

Attachments:

Staff Report, Current Code

Planning Commission Public Hearing: Thursday, April 6, 2017

City Council Introduction: Tuesday April 11, 2017

City Council Final: Tuesday April 25, 2017

City Council Request (Ordinance):

Introduction of an Ordinance to Amend Unified Development Code Ordinance #14-5634 to provide Relative to Article 10 Streets, Sidewalks, and Railroads Section 10.2.2 Street Geometric Design Standards I) (Case#TA-2017-03-00005) Recommend approval by Planning Commission.

Additional Information:

10.2.2. Street Geometric Design Standards

"I. The minimum centerline street grade road grade for local streets shall be BASE FLOOD ELEVATION ("BFE") as established by the latest Flood Insurance Rate Map ("FIRM) should be the greater of 1.0 feet above the 50 year flood elevation or record inundation elevation, unless Unless otherwise unanimously approved by the Director Public Works, the City Building Official, and the City Engineer the centerline of all Collector or Arterial streets shall be constructed at or above the FIRM Base Flood Elevation or record inundation whichever is greater."

Public Hearing:

For: NONE

Against: NONE

Commission Recommendation:

Motion: To recommend approval to proposed change to Section 10.2.2

For: Matt Sandifer, Jeffrey Smith, Stanley Young

Against: NONE

Abstain: NONE

Absent: Jimmy Meyer, William Travis

Ordinance to Read:

WHEREAS the Planning Commission held a public hearing on April 6, 2017 and recommended approval to change Unified Development Code Ordinance #14-5634 10.2.2. Street Geometric Design Standards "I. The minimum centerline street grade road grade for local streets shall be BASE FLOOD ELEVATION ("BFE") as established by the latest Flood Insurance Rate Map ("FIRM) should be the greater of 1.0 feet above the 50 year flood elevation or record inundation elevation, unless Unless otherwise unanimously approved by the Director Public Works, the City Building Official, and the City Engineer the centerline of all Collector or Arterial streets shall be constructed at or above the FIRM Base Flood Elevation or record inundation whichever is greater."

- (4) The requirements of the Louisiana Department of Transportation and Development when so noted and if the subdivision or any lot contained therein abuts a state highway or connecting street;
- (5) All applicable standards and regulations adopted by the city; and
- (6) The current adopted rules of procedure of the planning commission available in the office of the city planner.
- C. Clear Sight Triangle
- At the intersection of a driveway and a street and on all corner lots (the intersection of two streets), a clear sight triangle must be established as set forth in Appendix C.

10.1.3 Maintenance of Required Improvements

The responsibility for maintenance of all required improvements under this Article shall remain with the owner, their successors, heirs, assignees or any consenting grantee. All improvements required under this Article shall be maintained in good surface and structural condition and in compliance with any building or electrical code to ensure continued compliance with the provisions of this Article.

10.2 Streets and Alleys

10.2.1 Street Classification

The following definitions apply to the street classification system adopted in the <u>City of Hammond Major Street Plan</u> and required in conjunction with new subdivisions. Local streets have the sole function of providing access to abutting properties. Local streets have an average daily traffic volume less than five thousand (5,000) vehicles per day. Collector streets provide access to abutting properties but also serve to connect local streets with arterial streets. Collector streets have an average daily traffic volume of between five thousand (5,000) and ten thousand (10,000) vehicles per day. Minor arterial streets are major streets in the city's street network that serve traffic moving into, out of and around the city, carrying volumes of traffic between ten thousand (10,000) and twenty five thousand (25,000) vehicles per day. Major arterial streets are major streets in the city's street network that serve traffic moving into, out of and around the city, carrying volumes of traffic between twenty five thousand (25,000) and fifty thousand (50,000) vehicles per day. The <u>Proposed Major Street Standards Table ES-1</u> located in the <u>City of Hammond Major Street Plan forms a part of this section</u>.

10.2.2 Street Geometric Design Standards

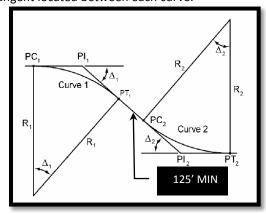
- A. Improvements which are required to be installed by the subdivider shall be designed by a civil engineer registered in the State of Louisiana and shall conform to the minimum design standards contained in these regulations and other regulations of the parish and state. All subdivision proposals shall be consistent with the need to minimize flood damage.
- B. General Street Design Criteria for Hammond Roads The following table titled, "City of Hammond Urban Design Standards for Roadways and Streets," shall be used on City of Hammond routes for each of the roadway classifications. Any exceptions to these design standards or when criteria is not specified in this table shall be developed with approval of the City Engineer and in accordance with the latest edition of the AASHTO design manual titled, "A Policy on Geometric Design of Highways and Streets."

| CITY OF HAMMOND URBAN DESIGN STANDARDS FOR ROADWAYS AND STREETS | | | |
|--|------------------|------------------|-----------------|
| | | | |
| Design Speed (mph) | 40-45 | 40-45 | 30 |
| Level of Service | С | С | N/A |
| Number of Lanes | 2 (min) 4 (typ) | 2-4 | 2 |
| Width of Travel Lanes (ft) | 11-12 | 11-12 | 11-12 |
| Width of Median (ft) | | | |
| Raised | 6-30 | 6-30 | N/A |
| TWLTL* | 11-14 | 11-14 | |
| Width of Sidewalk (ft) | | | |
| Offset from curb | 5 | 5 | 5 |
| Adjacent to Curb | 6 | 6 | 6 |
| Fore Slope | 3:1 Max | 3:1 Max | 3:1 Max |
| Back Slope | 3:1 Max | 3:1 Max | 2:1 Max |
| Pavement Cross Slope (%) | 2.5 | 2.5 | 2.5 |
| Stopping Sight Distance (ft) | | | 300 |
| 40 mph | 305 | 305 | |
| 45 mph | 360 | 360 | |
| Maximum Superelevation (%) | 4 | 4 | 4 |
| Minimum Radius With Normal Crown | | | 343 |
| 40 mph | 790 | 790 | |
| 45 mph | 1080 | 1080 | |
| Minimum Radius With 2.5% S.E. | | | 267 |
| 40 mph | 576 | 576 | |
| 45 mph | 771 | 771 | |
| Minimum Radius With Full S.E. | | | 250 |
| 40 mph | 533 | 533 | |
| 45 mph | 711 | 711 | |
| Maximum Grade | | | 9 |
| 40 mph | 7 | 9 | |
| 45 mph | 6 | 8 | |
| Minimum Vertical Clearance (ft) | 16 | 15 | 15 |
| Minimum Horizontal Clearance (ft) | | | |
| From Back of Curb | 6 (min) 15 (des) | 4 (min) 15 (des) | 1 (min) 6 (des) |

TWTL*=Two Way Left Turn Lane

- C. Curb and gutter are required on all streets unless otherwise waived and shall include a subsurface drainage system designed to the specifications of the City of Hammond and in accordance with Article 12 of these regulations. Curb shall be either Barrier or Mountable type and designed and constructed in accordance with the latest LA DOTD Standard details and specifications for Concrete Curb.
- D. Curb and Gutter requirement may be waived on streets where there are estate size lots of 1 acre minimum and 150 feet frontage minimum. This waiver requires approval of the planning commission and the city council. Size and type of culverts used shall be approved by the City Engineer.
- E. Bridges shall be designed in accordance with the latest <u>LA DOTD Bridge Design standards</u> and shall be constructed with minimum 6' sidewalks located on both sides of every bridge. The width of bridges for curbed facilities with sidewalks shall be the same as the curb to curb width of the roadway. Bridges of primary benefit to the applicant and for service of his/her subdivision shall be constructed at the full expense of the applicant. Sharing of expenses for bridges of benefit to the applicant and the City shall be agreed upon by both parties.
- F. Minimum radii for selected design speed shall be in accordance with the table "City of Hammond Urban Design Standards for Roadways and Streets" Shown in <u>Sub-Section 10.2.2B</u>. A reverse curve is two adjacent,

or nearly so, circular curves with deflections in opposite directions. When reverse curves are utilized there shall be a minimum 125' tangent located between each curve.



When developing left or right turn lanes a straight line taper may be used. The taper rate for turn lanes shall be between 8:1 and 15:1 for design speeds of 30 mph and 50 mph, respectively. It is preferred that the transitions in number of lanes should be accomplished using reverse curves appropriate for the design speed of the roadway. Required lane width transitions for roadways will be calculated based upon the following formula:

 $L= (w) (s)^2$ for design speeds < 45 mph 60

Where L = Taper length (ft), w = width of widening (ft), and s = design speed (mph).

- G. Vertical alignment shall be based on symmetric parabolic vertical curves based on stopping sight distances between roadway grade changes. The minimum length of vertical curve is equal to three (3) times the design speed. For curbed roadways the curve length should not provide a K value that exceeds 167 in order to provide proper roadway drainage.
- H. Superelevation, if required, of the roadway should be accomplished using the design guidelines in the latest edition of the LA DOTD Road Design Manual governing superelevation of roadways.
- I. The minimum road grade for local streets should be the greater of 1.0 feet above the 50-year flood elevation or record inundation elevation. Unless otherwise approved by the Director Public Works, the centerline of all Collector or Arterial streets shall be constructed at or above the FIRM Base Flood Elevation or record inundation whichever is greater.
- J. Maximum grade through intersections shall be four percent. The maximum grade shall extend a minimum of 50 feet each direction from the centerline of the intersecting streets or to the end of radii, whichever is the longer distance.

10.2.3 Street and alley rights-of-way

- A. Major Street and major road rights-of-way shall conform to the widths designated on the Major Street Plan as adopted by the Planning Commission and on all subsequent amendments and additions thereto.
- B. Minimum right-of-ways for streets and alleys shall be as shown for street cross sections illustrated in Appendix B.
- C. Alleys shall be paved and part of a private street development as described in <u>Chapter 10.3.</u>. Dead-end alleys may not be allowed unless approved by the City Engineer.
- D. Adequate right of way at subdivision entrances shall be dedicated as described in Chapter 10.4..
- E. Reserve Strips. The creation of reserve strips shall not be permitted adjacent to a proposed street in such a manner as to deny access from adjacent property to such street, without first receiving unanimous approval from the Planning Commission members.