

**GPS SURVEY MARK DESCRIPTION**

GIS MAPPING BY:  
 THE SIDWELL COMPANY  
 WEST CHICAGO, ILLINOIS

THE OFFICE OF THE  
 COUNTY ENGINEER  
 DICKINSON COUNTY, IOWA

DESIGNATION 1013731 3 GPS NO. 8019 COUNTY JACKSON STATE MN  
 LOCATED IN SECTION 31 TWP 101 N RANGE 37 W USGS QUAD MAP LAKEFIELD SW  
 THE STATION IS \_\_\_\_\_  
 DUE NORTH OF THE INTERSECTION BETWEEN 100TH STREET AND 190TH AVENUE.

MARK \_\_\_\_\_  
 BERNTSEN MONUMENT WITH 2-1/2" ALUMINUM DISK ON ROD WITH 6" ACCESS COVER  
 MARK EXISTING     VALUES AS PUBLISHED BY  
 MARK SET     VALUES ESTABLISHED BY  
 Patrick Engineering Inc. \_\_\_\_\_ DATE August, 2002

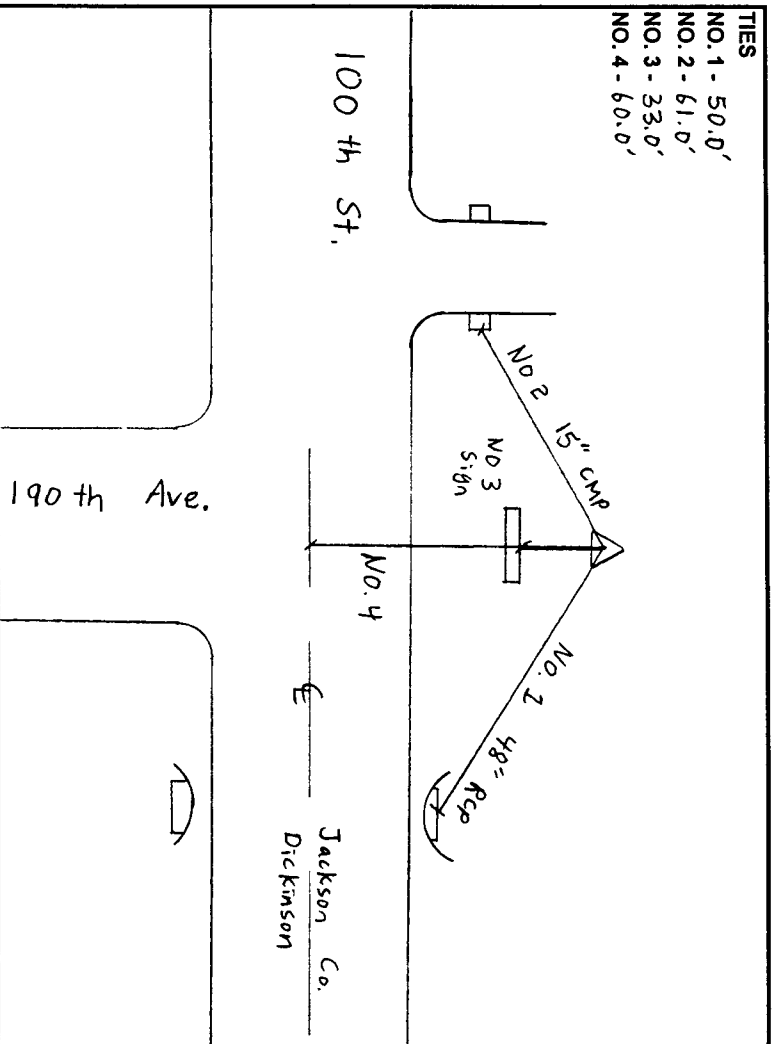
HORIZONTAL VALUES ORIGINATED ON ORDER "B" IOWA HIGH ACCURACY REFERENCE NETWORK (HARN) CONTROL ESTABLISHED BY THE NATIONAL GEODETIC SURVEY AND BASED ON THE NORTH AMERICAN DATUM OF 1983, 1996 ADJUSTMENT.

LATITUDE NORTH 43° 30' 03.453726"  
 LONGITUDE WEST 95° 12' 40.589493"  
 ELLIPSOID HEIGHT (meter) 401.483 \* (Based on GEOID99 Model)

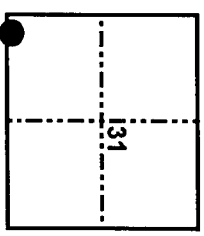
IOWA COORDINATE SYSTEM, NORTH ZONE  
 CONVERGENCE ANGLE -1° 09' 35.31"  
 SCALE FACTOR 0.999988  
 COORDINATES (US FEET)  
 NORTHING (Y) 4014688.61 COORDINATES (METERS)  
 EASTING (X) 4467190.30 NORTHING (Y) 1223673.440  
 EASTING (X) 1361602.327

VERTICAL VALUES ORIGINATED ON VERTICAL CONTROL ESTABLISHED BY THE NATIONAL GEODETIC SURVEY AND/OR THE U.S. GEOLOGICAL SURVEY AND BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988.

ELEVATION (US FEET) 1407.58 ELEVATION (METERS) 429.031



TIES  
 NO. 1 - 50.0'  
 NO. 2 - 61.0'  
 NO. 3 - 33.0'  
 NO. 4 - 60.0'



SECTION MAP



SKETCH BY SL

PATRICK 09-2002