

THIRD-ORDER HORIZONTAL CONTROL  
NORTH AMERICAN DATUM OF 1927

41-076-21  
HARVEYS LAKE QUADRANGLE  
168 PENNSYLVANIA  
N4115-W7600/15  
DIAGRAM NK 18-7  
WILLIAMSPORT

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Final adjustment of 1971

Edition of 10/19/73

PR: GWK/jyk

Plane coordinates are based on  
Lambert projection, Pennsylvania,  
North Zone

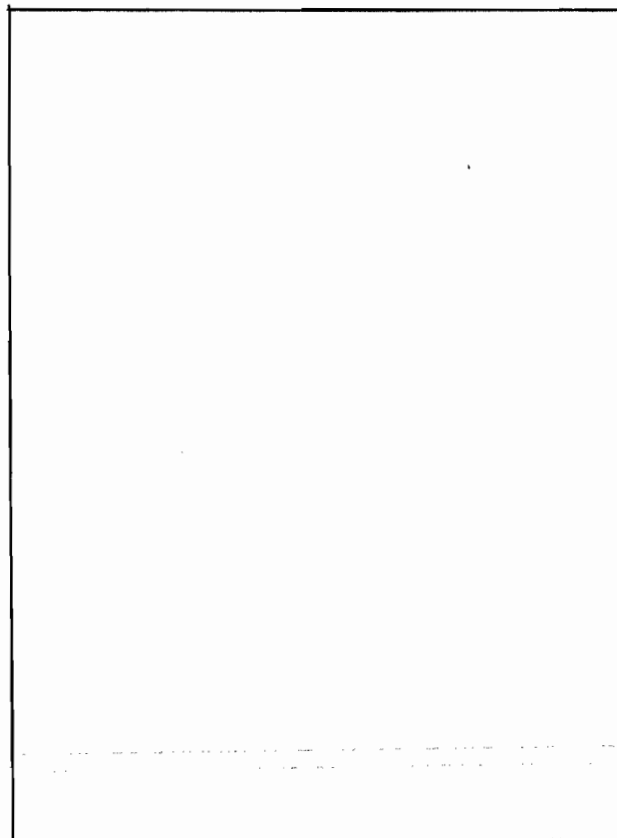
Only the permanent marks  
are listed for lines run  
more than 25 years before  
edition date and are not  
shown on sketch

MESHOPPEN  
(192)

LAPORTE  
(169)

PITTSTON  
(167)

X = 2,412,456  
Y = 398,276



76°00'

41°15'

SHICKSHINNY  
(143)

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STATION	DESCRIPTION	LATITUDE	LONGITUDE
PLANE COORDINATES, FEET		0 ' "	0 ' "

Obsolete control established more than 25 years prior to edition date. To be used only to locate permanent marks in the field.

L. E. Briggs, 1929; Books C8907 and C8908

Ricketts, 1.7 mi N. of, thence 0.9 mi E.; at N. side of swamp; 180 ft W. of junction of two old RR. beds (one from N. side and one from S. side of Ficht Pond); about 150 ft NW. of low ridge between two swamps; 20 ft SW. of old logging RR. to Sandy Nook; in 3- by 3-ft boulder; standard tablet stamped "TT STA NO 18 B 1929"

X = 2,412,413      Y = 463,632      41 25 45.67      76 14 45.71

C. B. Kendall, 1932; Book D427

Prichard; 115 ft N. and 56 ft W. of centerline of crossroad; 25 ft S. and 15 ft W. of SW. corner of Baptist parsonage; in yard between parsonage and E.-W. rd.; in top of sandstone outcrop; 4 in. above surface of ground; standard tablet stamped "TT 38 K 1932"

X = 2,444,057      Y = 400,830      41 15 19.62      76 08 05.74

Prichard, 3.5 mi E. of; 0.8 mi SE. of Silkworth; at Leonard School; 160 ft NE. of junction of State Highway 139 and T-rd. S. to Hunlock Creek; 90 ft N. of centerline of hwy.; 7 ft N. and 22 ft W. of NW. corner of schoolhouse; in top of 6- by 12-ft rectangular sandstone boulder; 2 ft above ground; standard tablet stamped "TT 39 K 1932"

X = 2,460,940      Y = 404,300      41 15 50.73      76 04 23.86

A. B. Kovacs, 1942; Book D4858

Lopez, 4.8 mi E. of, along macadam rd., thence about 1.6 mi NE. along county rd.; at edge of trail; in granite boulder about 2 ft above trail; standard tablet stamped "63 EWS 1942"

X = 2,412,367      Y = 484,318      41 29 10.03      76 14 41.60

E. M. Thompson, 1942; Book D4858

Huntsville, 2.8 mi SW. of, along Huntsville-Jackson Road; 120 ft E. of crossroad; in NE. wingwall of concrete bridge over small stream; standard tablet stamped "TT 78 TH 1942"

X = 2,476,781      Y = 412,060      41 17 04.30      76 00 54.44

STATION	DESCRIPTION PLANE COORDINATES, FEET	LATITUDE ° ' "	LONGITUDE ° ' "
---------	--	-------------------	--------------------

C. A. Turner, 1942; Book D4839

Forkston, 2.2 mi S. of; 2.9 mi E. of Kasson Brook; on Forkston-Kasson Brook Road; in NW. abutment of concrete bridge over stream from W.; PDH standard disk not stamped

X = 2,443,302      Y = 489,348      41 29 54.21      76 07 53.97

Kasson Brook; 2-0 ft SW. of junction of C.C.C. and Mehoopany Roads; 28 ft S. of Mehoopany Road; in triangle in rock boulder in place; about 2 in. above ground; standard tablet stamped "TT 41 T 1942"

X = 2,440,282      Y = 480,239      41 28 24.78      76 08 35.87

Kasson Brook, 2.1 mi S. of; 12.9 mi NW. of Stull; on C.C.C. rd. over North Mountain; 1.1 mi S. of sharp U-bend in rd.; 18 ft W. of centerline of rd.; in large rock boulder; 4 ft higher than road; standard tablet stamped "TT 42 T 1942"

X = 2,439,176      Y = 473,296      41 27 16.40      76 08 52.09

Kasson Brook, 4.1 mi S. of; 10.6 mi NW. of Stull; on C.C.C. rd. over North Mountain; 50 ft W. of small culvert; on W. side of rd.; in 2.5-ft boulder; standard tablet stamped "TT 43 T 1942"

X = 2,438,554      Y = 470,985      41 26 53.68      76 09 00.82

Kasson Brook, 6.1 mi S. of; 8.0 mi NW. of Stull; on C.C.C. rd. over North Mountain; 21 ft N. and 52 ft E. of stone culvert over drain; 38 ft S. of centerline of rd.; at clearing; in 4- by 4-ft white rock; 2 ft above ground; standard tablet stamped "TT 44 T 1942"

X = 2,436,443      Y = 467,123      41 26 15.91      76 09 29.47

Kasson Brook, 8.3 mi S. of; 5.8 mi W. of Stull; on C.C.C. rd. over North Mountain; 9 ft N. and 31 ft E. of junction of Lott Creek and Cider Run Roads; in boulder; 4 in. above ground; standard tablet stamped "TT 45 T 1942"

X = 2,434,840      Y = 458,053      41 24 46.60      76 09 52.68

Stull, 4.1 mi SW. of; on C.C.C. rd. over North Mountain; 0.8 mi NW. of gate marking Pennsylvania Game Lands; 27 ft N. and 40 ft E. of centerline of rd.; in large boulder; 2.5 ft above ground; standard tablet stamped "TT 46 T 1942"

X = 2,440,221      Y = 451,594      41 23 41.82      76 08 43.64

STATION	DESCRIPTION	LATITUDE			LONGITUDE		
PLANE COORDINATES, FEET		O	'	"	O	'	"

Bakers; about 126 ft W. of L. V. RR. station signboard; at bridge B 202; 6 ft N. of N. rail; about 1 ft lower than top of rail; in N. end of W. abutment; NGS standard disk stamped "X 49 1934"

X = 2,448,358      Y = 453,924      41 24 03.33      76 06 56.32

C. A. Turner, 1942; Book D4839

Red Rock, 2.4 mi E. of, thence 1.7 mi S.; in frontyard of Bethel Methodist Church; 130 ft N. and 20 ft E. of junction of Y-rd.; in rock outcrop; standard tablet stamped "51 CH 1942"

X = 2,412,883      Y = 409,374      41 16 49.57      76 14 51.90

Ricketts, about 2.9 mi SE. of, along L. V. RR.; about 0.4 mi E. of milepost 213; 5 ft S. of S. rail; about 1 ft lower than rail; in S. end of W. abutment of bridge B 212A; NGS standard disk stamped "Q 49 1934"

X = 2,414,235      Y = 439,672      41 21 48.65      76 14 27.28

Mountain Springs, 3.3 mi S. of; 2.3 mi NW. of junction of private rd. N. to Mountain Springs and Route 115; on property of T. N. Wood; 12 ft E. of centerline of rd.; in boulder; standard tablet stamped "TT 47 T 1942"

X = 2,417,074      Y = 425,706      41 19 30.19      76 13 53.26

Kytte, 1.5 mi W. of; 4.7 mi E. of Red Rock; 0.2 mi E. of junction of rd. S.; 650 ft W. of red barn; 35 ft S. of centerline of rd.; in large flat rock; standard tablet stamped "58 CH 1942"

X = 2,420,647      Y = 418,354      41 18 16.94      76 13 08.14

Sweet Valley; 1.8 mi SW. of post office; 220 ft E. of junction of T-rd. S.; 20 ft N. and 35 ft E. of NE. corner of barn; 25 ft S. of centerline of rd.; in large flat rock; standard tablet stamped "48 CH 1942"

X = 2,435,823      Y = 402,772      41 15 40.31      76 09 53.07

Sweet Valley; 4.5 mi SW. of post office; 25 ft E. of cemetery fence; 45 ft S. of centerline of rd.; in flat rock; standard tablet stamped "49 CH 1942"

X = 2,423,738      Y = 399,422      41 15 09.37      76 12 32.06

Broadway, 2.4 mi W. of, along rd. and trail; 2.5 mi N. of Harveyville; 2.4 mi E., thence 3.5 mi S. of Red Rock; 125 ft N. of junction of T-rd. E.; 35 ft N. and 35 ft W. of junction of T-rd. W.; in rock outcrop; standard tablet stamped "50 CH 1942"

X = 2,413,628      Y = 398,395      41 15 00.98      76 14 44.63

STATION	DESCRIPTION	LATITUDE	LONGITUDE
PLANE COORDINATES, FEET		O ' "	O ' "

Junction of U. S. Highway 309 and State Highway 292; 880 ft SE. of, along Highway 292; 16 ft SW. of centerline of hwy.; in top of W. wingwall of concrete bridge over Bowman Creek; standard tablet stamped "38 B 1942"

X = 2,478,910    Y = 480,556    41 28 20.52    76 00 08.46

E. C. Wood, 1943; Book D5038

Noxen, 1.6 mi E. of, along State Highway 29; 125 ft S. of SE. corner of steel and concrete bridge over Bowman Creek; 18 ft SE. of centerline of macadam rd. SW.; in rock outcrop; 4.5 ft higher than rd.; standard tablet stamped "1 AMD 1942"

X = 2,471,505    Y = 463,301    41 25 31.53    76 01 50.21

Noxen; about 700 ft S. of L. V. RR. station; 150 ft N. of milepost 199; 75 ft S. of centerline of macadam rd. crossing; at 120-ft three-span plate girder bridge over Bowman Creek; in NE. end of NW. bridge seat; 6 ft NE. of centerline of RR. track; about 6 ft lower than top of rail; NGS standard disk stamped "K 57 1934"

X = 2,463,495    Y = 462,834    41 25 28.48    76 03 35.45

Stull; on L. V. RR.; about 400 ft E. of milepost 201; at bridge B 200; 7 ft S. of S. rail; about 3 ft lower than top of rail; in S. end of W. abutment; NGS standard disk stamped "N 49 1934"

X = 2,455,558    Y = 460,483    41 25 06.77    76 05 20.21

Bakers, about 1.9 mi W. of, along L. V. RR.; about 0.3 mi E. of milepost 205; at 30-ft span plate girder bridge B 205; 5 ft S. of S. rail; about 3 ft lower than top of rail; in S. end of E. abutment; NGS standard disk stamped "Y 49 1934"

X = 2,440,596    Y = 447,656    41 23 02.84    76 08 39.68

Ricketts, about 8.0 mi E. of, along L. V. RR.; about 0.6 mi E. of milepost 208; about 75 ft W. of water tank; 4 ft S. of S. rail; 3 ft lower than top of rail; in S. end of E. abutment of bridge B 207; NGS standard disk stamped "Z 49 1934"

X = 2,433,126    Y = 437,785    41 21 26.69    76 10 20.02

Ricketts, about 5.7 mi E. of, along L. V. RR.; about 0.3 mi E. of Mountain Springs Station; about 0.2 mi E. of milepost 210; at 50-span plate girder bridge B 209; 4 ft S. of S. rail; about 1 ft lower than top of rail; in S. end of W. abutment; NGS standard disk stamped "R 49 1934"

X = 2,422,666    Y = 435,829    41 21 09.22    76 12 37.62

168 PENNSYLVANIA  
HARVEYS LAKE QUADRANGLE

41-076-21  
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STATION	DESCRIPTION	LATITUDE	LONGITUDE
PLANE COORDINATES, FEET		° ' "	° ' "

J. L. Gassman, 1943; Book D5038

Stull, 2.5 mi S. of, along Sorbor Run Road; 20 ft S. and 40 ft W. of junction of private rd. W.; 400 ft N. of barn; in rock outcrop; standard tablet stamped "43 CH 1942"

X = 2,453,200      Y = 448,076      41 23 04.65      76 05 54.27

Stull, 5.1 mi S. of; about 300 ft E. of residence; 30 ft N. and 70 ft E. of junction of rd.; in rock outcrop; standard tablet stamped "44 CH 1942". Geographic azimuth to church spire in Loyalville about 1 mi distant: 358°05'10".

X = 2,452,179      Y = 435,976      41 21 05.31      76 06 10.68

Loyalville School, 1.0 mi W. of, thence 0.3 mi S.; 275 ft W. of junction of State Highways 29 and 415; in yard of old Durland School (voting precinct); 65 ft S. and 45 ft W. of junction of T-rd. S.; in rock ledge; standard tablet stamped "45 CH 1942"

X = 2,448,053      Y = 427,087      41 19 38.27      76 07 06.96

Loyalville School, 1.0 mi W. of, thence 2.6 mi S.; 0.5 mi W. of Pike Creek Post Office; in yard of Maple Grove Church; in large boulder; about 4 ft above ground; standard tablet stamped "46 CH 1942"

X = 2,451,840      Y = 418,487      41 18 12.60      76 06 19.47

Prichard; 2.0 mi N. of crossroad; 330 ft S. of residence; 25 ft W. of centerline of rd.; in NE. corner of pasture; in large flat rock; standard tablet stamped "47 CH 1942"

X = 2,445,337      Y = 411,093      41 17 00.77      76 07 46.48

Quad 168 Penn.  
**DESCRIPTION**  
**HORIZONTAL CONTROL STATION**

Triangulation  Electronic - Distance Traverse  Intersected Object   
 Station ROSE ET 1968 County Wyoming State Penna.  
 Established by USGS Year 1968 Project Laporte

Check one:

New Station: Write full description below  
 Recovery of Old Station: Recovered by \_\_\_\_\_ Year \_\_\_\_\_ Project \_\_\_\_\_

Object	Bearing	Distance		Directions
		Feet	Meters	
LISA ET 1968				00 00 00.00
Reference mark No.2	S	17.16	5.228	202 54 06
Reference mark No.1	W	18.48	5.634	292 03 37

Station is located about 12 miles northeast of Red Rock and about 5 miles east of Lopez.

To reach from junction of state routes 118 and 487 at Red Rock follow state route 487 north for 13.0 miles to reversed Y-fork, turn right and go on paved road for 4.2 miles to T-road right which is County road No. 56041, turn right and go for 2.3 miles to the Rose Hill Rod and Gun Club building on left, the building is asbestos-shingled with green roof and porch facing station, turn left and follow drive and then track road for 0.15 miles through scrub trees to top of small hill and station.

The station mark is a standard tablet stamped " ROSE ET 1968 " set in a drill hole in a 2 by 2 foot boulder projecting about 6 inches.

Reference mark No. 1 is a standard reference mark tablet stamped " ROSE ET 1968 RM 1 " set in a drill hole in a 5 by 3 foot boulder projecting about 1 foot. It is 2 feet northeast of a standard witness sign post.

Reference mark No. 2 is a standard reference mark tablet stamped " ROSE ET 1968 RM 2 " set in a drill hole in a 2 by 2 foot boulder projecting about 3 inches.

No azimuth mark was set as station LISA ET 1968 is visible from ground.

Lat.  $41^{\circ}25'20.61''$   
 Long.  $76^{\circ}13'39.64''$



Quad 168 Penn.

**DESCRIPTION**  
**HORIZONTAL CONTROL STATION**

Triangulation  Electronic - Distance Traverse  Intersected Object   
 Station MIKE ET 1968 County Wyoming State Pennsylvania  
 Established by USGS Year 1968 Project Laporte

Check one:

- New Station: Write full description below  
 Recovery of Old Station: Recovered by \_\_\_\_\_ Year \_\_\_\_\_ Project \_\_\_\_\_

Object	Bearing	Distance		Directions
		Feet	Meters	
HEM ET 1968	W			00 00 00.00
Reference Mark No. 2	SE	81.26	24.768	84 56 38
RICKETTS L.O.T.	SSW	about 3.0 miles		160 48 23.58
Reference Mark No. 1	NW	78.395	23.895	196 30 41

Station is located on Pennsylvania state game land about 9.0 miles west of Harveys Lake and about 8.0 miles northeast of Red Rock.

To reach from junction of state highways 118 and 487 at Red Rock go north on state highway 487 for 7.6 miles to Mountain Spring Lake Road with gate on right, turn right and go for 3.3 mileste Y-fork, turn left on road with locked gate and go for 4.0 miles to small clearing and top of a small knoll with station on right.

The station mark is a standard tablet stamped " MIKE ET 1968 " set in a drill hole in boulder flush with ground. It is 45.6 feet west of a 18 inch oak with a triangular blaze and 27.5 feet southeast of centerline road.

Reference mark No. 1 is a standard reference mark tablet stamped " MIKE ET 1968 RM 1 " set in a drill hole in a 5 by 6 foot boulder projecting about 3 feet. It is 27.8 feet northwest of centerline road and 2 feet northwest of a standard witness post.

Reference mark No. 2 is a standard reference mark tablet stamped " MIKE ET 1968 RM 2 " set in a drill hole in a 3 by 4 foot boulder and about 3 feet higher than road surface. It is 76.5 feet southeast of centerline road and 2 feet southeast of a standard witness post.

The azimuth mark is the centerline of Ricketts L.O.T. about 3 miles south-southwest of station and is visible from ground.

Lat.  $41^{\circ}23'13.64''$   
 Long.  $76^{\circ}2'11.80''$

Quad 168 Penn.  
**DESCRIPTION**  
HORIZONTAL CONTROL STATION

Triangulation  Electronic - Distance Traverse  Intersected Object   
 Station HEM ET 1968 County Wyoming State Penna.  
 Established by USGS Year 1968 Project Laporte

Check one:

- New Station: Write full description below  
 Recovery of Old Station: Recovered by \_\_\_\_\_ Year \_\_\_\_\_ Project \_\_\_\_\_

Object	Bearing	Distance		Directions
		Feet	Meters	
MIKE ET 1968				00 00 00.00
Reference Mark No. 1	E	41.61	12.683	185 49 07
<i>HARVEY LOT</i> → <del>A-5 (Dallas L.O.T.)</del>	SE	about 4	miles	190 09 28.34
Reference Mark No. 2	W	42.68	13.009	227 55 16

Station is about 6.0 miles northwest of Lehman and about 3.0 mile northwest of Harveys Lake.

To reach from junction of state highways 118 and 487 at Red Rock go east on state highway 118 for 9.8 miles to junction of state highways 118 and 29, turn left on state highway 29 and go for 3.8 miles to T-road left, turn left and go for 1.1 miles to Y-fork, turn left uphill for 0.6 mile to T-road left, turn left and go for 0.4 mile to a turn around, continue uphill on Jeep trail for 0.6 mile to top of ridge, pack in northwesterly direction on top of ridge for about 0.3 mile to prominent knoll and station.

The station mark is a standard tablet stamped "HEM ET 1968" set in a drill hole in a flush 1.5 by 1.5 feet rock outcrop. It is 12 feet south of a 4 inch oak with standard witness sign, 5 feet west-north west of a 6 inch oak with standard witness sign and 5 feet west of a 3 feet high rock cairn.

Reference mark No. 1 is a standard reference mark tablet stamped "HEM ET 1968 RM 1" set in a drill hole in a 3 by 3 feet boulder projecting 1.5 feet. It is 36 feet east-southeast of a 3 feet high rock cairn, 21 feet southwest of trail to station and 6.7 feet south of a 6 inch oak with standard witness sign.

Reference mark No. 2 is a standard reference mark tablet stamped "HEM ET 1968 RM 2" set in a drill hole in a 2 by 3 feet boulder projecting 0.5 foot. It is 47.5 feet southwest of a 3 feet high rock cairn and 12.2 feet north of a 6 inch oak with standard witness sign.

The azimuth mark is the centerline of Dallas L.O.T. visible from ground.

Lat. 41° 23' 04.13"  
 Long. 76° 06' 47.17"

Quad 168 Penn.

**DESCRIPTION**  
**HORIZONTAL CONTROL STATION**

Triangulation  Electronic - Distance Traverse  Intersected Object   
Station LEHMAN ET 1968 County Luzerne State Pennsylvania  
Established by USGS Year 1968 Project Laporte

Check one:

- New Station: Write full description below  
 Recovery of Old Station: Recovered by \_\_\_\_\_ Year \_\_\_\_\_ Project \_\_\_\_\_

Object	Bearing	Distance		Directions
		Feet	Meters	
FRED ET 1968				00 00 00.00
Reference Mark No. 1	N	48.65	14.829	96 49 54
Reference Mark No. 2	E	30.68	9.351	192 16 05
Azimuth ( Dallas L.O.T. )	NE	about 3.5 miles		145 37 28.59

Station is located about 3 miles southwest of Dallas and about 1.5 miles south of Harveys Lake.

To reach from junction of state highway 118 and paved road northwest at Lehman, go northwest on paved road past Lehman Township High School for 0.7 mile to field road left just before reaching the white frame house and residence of Mr. Dick Sutton, turn right on field road and go northeast for 0.15 mile to woodstrail on right, turn right and go uphill for 0.5 mile to large clearing and end of trail.

The station mark is a standard tablet stamped " LEHMAN ET 1968 " set in a drill hole in a flush 4 by 7 feet rock outcrop. It is 55 feet southeast of a 4-stemmed 6 inch white birch, 28.7 feet southwest of a lone 8 feet tall pine, 21.2 feet northeast of a 4 inch aspen with a standard witness sign and 16.6 feet west-southwest of a 4 inch oak.

Reference mark No.1 is a standard reference mark tablet stamped " LEHMAN ET 1968 RM 1 " set in a drill hole in flush 3 by 5 feet rock outcrop. It is 56 feet southeast of woodline at south end of pipeline clearing, 46 feet south of centerline of pipeline clearing, 40 feet northwest of a 8 feet tall lone pine and 35.5 feet east of a 4-stemmed birch.

Reference mark No. 2 is a standard reference mark tablet stamped " LEHMAN ET 1968 RM 2 " set in a drill hole in a 2 by 3 feet boulder projecting 0.5 foot. It is 21 feet south-southeast of a 8 feet tall lone pine, 15 feet east of a pile of 3 big boulders and 12 feet north west of a rock cairn.

Distance between reference marks is 59.92 feet.

The azimuth mark is the centerline of Dallas L.O.T. and is visible from ground.

Lat. 41° 19' 36.26"  
Long. 76° 01' 23.61"

Quad 168 Penn.

**DESCRIPTION**  
**HORIZONTAL CONTROL STATION**

Triangulation

Electronic - Distance Traverse

Intersected Object

Station FRED ET 1968 County Luzerne State Pennsylvania  
Established by USGS Year 1968 Project Laporte

Check one:

New Station: Write full description below

Recovery of Old Station: Recovered by \_\_\_\_\_ Year \_\_\_\_\_ Project \_\_\_\_\_

Object	Bearing	Distance		Directions
		Feet	Meters	
GELS ET 1968	W			00 00 00.00
LEHMAN ET 1968	ENE	about 4.0 miles		164 58 50.76
Reference Mark No. 1	SE	51.14	15.588	226 43 30
Reference Mark No. 2	SW	61.83	18.846	290 37 25

Station is located about 10.0 miles east of Red Rock and about 3.5 miles north of Sweet Valley.

To reach from junction of state highways 118 and 487 at Red Rock, go east on state highway 118 for 9.7 miles to crossroads, continue east for about 0.1 mile to a group of large boulders on right and station on right.

The station mark is a standard tablet stamped " FRED ET 1968 " set in a drill hole in a 6 by 12 boulder projecting about 2 feet above ground. It is 14 feet north of a 6 inch maple and 11.5 feet west of telephone pole NO. K 147.

Reference Mark No. 1 is a standard reference mark tablet stamped " FRED ET 1968 RM 1 " set in a drill hole in a 2 by 3 foot boulder projecting about 2 inches. It is 108 feet north of centerline of state highway 118, 85 feet east of a stone wall and 50.6 feet south-south-east of telephone pole No. K 147.

Reference Mark No. 2 is a standard reference mark tablet stamped " FRED ET 1968 RM 2 " set in a drill hole in a 3 by 4 foot boulder flush with ground. It is 125 feet north of state highway 118, 37 feet north-northeast of a three-stemmed maple at stone wall and 23 feet east of centerline of stone wall.

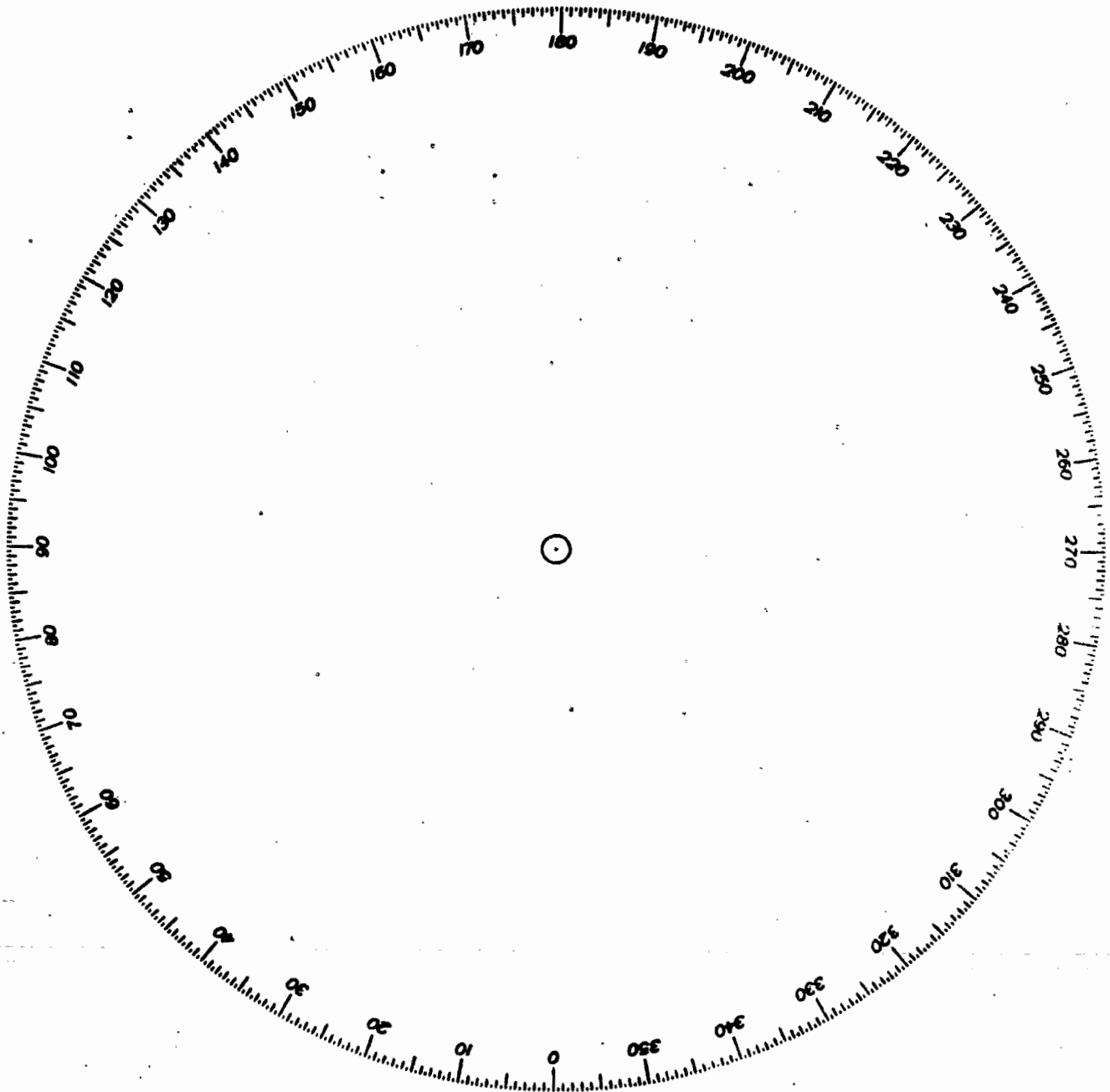
The azimuth mark is station " LEHMAN ET 1968 " about 4 miles east-northeast from station and is visible from ground.





Lat.  $41^{\circ}18'39.64''$   
Long.  $76^{\circ}07'25.16''$

SKETCH

Station .....  
Field Book .....  
Page .....

Observer .....  
Year .....  
Plotted by .....



- Symbols:
- Instrument Position 
  - Signal 
  - Station Mark 
  - All Concentric 

Quad 168 Penn.

**DESCRIPTION**  
**HORIZONTAL CONTROL STATION**

Triangulation

Electronic - Distance Traverse

Intersected Object

Station GELS ET 1968 County Luzerne State Pennsylvania  
Established by USGS Year 1968 Project Laporte

Check one:

New Station: Write full description below

Recovery of Old Station: Recovered by \_\_\_\_\_ Year \_\_\_\_\_ Project \_\_\_\_\_

Object	Bearing	Distance		Directions
		Feet	Meters	
BANUL ET 1968	SW			00 00 00.00
Reference Mark No. 1	N	158.42	48.290	106 43 20
Reference Mark No. 2	S	57.02	17.380	282 05 28
SHICKSHINNY L.O.T.	SSE	about	10.0 miles	285 26 32.73

Station is located about 7.0 miles west of Lehman and about 3.0 miles northwest of Sweet Valley.

To reach from junction of state highways 118 and 487 at Red Rock go east on state highway 118 for 7.0 miles to Y-fork, turn left on gravel road and go for 0.1 mile to driveway on left, turn left on driveway and go for 0.2 miles to house and station on right.

The station mark is a standard tablet stamped " GELS ET 1968 " set in a drill hole in a 1 by 2 foot boulder flush with ground. It is 190 feet south of house, 13 feet southeast of a 4 inch cedar, 12 feet north-northeast of a 10 feet long rockpile and 6.7 feet east of telephone pole No. KP 3.

Reference mark No. 1 is a standard reference mark tablet stamped " GELS ET 1968 RM 1 " set in a drill hole in a 2by4 foot boulder projecting 2 inches above ground. It is 31.4 feet south of southwest corner of house, 24.5 feet west-northwest of a 36 inch maple and 8.2 feet north of a 14 inch spruce.

Reference mark No. 2 is a standard reference mark tablet stamped " GELS ET 1968 RM 2 " set in a drill hole in a 2 by 3 foot boulder projecting 2 inches above ground. It is 2988 feet east of a double-stemmed maple, 23.1 feet west of power pole No. R-488 and 8 feet northwest of a double-stemmed maple.

The azimuth mark is the centerline of Shickshinny L.O.T. about 10 miles south-southeast of station and visible from ground.

Lat. 41° 18' 46.98"  
Long. 76° 10' 17.53"

SKETCH

Station .....

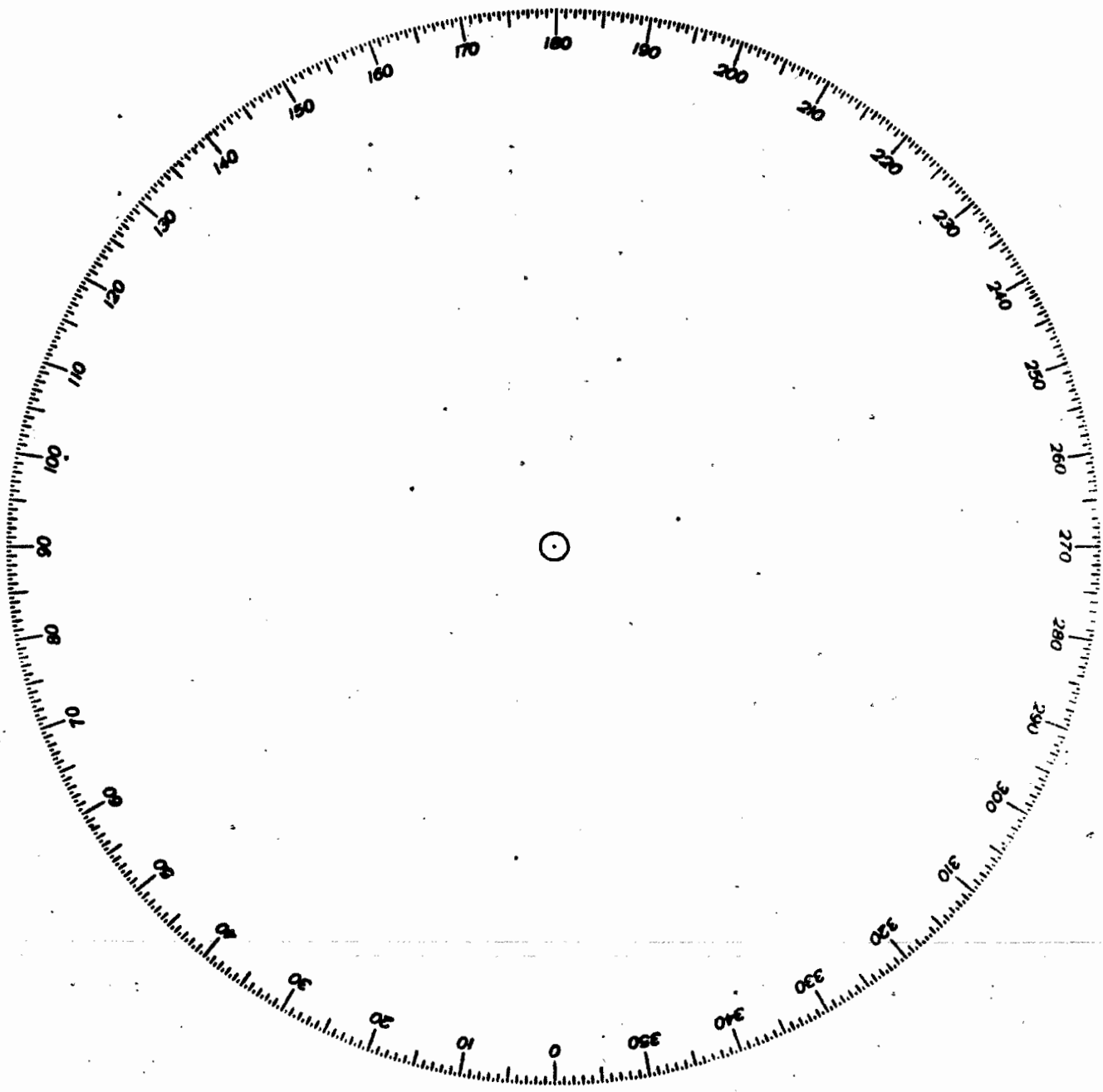
Observer .....

Field Book .....

Year .....

Page .....

Plotted by .....



Symbols:

Instrument Position



Signal



Station Mark



All Concentric



Quad 168 Penn.

**DESCRIPTION**  
**HORIZONTAL CONTROL STATION**

Triangulation  Electronic - Distance Traverse  Intersected Object   
 Station BANUL ET 1968 County Luzerne State Pennsylvania  
 Established by USGS Year 1968 Project Laporte

Check one:

- New Station: Write full description below  
 Recovery of Old Station: Recovered by \_\_\_\_\_ Year \_\_\_\_\_ Project \_\_\_\_\_

Object	Bearing	Distance		Directions
		Feet	Meters	
GELS ET 1968	NE			00 00 00.00
Reference Mark No. 1	SE	45.93	13.999	84 39 44
Reference Mark No. 2	W	19.50	5.944	205 07 12
BANUL AZIMUTH MARK	NE	( about 0.2 miles )		346 47 22.17

Station is located about 4.0 miles east of Red Rock and about 3.5 miles northwest of Sweet Valley.

To reach from junction of state route 118 and 487 at Red Rock go east on state route 118 for 4.4 miles to gravel T-road, turn right and go south for 0.4 miles to Y-fork, turn left and go southwest for 0.3 miles ( 0.2 miles to residence of Mr. John Harrison and Azimuth mark on left) to residence of Mr. Simon Long and driveway on right, turn right on driveway and go for 0.1 miles to house owned by Mr. Edward Banul, continue on woods road for 0.05 miles to top of small hill and station on right.

Reference mark No. 1 is a standard reference mark tablet stamped " BANUL ET 1968 RM 1" set in a drill hole in rock ledge about 3 feet lower than station. It is 43.1 feet west of a 10 inch hickory with triangular blaze.

Reference mark No. 2 is a standard reference mark tablet stamped " BANUL ET 1968 RM 2" set in a drill hole in rock ledge flush with ground. It is 7.8 feet south of a 4 inch white pine.

The station mark is a standard tablet stamped " BANUL ET 1968 " set in a drill hole in a rock ledge flush with ground. It is 9.5 feet west of a 8 inch black cherry and 2.5 feet north of witness post with standard witness sign.

The azimuth mark is a standard reference mark tablet stamped " BANUL ET 1968 AZ MARK " crimped to copper weld steel rod set flush with ground. It is 29.3 feet west of a 16 inch black walnut, 17.0 feet north of a 20 inch black walnut and 15 feet southeast of center-line of road.

Lat. 41° 17' 44.56"  
 Long. 76° 13' 52.30"



SKETCH

Station .....

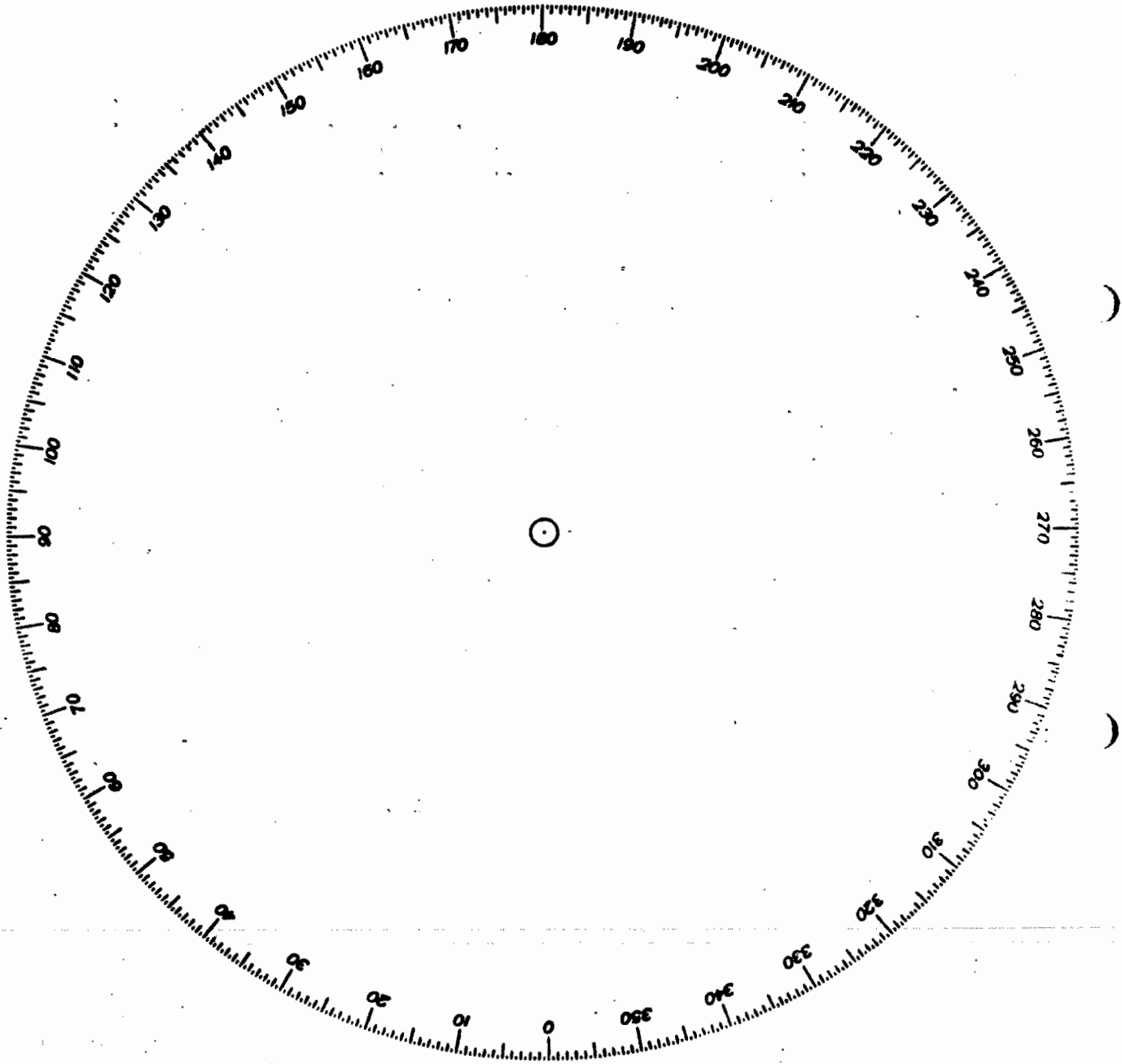
Observer .....

Field Book .....

Year .....

Page .....

Plotted by .....



Symbols:

Instrument Position



Signal



Station Mark



All Concentric



Quad 168 Penn.

**DESCRIPTION**  
**HORIZONTAL CONTROL STATION**

Triangulation  Electronic - Distance Traverse  Intersected Object   
 Station DOUGLAS ET 1968 County Luzerne State Pennsylvania  
 Established by USGS Year 1968 Project Laporte

Check one:

- New Station: Write full description below  
 Recovery of Old Station: Recovered by \_\_\_\_\_ Year \_\_\_\_\_ Project \_\_\_\_\_

Object	Bearing	Distance		Directions		
		Feet	Meters			
SHICKSHINNY 1934	SE			00	00	00.00
SHICKSHINNY L.O.T.	SE	approx.	7.4 mi.	00	00	00.0
Reference Mark No. 1	WNW	115.69	35.263	145	14	29
Reference Mark No. 2	NNE	81.71	24.907	210	46	26

Station is located about 5.2 miles east-southeast of Red Rock, about 3.5 miles southwest of Sweet Valley and about 1.2 miles north-northeast of Broadway.

To reach from the post office at Sweet Valley follow paved road southwest for 0.7 miles to a fork, take right fork and go 2.3 miles to a road right, turn right and go 1.0 miles to a T-road, turn left and go 0.15 miles to a farm lane right, turn right and follow lane past house uphill to highest point of hill and station.

The station mark is a standard tablet stamped "DOUGLAS ET 1968" set in a drill-hole in outcropping bedrock. It is 161 feet south-southeast of a lone pine in rock fence, 106 feet west of a gap in rock fence and 56.5 feet south of rock fence.

Reference mark No. 1 is a standard reference mark tablet stamped "DOUGLAS ET 1968 RM 1" set in a drill-hole in outcropping bedrock. It is 48 feet southeast of lone pine in rock fence and 32 feet south of rock fence.

Reference mark No. 2 is a standard reference mark tablet stamped "DOUGLAS ET 1968 RM 2" set in a drill-hole in outcropping bedrock. It is 142 feet east of lone pine in rock fence and 18 feet north of rock fence.

No azimuth mark was set as SHICKSHINNY L.O.T. is visible from the ground.

Lat. 41° 16' 02.14"

Long. 76° 12' 28.75"

SUPPLEMENTAL

A. I. Malva-Gomes, 1968; Book AH 1364

Standard tablet stamped "DOUGLAS ET 1968"

X = 2,423,894.88 Y = 404,767.35 41 16 02.1460 76 12 28.7615

Pine tree in fenceline

X = 2,423,766 Y = 404,862 41 16 03.10 76 12 30.43

Standard tablet stamped "BANUL ET 1968 AZ MARK"

X = 2,418,147.85 Y = 415,595.74 41 17 50.1256 76 13 41.5165

Centerline of rd. at drive SE.

X = 2,418,151 Y = 415,624 41 17 50.41 76 13 41.47

Standard tablet stamped "GELS ET 1968"

X = 2,433,610.25 Y = 421,628.92 41 18 46.9936 76 10 17.5349

Centerline of rd. at drive N.

X = 2,433,268 Y = 421,115 41 18 41.98 76 10 22.14

Standard tablet stamped "FRED ET 1968"

X = 2,446,775.21 Y = 421,128.81 41 18 39.6465 76 07 25.1711

Centerline of rd. at driveway NE.

X = 2,446,482 Y = 421,311 41 18 41.50 76 07 28.97

Standard tablet stamped "MIKE ET 1968"

X = 2,424,410.08 Y = 448,456.08 41 23 13.6586 76 12 11.7996

Centerline of rd. at grassy tip

X = 2,424,222 Y = 448,186 41 23 11.03 76 12 14.33

"RICKETTS LOOKOUT TOWER"

X = 2,411,841 Y = 444,368 41 22 35.45 76 14 58.00

Spruce tree, 15 ft high

X = 2,411,770 Y = 444,255 41 22 34.35 76 14 58.56