

LB0781

CBN - This is a Cooperative Base Network Control Station.
DESIGNATION - B 120
PID - LB0781
STATE/COUNTY- IN/TIPPECANOE
USGS QUAD - LAFAYETTE EAST (1986)

*CURRENT SURVEY CONTROL

* NAD 83(2007)- 40 23 06.26402(N) 086 45 06.07485(W) ADJUSTED
* NAVD 88 - 207.733 (meters) 681.54 (feet) ADJUSTED

EPOCH DATE - 2002.00
X - 275,681.297 (meters) COMP
Y - -4,857,429.172 (meters) COMP
Z - 4,110,760.111 (meters) COMP
LAPLACE CORR- -2.09 (seconds) DEFLEC99
ELLIP HEIGHT- 173.926 (meters) (02/10/07) ADJUSTED
GEOID HEIGHT- -33.84 (meters) GEOID03
DYNAMIC HT - 207.628 (meters) 681.19 (feet) COMP

----- Accuracy Estimates (at 95% Confidence Level in cm) -----

Type PID Designation North East Ellip

NETWORK B 120 0.88 0.74 1.90

MODELED GRAV- 980,115.5 (mgal) NAVD 88

VERT ORDER - SECOND CLASS 0

.The horizontal coordinates were established by GPS observations
.and adjusted by the National Geodetic Survey in February 2007.

.The datum tag of NAD 83(2007) is equivalent to NAD 83(NSRS2007).
.The horizontal coordinates are valid at the epoch date displayed
above.

.The epoch date for horizontal control is a decimal equivalence
.of Year/Month/Day.

.The orthometric height was determined by differential leveling
.and adjusted in June 1991.

.The X, Y, and Z were computed from the position and the ellipsoidal
ht.

.The Laplace correction was computed from DEFLEC99 derived
deflections.

.The ellipsoidal height was determined by GPS observations
.and is referenced to NAD 83.

.The geoid height was determined by GEOID03.

.The dynamic height is computed by dividing the NAVD 88

.geopotential number by the normal gravity value computed on the
 .Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 .degrees latitude (g = 980.6199 gals.).

.The modeled gravity was interpolated from observed gravity values.

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;          North          East          Units Scale Factor
Converg.
;SPC IN W   -   570,326.920   928,159.884   MT   0.99997642   +0 12
53.6
;SPC IN W   - 1,871,147.57   3,045,137.89   sFT   0.99997642   +0 12
53.6
;UTM 16     - 4,470,527.610   521,076.353   MT   0.99960547   +0 09
39.2

!          - Elev Factor x Scale Factor = Combined Factor
!SPC IN W   -   0.99997272 x   0.99997642 =   0.99994914
!UTM 16     -   0.99997272 x   0.99960547 =   0.99957820
  
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SUPERSEDED SURVEY CONTROL

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NAD 83(1997)- 40 23 06.26399(N)    086 45 06.07478(W) AD(      ) A
ELLIP H (01/19/05) 173.930 (m)          GP(      ) 4
1
NAVD 88 (01/19/05) 207.73 (m)          681.5 (f) LEVELING 3
NGVD 29 (??/??/92) 207.839 (m)        681.89 (f) ADJ UNCH 2
0
  
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.Superseded values are not recommended for survey control.
 .NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 .[See file dsdata.txt](#) to determine how the superseded data were
 derived.

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_U.S. NATIONAL GRID SPATIAL ADDRESS: 16TEK2107670528(NAD 83)
_MARKER: DB = BENCH MARK DISK
_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
_SP_SET: SET IN TOP OF CONCRETE MONUMENT
_STAMPING: B 120 1946
_MARK LOGO: CGS
_PROJECTION: PROJECTING 8 CENTIMETERS
_MAGNETIC: O = OTHER; SEE DESCRIPTION
_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
+STABILITY: SURFACE MOTION
_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
+SATELLITE: SATELLITE OBSERVATIONS - June 24, 2003
  
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HISTORY - Date      Condition      Report By
HISTORY - 1946      MONUMENTED   CGS
HISTORY - 1965      GOOD         NGS
HISTORY - 20020520 MARK NOT FOUND INDIV
HISTORY - 20030520 GOOD         INDIV
HISTORY - 20030624 GOOD         PURDUE
  
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STATION DESCRIPTION

DESCRIBED BY COAST AND GEODETIC SURVEY 1946
 1.6 MI NE FROM DAYTON.

ABOUT 0.9 MILE EAST ALONG STATE HIGHWAY 38 FROM THE POST OFFICE AT DAYTON, THENCE 0.7 MILE NORTH ALONG THE BUCK CREEK-DAYTON ROAD, 0.2 MILE SOUTH OF AN EAST-WEST CROSS ROAD, 22 FEET EAST OF THE CENTER LINE OF THE ROAD, 20.5 FEET NORTH OF THE CENTER LINE OF A DRIVEWAY TO THE WALLACE PATTON FARM HOUSE, 11 FEET NORTH OF A FENCE CORNER, 1 1/2 FEET WEST OF A FENCE LINE AND ABOUT 1 FOOT HIGHER THAN ROAD LEVEL. A STANDARD DISK, STAMPED B 120 1946 AND SET IN THE TOP OF A CONCRETE POST PROJECTING 5 INCHES ABOVE GROUND.

STATION RECOVERY (1965)

RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1965
RECOVERED IN GOOD CONDITION.

STATION RECOVERY (2002)

RECOVERY NOTE BY INDIVIDUAL CONTRIBUTORS 2002
MARK NOT FOUND, DUE TO THE ROAD IS NOT BEING THERE.

STATION RECOVERY (2003)

RECOVERY NOTE BY INDIVIDUAL CONTRIBUTORS 2003 (BLY)
RECOVERED IN GOOD CONDITION.

STATION RECOVERY (2003)

RECOVERY NOTE BY PURDUE UNIVERSITY 2003 (BHV)
THE STATION IS LOCATED IN SHEFFIELD TOWNSHIP, ABOUT 1.6 MI NORTHEAST OF DAYTON. OWNERSHIP--WALLACE PATTON FARM HOUSE, JOHN B. SPITZNAGLE, JOHN DEERE ROAD, 2233 CR S 800 E, LAFAYETTE, IN 47905.

TO REACH THE STATION FROM THE INTERSECTION OF INTERSTATE HIGHWAY 65 AND US HIGHWAY 38 GO EAST ON HIGHWAY 38 FOR 1.75 MI PASSING THROUGH DAYTON TO COUNTY ROAD 800 E ON THE LEFT. TURN LEFT AND GO NORTH ON ROAD 800 E FOR 0.8 MI TO THE STATION ON THE RIGHT.

THE STATION IS 40.6 FT WEST-NORTHWEST OF A UTILITY POLE, 24.3 FT EAST OF THE CENTER OF ROAD 800 E, 22.5 FT NORTH OF THE CENTER OF JOHN DEERE ROAD AND 11.3 FT NORTHWEST OF THE LAST POST OF AN EAST-WEST FENCE LINE.

1 National Geodetic Survey, Retrieval Date = DECEMBER 21,
2007

KK: 25

BM: TTH 11 = USC&GS BM B120

Lafayette East Quad

USC & GS Berger Associates, Ltd.

From the intersection of Roads 800E and 200S, go South on 800E 0.25 mi. Station is located on the east side of 800E, just North of a private drive. A standard USC&GS disc in a concrete post stamped "B 120 1946".

20' North of a private drive
TTH 11 = USC&GS BM B120 1966
Elevation: 681.885

State Grid Coordinates: X=592,390.957
Zone West Y=1,050,907.074

Recovered: October 17, 1989 T.B./G.L.

" *Oct. 4, 1994 In Good Condition* (Over)
" *7/17/07 Good Condition (MWF)*