
USGS Quad: West View  
Type of Mark: Bronze Disk  
Stamping on Mark: 2005-52  
Horizontal Datum: NAD83(1995)  
Latitude: 41-21-02.701180  
North (y) Meters: 187182.093  
North (y) USFeet: 614113.249  
Convergence: 0-23-27.26  
State Plane Coordinate System Zone: Ohio North (3401)  
Vertical Datum: NAVD88  
Elevation (z) Meters: 236.463

Alias: None  
Township: Columbia  
Set By: KS Associates, Inc.  
Survey By: KS Associates, Inc.  
Horizontal Order: First    Method: GPS  
Longitude: 81-54-17.894238  
East (x) Meters: 649793.761  
East (x) USFeet: 2131865.033  
Combined Scale Factor: 0.99991958  
Vertical Order: Second  
Elevation (z) USFeet: 775.797

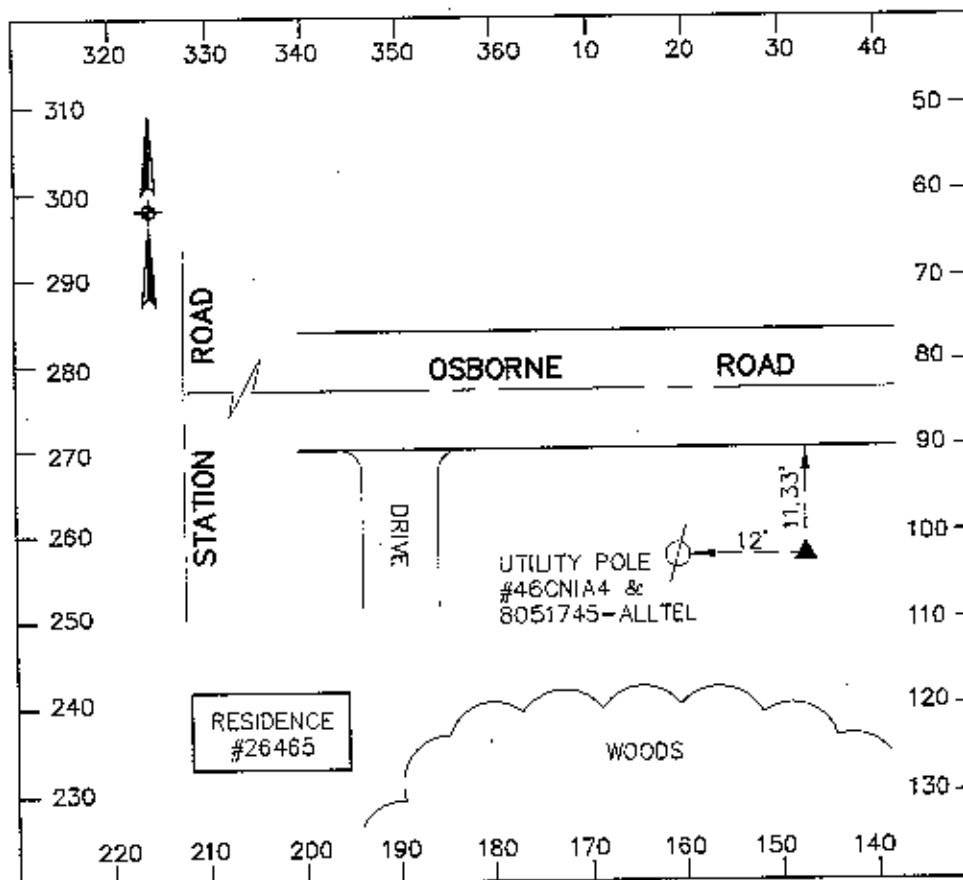
Location: The station is located at the Southeast corner of the intersection of Columbia West River Road and Sprague Road in Columbia Township. The station is a bronze disk in concrete.



# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-53	Alias: None
USGS Quad: West View	Township: Columbia
Type of Mark: Bronze Disk	Set By: KS Associates, Inc.
Stamping on Mark: 2005-53	Survey By: KS Associates, Inc.
Horizontal Datum: NAD83(1995)	Horizontal Order: First      Method: GPS
Latitude: 41-20-22.806962	Longitude: 81-56-31.635408
North (y) Meters: 185930.887	East (x) Meters: 646692.832
North (y) USFeet: 610008.252	East (x) USFeet: 2121691.399
Convergence: 0-21-59.40	Combined Scale Factor: 0.99991765
State Plane Coordinate System Zone: Ohio North (3401)	
Vertical Datum: NAVD88	Vertical Order: Second
Elevation (z) Meters: 242.780	Elevation (z) USFeet: 796.521

Location: To reach the monument, commence at the intersection of Station Road and Osborne Road in Columbia Township and travel East on Osborne Road 0.1 miles more or less to the station on the right. The station is a bronze disk in concrete.



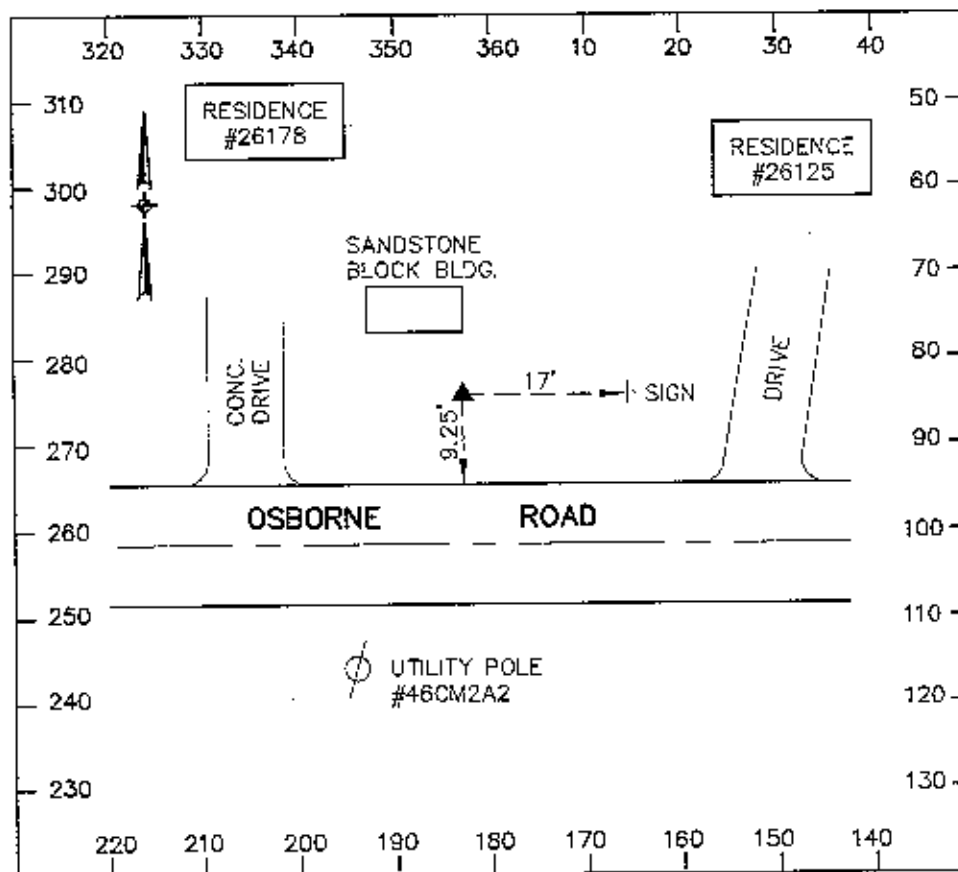
# Lorain County Auditor's Office

## Geodetic Survey Marker

Station Name: 2005-54  
USGS Quad: West View  
Type of Mark: Bronze Disk  
Stamping on Mark: 2005-54  
Horizontal Datum: NAD83(1995)  
Latitude: 41-20-22.897000  
North (y) Meters: 185936.522  
North (y) USFeet: 610026.740  
Convergence: 0-22-11.96  
State Plane Coordinate System Zone: Ohio North (3401)  
Vertical Datum: NAVD88  
Elevation (z) Meters: 243.043

Alias: None  
Township: Columbia  
Set By: KS Associates, Inc.  
Survey By: KS Associates, Inc.  
Horizontal Order: First    Method: GPS  
Longitude: 81-56-12.510027  
East (x) Meters: 647137.457  
East (x) USFeet: 2123150.141  
Combined Scale Factor: 0.99991761  
Vertical Order: Second  
Elevation (z) USFeet: 797.385

Location: To reach the monument, commence at the intersection of Station Road and Osborne Road in Columbia Township and travel East on Osborne Road 0.3 miles more or less to the station on the left. The station is a bronze disk in concrete.





# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-55  
USGS Quad: West View  
Type of Mark: Bronze Disk  
Stamping on Mark: 2005-55  
Horizontal Datum: NAD83(1995)  
Latitude: 41-19-56.346612  
North (y) Meters: 185140.393  
North (y) USFeet: 607414.772  
Convergence: 0-23-48.63

Alias: None  
Township: Columbia  
Set By: KS Associates, Inc.  
Survey By: KS Associates, Inc.  
Horizontal Order: First      Method: GPS  
Longitude: 81-53-45.367747  
East (x) Meters: 650564.013  
East (x) USFeet: 2134392.099  
Combined Scale Factor: 0.99991708

State Plane Coordinate System Zone: Ohio North (3401)

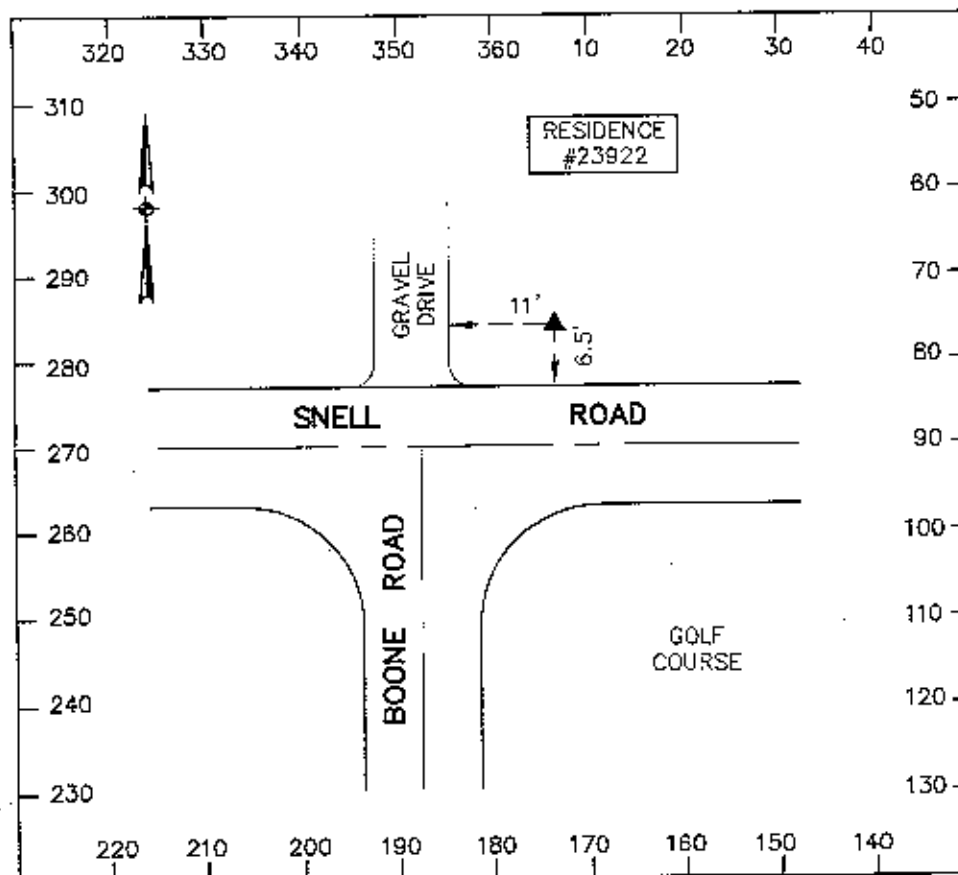
Vertical Datum: NAVD88

Vertical Order: Second

Elevation (z) Meters: 242.571

Elevation (z) USFeet: 795.834

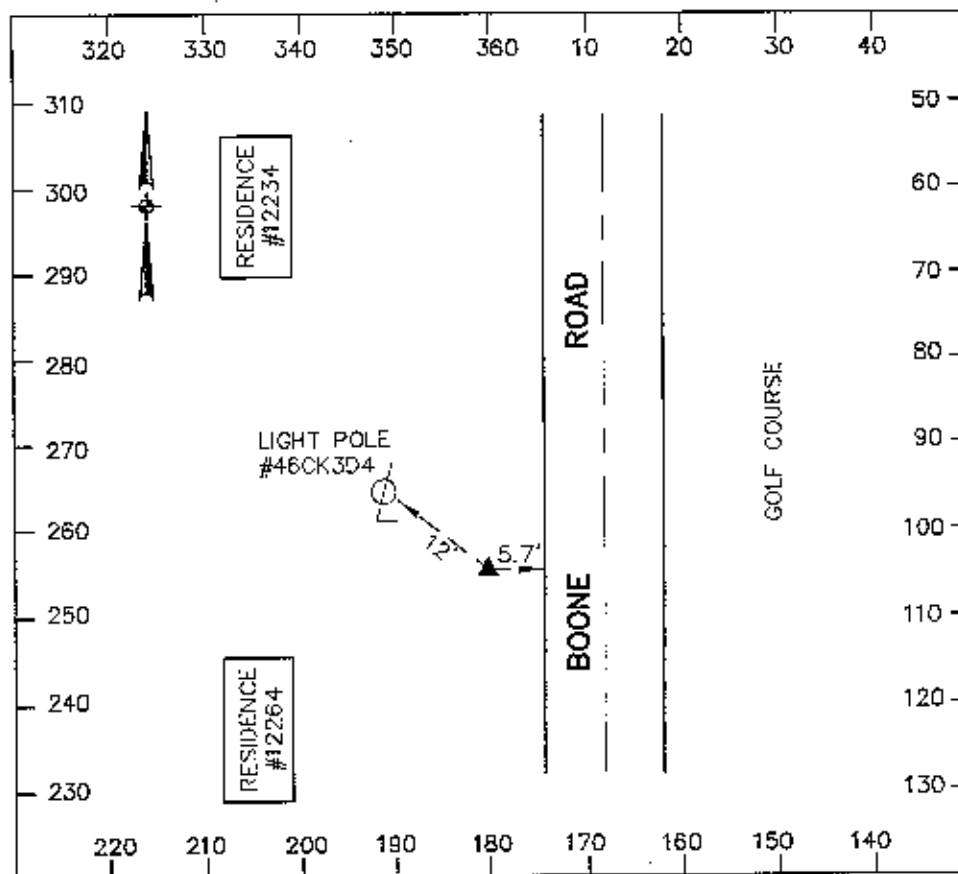
Location: The station is located at the Northeast corner of the intersection of Boone Road and Snell Road in Columbia Township. The station is a bronze disk in concrete.



# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-56  
USGS Quad: West View  
Type of Mark: Bronze Disk  
Stamping on Mark: 2005-56  
Horizontal Datum: NAD83(1995)  
Latitude: 41-19-41.876333  
North (y) Meters: 184693.881  
North (y) USFeet: 605949.842  
Convergence: 0-23-48.07  
State Plane Coordinate System Zone: Ohio North (3401)  
Vertical Datum: NAVD88  
Elevation (z) Meters: 243.320  
Location: To reach the monument, commence at the intersection of Boone Road and Snell Road in Columbia Township and travel South on Boone Road 0.3 miles more or less to the station on the right. The station is a bronze disk in concrete.

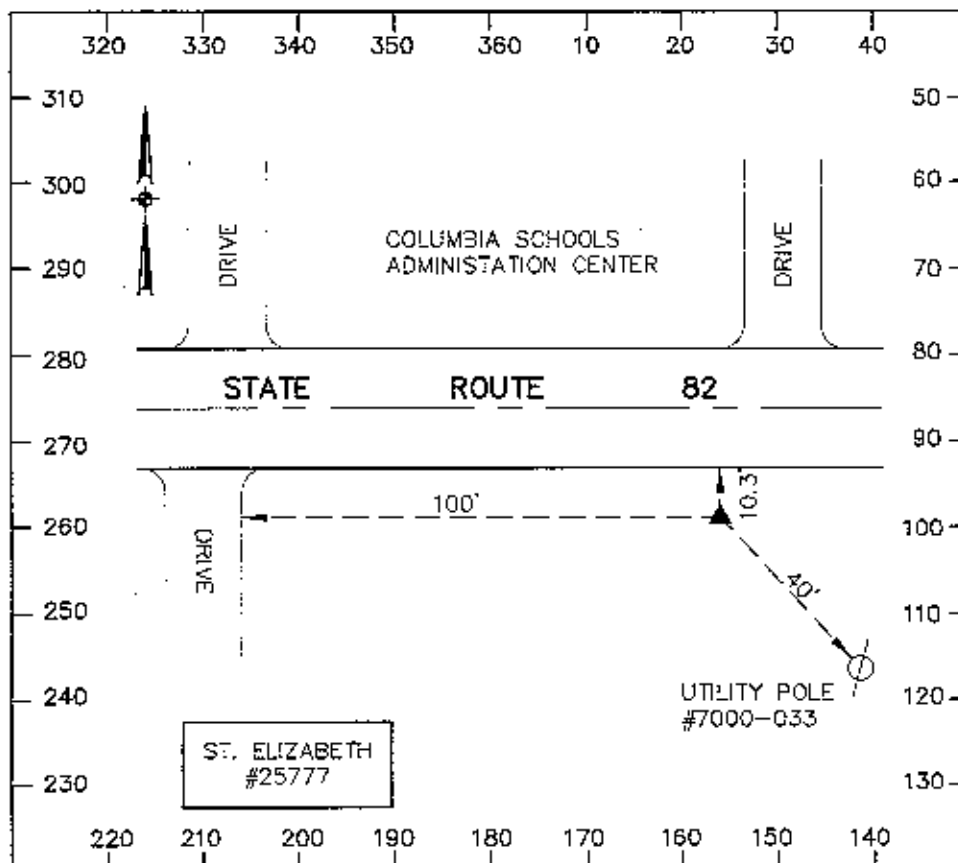
Alias: None  
Township: Columbia  
Set By: KS Associates, Inc.  
Survey By: KS Associates, Inc.  
Horizontal Order: First Method: GPS  
Longitude: 81-53-46.208254  
East (x) Meters: 650547.561  
East (x) USFeet: 2134338.122  
Combined Scale Factor: 0.99991664  
Vertical Order: Second  
Elevation (z) USFeet: 798.292



# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-57  
USGS Quad: West View  
Type of Mark: Bronze Disk  
Stamping on Mark: 2005-57  
Horizontal Datum: NAD83(1995)  
Latitude: 41-18-45.761349  
North (y) Meters: 182943.368  
North (y) USFeet: 600206.700  
Convergence: 0-22-26.20  
State Plane Coordinate System Zone: Ohio North (3401)  
Vertical Datum: NAVD88  
Elevation (z) Meters: 244.099  
Location: To reach the monument, commence at the intersection of S.R. 82 and Columbia West River Road in Columbia Township and travel West on S.R. 82 0.3 miles more or less to the station on the left. The station is a bronze disk in concrete.

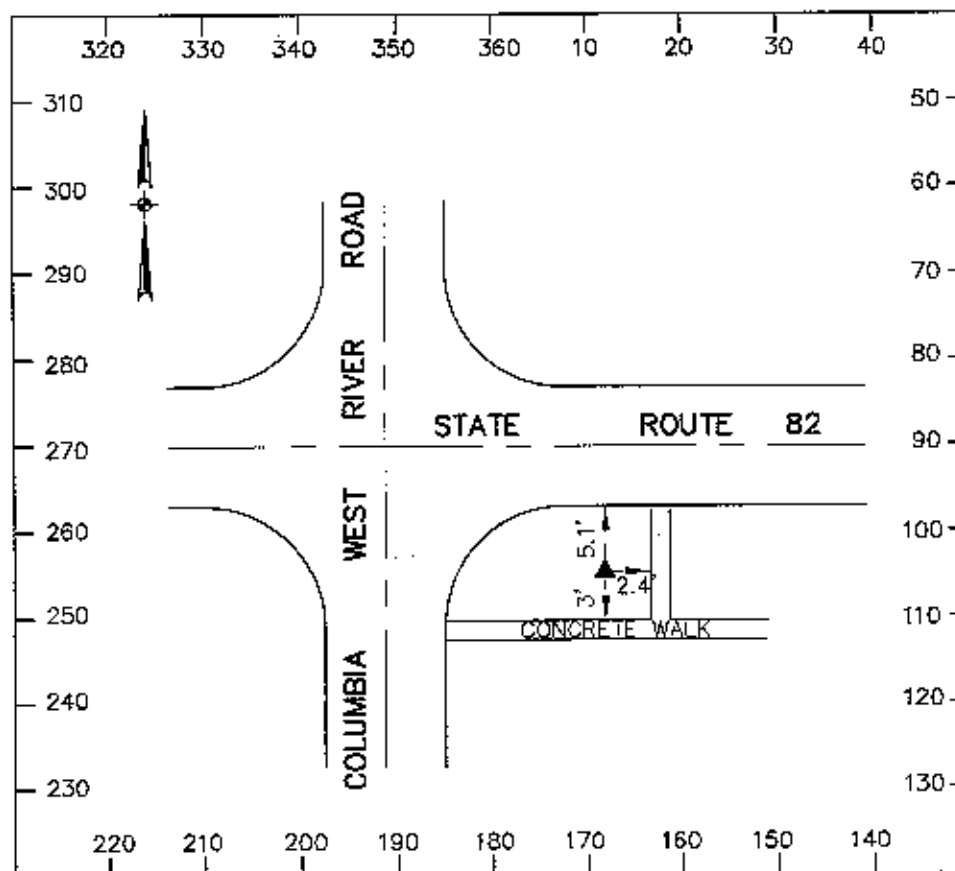
Alias: None  
Township: Columbia  
Set By: KS Associates, Inc.  
Survey By: KS Associates, Inc.  
Horizontal Order: First Method: GPS  
Longitude: 81-55-50.840647  
East (x) Meters: 647660.802  
East (x) USFeet: 2124867.147  
Combined Scale Factor: 0.99991532  
Vertical Order: Second  
Elevation (z) USFeet: 800.847



# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-58	Alias: None
USGS Quad: West View	Township: Columbia
Type of Mark: Bronze Disk	Set By: KS Associates, Inc.
Stamping on Mark: 2005-58	Survey By: KS Associates, Inc.
Horizontal Datum: NAD83(1995)	Horizontal Order: First Method: GPS
Latitude: 41-18-45.381456	Longitude: 81-55-30.503251
North (y) Meters: 182934.752	East (x) Meters: 648133.894
North (y) USFeet: 600178.431	East (x) USFeet: 2126419.283
Convergence: 0-22-39.56	Combined Scale Factor: 0.99991538
State Plane Coordinate System Zone: Ohio North (3401)	
Vertical Datum: NAVD88	Vertical Order: Second
Elevation (z) Meters: 243.627	Elevation (z) USFeet: 799.299

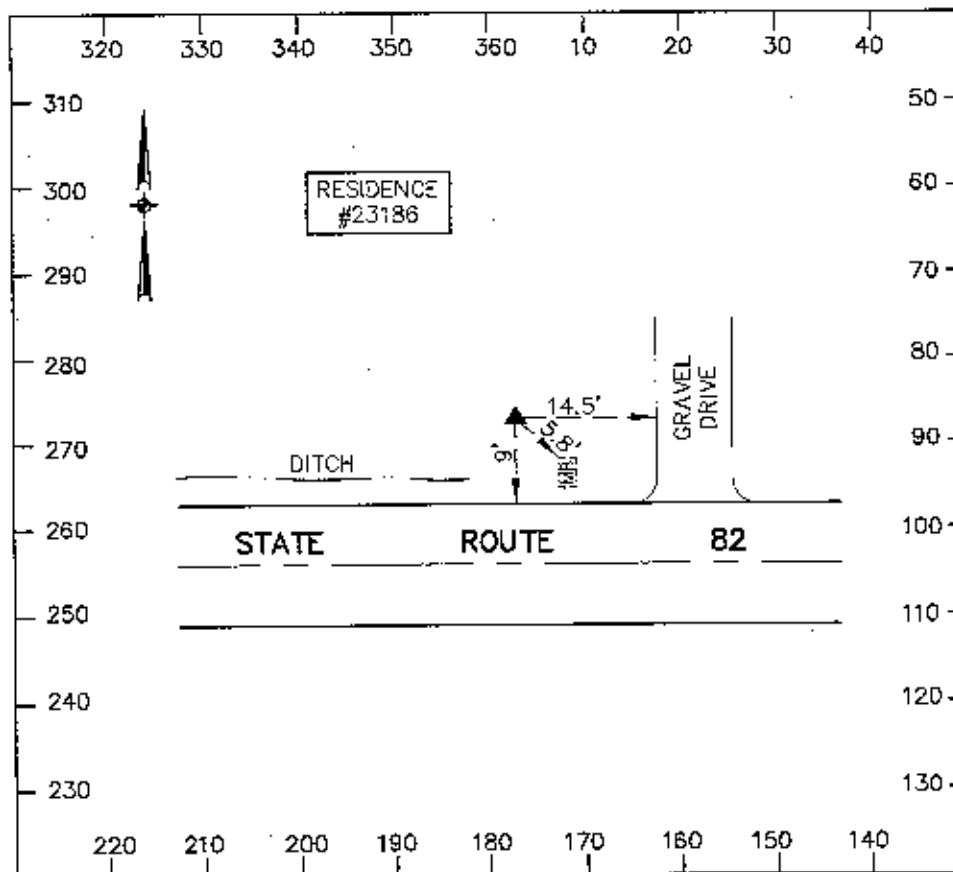
Location: The station is located at the Southeast corner of the intersection of S.R. 82 and Columbia West River Road in Columbia Township. The station is a bronze disk in concrete.



# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-59	Alias: None
USGS Quad: West View	Township: Columbia
Type of Mark: Bronze Disk	Set By: KS Associates, Inc.
Stamping on Mark: 2005-59	Survey By: KS Associates, Inc.
Horizontal Datum: NAD83(1995)	Horizontal Order: First      Method: GPS
Latitude: 41-18-45.299890	Longitude: 81-52-52.274217
North (y) Meters: 182957.420	East (x) Meters: 651814.061
North (y) USFeet: 600252.803	East (x) USFeet: 2138493.297
Convergence: 0-24-23.51	Combined Scale Factor: 0.99991252
State Plane Coordinate System Zone: Ohio North (3401)	
Vertical Datum: NAVD88	Vertical Order: Second
Elevation (z) Meters: 261.779	Elevation (z) USFeet: 858.855

Location: To reach the monument, commence at the intersection of S.R. 82 and Marks Road in Columbia Township and travel West on S.R. 82 0.2 miles more or less to the station on the right. The station is a bronze disk in concrete.



# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-60

USGS Quad: West View

Type of Mark: Bronze Disk

Stamping on Mark: 2005-60

Horizontal Datum: NAD83(1995)

Latitude: 41-18-45.095355

North (y) Meters: 182953.200

North (y) USFeet: 600238.957

Convergence: 0-24-31.80

State Plane Coordinate System Zone: Ohio North (3401)

Vertical Datum: NAVD88

Elevation (z) Meters: 262.673

Location: The station is located at the Northwest corner of the intersection of S.R. 82 and Marks Road in Columbia Township. The station is a bronze disk in concrete.

Alias: None

Township: Columbia

Set By: KS Associates, Inc.

Survey By: KS Associates, Inc.

Horizontal Order: First Method: GPS

Longitude: 81-52-39.651065

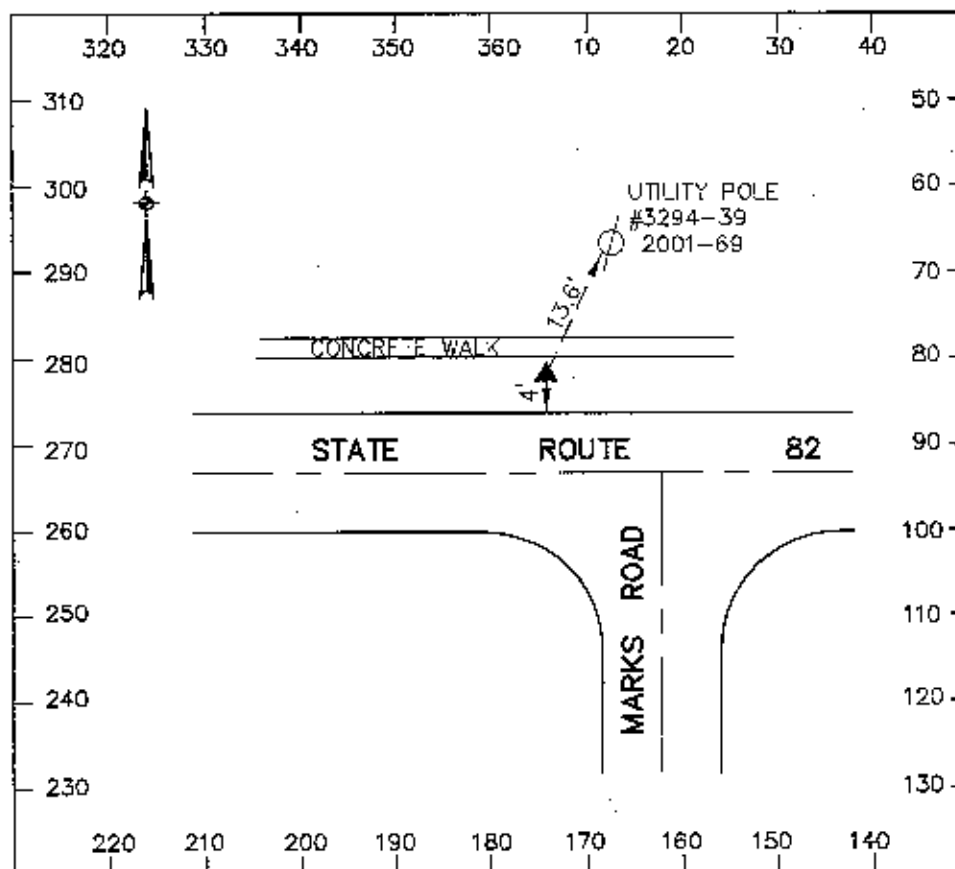
East (x) Meters: 652107.699

East (x) USFeet: 2139456.676

Combined Scale Factor: 0.99991238

Vertical Order: Second

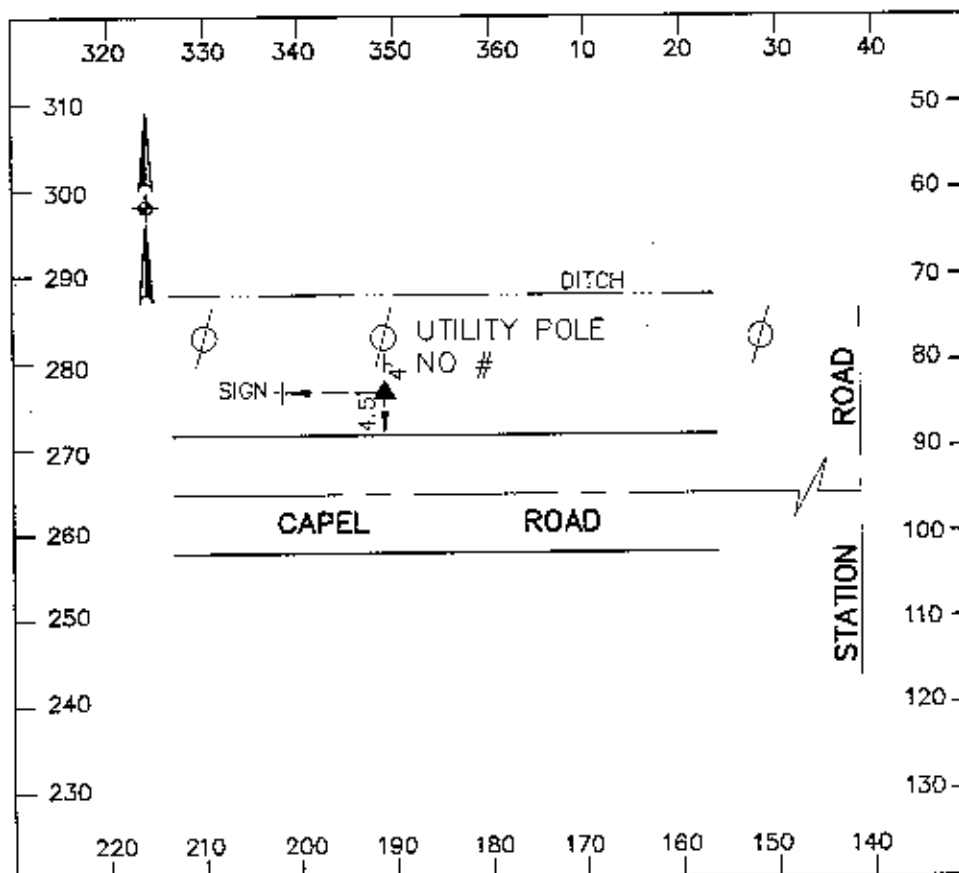
Elevation (z) USFeet: 861.786



# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-61	Alias: None
USGS Quad: West View	Township: Columbia
Type of Mark: Bronze Disk	Set By: KS Associates, Inc.
Stamping on Mark: 2005-61	Survey By: KS Associates, Inc.
Horizontal Datum: NAD83(1995)	Horizontal Order: First      Method: GPS
Latitude: 41-17-52.227312	Longitude: 81-57-19.142420
North (y) Meters: 181278.849	East (x) Meters: 645617.358
North (y) USFeet: 594745.690	East (x) USFeet: 2118162.947
Convergence: 0-21-28.19	Combined Scale Factor: 0.99991349
State Plane Coordinate System Zone: Ohio North (3401)	
Vertical Datum: NAVD88	Vertical Order: Second
Elevation (z) Meters: 248.890	Elevation (z) USFeet: 816.565

Location: To reach the monument, commence at the intersection of Station Road and Capel Road in Columbia Township and travel West on Capel Road 0.1 miles more or less to the station on the right. The station is a bronze disk in concrete.

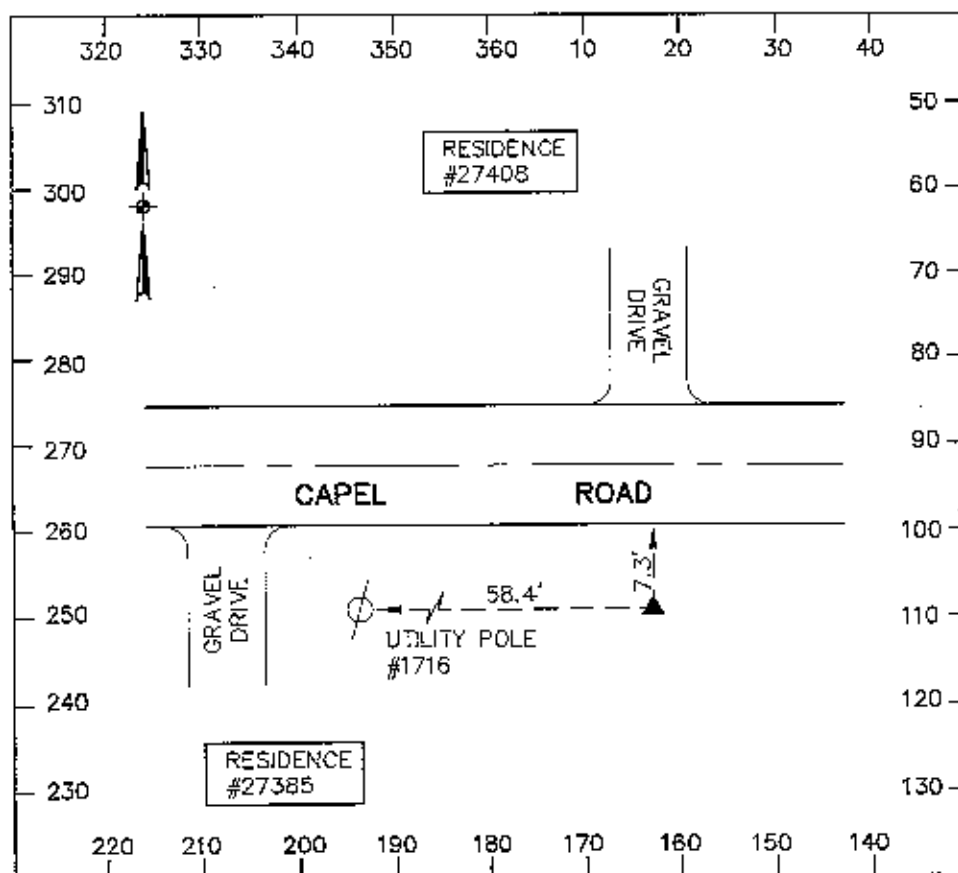


# Lorain County Auditor's Office

## Geodetic Survey Marker

Station Name: 2005-62	Alias: None
USGS Quad: West View	Township: Columbia
Type of Mark: Bronze Disk	Set By: KS Associates, Inc.
Stamping on Mark: 2005-62	Survey By: KS Associates, Inc.
Horizontal Datum: NAD83(1995)	Horizontal Order: First      Method: GPS
Latitude: 41-17-52.018999	Longitude: 81-57-41.028234
North (y) Meters: 181269.261	East (x) Meters: 645108.252
North (y) USFeet: 594714.234	East (x) USFeet: 2116492.658
Convergence: 0-21-13.81	Combined Scale Factor: 0.99991338
State Plane Coordinate System Zone: Ohio North (3401)	
Vertical Datum: NAVD88	Vertical Order: Second
Elevation (z) Meters: 249.539	Elevation (z) USFeet: 818.695

Location: To reach the monument, commence at the intersection of Station Road and Capel Road in Columbia Township and travel West on Capel Road 0.4 miles more or less to the station on the left. The station is a bronze disk in concrete.



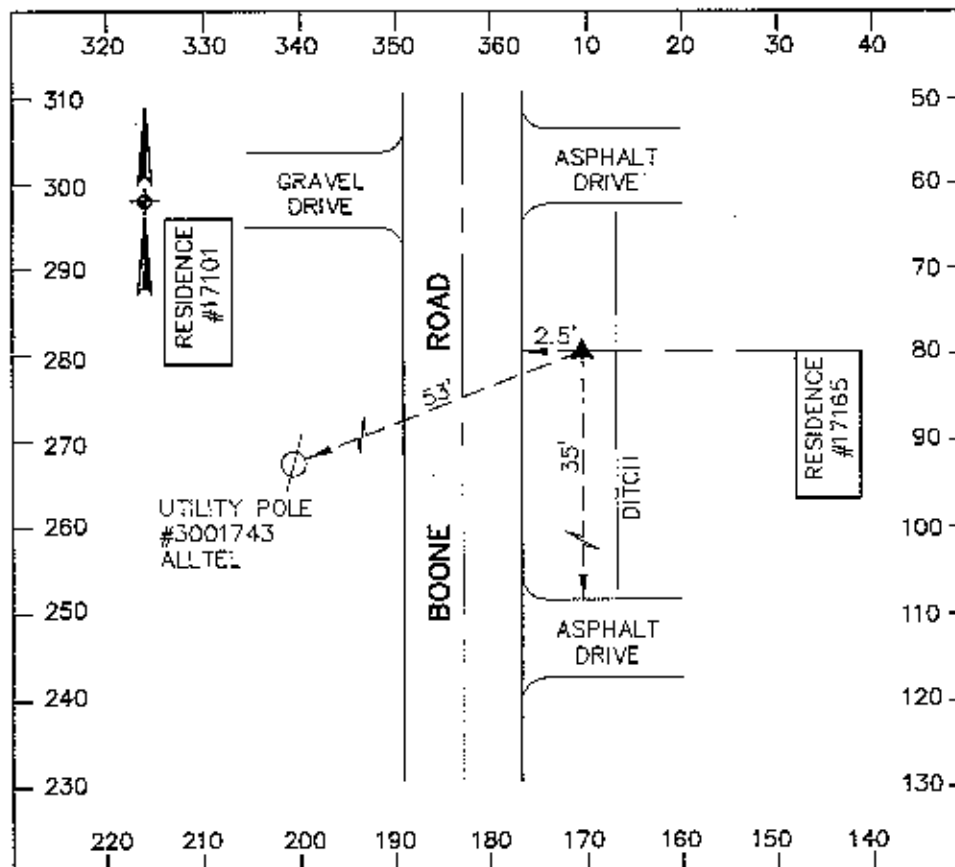


# Lorain County Auditor's Office

## Geodetic Survey Marker

<p>Station Name: 2005-63          USGS Quad: West View          Type of Mark: Bronze Disk          Stamping on Mark: 2005-63          Horizontal Datum: NAD83(1995)          Latitude: 41-17-36.455753          North (y) Meters: 180824.235          North (y) USFeet: 593254.177          Convergence: 0-23-45.14          State Plane Coordinate System Zone: Ohio North (3401)          Vertical Datum: NAVD88          Elevation (z) Meters: 263.846</p>	<p>Alias: None          Township: Columbia          Set By: KS Associates, Inc.          Survey By: KS Associates, Inc.          Horizontal Order: First      Method: GPS          Longitude: 81-53-50.667947          East (x) Meters: 650470.592          East (x) USFeet: 2134085.601          Combined Scale Factor: 0.99991083          Vertical Order: Second          Elevation (z) USFeet: 865.634</p>
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Location: To reach the monument, commence at the intersection of Boone Road and Emmons Road in Columbia Township and travel North on Boone Road 0.3 miles more or less to the station on the right. The station is a bronze disk in concrete.



# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-64

USGS Quad: West View

Type of Mark: Bronze Disk

Stamping on Mark: 2005-64

Horizontal Datum: NAD83(1995)

Latitude: 41-17-22.472766

North (y) Meters: 180392.777

North (y) USFeet: 591838.635

Convergence: 0-23-44.66

State Plane Coordinate System Zone: Ohio North (3401)

Vertical Datum: NAVD88

Elevation (z) Meters: 264.844

Location: The station is located at the Northwest corner of the intersection of Boone Road and Emmons Road in Columbia Township. The station is a bronze disk in concrete.

Alias: None

Township: Columbia

Set By: KS Associates, Inc.

Survey By: KS Associates, Inc.

Horizontal Order: First Method: GPS

Longitude: 81-53-51.401942

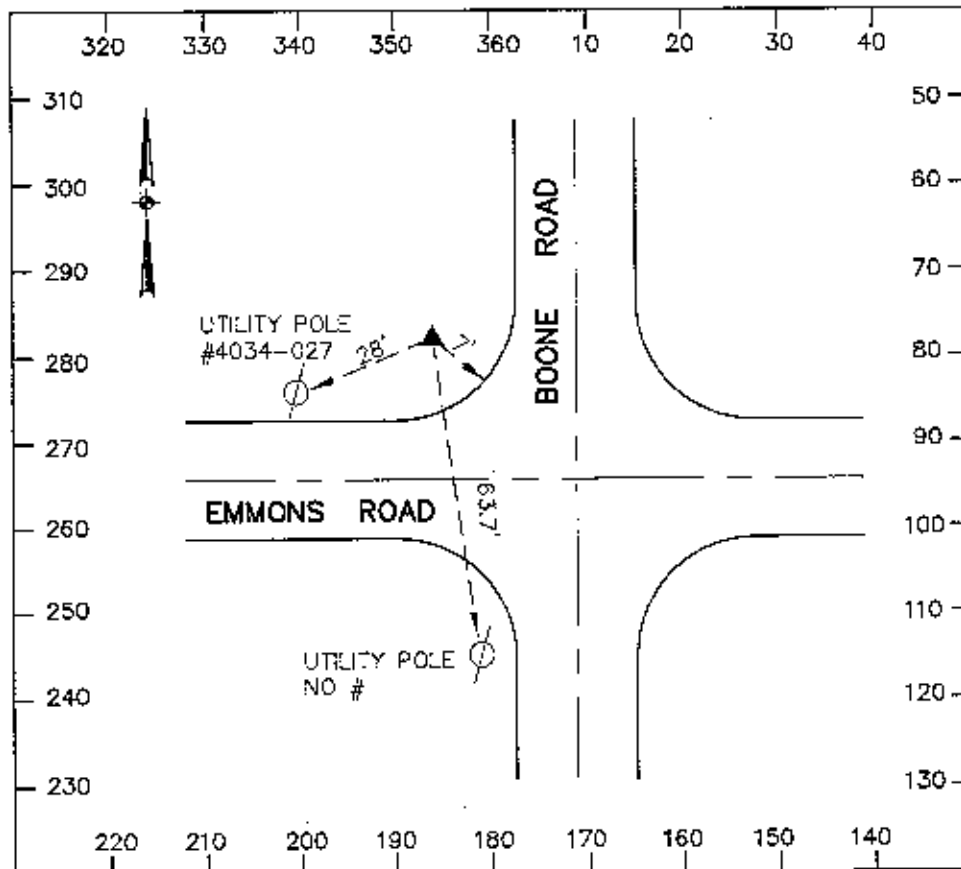
East (x) Meters: 650456.495

East (x) USFeet: 2134039.351

Combined Scale Factor: 0.99991041

Vertical Order: Second

Elevation (z) USFeet: 868.909



# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-65

USGS Quad: West View

Type of Mark: Bronze Disk

Stamping on Mark: 2005-65

Horizontal Datum: NAD83(1995)

Latitude: 41-17-22.644148

North (y) Meters: 180366.929

North (y) USFeet: 591753.833

Convergence: 0-21-31.13

State Plane Coordinate System Zone: Ohio North (3401)

Vertical Datum: NAVD88

Elevation (z) Meters: 250.002

Location: The station is located at the Southeast corner of the intersection of Station Road and Akins Road in Columbia Township. The station is a bronze disk in concrete.

Alias: None

Township: Columbia

Set By: KS Associates, Inc.

Survey By: KS Associates, Inc.

Horizontal Order: First Method: GPS

Longitude: 81-57-14.667089

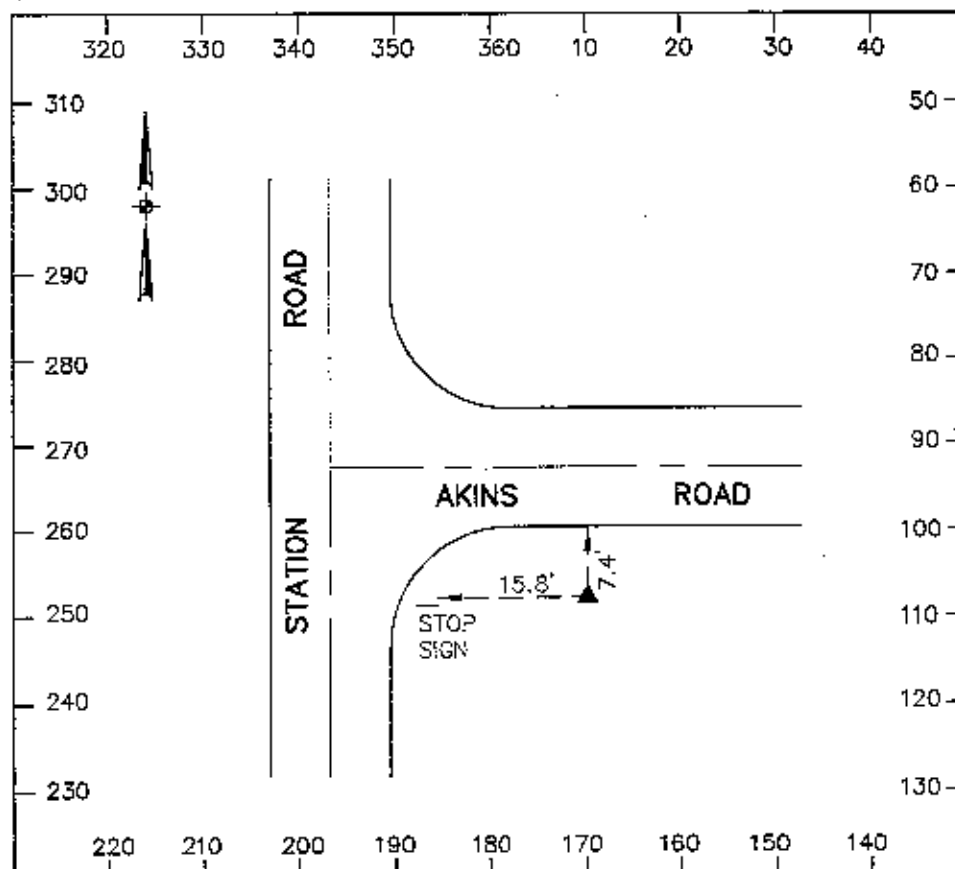
East (x) Meters: 645727.183

East (x) USFeet: 2118523.265

Combined Scale Factor: 0.99991275

Vertical Order: Second

Elevation (z) USFeet: 820.215



# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-66

USGS Quad: West View

Type of Mark: Bronze Disk

Stamping on Mark: 2005-66

Horizontal Datum: NAD83(1995)

Latitude: 41-17-22.882208

North (y) Meters: 180377.676

North (y) USFeet: 591789.092

Convergence: 0-21-46.39

State Plane Coordinate System Zone: Ohio North (3401)

Vertical Datum: NAVD88

Elevation (z) Meters: 250.080

Alias: None

Township: Columbia

Set By: KS Associates, Inc.

Survey By: KS Associates, Inc.

Horizontal Order: First Method: GPS

Longitude: 81-56-51.436874

East (x) Meters: 646267.624

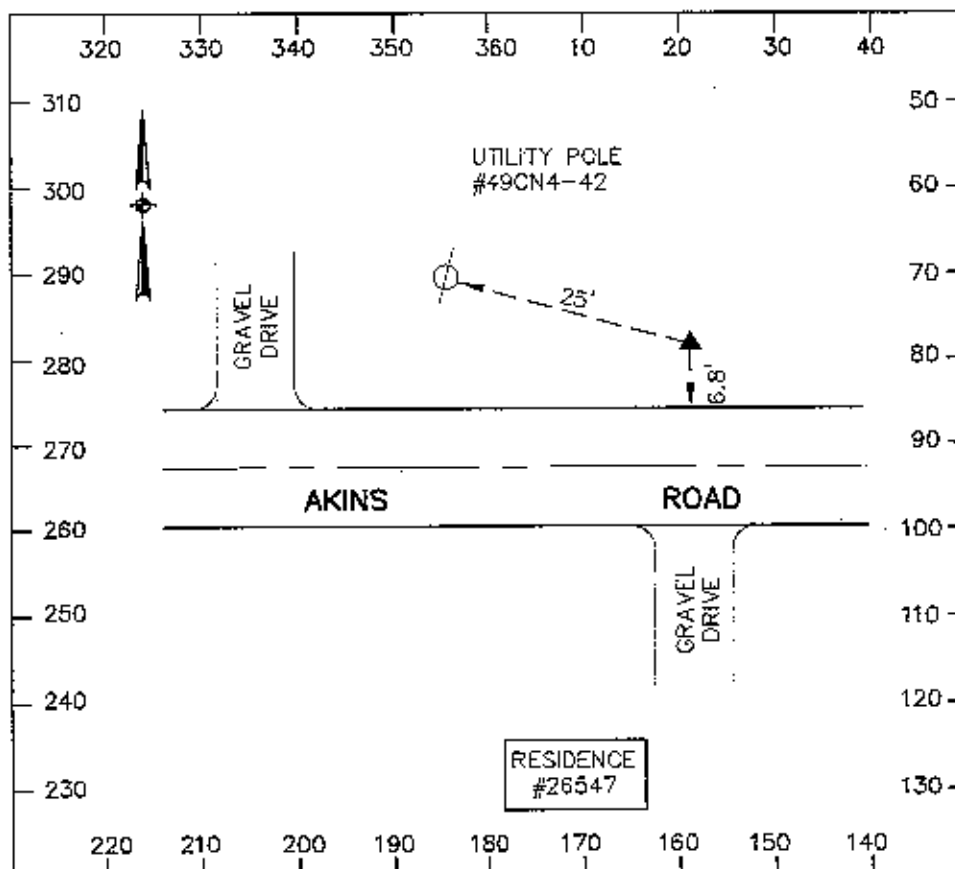
East (x) USFeet: 2120296.362

Combined Scale Factor: 0.99991274

Vertical Order: Second

Elevation (z) USFeet: 820.470

Location: To reach the monument, commence at the intersection of Station Road and Akins Road in Columbia Township and travel East on Akins Road 0.3 miles more or less to the station on the left. The station is a bronze disk in concrete.



# Lorain County Auditor's Office

## Geodetic Survey Marker

Station Name: 2005-67

Alias: None

USGS Quad: West View

Township: Columbia

Type of Mark: Bronze Disk

Set By: KS Associates, Inc.

Stamping on Mark: 2005-67

Survey By: KS Associates, Inc.

Horizontal Datum: NAD83(1995)

Horizontal Order: First      Method: GPS

Latitude: 41-16-56.966144

Longitude: 81-54-50.159902

North (y) Meters: 179596.647

East (x) Meters: 649094.689

North (y) USFeet: 589226.665

East (x) USFeet: 2129571.493

Convergence: 0-23-06.06

Combined Scale Factor: 0.99991216

State Plane Coordinate System Zone: Ohio North (3401)

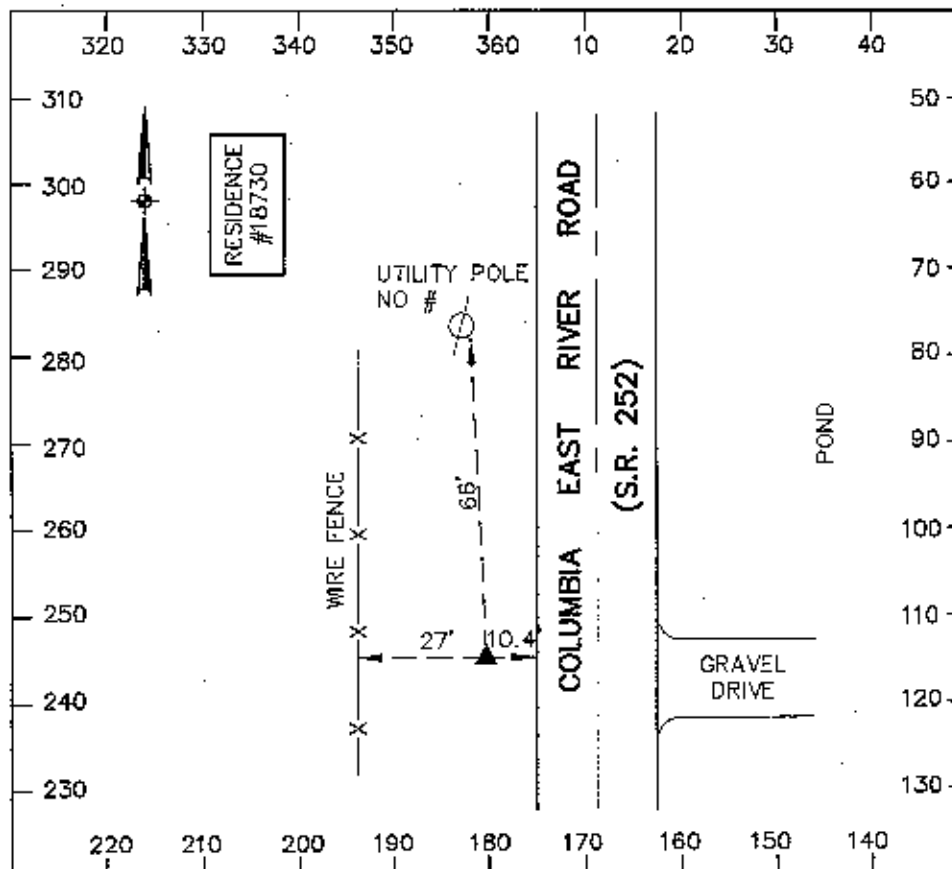
Vertical Datum: NAVD88

Vertical Order: Second

Elevation (z) Meters: 250.689

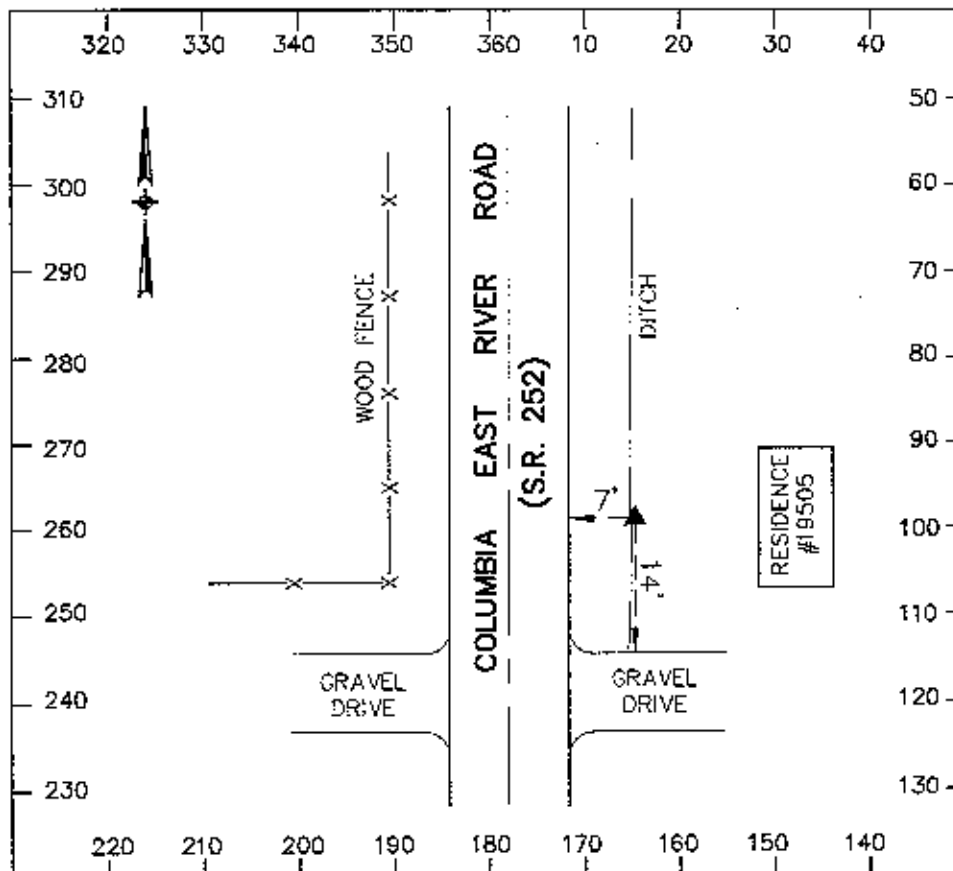
Elevation (z) USFeet: 822.470

Location: To reach the monument, commence at the intersection of S.R. 252 and Boston Road in Columbia Township and travel North on S.R. 252 0.5 miles more or less to the station on the left. The station is a bronze disk in concrete.



# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-68 USGS Quad: West View Type of Mark: Bronze Disk Stamping on Mark: 2005-68 Horizontal Datum: NAD83(1995) Latitude: 41-16-41.999675 North (y) Meters: 179134.812 North (y) USFeet: 587711.461 Convergence: 0-23-05.40 State Plane Coordinate System Zone: Ohio North (3401) Vertical Datum: NAVD88 Elevation (z) Meters: 254.768 Location: To reach the monument, commence at the intersection of S.R. 252 and Boston Road in Columbia Township and travel North on S.R. 252 0.2 miles more or less to the station on the right. The station is a bronze disk in concrete.	Alias: None Township: Columbia Set By: KS Associates, Inc. Survey By: KS Associates, Inc. Horizontal Order: First      Method: GPS Longitude: 81-54-51.168994 East (x) Meters: 649074.310 East (x) USFeet: 2129504.631 Combined Scale Factor: 0.99991125 Vertical Order: Second Elevation (z) USFeet: 835.853
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# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-69

USGS Quad: West View

Type of Mark: Bronze Disk

Stamping on Mark: 2005-69

Horizontal Datum: NAD83(1995)

Latitude: 41-17-10.626778

North (y) Meters: 180038.863

North (y) USFeet: 590677.502

Convergence: 0-24-30.94

State Plane Coordinate System Zone: Ohio North (3401)

Vertical Datum: NAVD88

Elevation (z) Meters: 279.978

Alias: None

Township: Columbia

Set By: KS Associates, Inc.

Survey By: KS Associates, Inc.

Horizontal Order: First Method: GPS

Longitude: 81-52-40.961103

East (x) Meters: 652098.012

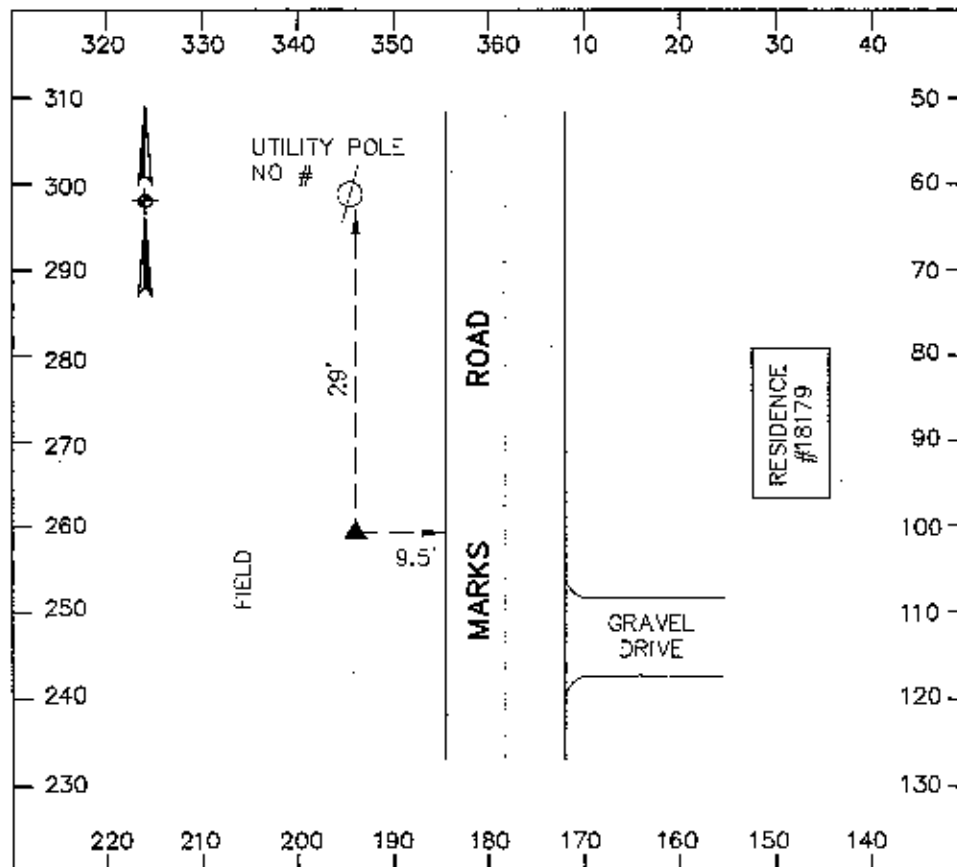
East (x) USFeet: 2139424.893

Combined Scale Factor: 0.99990781

Vertical Order: Second

Elevation (z) USFeet: 918.562

Location: To reach the monument, commence at the intersection of Boston Road and Marks Road in Columbia Township and travel North on Marks Road 0.8 miles more or less to the station on the left. The station is a bronze disk in concrete.



# Lorain County Auditor's Office Geodetic Survey Marker

Station Name: 2005-70	Alias: None
USGS Quad: West View	Township: Columbia
Type of Mark: Bronze Disk	Set By: KS Associates, Inc.
Stamping on Mark: 2005-70	Survey By: KS Associates, Inc.
Horizontal Datum: NAD83(1995)	Horizontal Order: First      Method: GPS
Latitude: 41-17-00.432802	Longitude: 81-52-41.024645
North (y) Meters: 179724.394	East (x) Meters: 652098.776
North (y) USFeet: 589645.784	East (x) USFeet: 2139427.400
Convergence: 0-24-30.90	Combined Scale Factor: 0.99990723
State Plane Coordinate System Zone: Ohio North (3401)	
Vertical Datum: NAVD88	Vertical Order: Second
Elevation (z) Meters: 282.439	Elevation (z) USFeet: 926.636

Location: To reach the monument, commence at the intersection of Boston Road and Marks Road in Columbia Township and travel North on Marks Road 0.6 miles more or less to the station on the left. The station is a bronze disk in concrete.

