

CHAPTER 138

STREET GRADES

138.01 Established Grades

138.02 Uniformity

138.03 Datum Established

138.04 Grades: How Calculated

138.05 Leading Streets

138.06 Elevations as Established

138.01 ESTABLISHED GRADES. The grades of all streets, alleys and sidewalks, which have be heretofore established by ordinance are hereby confirmed, ratified and established as official grades.

138.02 UNIFORMITY. All grades on any street, highway or alley shall be uniform between the grade points given and the grade of the alleys in any block shall conform to the grade of the streets intersecting such alleys and be uniform between street unless the grades thereof are otherwise stated or given.

138.03 DATUM ESTABLISHED. Two datum lines are hereby established for determining grades of all streets.

1. The datum line or base of levels, for establishing the grades of all streets within the City shall be at the south end of the cement door step of Stewart's Bank (210 South Main Street) situated on Lots 9 and 10, Block 7 of the Original Plat of Grimes, said datum line to be expressed figures as fifty (50) feet. The following bench marks for future levels are hereby established as follows:

West of the door sill of church on south side of First Street between Main and Jacob Streets, 45.28 feet;

South end of door sill on school house at South Main and South 5th Streets, 45.29 feet.

2. The datum line as of the adoption of this ordinance shall be established using the datum plane established by the United States Geological survey.

The datum line or base of levels, for establishing the grades of all streets within the City shall be relative to the United States Geological Survey (USGS) datum plane. The following bench marks for future levels are hereby established as follows:

Railroad spike in west side of power pole located 164 feet south of the intersection of First Street (Highway 44) and South Trailridge Road. Elevation 942.28.

Brass plug on top of northwest wingwall, southbound lane of Highway 141 bridge over Highway 44. Elevation: 991.64.

Brass plug on top of southeast bridge wingwall, northbound lane of Highway 141 bridge over Highway 44. Elevation: 990.68.

Top of United States Geodetic Monument #77, located along the west right-of-way line of Highway 141, approximately 1,344 feet north of NW 62nd Avenue. Elevation: 959.95.

Iowa Highway Department Bench Mark in west headwall of reinforced concrete box culvert under Highway 141, approximately 397 feet south of NW 62nd Avenue. Elevation: 949.09.

Iowa Highway Department Bench Mark in west headwall of 8-foot by 8-foot reinforced concrete box culvert under Highway 141, approximately 972 feet north of NW 54th Avenue. Elevation: 938.22.

138.04 GRADES: HOW CALCULATED. All grades established by this chapter prior to the date of adoption of this ordinance shall be calculated from the datum lines herein established in Section 138.03(1), and shall be calculated for the center of the streets on which they are established. Grades calculated after the adoption of this ordinance shall be calculated based upon United States Geological Survey Information established in Section 138.03(2).

138.05 LEADING STREETS. When a difference of the grades of the streets create a difference in the elevation of the sidewalks of two or more streets at their point of meeting the elevation of the grades at such places of meeting or corners of streets, shall conform to that of the leading street, and for this purpose all streets running north and south in the City shall be regarded as leading streets.

138.06 ELEVATIONS AS ESTABLISHED.

1. First Street, elevation above datum plane:

A. At center of James Street	47.25 feet
B. At center of Ewing Street	46.70 feet
C. At center of C.M. & St. P & P	45.22 feet
D. At center of Main Street	44.25 feet
E. At center of Jacob Street	38.00 feet

2. South 2nd Street, elevation above datum plane:

- | | |
|----------------------------------|------------|
| A. At center of James Street | 49.58 feet |
| B. At center of Ewing Street | 49.10 feet |
| C. At center of C.M. & St. P & P | 48.62 feet |
| D. At center of Main Street | 46.75 feet |
| E. At center of Jacob Street | 42.00 feet |
3. South 3rd Street, elevation above datum plane:
- | | |
|----------------------------------|------------|
| A. At center of James Street | 50.92 feet |
| B. At center of Ewing Street | 50.45 feet |
| C. At center of C.M. & St. P & P | 50.01 feet |
| D. At center of Main Street | 47.50 feet |
| E. At center of Jacob Street | 37.50 feet |
4. South 4th Street, elevation above datum plane:
- | | |
|----------------------------------|------------|
| A. At center of James Street | 52.26 feet |
| B. At center of Ewing Street | 50.00 feet |
| C. At center of C.M. & St. P & P | 49.23 feet |
| D. At center of Main Street | 42.00 feet |
| E. At center of Jacob Street | 35.50 feet |
5. South 5th Street, elevation above datum plane:
- | | |
|----------------------------------|------------|
| A. At center of James Street | 53.60 feet |
| B. At center of Ewing Street | 51.50 feet |
| C. At center of C.M. & St. P & P | 49.07 feet |
| D. At center of Main Street | 41.00 feet |
| E. At center of Jacob Street | 32.00 feet |
6. South corporation line, elevation above datum plane:
- | | |
|--|------------|
| A. At center of James Street | 54.75 feet |
| B. At center of Ewing Street | 51.00 feet |
| C. At center of C.M. & St. P & P | 50.09 feet |
| D. At center of Main Street | 37.50 feet |
| E. At a point 104 east
of center of Main Street | 36.00 feet |
| F. At center of Jacob Street | 45.00 feet |
7. Jacob Street, elevation above datum plane:
- | | |
|------------------------------------|--|
| A. At a point 173.52 feet north of | |
|------------------------------------|--|

center of Walker Street

43.00 feet