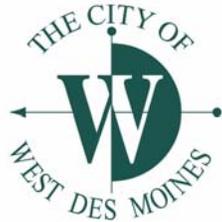


**VERTICAL CONTROL  
FOR THE  
CITY OF WEST DES MOINES, IOWA  
July, 2010**



Prepared by:

**Engineering Division  
Department of Public Works**

I HEREBY CERTIFY THAT THIS REPORT WAS MADE BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND I AM A DULY REGISTERED LAND SURVEYOR UNDER THE LAWS OF THE STATE OF IOWA.

---

Duane C. Wittstock, P.E., L.S.  
Iowa Registration No. 9678  
Registration Expires December 31, 2010

---

Date

## **WEST DES MOINES STANDARD BENCHMARK**

West Des Moines Standard Benchmarks are constructed of #5 rebar encased in a concrete cylinder six inches (6") in diameter x forty-eight inches (48") inches minimum depth. Affixed to the top of the rebar is an aluminum cap one and one-half inches (1 ½") in diameter with the Benchmark number and other identification as shown on the attached drawing.

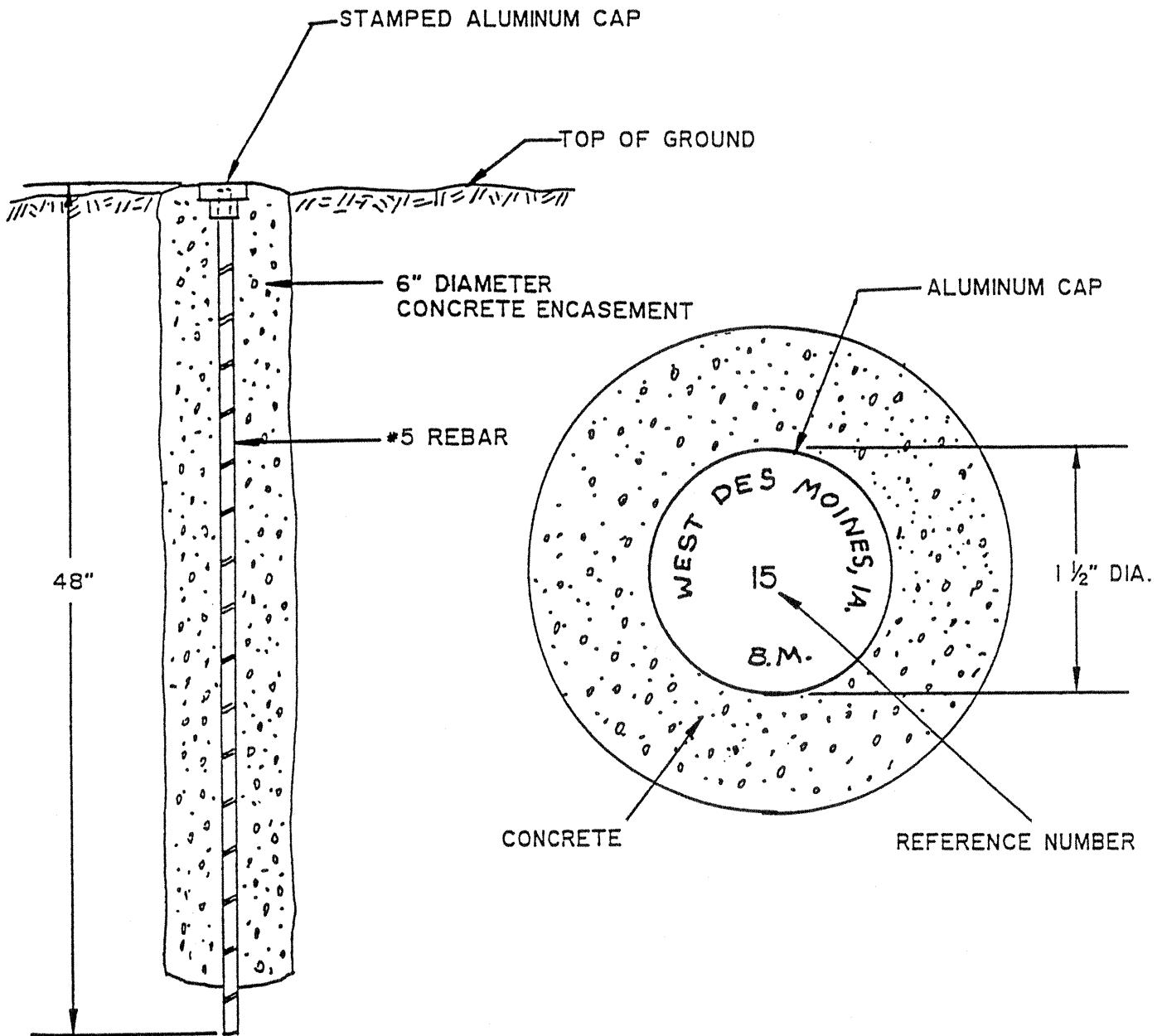
Vertical Control was established to third-order accuracy utilizing existing National Geodetic survey monuments tied to the North American Vertical Datum of 1988 (NAVD88).

To convert from NAVD88 datum to West Des Moines datum subtract 774.01 feet. The conversion from the National Geodetic Survey Datum of 1929 (NGVD29) to the West Des Moines datum was to subtract 773.84 feet from the NGVD29 elevations.

The current condition of these benchmarks is not warranted. The user is recommended to carefully scrutinize the condition of the benchmarks prior to utilization. It is recommended the user always check between two separate benchmarks when performing vertical control work.

The Engineering Division of the Department of Public Works would appreciate being contacted if any damage is noted to any of these benchmarks.

City of West Des Moines  
Engineering Division  
560 S. 16th Street  
West Des Moines, Iowa 50265  
Phone # (515) 222-3480  
Fax # (515) 222-3478



STANDARD BENCHMARK

ENGINEERING DIVISION

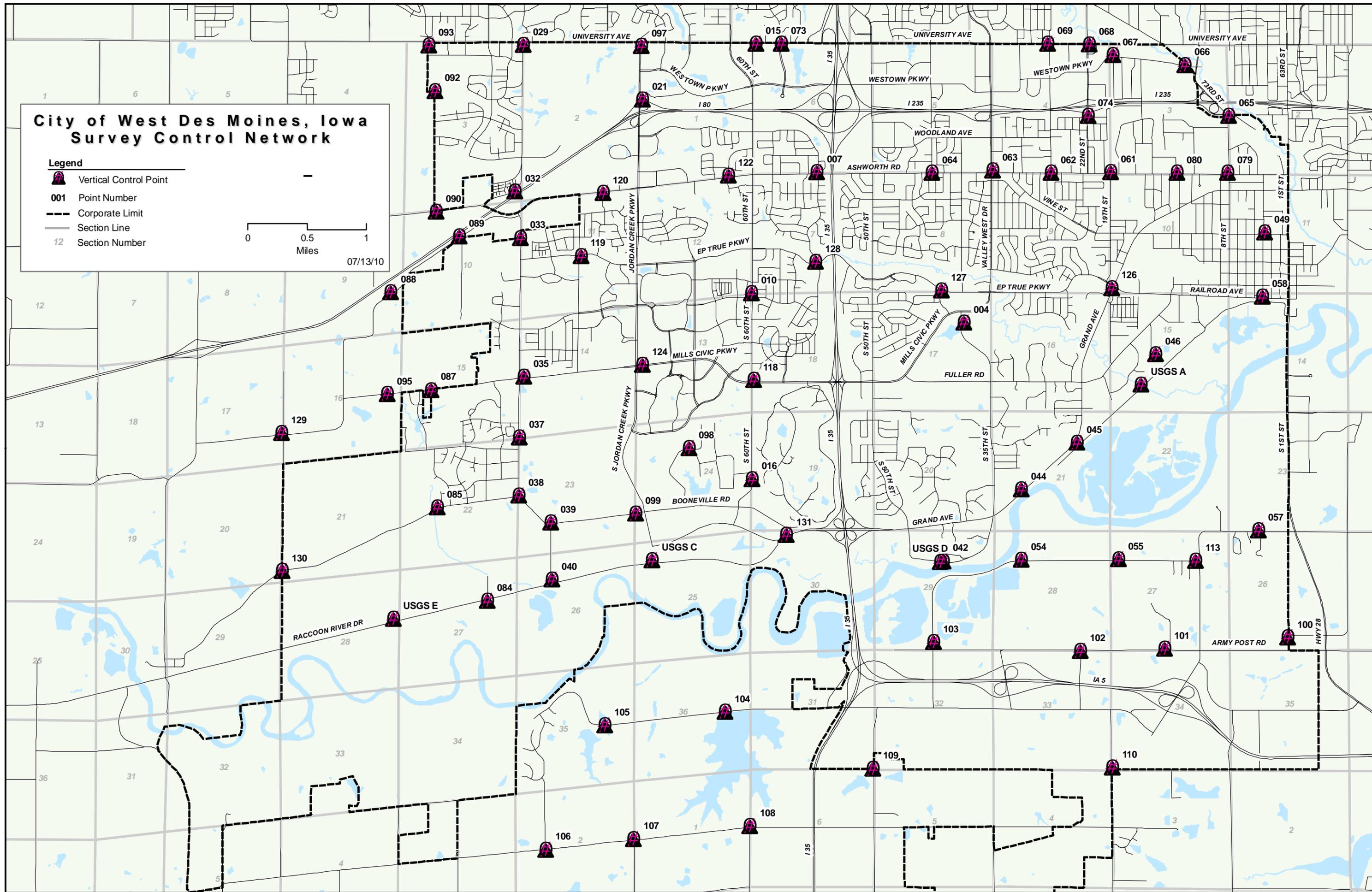
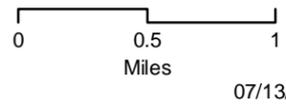
CITY OF WEST DES MOINES

JUNE 1989  
D.L.B.

# City of West Des Moines, Iowa Survey Control Network

## Legend

-  Vertical Control Point
- 001** Point Number
-  Corporate Limit
-  Section Line
- 12** Section Number





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **004**

NAVD88 - FEET	893.82
WDM DATUM - FEET	119.81
NAVD88 - METERS	272.437
NAD83 NORTHING	570795.2
NAD83 EASTING	1570339.5
SECTION	17
TOWNSHIP	T78N
RANGE	R25W
COUNTY	Polk

### LOCATION

South 35th Street at the North entrance to Southwoods Park, 125.5 feet ± East of the East back of curb of South 35th Street, 25.5 feet South of entrance road.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: 007

NAVD88 - FEET	984.74
WDM DATUM - FEET	210.73
NAVD88 - METERS	300.149
NAD83 NORTHING	577454.9
NAD83 EASTING	1563793.0
SECTION	06
TOWNSHIP	T78N
RANGE	R25W
COUNTY	Polk

### LOCATION

Intersection Ashworth Road and Prairie View Drive, Northwest corner of intersection, 50 feet West of centerline of Prairie View Drive, 20 feet North of North back of curb of Ashworth Road, 2 feet South of sidewalk.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: 010

NAVD88 - FEET 954.00  
WDM DATUM - FEET 179.99  
NAVD88 - METERS 290.780  
SECTION 12  
TOWNSHIP T78N  
RANGE R26W  
COUNTY Dallas

## LOCATION

Intersection of 60th Street and Wistful Vista Drive, 150 ± feet North on 60th Street, Intersection of 60th Street and Beech Tree Drive, 520 feet South on 60th Street, 31 feet West of centerline 60th Street.

## DESCRIPTION

Standard Benchmark.

## NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: 015

NAVD88 - FEET	972.37
WDM DATUM - FEET	198.36
NAVD88 - METERS	296.379
NAD83 NORTHING	583168.8
NAD83 EASTING	1561072.9
SECTION	06
TOWNSHIP	T78N
RANGE	R25W
COUNTY	Polk

### LOCATION

Intersection of 59th Place and University Avenue, Southeast corner of intersection, 3 feet North of South Right-of-Way line, 147 feet East of centerline of 59th Place.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **016**

NAVD88 - FEET	953.78
WDM DATUM - FEET	179.77
NAVD88 - METERS	290.713
NAD83 NORTHING	563846.8
NAD83 EASTING	1560913.9
SECTION	19
TOWNSHIP	T78N
RANGE	R25W
COUNTY	Polk

## LOCATION

1500 Block of South 60th Street, 319 feet South of centerline of Pheasant Ridge Drive, 8 feet West of Southwest property corner of 1520 South 60th Street, 4 feet West of power pole.

## DESCRIPTION

Standard Benchmark.

## NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: 021

NAVD88 - FEET	979.76
WDM DATUM - FEET	205.75
NAVD88 - METERS	298.631
NAD83 NORTHING	580686.8
NAD83 EASTING	1556025.8
SECTION	01
TOWNSHIP	T78N
RANGE	R26W
COUNTY	Dallas

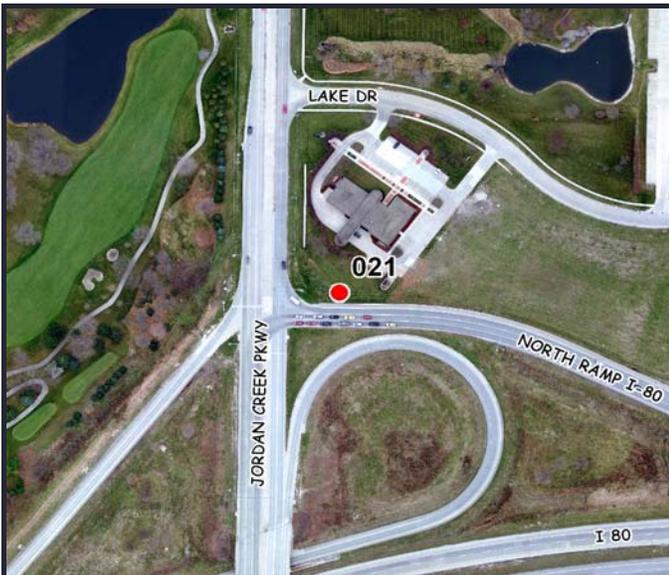
### LOCATION

Intersection of Jordan Creek Parkway and the North Ramp of I-80, Northeast corner of intersection, 9.5 feet West of the Southeast Right-of-Way fence corner, 125 feet East of centerline of Jordan Creek Parkway, in pipe/tube, approx. 1.5 feet deep.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: 029

NAVD88 - FEET	993.26
WDM DATUM - FEET	219.25
NAVD88 - METERS	302.746
NAD83 NORTHING	583109.7
NAD83 EASTING	1550736.1
SECTION	02
TOWNSHIP	T78N
RANGE	R26W
COUNTY	Dallas

### LOCATION

Intersection of 88th Street and University Avenue, Southeast corner of intersection, 31 feet East of the centerline of 88th Street, 2 feet West of the 6 foot chain link fence.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **032**

NAVD88 - FEET 996.30  
WDM DATUM - FEET 222.29  
NAVD88 - METERS 303.673  
NAD83 NORTHING 576621.7  
NAD83 EASTING 1550370.7  
SECTION 03  
TOWNSHIP T78N  
RANGE R26W  
COUNTY Dallas

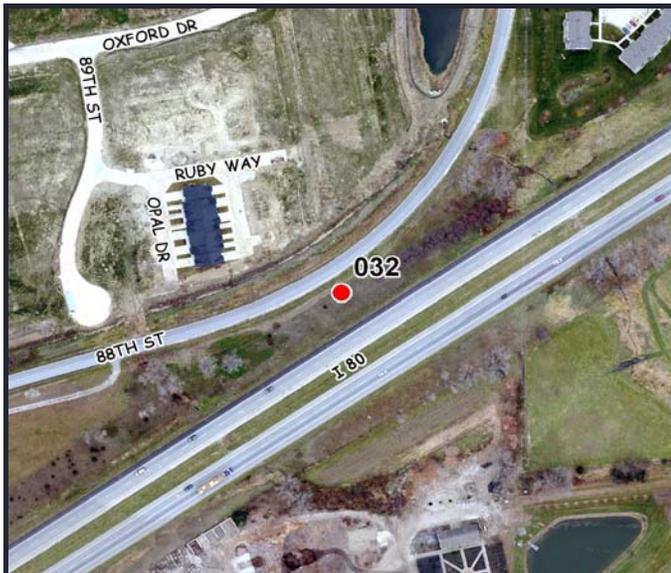
### LOCATION

1000 Block of 88th Street, 1250 + feet East of the intersection of Ashworth Road, 2 feet North of the fence line on the South side of 88th Street, 10 feet West of power pole.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **033**

NAVD88 - FEET 1001.50  
WDM DATUM - FEET 227.49  
NAVD88 - METERS 305.258  
NAD83 NORTHING 574550.0  
NAD83 EASTING 1550594.1  
SECTION 10  
TOWNSHIP T78N  
RANGE R26W  
COUNTY Dallas

### LOCATION

700 Block of 88th Street (X Avenue, Dallas County), 1100 + feet South of Ashworth Road, 32 feet West of the centerline of 88th Street, 10 feet South of the fence line (1/4 Section line).

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: 035

NAVD88 - FEET	993.05
WDM DATUM - FEET	219.04
NAVD88 - METERS	302.682
NAD83 NORTHING	568383.5
NAD83 EASTING	1550750.0
SECTION	14
TOWNSHIP	T78N
RANGE	R26W
COUNTY	Dallas

### LOCATION

Intersection of Mills Civic Parkway (335th Street, Dallas County) and South 88th Street (X Avenue, Dallas County), Northeast corner of intersection, 206 feet East of centerline of South 88th Street, 49 feet North of the centerline of Mills Civic Parkway, 2 feet South of the fence line.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **037**

NAVD88 - FEET	968.81
WDM DATUM - FEET	194.80
NAVD88 - METERS	295.294
NAD83 NORTHING	565674.1
NAD83 EASTING	1550553.2
SECTION	14
TOWNSHIP	T78N
RANGE	R26W
COUNTY	Dallas

### LOCATION

South 88th Street, 2,640 ± feet South of Mills Civic Parkway, 32 feet East of the centerline of South 88th Street (X Avenue, Dallas County), near the 1/4 Section line, 1 foot West of the North/South fence line.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: 038

NAVD88 - FEET	933.13
WDM DATUM - FEET	159.12
NAVD88 - METERS	284.419
NAD83 NORTHING	563110.4
NAD83 EASTING	1550532.0
SECTION	23
TOWNSHIP	T78N
RANGE	R26W
COUNTY	Dallas

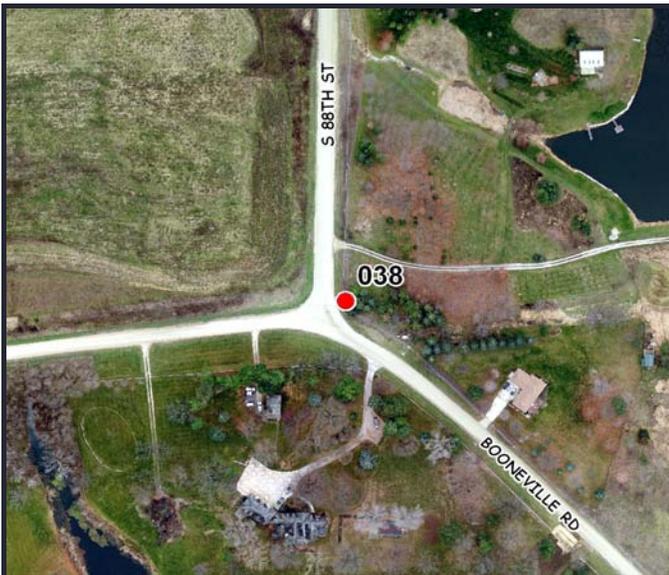
### LOCATION

Intersection of Booneville Road and Xavier Avenue (Dallas County), Northeast corner of intersection, 58 feet North of the centerline of Booneville Road, 36 feet East of the centerline of South 88th Street, 5 feet West of the North/South fence line, 11 feet North of fence corner post.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **039**

NAVD88 - FEET	850.98
WDM DATUM - FEET	76.97
NAVD88 - METERS	259.379
NAD83 NORTHING	561908.9
NAD83 EASTING	1551950.6
SECTION	23
TOWNSHIP	T78N
RANGE	R26W
COUNTY	Dallas

## LOCATION

Intersection of Booneville Road and Xavier Place, North side of the intersection, 39 feet North of the centerline of Booneville Road on the centerline of Xavier Place extended, 3 feet South of East/West fence line.

## DESCRIPTION

Standard Benchmark.

## NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: 040

NAVD88 - FEET	838.07
WDM DATUM - FEET	64.06
NAVD88 - METERS	255.444
NAD83 NORTHING	559390.6
NAD83 EASTING	1551991.7
SECTION	26
TOWNSHIP	T78N
RANGE	R26W
COUNTY	Dallas

## LOCATION

Intersection of Raccoon River Drive and Xavier Place, Northeast corner of intersection, 34 feet East of the centerline of Xavier Place, 54 feet North of the centerline of Iowa Interstate Railroad tracks, 4 feet North of the East/West fence line, 1 foot West of the North/South fence line.

## DESCRIPTION

Standard Benchmark.

## NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **042**

NAVD88 - FEET 842.98  
WDM DATUM - FEET 68.97  
NAVD88 - METERS 256.941  
SECTION 29  
TOWNSHIP T78N  
RANGE R25W  
COUNTY Polk

### LOCATION

4000 Block of Commerce Drive, 20 feet North of the centerline of Commerce Drive, 18 feet West of the centerline of concrete entrance to 4025 Commerce Drive.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **044**

NAVD88 - FEET 820.14  
WDM DATUM - FEET 46.13  
NAVD88 - METERS 249.979  
SECTION 21  
TOWNSHIP T78N  
RANGE R25W  
COUNTY Polk

### LOCATION

3400 Block of Grand Avenue, 94 feet North of the centerline of Grand Avenue, 48 feet West of the West side of the West Des Moines Lift Station (3421 Grand Avenue), 18 feet East of the North/South fence line.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: 045

NAVD88 - FEET	817.27
WDM DATUM - FEET	43.26
NAVD88 - METERS	249.104
NAD83 NORTHING	565468.7
NAD83 EASTING	1575353.5
SECTION	21
TOWNSHIP	T78N
RANGE	R25W
COUNTY	Polk

### LOCATION

2400 Block of Grand Avenue, 114 feet Southeast of the centerline of Grand Avenue, 54 feet Northwest of the centerline of the Iowa Interstate Railroad, 118 feet West of the centerline of the entrance to Raccoon River Regional Park.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **046**

NAVD88 - FEET 819.97  
WDM DATUM - FEET 45.96  
NAVD88 - METERS 249.927  
SECTION 15  
TOWNSHIP T78N  
RANGE R25W  
COUNTY Polk

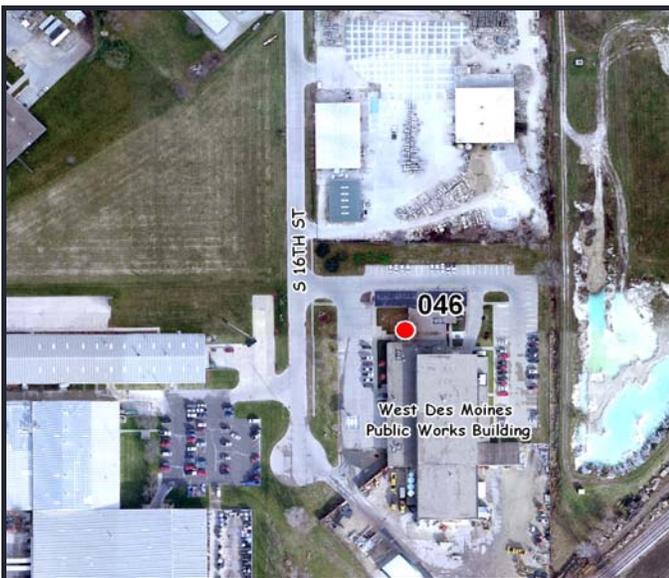
## LOCATION

560 South 16th Street, 46.5 feet South of the Northwest corner of the City of West Des Moines Public Works Building, 4 feet West of building.

## DESCRIPTION

Standard Benchmark.

## NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: 049

NAVD88 - FEET 812.36  
WDM DATUM - FEET 38.35  
NAVD88 - METERS 247.608  
SECTION 11  
TOWNSHIP T78N  
RANGE R25W  
COUNTY Polk

### LOCATION

Intersection of 4th Street and Vine Street, Northeast corner of intersection, 50 feet East of the centerline of 4th Street, 50 feet North of the centerline of Vine Street.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **054**

NAVD88 - FEET	818.98
WDM DATUM - FEET	44.97
NAVD88 - METERS	249.625
SECTION	28
TOWNSHIP	T78N
RANGE	R25W
COUNTY	Polk

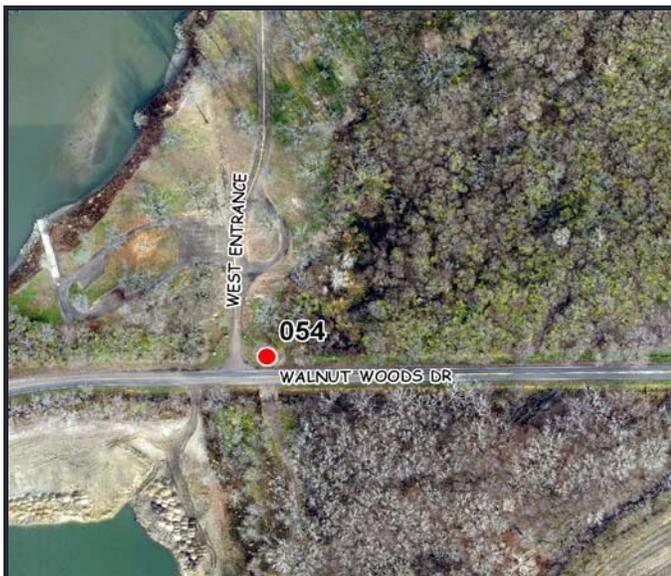
### LOCATION

Intersection of Walnut Woods Drive and West entrance to Walnut Woods State Park, Northeast corner of intersection, 20 feet East of Walnut Woods State Park sign, 5 feet South of fence.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **055**

NAVD88 - FEET 823.04  
WDM DATUM - FEET 49.03  
NAVD88 - METERS 250.863  
SECTION 27  
TOWNSHIP T78N  
RANGE R25W  
COUNTY Polk

### LOCATION

1700 Block of Walnut Woods Drive, 24 feet East of East Gate Post of entrance of Hidden Valley Soccer Complex, and 3 feet South of 6 foot chain link fence of entrance of Hidden Valley Soccer.

### DESCRIPTION

Standard Benchmark.

### NOTE

Point has been reset, elevation needs to be verified.





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **057**

NAVD88 - FEET 935.60  
WDM DATUM - FEET 161.59  
NAVD88 - METERS 285.171  
SECTION 23  
TOWNSHIP T78N  
RANGE R25W  
COUNTY Polk

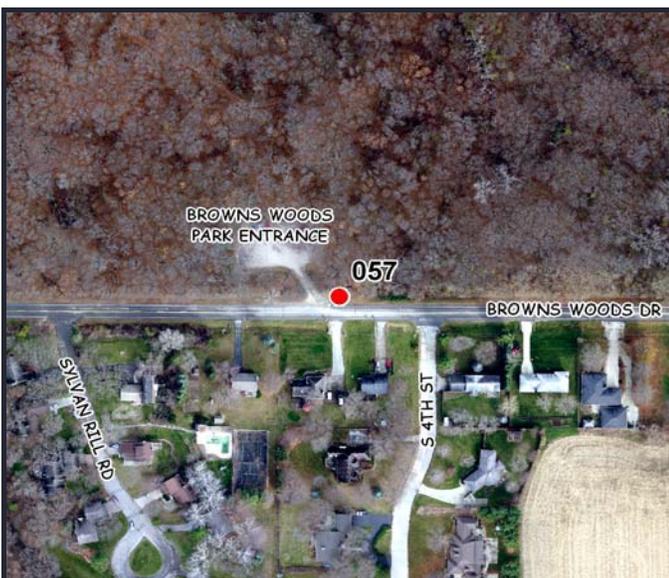
## LOCATION

400 Block of Browns Woods Drive, 20 feet East of entrance to Browns Woods Park, 30 feet North of centerline of Browns Woods Drive

## DESCRIPTION

Standard Benchmark.

## NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **058**

NAVD88 - FEET 812.24  
WDM DATUM - FEET 38.23  
NAVD88 - METERS 247.572  
SECTION 14  
TOWNSHIP T78N  
RANGE R25W  
COUNTY Polk

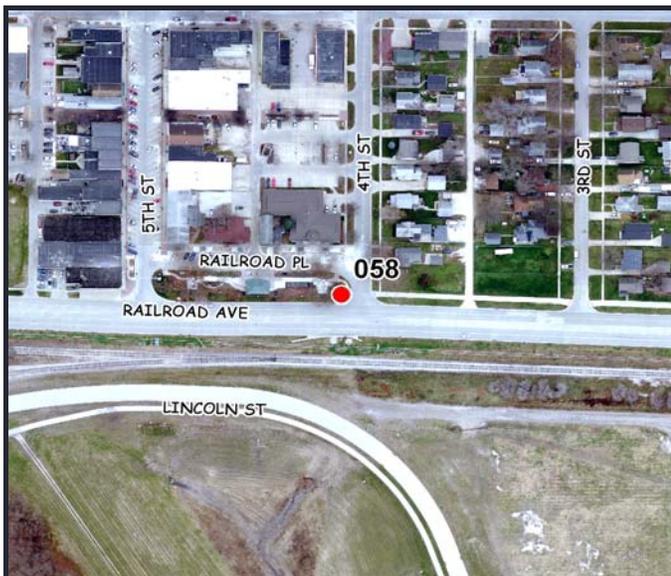
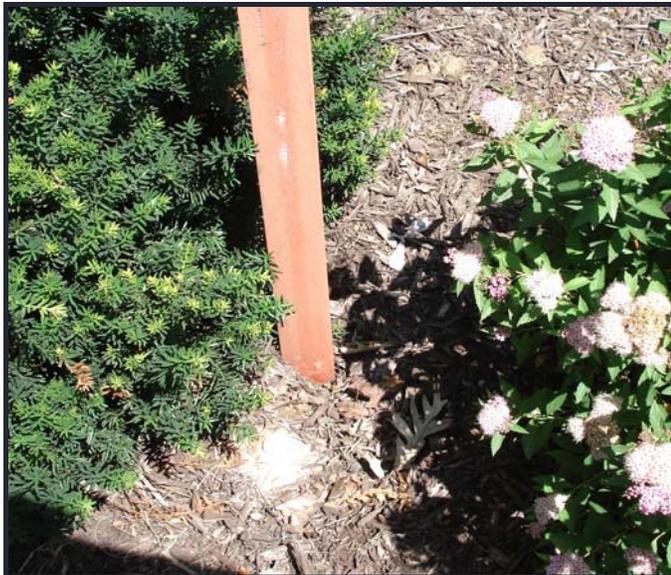
### LOCATION

Intersection of 4th Street and Railroad Avenue,  
Northwest corner of intersection, 41 feet West of  
centerline of 4th Street, 55 ± feet North of centerline of  
Railroad Avenue.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **061**

NAVD88 - FEET 945.82  
WDM DATUM - FEET 171.81  
NAVD88 - METERS 288.287  
NAD83 NORTHING 577452.0  
NAD83 EASTING 1576870.3  
SECTION 03  
TOWNSHIP T78N  
RANGE R25W  
COUNTY Polk

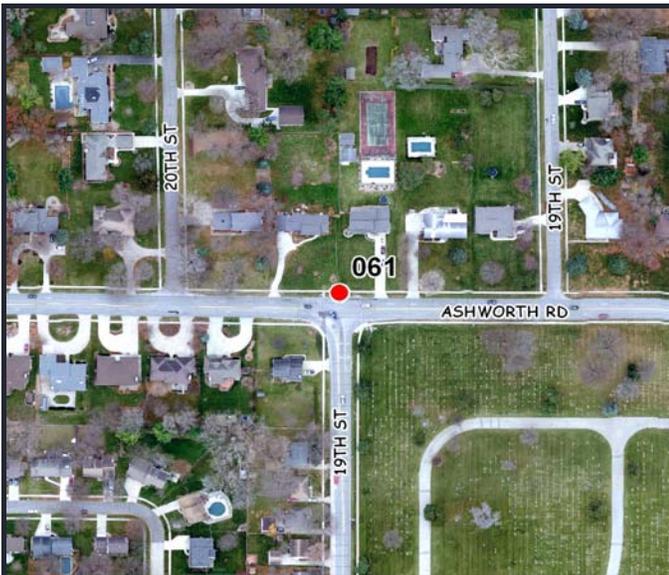
## LOCATION

Intersection of 19th Street (South) and Ashworth Road, North of intersection, 3.5 feet West of centerline of 19th Street extended, 26.5 feet North of centerline of Ashworth Road.

## DESCRIPTION

Standard Benchmark.

## NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: 062

NAVD88 - FEET 943.18  
WDM DATUM - FEET 169.17  
NAVD88 - METERS 287.482  
NAD83 NORTHING 577438.7  
NAD83 EASTING 1574202.7  
SECTION 04  
TOWNSHIP T78N  
RANGE R25W  
COUNTY Polk

### LOCATION

Intersection of 28th Street (North) and Ashworth Road, South of intersection, 15.5 feet West of centerline of 28th Street extended, 23.5 feet South of centerline of Ashworth Road.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **063**

NAVD88 - FEET	939.77
WDM DATUM - FEET	165.76
NAVD88 - METERS	286.443
NAD83 NORTHING	577542.4
NAD83 EASTING	1571603.4
SECTION	04
TOWNSHIP	T78N
RANGE	R25W
COUNTY	Polk

### LOCATION

Intersection of 35th Street/Valley West Drive and Ashworth Road, Northeast corner of intersection, 59.5 feet East of centerline of 35th Street, 65.0 feet North of centerline of Ashworth Road.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **064**

NAVD88 - FEET	957.20
WDM DATUM - FEET	183.19
NAVD88 - METERS	291.756
NAD83 NORTHING	577432.5
NAD83 EASTING	1568918.9
SECTION	08
TOWNSHIP	T78N
RANGE	R25W
COUNTY	Polk

### LOCATION

Intersection of 42nd Street and Ashworth Road, South of intersection, 3 feet West of the centerline of 42nd Street extended, 25.5 feet South of centerline of Ashworth Road.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: 065

NAVD88 - FEET 825.77  
WDM DATUM - FEET 51.76  
NAVD88 - METERS 251.696  
NAD83 NORTHING 579969.5  
NAD83 EASTING 1582122.0  
SECTION 02  
TOWNSHIP T78N  
RANGE R25W  
COUNTY Polk

### LOCATION

Intersection of 8th Street and Center Street, Southeast corner of intersection, 7 feet East of the East curb line of turn lane on 8th Street, 6 feet South of traffic hand hole in Southeast parking, between East of curb and sidewalk.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **066**

NAVD88 - FEET 834.61  
WDM DATUM - FEET 60.60  
NAVD88 - METERS 254.390  
SECTION 03  
TOWNSHIP T78N  
RANGE R25W  
COUNTY Polk

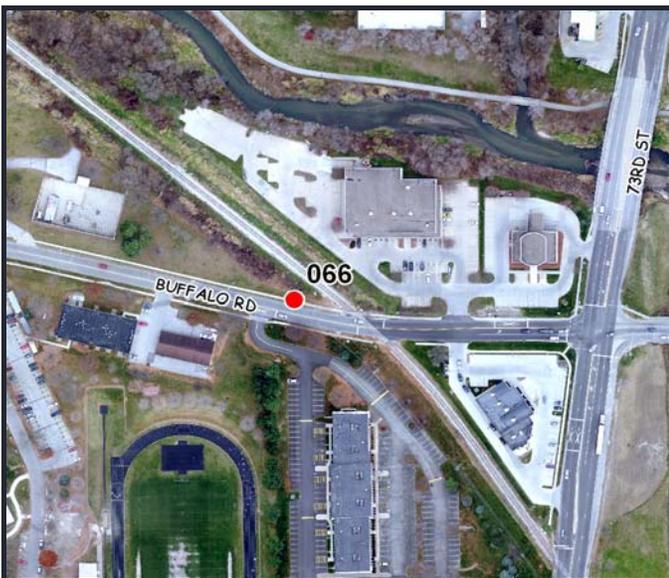
### LOCATION

1300 Block of Buffalo Road, 130 feet West of centerline of Norfolk and Southern Railroad Tracks along the centerline of Buffalo Road, 24.5 feet North of centerline of Buffalo Road, along edge of sidewalk.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **067**

NAVD88 - FEET 895.80  
WDM DATUM - FEET 121.79  
NAVD88 - METERS 273.041  
SECTION 03  
TOWNSHIP T78N  
RANGE R25W  
COUNTY Polk

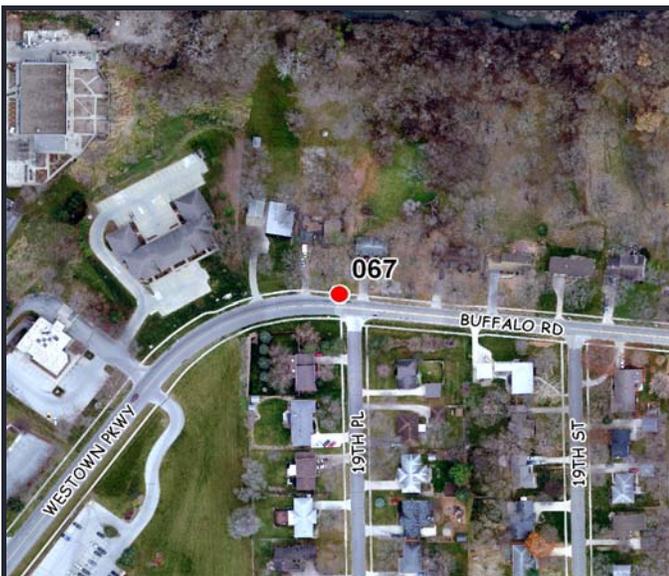
### LOCATION

Intersection of 19th Place and Buffalo Road, Northwest corner of intersection, 21.5 feet North of centerline of Buffalo Road, 23 feet West of centerline of 19th Place.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **068**

NAVD88 - FEET 839.09  
WDM DATUM - FEET 65.08  
NAVD88 - METERS 255.755  
SECTION 04  
TOWNSHIP T78N  
RANGE R25W  
COUNTY Polk

### LOCATION

Intersection of 22nd Street and University Avenue,  
Southeast corner of intersection, 77.5 feet East of  
centerline of 22nd Street, 39.5 feet South of centerline of  
University Avenue

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: 069

NAVD88 - FEET 870.59  
WDM DATUM - FEET 96.58  
NAVD88 - METERS 265.357  
SECTION 04  
TOWNSHIP T78N  
RANGE R25W  
COUNTY Polk

### LOCATION

Intersection of 28th Street and University Avenue, Southwest corner of intersection 41.5 feet South of centerline of University Avenue, 68.5 feet West of centerline of 28th Street.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **073**

NAVD88 - FEET	944.92
WDM DATUM - FEET	170.91
NAVD88 - METERS	288.013
NAD83 NORTHING	583155.3
NAD83 EASTING	1562200.6
SECTION	06
TOWNSHIP	T78N
RANGE	R25W
COUNTY	Polk

### LOCATION

Intersection of West Lakes Parkway and University Avenue, Southeast corner of intersection, 58.5 feet East of centerline of West Lakes Parkway, 73.0 feet South of centerline of University Avenue.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **074**

NAVD88 - FEET 878.77  
WDM DATUM - FEET 104.76  
NAVD88 - METERS 267.850  
SECTION 04  
TOWNSHIP T78N  
RANGE R25W  
COUNTY Polk

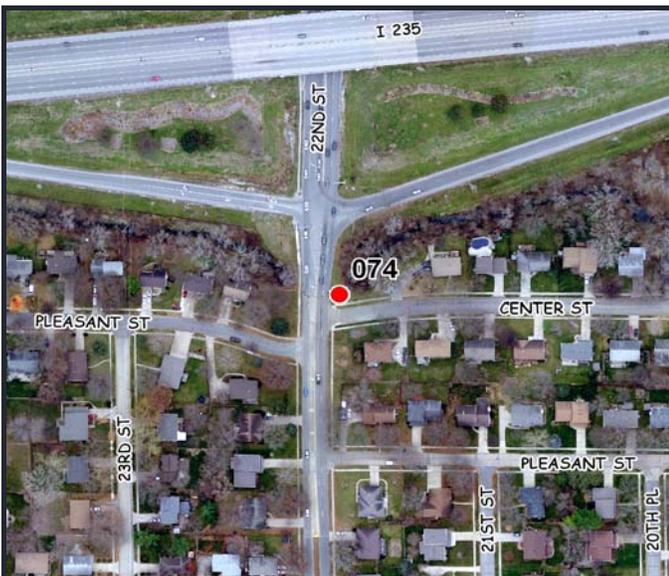
### LOCATION

Intersection of 22nd Street and Center Street, Northeast corner of intersection, 34.5 feet North of centerline of Center Street, 38 feet East of centerline of 22nd Street

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **079**

NAVD88 - FEET	882.08
WDM DATUM - FEET	108.07
NAVD88 - METERS	268.859
SECTION	03
TOWNSHIP	T78N
RANGE	R25W
COUNTY	Polk

### LOCATION

Intersection of 8th Street and Ashworth Road, Northwest corner of intersection, 90.5 feet West of the centerline of 8th Street, 32.3 feet North of centerline of Ashworth Road, between sidewalk and back of curb, 2.7 feet North of North back of curb.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **080**

NAVD88 - FEET 896.77  
WDM DATUM - FEET 122.76  
NAVD88 - METERS 273.336  
SECTION 03  
TOWNSHIP T78N  
RANGE R25W  
COUNTY Polk

### LOCATION

Intersection of 13th Street (North) and Ashworth Road, Northeast corner of intersection, 28.3 feet East of the centerline of 13th Street, 26.6 feet North of centerline of Ashworth Road.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **084**

NAVD88 - FEET	841.07
WDM DATUM - FEET	67.06
NAVD88 - METERS	256.359
NAD83 NORTHING	558438.3
NAD83 EASTING	1549116.9
SECTION	27
TOWNSHIP	T78N
RANGE	R26W
COUNTY	Dallas

### LOCATION

9100 Block of Raccoon River Drive, intersection of Raccoon River Drive and Windsor Court, 3 feet North of South fence, 25 feet West of fence corner, Sta 1124 ± stamped in PCC pavement on the South side.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **085**

NAVD88 - FEET	855.42
WDM DATUM - FEET	81.41
NAVD88 - METERS	260.733
NAD83 NORTHING	562593.3
NAD83 EASTING	1546901.9
SECTION	22
TOWNSHIP	T78N
RANGE	R26W
COUNTY	Dallas

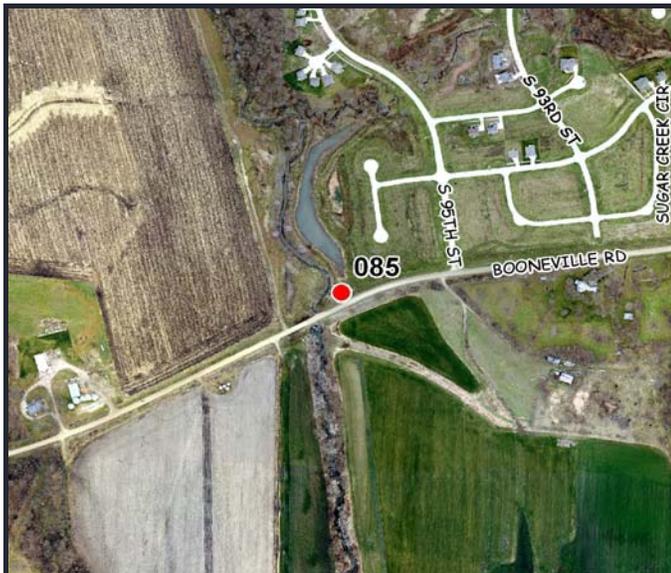
### LOCATION

9700 Block of Booneville Road, 3 feet South of North fence, 170 feet East of centerline of 12 foot diameter corrugated metal pipe under road.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **087**

NAVD88 - FEET 941.69  
WDM DATUM - FEET 167.68  
NAVD88 - METERS 287.028  
NAD83 NORTHING 567798.1  
NAD83 EASTING 1546632.5  
SECTION 15  
TOWNSHIP T78N  
RANGE R26W  
COUNTY Dallas

### LOCATION

3960 ± feet West of intersection of South 88th Street and 335th Street (Dallas County), 3 feet North of East/West fence, 10 feet East of North/South fence, on 335th Street across from house #3307 and #3309.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **088**

NAVD88 - FEET 1001.01  
WDM DATUM - FEET 227.00  
NAVD88 - METERS 305.109  
SECTION 09  
TOWNSHIP T78N  
RANGE R26W  
COUNTY Dallas

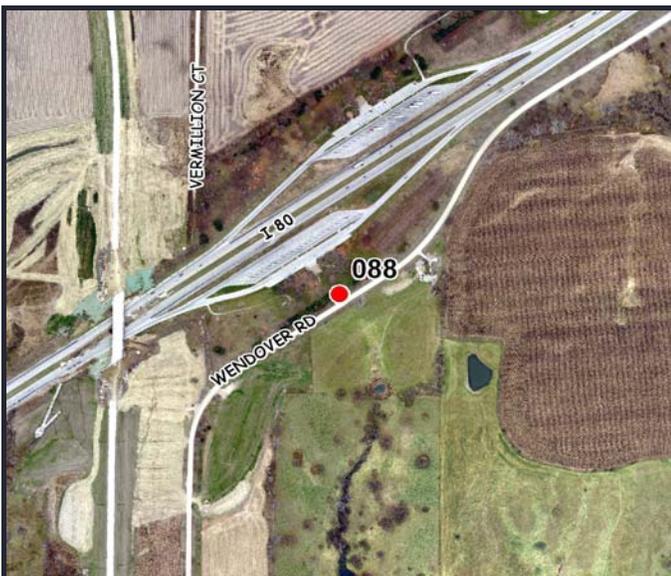
## LOCATION

1.3 ± miles West of intersection of Wendover Road (Dallas County) and 88th Street, 3 feet South of North fence and 300 feet South of Southeast corner of Rest Area main building.

## DESCRIPTION

Standard Benchmark.

## NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **089**

NAVD88 - FEET 1003.40  
WDM DATUM - FEET 229.39  
NAVD88 - METERS 305.837  
NAD83 NORTHING 574614.1  
NAD83 EASTING 1547883.8  
SECTION 10  
TOWNSHIP T78N  
RANGE R26W  
COUNTY Dallas

### LOCATION

Intersection of Wendover Road (Dallas County) and Wendover Lane, 3 feet Southeast of North fence, on centerline of Wendover Lane extended.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **090**

NAVD88 - FEET	985.28
WDM DATUM - FEET	211.27
NAVD88 - METERS	300.314
NAD83 NORTHING	575703.2
NAD83 EASTING	1546843.1
SECTION	10
TOWNSHIP	T78N
RANGE	R26W
COUNTY	Dallas

## LOCATION

Intersection of Ashworth Road and 98th Street, 3 feet North of the South fence, 93 feet East of centerline 98th Street (Waco Place, Dallas County).

## DESCRIPTION

Standard Benchmark.

## NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: 092

NAVD88 - FEET	1053.47
WDM DATUM - FEET	279.46
NAVD88 - METERS	321.009
NAD83 NORTHING	581076.4
NAD83 EASTING	1546808.8
SECTION	03
TOWNSHIP	T78N
RANGE	R26W
COUNTY	Dallas

### LOCATION

1 mile North of intersection of Ashworth Road and 98th Street (Waco Place, Dallas County), at the East 90° bend in road, East side of 98th Street.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **093**

NAVD88 - FEET	1046.58
WDM DATUM - FEET	272.57
NAVD88 - METERS	318.999
NAD83 NORTHING	583099.7
NAD83 EASTING	1546519.1
SECTION	03
TOWNSHIP	T78N
RANGE	R26W
COUNTY	Dallas

### LOCATION

Intersection of University Avenue and 98th Street (Waco Place, Dallas County), 30 feet West of the centerline of 98th Street 147 feet South of University Avenue centerline.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **095**

NAVD88 - FEET	881.69
WDM DATUM - FEET	107.68
NAVD88 - METERS	268.740
NAD83 NORTHING	567621.5
NAD83 EASTING	1544673.0
SECTION	16
TOWNSHIP	T78N
RANGE	R26W
COUNTY	Dallas

### LOCATION

1.1 miles West of intersection of 88th Street and 335th Street, (Dallas County), top of Southwest concrete bridge rail on bridge over Fox Creek.

### DESCRIPTION

Brass disk stamped "881.41"

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **097**

NAVD88 - FEET 972.64  
WDM DATUM - FEET 198.63  
NAVD88 - METERS 296.461  
NAD83 NORTHING 583061.0  
NAD83 EASTING 1555991.9  
SECTION 01  
TOWNSHIP T78N  
RANGE R26W  
COUNTY Dallas

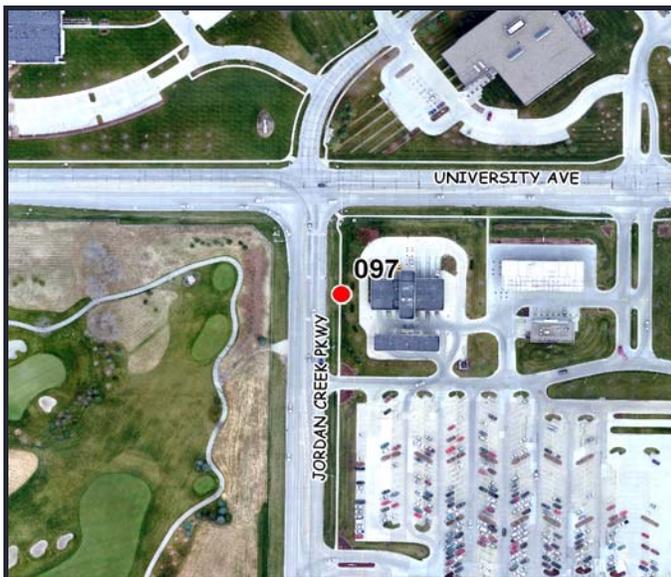
### LOCATION

Intersection of University Avenue and Jordan Creek Parkway, Southeast corner of intersection, 59.5 feet East of the centerline of Jordan Creek Parkway, 200 feet South of the centerline of University Avenue.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: 098

NAVD88 - FEET 972.42  
WDM DATUM - FEET 198.41  
NAVD88 - METERS 296.394  
NAD83 NORTHING 565204.3  
NAD83 EASTING 1558094.2  
SECTION 24  
TOWNSHIP T78N  
RANGE R26W  
COUNTY Dallas

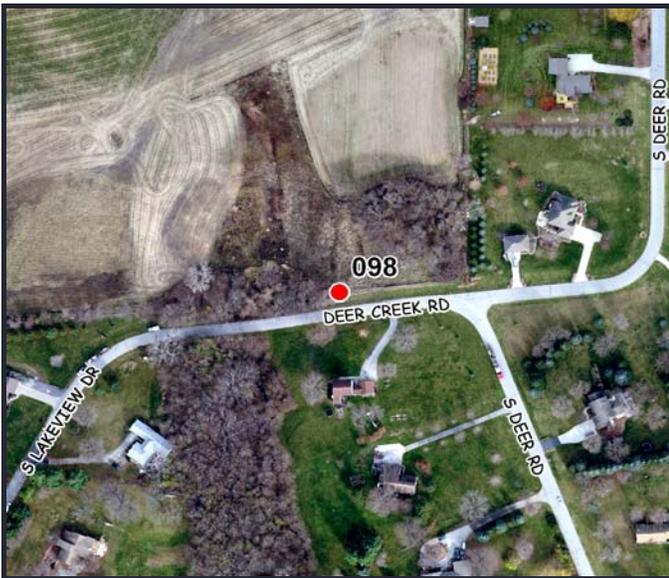
### LOCATION

Intersection of Deer Creek Road (PVT) and Deer Road (PVT), 226 feet West of the centerline of Deer Road (PVT) extended, 38 feet North of the centerline of Deer Creek Road.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **099**

NAVD88 - FEET 855.58  
WDM DATUM - FEET 81.57  
NAVD88 - METERS 260.781  
SECTION 24  
TOWNSHIP T78N  
RANGE R26W  
COUNTY Dallas

## LOCATION

410 ± feet West of intersection of S. Jordan Creek Parkway and Booneville Road, 2 feet North of East/West fence, South side of Booneville Road.

## DESCRIPTION

Standard Benchmark.

## NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: 100

NAVD88 - FEET 963.85  
WDM DATUM - FEET 189.84  
NAVD88 - METERS 293.781  
NAD83 NORTHING 556802.0  
NAD83 EASTING 1584737.1  
SECTION 26  
TOWNSHIP T78N  
RANGE R25W  
COUNTY Polk

### LOCATION

Intersection of South 1st Street and Southwest Leland Avenue, 133 feet South of the centerline of Southwest Leland Avenue extended, 47.5 feet West of the centerline of South 1st Street.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **101**

NAVD88 - FEET 946.03  
WDM DATUM - FEET 172.02  
NAVD88 - METERS 288.350  
SECTION 27  
TOWNSHIP T78N  
RANGE R25W  
COUNTY Polk

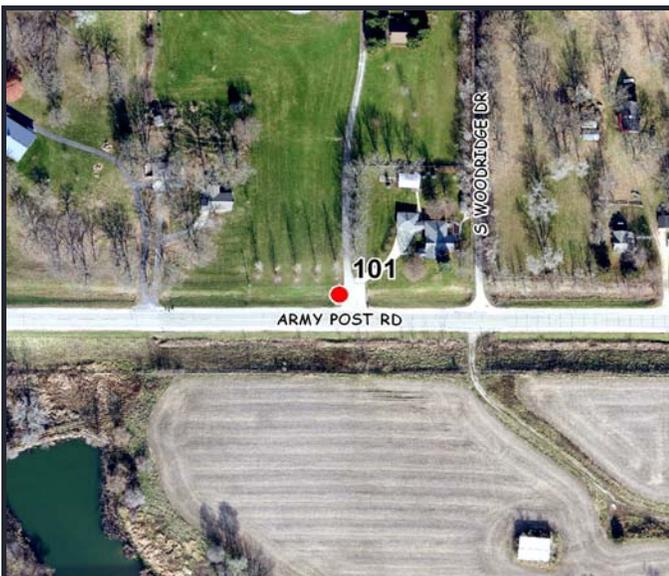
## LOCATION

1,584 ± feet West of intersection of South 11th Street and Army Post Road, 54.5 feet North of the centerline of Army Post Road.

## DESCRIPTION

Standard Benchmark.

## NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **102**

NAVD88 - FEET 927.29  
WDM DATUM - FEET 153.28  
NAVD88 - METERS 282.638  
SECTION 33  
TOWNSHIP T78N  
RANGE R25W  
COUNTY Polk

### LOCATION

Intersection of Army Post Road and South 22nd Street, Southwest corner of intersection, 80 feet South of the centerline of Army Post Road, 38 feet West of the centerline of South 22nd Street.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **103**

NAVD88 - FEET	828.99
WDM DATUM - FEET	54.98
NAVD88 - METERS	252.676
NAD83 NORTHING	556613.2
NAD83 EASTING	1568980.6
SECTION	29
TOWNSHIP	T78N
RANGE	R25W
COUNTY	Polk

## LOCATION

Intersection of Army Post Road and S.42nd Street, Northeast of intersection, 322 feet North of the centerline of Army Post Road, 32 feet East of the centerline of S.42nd Street.

## DESCRIPTION

Standard Benchmark.

## NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **104**

NAVD88 - FEET 930.77  
WDM DATUM - FEET 156.76  
NAVD88 - METERS 283.699  
NAD83 NORTHING 553504.8  
NAD83 EASTING 1559712.9  
SECTION 36  
TOWNSHIP T78N  
RANGE R26W  
COUNTY Dallas

### LOCATION

5,016 ± feet East of intersection of Beechwood Drive and Maffitt Lake Road, 29 feet South of the centerline of Maffitt Lake Road.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **105**

NAVD88 - FEET 962.52  
WDM DATUM - FEET 188.51  
NAVD88 - METERS 293.376  
SECTION 35  
TOWNSHIP T78N  
RANGE R26W  
COUNTY Dallas

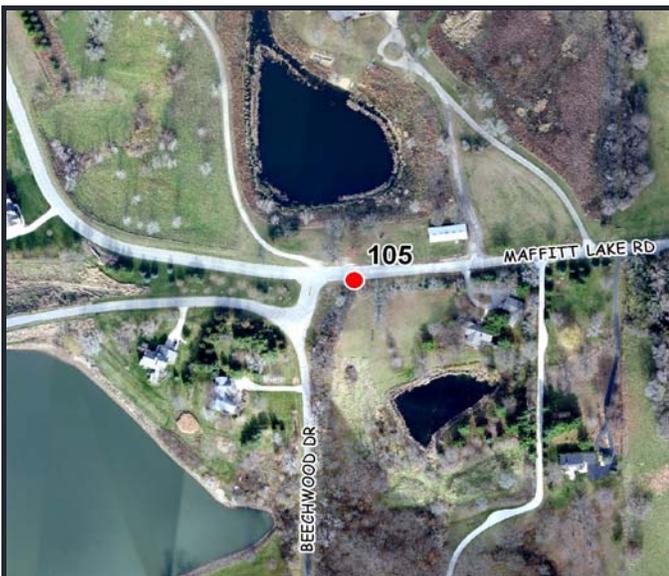
### LOCATION

216 feet East of intersection of Beechwood Drive and Maffitt Lake Road, 19.5 feet South of the centerline of Maffitt Lake Road.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **106**

NAVD88 - FEET	963.96
WDM DATUM - FEET	189.95
NAVD88 - METERS	293.815
NAD83 NORTHING	547394.0
NAD83 EASTING	1551717.7
SECTION	02
TOWNSHIP	T77N
RANGE	R26W
COUNTY	Madison

### LOCATION

Intersection of 105th Street and Wildrose Lane, South of intersection, 4 feet East of the centerline of Wildrose Lane extended, 2.5 feet North of East/West fence.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **107**

NAVD88 - FEET	995.27
WDM DATUM - FEET	221.26
NAVD88 - METERS	303.358
NAD83 NORTHING	547869.4
NAD83 EASTING	1555639.0
SECTION	02
TOWNSHIP	T77N
RANGE	R26W
COUNTY	Madison

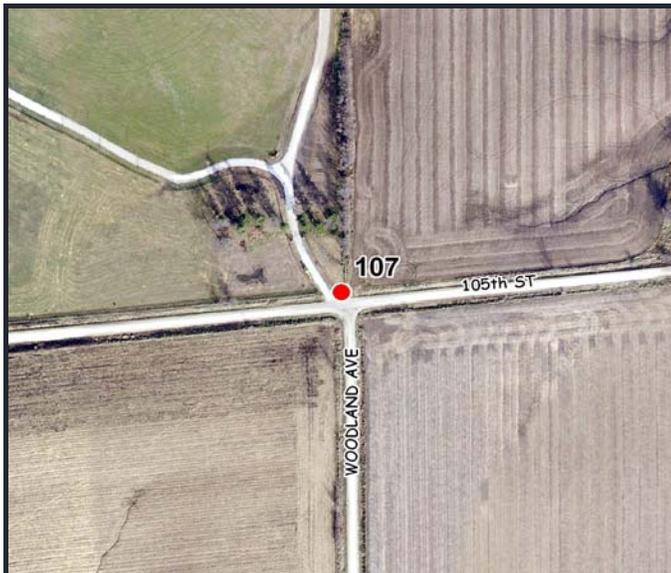
### LOCATION

Intersection of 105th Street and Woodland Avenue, North of intersection, 21 feet West of the centerline of Woodland Avenue extended, 2.5 feet South of East/West fence.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **108**

NAVD88 - FEET 985.98  
WDM DATUM - FEET 211.97  
NAVD88 - METERS 300.527  
NAD83 NORTHING 548434.6  
NAD83 EASTING 1560814.4  
SECTION 01  
TOWNSHIP T77N  
RANGE R26W  
COUNTY Madison

### LOCATION

Intersection of 105th Street and Warren Avenue, North of intersection, 4 feet West of the centerline extended, 20 feet South of East/West fence.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **109**

NAVD88 - FEET 937.36  
WDM DATUM - FEET 163.35  
NAVD88 - METERS 285.707  
NAD83 NORTHING 550995.0  
NAD83 EASTING 1566291.7  
SECTION 31  
TOWNSHIP T78N  
RANGE R25W  
COUNTY Polk

### LOCATION

2,640 ± feet South of intersection of Maffitt Lake Road and South 50th Street, 41 feet West of the Centerline of South 50th Street.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **110**

NAVD88 - FEET	969.98
WDM DATUM - FEET	195.97
NAVD88 - METERS	295.650
NAD83 NORTHING	551027.5
NAD83 EASTING	1576943.2
SECTION	34
TOWNSHIP	T78N
RANGE	R25W
COUNTY	Polk

## LOCATION

Intersection of South Orilla Road and South County Line Road, Northeast corner of intersection, 58 feet East of the centerline of South Orilla Road, 37 feet North of the centerline of South County Line Road.

## DESCRIPTION

Standard Benchmark.

## NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **113**

NAVD88 - FEET 916.21  
WDM DATUM - FEET 142.20  
NAVD88 - METERS 279.261  
SECTION 27  
TOWNSHIP T78N  
RANGE R25W  
COUNTY Polk

### LOCATION

Intersection of South 11th Street and Walnut Woods Drive, Southwest corner of intersection, 176 feet West of centerline of South 11th Street, 34 feet South of centerline of Walnut Woods Drive.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **118**

NAVD88 - FEET 975.58  
WDM DATUM - FEET 201.57  
NAVD88 - METERS 297.358  
SECTION 18  
TOWNSHIP T78N  
RANGE R25W  
COUNTY Polk

### LOCATION

Northeast corner of intersection of South 60th Street and Mills Civic Parkway, 18.5 feet Southeast of traffic signal pole, 1.5 feet Southeast of face of sidewalk, 31 feet West of fire hydrant.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **119**

NAVD88 - FEET 984.03  
WDM DATUM - FEET 210.03  
NAVD88 - METERS 299.930  
NAD83 NORTHING 573749.3  
NAD83 EASTING 1553293.0  
SECTION 11  
TOWNSHIP T78N  
RANGE R26W  
COUNTY Dallas

### LOCATION

Southeast corner of E.P. True Parkway and 81st Street, Northeast corner of the sidewalk junction, 3 feet East of North-South sidewalk, 3 feet North of East-West sidewalk, 34 feet South of E. P. True Pkwy South back of curb.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: 120

NAVD88 - FEET 1015.80  
WDM DATUM - FEET 241.79  
NAVD88 - METERS 309.620  
NAD83 NORTHING 576535.7  
NAD83 EASTING 1554281.7  
SECTION 11  
TOWNSHIP T78N  
RANGE R26W  
COUNTY Dallas

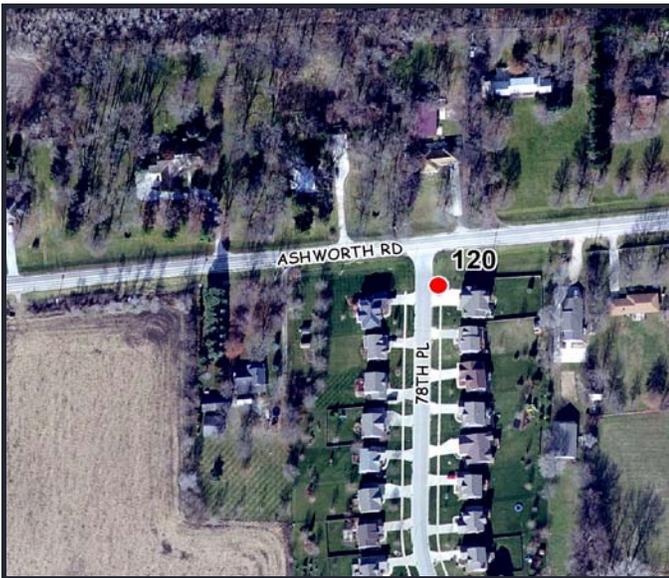
### LOCATION

Southeast corner of Ashworth Road and 78th Place, 2 feet West of North end of sidewalk at house #991, 13 feet East of back of curb, 19 feet North of North edge of driveway at junction of sidewalk.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: 122

NAVD88 - FEET	994.63
WDM DATUM - FEET	220.62
NAVD88 - METERS	303.160
NAD83 NORTHING	577321.4
NAD83 EASTING	1559850.8
SECTION	01
TOWNSHIP	T78N
RANGE	R26W
COUNTY	Dallas

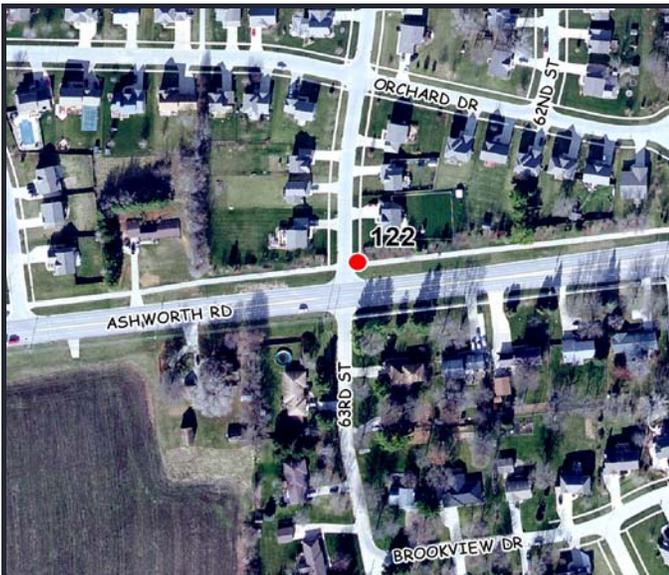
### LOCATION

Northeast corner of Ashworth Road and 63rd Street, Northwest corner of sidewalk junction, 1 foot West of North-South sidewalk, 1 foot North of East-West sidewalk/bike path, 11 feet East of back of curb.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **124**

NAVD88 - FEET	977.66
WDM DATUM - FEET	203.65
NAVD88 - METERS	297.990
NAD83 NORTHING	568905.3
NAD83 EASTING	1556016.4
SECTION	13
TOWNSHIP	T78N
RANGE	R26W
COUNTY	Dallas

### LOCATION

Intersection of Jordan Creek Parkway and Mills Civic Parkway, 169 ± feet East of the West end of median, in the center of 6 feet grass median in Mills Civic Parkway, 17 ± feet West of the angle point in the curb for the Westbound turn lane.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **126**

NAVD88 - FEET	843.23
WDM DATUM - FEET	69.22
NAVD88 - METERS	257.017
SECTION	10
TOWNSHIP	T78N
RANGE	R25W
COUNTY	Polk

### LOCATION

Southwest corner of Grand Avenue and E.P. True Parkway. 10 feet West of back of walk and 77 feet South of traffic signal pole at the Southwest corner of E.P. True Parkway and Grand Avenue.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: 127

NAVD88 - FEET 893.47  
WDM DATUM - FEET 119.46  
NAVD88 - METERS 272.330  
SECTION 08  
TOWNSHIP T78N  
RANGE R25W  
COUNTY Polk

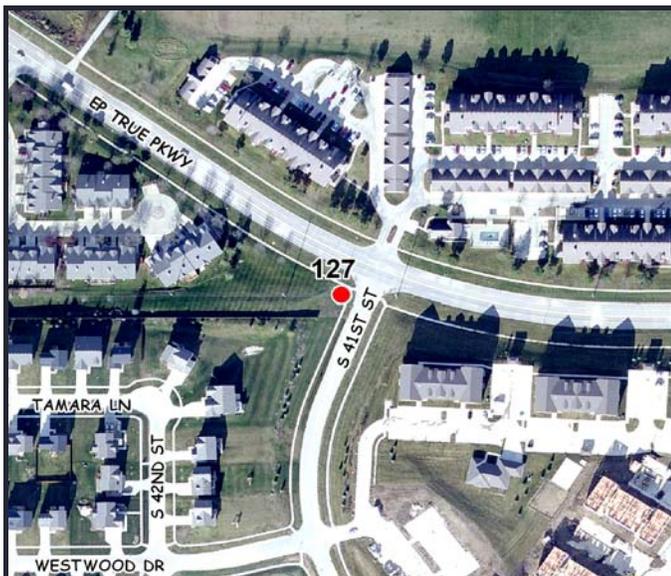
### LOCATION

Southwest corner of E.P. True and S. 41st Street. 4.5 feet South of the East-West back of walk and 4.5 feet west of the North-South back of walk.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **128**

NAVD88 - FEET 910.23  
WDM DATUM - FEET 136.22  
NAVD88 - METERS 277.439  
SECTION 07  
TOWNSHIP T78N  
RANGE R25W  
COUNTY Polk

## LOCATION

Northwest corner of E.P. True Parkway and Prairie View Drive. 61.5 feet West of the traffic signal manhole and 8.5 feet North of back of walk.

## DESCRIPTION

Standard Benchmark.

## NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **129**

NAVD88 - FEET 986.23  
WDM DATUM - FEET 212.22  
NAVD88 - METERS 300.604  
SECTION 17  
TOWNSHIP T78N  
RANGE R26W  
COUNTY Dallas

### LOCATION

Northwest corner of "V" Place and 335th Street. 5 feet South of North Right of Way fence on 335th Street and 8 feet East of the East gate post.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **130**

NAVD88 - FEET 873.86  
WDM DATUM - FEET 99.85  
NAVD88 - METERS 266.353  
SECTION 20  
TOWNSHIP T78N  
RANGE R26W  
COUNTY Dallas

### LOCATION

Southwest corner of Booneville Road and "V" Place. 3 feet North of South Right of Way fence on Booneville Road and in line with East edge of "V" Place. West side of field entrance.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **131**

NAVD88 - FEET	840.45
WDM DATUM - FEET	66.44
NAVD88 - METERS	256.170
NAD83 NORTHING	561343.7
NAD83 EASTING	1562437.7
SECTION	30
TOWNSHIP	T78N
RANGE	R26W
COUNTY	Polk

### LOCATION

Northwest corner of Booneville Road and Grand Avenue.  
46 feet North of Centerline of Grand Avenue and 53 feet  
West of the Centerline of Booneville Road.

### DESCRIPTION

Standard Benchmark.

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **USGS A**

NAVD88 - FEET 818.86  
WDM DATUM - FEET 44.85  
NAVD88 - METERS 249.589  
SECTION 15  
TOWNSHIP T78N  
RANGE R25W  
COUNTY Polk

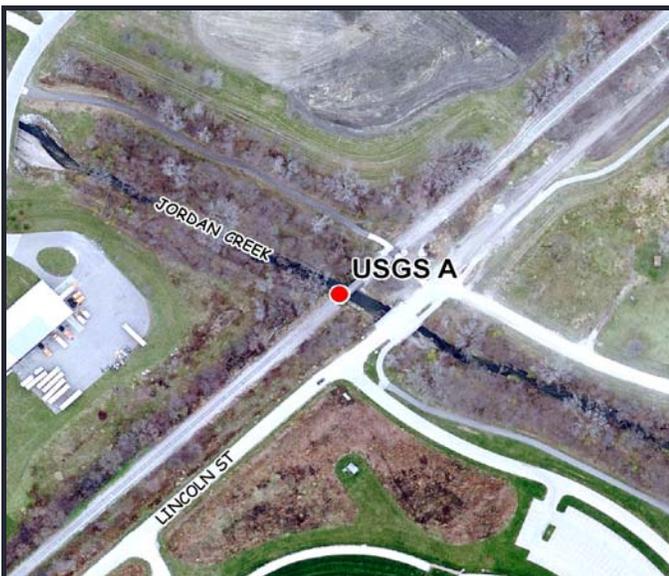
### LOCATION

Iowa Interstate Railroad, NW end of SW abutment of bridge number 3639, over Jordan Creek, 5.8 feet NW of NW rail, 1 foot below top of rail.

### DESCRIPTION

Standard USC & GS disk stamped "N 155 1950", NAVD88 benchmark

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **USGS C**

NAVD88 - FEET 835.07  
WDM DATUM - FEET 61.06  
NAVD88 - METERS 254.530  
SECTION 25  
TOWNSHIP T78N  
RANGE R26W  
COUNTY Dallas

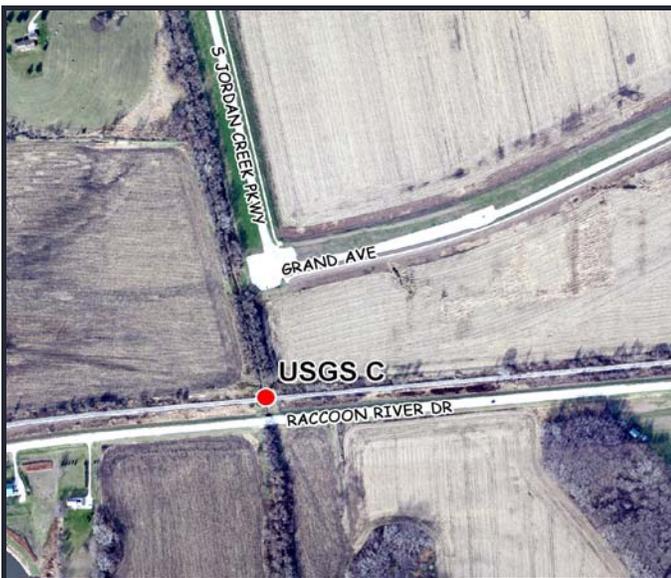
### LOCATION

1.3 miles West of S. 60th Street along Iowa Interstate Railroad, immediately North of Raccoon River Drive, top of West end of North headwall of concrete culvert.

### DESCRIPTION

Standard USC & GS disk stamped "ELEV 834.903"

### NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **USGS D**

NAVD88 - FEET	839.08
WDM DATUM - FEET	65.07
NAVD88 - METERS	255.752
SECTION	29
TOWNSHIP	T78N
RANGE	R25W
COUNTY	Polk

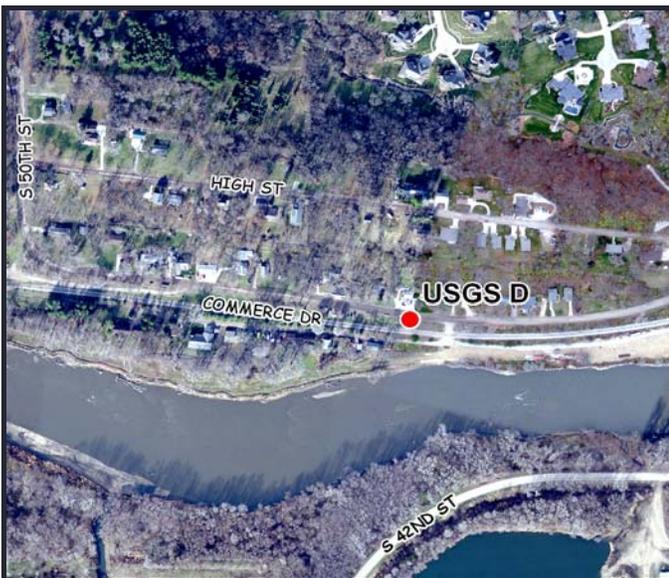
## LOCATION

In Commerce, 38.5 feet North of North rail of Iowa Interstate Railroad, 72 feet West of centerline of road leading to former bridge, 25 feet South of Center line of Commerce Drive, set in top of concrete post flush with ground.

## DESCRIPTION

Standard USC & GS disk stamped "Q 115 1950"

## NOTE





# City of West Des Moines, Iowa Vertical Control Network

Benchmark: **USGS E**

NAVD88 - FEET 845.50  
WDM DATUM - FEET 71.49  
NAVD88 - METERS 257.709  
SECTION 28  
TOWNSHIP T78N  
RANGE R26W  
COUNTY Dallas

### LOCATION

U.S.G.S. Tablet #845 - Southwest concrete headwall of railroad bridge #370.9 over creek on the North side of Raccoon River Drive, 300+/- West of East line of Section 28, Township 78 North, Range 26 West.

### DESCRIPTION

Stamped elevation 845.208 feet;

### NOTE

