

MISSOURI GEOGRAPHIC REFERENCE SYSTEM

MISSOURI DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGY AND LAND SURVEY
LAND SURVEY PROGRAM

PO Box 250, Rolla, Missouri 65402, (573) 368-2300

STATION NAME: BU-01

PID: AD9774

COUNTY: Buchanan

STATE: Missouri

TOWNSHIP: 58 NORTH, RANGE: 35 WEST, SECTION: N 1/2 OF 34

USGS 7.5' QUAD: St. Joseph North

DATE MONUMENTED: 1993

MONUMENTED BY: MODNR

TECHNICAL DATA TABLE:

(All data in meters 1 meter = 3.28083333 feet)

HORIZONTAL: NAD 1983**VERTICAL:** NAVD 1988

DATE OF OBSERVATIONS: 1993

DATE OF OBSERVATIONS: 1993

DATE OF ADJUSTMENT: 2000

DATE OF ADJUSTMENT: 2000

ORDER: 1ST

ORDER:

LATITUDE: 39°48'08.03725"

ELEVATION: 324.7

LONGITUDE: 94°48'53.38531"

ELLIPSOID HEIGHT: 292.79

MISSOURI COORDINATE SYSTEM 1983:

NORTH (Y): 403557.956

EAST (X): 823039.679

ZONE: West

CONVERGENCE: -00°12'06"

GRID FACTOR: .9999042

AZIMUTH INFORMATION:

STATION: BU-01

AZIMUTH MARK: BU-01A

GEODETTIC:

ASTRONOMIC: 214°13'13"

GRID: 214°25'19"

REMARKS

The HORIZONTAL POSITION was determined by GPS observations and adjusted by the National Geodetic Survey in February 2000.

The AZIMUTH was determined by observation of Polaris with an estimated accuracy of 1 second of arc.

The ELEVATION was determined by GPS observations.

The ELLIPSOID HEIGHT was determined by GPS observations referenced to NAD83.

GEOID 99 was used in determining ELEVATION and ELLIPSOID HEIGHT.

STATION: BU-01

DESCRIPTION: The station is a standard DNR aluminum GRS disk stamped "BU-01, 1993", set in a 12 inch diameter concrete post flush with the ground surface. The station has an underground mark 0.738 meters below the surface disk. The azimuth mark is a standard DNR aluminum GRS disk stamped "BU-01A, 1993", set in a 12 inch diameter concrete post flush with the ground surface.

STATION, AZIMUTH MARKS AND REFERENCE TIES: The station is in the north central part of St. Joseph, Mo, on the east side of US Highway 169 and Belt Highway (Loop I-29) at the Y-junction where Highway 169 veers northeast in front of Mo Highway Patrol Headquarters for Troop H. It is 230+ feet north of the south entrance to Troop H Headquarters; 225+ feet south of a traffic signal; 135+ feet south of a highway route marker at junction; 23.8 feet east of back of curb; 30.2 feet east-northeast of the center of a Bell System manhole and 32.0 feet south-southwest of a KPL gasoline warning sign.

The azimuth mark is about 0.25 mile southwest of the station in the southeast angle of the traffic light intersection of Karnes Road and Ashland Avenue. It is 15.0 feet west of a nail and shiner in the north side of a utility pole; 11.5 feet north of the center post of a sign for eye clinics; 8.5 feet east-northeast of a nail and shiner in the north side of a utility pole and 16.2 feet south-southeast of the edge of pavement at a joint.

STATION & AZIMUTH MARK TO REACH: To reach the station in the north central St. Joseph, Mo, go to the Y-junction of Business Route I-29 and US Highway 169 and the station on the east side as described.

To reach the azimuth mark from the station, go south on Belt Highway (Bus. Rt. I-29 and US Highway 169) for 0.2 mile to traffic light intersection with Karnes Road. Turn right and go west on Karnes for 0.1 mile to mark on the left in the southeast angle of traffic light intersection with Ashland Avenue as described.

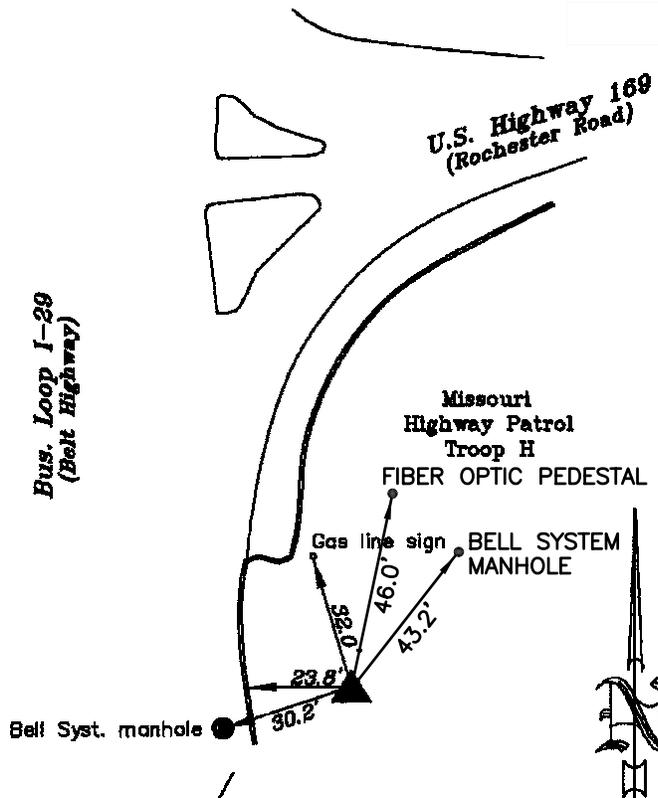
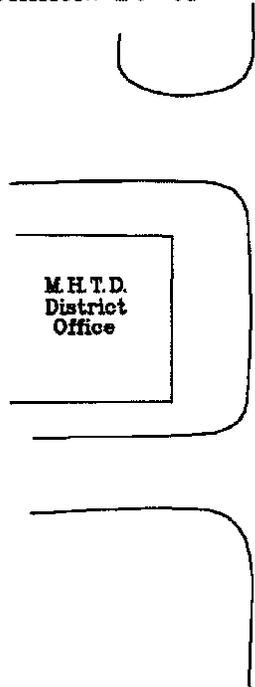
SPECIAL INFORMATION:

SUPERSEDED SURVEY CONTROL

NGS NAD 83(1997)-	39°48'08.03724" (N)	94°48'53.38532" (W)
NGS NAD 83(1997)-	39°48'08.03724" (N)	94°48'53.38533" (W)
NGS NAD 83(1986)-	39°48'08.03993" (N)	94°48'53.38081" (W)
MODNR NAD 83(1986)-	39°48'08.03978" (N)	94°48'53.38083" (W)

DATE of REPORT, 2002

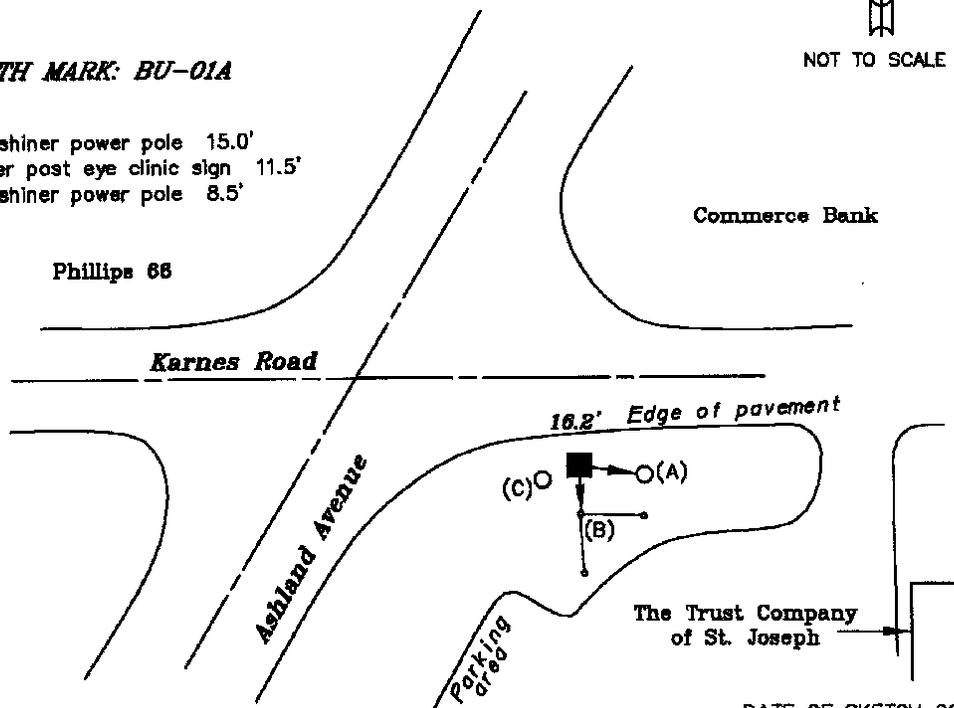
STATION: BU-01



NOT TO SCALE

AZIMUTH MARK: BU-01A

- (A) Nail/shiner power pole 15.0'
- (B) Corner post eye clinic sign 11.5'
- (C) Nail/shiner power pole 8.5'



DATE OF SKETCH 2001



STATION: BU-01 (LOOKING EAST)



STATION: BU-01 (LOOKING WEST)