

# GPS SURVEY MARK DESCRIPTION

GIS MAPPING BY:  
THE SIDWELL COMPANY  
WEST CHICAGO, ILLINOIS

THE OFFICE OF THE  
COUNTY ENGINEER  
HARDIN COUNTY, IOWA

DESIGNATION J 31 GPS No. 9805 COUNTY HARDIN STATE IOWA  
 LOCATED IN SECTION 19 TWP 89 N RGE 21 W USGS QUAD MAP POPEJOY  
 TO REACH FROM THE INTERSECTION OF STATE HIGHWAY 359 AND 140th STREET SOUTH OF ALDEN; GO 0.25  
MILE NORTH TO RAILROAD TRACKS AND MARK.

MARK STANDARD U.S.C. & G.S. DISK IN CONCRETE, FLUSH WITH GROUND, STAMPED "J 31 1934"  
 MARK EXISTING     VALUES AS PUBLISHED BY N.G.S., VERTICAL ONLY  
 MARK SET         VALUES ESTABLISHED BY DENI ASSOCIATES, INC. DATE 1998

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.

IOWA COORDINATE SYSTEM, NORTH ZONE	SCALE FACTOR: <u>0.99994943</u>
COORDINATES (US FEET)	COORDINATES (METERS)
NORTHING (Y) <u>3646728.15</u>	NORTHING (Y) <u>1111524.962</u>
EASTING (X) <u>4953429.83</u>	EASTING (X) <u>1509808.431</u>

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) 1168.68                      ELEVATION (METERS) 356.21

