



**AGENDA**  
**City of Lucas**  
**Joint Meeting**  
**Planning and Zoning Commission**  
**&**  
**City Council**  
**September 12, 2019**  
**7:00 PM**  
**City Hall – Council Chambers**  
**665 Country Club Road – Lucas, Texas**

*Notice is hereby given that a joint meeting between the Planning and Zoning Commission and the City Council will be held on Thursday, September 12, 2019 at 7:00 pm at the Lucas City Hall, 665 Country Club Road, Lucas, Texas 75002 at which time the following agenda will be discussed.*

### **Call to Order**

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- Roll Call of both the Planning and Zoning Commission and the City Council
- Reminder to turn off or silence cell phones
- Pledge of Allegiance

### **Regular Agenda**

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1. Discuss drainage challenges throughout the City and consider possible solutions to install, maintain, and promote drainage on private and public property and rights-of-ways.
2. Adjournment of both the Planning and Zoning Commission and City Council.

### **Certification**

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*I do hereby certify that the above notice was posted in accordance with the Texas Open Meetings Act on the bulletin board at Lucas City Hall, 665 Country Club Road, Lucas, Texas 75002 and on the City's website at [www.lucastexas.us](http://www.lucastexas.us) on or before 6:00 p.m. on September 5, 2019.*

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*Stacy Henderson, City Secretary*

*In compliance with the American with Disabilities Act, the City of Lucas will provide for reasonable accommodations for persons attending public meetings at City Hall. Requests for accommodations or interpretive services should be directed to Stacy Henderson at 972-912-1211 or by email at [shenderson@lucastexas.us](mailto:shenderson@lucastexas.us) at least 48 hours prior to the meeting.*



# City of Lucas

## Planning and Zoning Request

### September 12, 2019

Item No. 01

Requester: City Council and Planning and Zoning Commission

#### **Agenda Item Request**

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Discuss drainage challenges throughout the City and consider possible solutions to install, maintain, and promote drainage on private and public property and rights-of-ways.

#### **Background Information**

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At the May 16, 2019, City Council meeting, Councilmembers stated they would like to consider hosting a joint meeting with the Planning and Zoning Commission to review City's ordinances as it pertains to drainage. City Engineer Stanton Foerster has met with the Planning and Zoning Commission and City Council regarding drainage workshop agenda topics and identified the following suggested topics:

##### **Current City ordinances to enforce or update**

- Property owner responsibility regarding maintaining drainage on their property
- Drainage study requirements with new development
- Homeowners Association drainage systems versus privately owned drainage systems
- Establishing minimum size requirements when a study is done for small subdivisions
- What the City expects when subdivisions come in regarding drainage studies and how the ordinance should read
- Drainage requirements for less than five acres
- Require drainage study/impact from property owners.
- Constructing berms and diverting flow without a permit

##### **Floodplain Development/Maintenance**

- Conditions and maintenance of existing creeks
- Legal requirements and restrictions related to cleaning out creek areas
- Regulations for building in flood zones (floodway, floodplain, etc.)
- Discuss the water shed pond behind the Bait Shop at Southview/West Lucas Road
- Education regarding different types of easements, including Federal flow easements and the 100-year flood plain
- Educating the community regarding drainage including creeks

##### **Budgeting for drainage issues/maintenance**

- Budgeting options for aging/undersized infrastructure and current/future maintenance
- Determine if Public Improvement Districts are a viable option to fund drainage improvements

The following links were shared with the Planning and Zoning Commission as part of their review of drainage and stormwater requirements:



# City of Lucas Planning and Zoning Request September 12, 2019

Item No. 01

City of Lucas Code of Ordinances, Article 10.04 Stormwater Runoff Regulations and Control  
<https://z2codes.franklinlegal.net/franklin/Z2Browser2.html?showset=lucasset>

<http://fairviewtexas.org/pdf/EngineeringDept/FairviewStormwaterOrdinance.pdf>

## **Attachments/Supporting Documentation**

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1. Drainage fees from surrounding cities.
2. Ordinance 2009-04-00645 Stormwater Run-off Regulations

## **Budget/Financial Impact**

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NA

## **Recommendation**

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NA

## **Motion**

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There is no action on this item, it is for discussion purposes only.

### Town of Fairview Drainage Fee

The following schedule of drainage charges is hereby levied against all real properties within the town subject to drainage charges under subchapter C of chapter 402 of the Texas Local Government Code:

Land Use Description	Monthly Charge
Single-family home	\$5.75 per dwelling unit
Duplex	\$5.75 per dwelling unit
Manufactured home, mobile homes, camper and/or recreational vehicle	\$5.75 per dwelling unit
Apartment and/or other MF residential	\$5.75 per dwelling unit
Retail/office/commercial	\$1.10/1,000 sq. ft. of impervious surface
Industrial	\$1.10/1,000 sq. ft. of impervious surface

### Town of Prosper Drainage Fee

Fees shall be based on a property's impact on the town's drainage utility system. Impact shall be based on the parcel size for residential property and the impervious area for all other nonexempt property. Ten percent (10%) of the area of the public streets and sidewalks on a property shall count towards that property's impervious area. The drainage utility fees shall be established according to the following schedule on a monthly basis:

Property Type	Parcel Size (sq. ft.)	Fees/Rates
Single-family residential		
Tier 1	<10,000	\$3.00
Tier 2	≥ 10,000	\$5.15
All other nonexempt property		\$1.00 per 1,000 square feet of impervious area; the minimum fee shall be \$2.75 per property

### City of Allen Drainage Fee

<b>Drainage Service Fees</b>	
<b>Property Classification</b>	<b>Base Rate</b>
Single Family Residential Property	\$3.00 per dwelling located on the property
Multi-Family Residential Property	\$20.42
Commercial/Industrial Property	\$20.42
Day Care Facility	\$15.88
Religious Facility	\$15.88

- |                                     |                    |
|-------------------------------------|--------------------|
| <input type="checkbox"/>            | Annexation         |
| <input type="checkbox"/>            | Disannexation      |
| <input checked="" type="checkbox"/> | Code of Ordinances |
| <input type="checkbox"/>            | Other              |

**ORDINANCE # 2009-04-00645**  
**[STORMWATER RUN-OFF REGULATIONS]**

**AN ORDINANCE OF THE CITY OF LUCAS, TEXAS AMENDING THE CODE OF ORDINANCES OF THE CITY OF LUCAS BY AMENDING CHAPTER 10, "SUBDIVISIONS" BY ADDING A NEW ARTICLE 10.04 TITLED "STORMWATER RUNOFF REGULATIONS AND CONTROL"; PROVIDING A REPEALING CLAUSE; PROVIDING A SAVINGS CLAUSE; PROVIDING A SEVERABILITY CLAUSE; PROVIDING A PENALTY CLAUSE AND PROVIDING AN EFFECTIVE DATE.**

**WHEREAS**, the after discussing and consideration, the City Council of the City of Lucas, Texas, finds that it is in the best interest of the City and its citizens to amend Chapter 10, "Subdivisions" by adding Article 10.04 "Stormwater Runoff Regulations."

**NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF LUCAS, TEXAS:**

**SECTION 1.** That Chapter 10 "Subdivision" of the City of Lucas Code of Ordinances be, and the same is hereby amended by adding a new Article 10.04 titled "Stormwater Runoff Regulations and Control" to read as follows:

**"ARTICLE 10.04 STORMWATER RUNOFF REGULATIONS AND CONTROL**

**Sec. 10.04.001      Purpose**

The purpose of this Article is to diminish threats to the public health and safety caused by the runoff of excess stormwater, to minimize movement of soils resulting from development, to reduce the possibilities of hydraulic overloading of the storm sewer drainage system, to reduce economic losses to individuals and the community at large as a result of erosion and the runoff of excess stormwater, and to protect and conserve land and water resources, while at the same time ensuring orderly development. The provisions of this Article are specifically intended to supplement existing ordinances regulating the following:

- (1) The subdivision, layout, and improvement of lands located within the City of Lucas;
- (2) The excavating, filling, and grading of lots and other parcels or areas;

- (3) The construction of buildings, including related parking and other paved areas, and the drainage of the sites on which those structures and their related parking and other paved areas are located; and
- (4) The design, construction, and maintenance of erosion control and stormwater drainage facilities and systems.

**Sec. 10.04.002            Definitions**

For the purposes of this Article, the following definitions are adopted:

Base flood elevation. The elevation delineating the flood level having a one-percent probability of being equaled or exceeded in any given year (also known as the 100-year flood elevation), as determined from Flood Insurance Rate Maps (FIRMS) or the best available information.

Channel. A natural or man-made open watercourse with definite bed and banks which periodically or continuously contains moving water, or which forms a connecting link between two bodies of water.

City. The City of Lucas.

City engineer. The City Engineer or his designee.

City manager. The City Manager or his designee.

Conduit. Any channel, pipe, sewer, or culvert used for the conveyance of movement of water, whether open or closed.

Control elevation. Contour lines and points of predetermined elevation used to denote a detention storage area on a plat or site drawing.

Design standards for public improvements. Standards on file in the city's offices to which all designs and the resulting public improvements, must conform.

Detention facility. A facility constructed or modified to restrict the flow of stormwater to a prescribed maximum rate, and to concurrently detain the excess waters that accumulated behind the outlet.

Detention storage. The temporary detaining or storage of stormwater in storage basins, on rooftops, in streets, parking lots, school yards, parks, open space, or other areas under predetermined and controlled conditions, with the rate of drainage there from regulated by appropriately installed devices.

Discharge. The rate of outflow of water from any source.

Drainage area. The area from which water is carried off by a drainage system, i.e., a watershed or catchment area.

Excess stormwater runoff. The rate of flow of stormwater discharged from an urbanized drainage area which is or will be in excess of that volume and rate which represented or represents the runoff from the property prior to the date of this Article.

Floodplain. The special flood hazard lands adjoining a watercourse, the surface elevation of which is lower than the Base Flood Elevation and is subject to periodic inundation.

Hydrograph. A graph showing, for a given point on a stream or conduit, the runoff flow rate with respect to time.

Land disturbance. Any man-made change to improve or unimprove real estate including but not limited to building structures, filling, grading, excavation, clearing, or removal of vegetation.

One-hundred year storm. A precipitation event of 24-hours' duration, having a one percent chance of occurring in any one year.

Peak flow. The maximum rate of flow of stormwater at a given point or in a channel or conduit resulting from a predetermined storm or flood.

Sediment. Any particulate matter that can be transported by fluid flow, and which eventually is deposited.

Stormwater drainage system. All means, natural or manmade, used for conducting stormwater to, through, or from a drainage area to the point of final outlet including, but not limited to, any of the following: open and closed conduits and appurtenant features, canals, channels, ditches, streams, swales, culverts, streets, and pumping stations.

Stormwater drainage facility. Any element in a stormwater drainage system which is made or improved by man.

Stormwater runoff. The waters derived from precipitation within a tributary drainage area flowing over the surface of the ground or collected in channels or conduits.

Time of concentration. The elapsed time for stormwater to flow from the most distant point in a drainage area to the outlet or other predetermined point.

Two-year storm. A precipitation event having a fifty percent chance of occurring in any one year.

Two-year storm runoff. The stormwater runoff having a fifty percent probability of occurring in any one year.

Unprotected channel. A channel which receives stormwater discharge and which is not paved, rip-rapped, or otherwise improved by addition of man-made materials so as to reduce the potential for erosion.

Upland area. Any land whose surface drainage flows toward the area being considered for development.

Urbanization. The development, change, or improvement of any parcel of land consisting of one or more lots for residential, commercial, industrial, institutional, recreational, or public utility purposes.

Waterbody. Any natural or artificial pond, lake, reservoir, or other area which ordinarily or intermittently contains water and which has a discernable shoreline.

Watercourse. Any natural or artificial stream, river, creek, channel, ditch, canal, conduit, culvert, drain, waterway, gully, ravine, street, roadway, swale, or wash in which water flows in a definite direction, either continuously or intermittently, and which has a definite channel, bed, or banks.

Wet bottom detention basin. A basin designed to retain a permanent pool of stormwater after having provided its planned detention of runoff during a storm event.

#### **Sec. 10.04.003      Permit**

Before initiating any activity regulated by this Article, an applicant shall be required to obtain a permit from the city which indicated that the requirements of this Article have been met. Permit fees shall be located in the city fee schedule for permits.

#### **Sec. 10.04.004      Other requirements**

In addition to meeting the requirements of 10.04.003 and the more specific requirements of 10.04.005 – 10.04.029 of this Article and before starting any activity regulated by this Article, an applicant shall comply with the requirements set forth in all other related ordinances and state statutes and regulations.

#### **Sec. 10.04.005      Specific requirements; general**

Sediment shall be maintained on site and excess stormwater runoff shall be detained in connection with any new construction, development, redevelopment, or land use change occurring within the city in accordance with the requirements set forth in this Article. Notwithstanding the foregoing, exceptions to this requirement are as follows:

- (1) For stormwater detention, the development of any subdivision of five or less single-family lots.



- (2) For stormwater detention, the development of commercial or industrial property in which the increase in run-off is less than ten percent (10%) of the pre-development runoff rate and less than five (5) cubic feet per second.
- (3) A determination by the city that the excess runoff from the proposed construction, development, redevelopment, or land use change will be insufficient to adversely effect the carrying capacity of the receiving body or watercourse. In this connection and should the city's determination of insufficient adverse effect be sought, the developer shall make available to the city such hydraulic or hydrologic computations as will support the requested exception.
- (4) In the event it is determined to the city manager's satisfaction, after consultation with appropriate engineering consultants, that the goals of this Article will be better met by the owner or developer of the site paying to the city an amount equal to the cost of the detention pond(s) required herein. Such cost shall be determined by the actual construction cost amount, if known, or as estimated by the design engineer and approved by the city. This agreement and payment will be completed before the city's approval of the development's construction plans.

**Sec. 10.04.006 Discharge rate**

The peak discharge rate after full development resulting from the proposed development shall not exceed the corresponding peak discharge rate prior to development during storms of 2-year, 5-year, 10-year, and 25 year return frequencies.

**Sec. 10.04.007 Flood elevation**

There shall be no detrimental effect on the floodway or the flood elevation during a 100 year storm upstream or downstream of the proposed development area as a result of the proposed development.

**Sec. 10.04.008 Allowable detention facilities**

The increased stormwater runoff resulting from proposed development shall be detained by providing for appropriate detention storage as required by this Article. Where streets or parking areas are used for temporary storage of stormwater runoff all manholes for sanitary sewers shall be of a type which prevent the infiltration of the ponded water. Where streets are used for the temporary storage of stormwater runoff, in no case shall the maximum design depth exceed six (6) inches.

**Sec. 10.04.009 Detention storage**

Designs for detention storage and related appurtenances shall be submitted to the city for approval. Upon submittal of designs of detention storage the city shall make a determination as to whether any or all of the facilities proposed are to become part of the public drainage system. The city shall, at the same time, in the case of a proposed subdivision make a determination as to

those control elevations that shall be entered on the final plat or make a determination as to the necessity for deed restrictions on any particular lot in said subdivision requiring the preservation of mandatory drainage facilities. Where a non-subdivided parcel of land is proposed for development, the city shall make a determination as to the need for covenants to maintain responsibility for mandatory drainage facilities. All of said facilities shall be designed and constructed in accordance with the city specifications, and shall be subject to continuing inspection during the construction period in the same manner as any other improvement regulated under this Article. Detention facilities associated with residential subdivisions shall be in a separate lot that shall be deeded to the HOA after 75% of the lots in the subdivision are occupied and the lot soil stabilized. Prior to acceptance of the detention facility the city and the developer will inspect the facility to assure it meets all of the requirements of this Article. If any deficiencies are found, the developer will be responsible to make the necessary changes at his expense. Wet bottom detention basin, shall be aerated or designed to drain within 60 hours.

**Sec. 10.04.010            Sizing of detention storage and outlet**

Detention storage shall meet the requirements of this Article and the City of Lucas drainage manual.

**Sec. 10.04.011            Discharge velocity**

The discharge velocity from detention facilities shall not exceed three feet per second unless it is determined by the city that greater velocities will not be harmful to the receiving channel. Where the city's determination is requested, the developer shall make available such hydraulic or hydrologic computations as will adequately support the course of action being requested.

**Sec. 10.04.012            Emergency spillway**

Emergency spillways shall be provided to permit the safe passage of runoff generated from rainfall events in excess of the 100-year rainfall event.

**Sec. 10.04.013            Freeboard**

Detention storage areas shall have adequate capacity to contain the storage volume of tributary stormwater runoff with at least one foot of freeboard above the water surface during the 100-year rainfall event.

**Sec. 10.04.014            Joint development of control system**

Stormwater control systems may be planned in coordination by two or more property owners as long as the potential for damage from stormwater is not increased at intervening locations.

**Sec. 10.04.015            Early installation of control systems**

Stormwater control measures shall be installed prior to undertaking other grading of site and a schedule of construction for this purpose shall be submitted by the owner(s)/developer(s) prior to construction in the city.

**Sec. 10.04.016            Flows from upland areas**

The total drainage area must be used in calculating the allowable release rate. The required storage volume will be based on the project area only, with extraneous flows from upland areas being bypassed or discharged via overflow spillways or other devices. Where storm sewers are required they shall be of such size as will provide sufficient capacity to receive the flow generated by five-year storm from upland areas. As to the latter and regardless of whether it has occurred in fact, such upland area shall be deemed to have been fully developed for all purposes of this requirement.

**Sec. 10.04.017            Land disturbance of five acres or more**

The developer shall comply with the State of Texas Commission on Environmental Quality or TPDES and federal NPDES permit for Storm water Discharges Associated with Construction Activity and provide a copy to the city prior to starting construction.

**Sec. 10.04.018            Land disturbance of more than two acres and less than five acres**

The developer shall submit to the city a sediment and erosion control plan that meets the requirements of the State of Texas Commission on environmental quality or cpdes and federal NPDES Permit for Storm water Discharges Associated with construction Activity prior to starting construction.

**Sec. 10.04.019            All land disturbances**

Land disturbances associated with any new construction, development, redevelopment, or land use change on any site of 2,500 square foot or larger or requiring a building permit shall incorporate into the development plan the following elements as minimum:

- (1) Stone construction entrance.
- (2) Silt fence or other sediment retaining device on the low side of the site.
- (3) Temporary seeding of disturbed areas remaining open more than three weeks.
- (4) Immediate removal of soil tracked into the public right-of-way.
- (5) Permanent turf established. A copy of the development plan shall be submitted to the city prior to starting construction.

**Sec. 10.04.020            Preliminary plats**

Information indicating the manner in which the provisions of this Article are to be met shall be submitted with the preliminary plats.

**Sec. 10.04.021 Requirements for construction plans**

Information indicating the manner in which the provisions of this Article are to be met shall be submitted with all construction plan submissions or any other plan for improvements which falls under the requirements of 10.04.005 of this Article. All computations, plans, and specifications shall be prepared and sealed by a professional engineer registered in the State of Texas.

**Sec. 10.04.022 Requirements for final plats**

The easements or separate lots required for detention facilities shall be shown on the final plat. The control elevation for each detention facility shall be shown on the plat near the detention facility.

**Sec. 10.04.023 Drainage and detention design requirements**

All subdivisions and other proposed improvements which are subject to the provisions of 10.04.005 of this Article shall incorporate such design features as are required in this Article. Variation from these requirements shall require the approval of the city planning commission whose action shall be conditioned upon the following:

- (1) That a petition be submitted describing in detail the rationale for the proposed design change.
- (2) That there are special circumstances or conditions affecting the property under consideration such that strict compliance with the provisions of this Article would deprive the applicant of the reasonable use of his land.
- (3) That the variance is necessary for the preservation and enjoyment of a substantial property right of the proprietor.
- (4) That the granting of the variance will not be detrimental to the public health, safety, or welfare or injurious to other property in the territory in which said property is located.

**Sec. 10.04.024 Maintenance**

Designs of detention facilities will incorporate features which facilitate their inspection and maintenance. The designer shall submit an operation and maintenance (O&M) plan for any detention facility prior to its approval by the city. All privately owned detention facilities may be inspected by representatives of the city at such times as they deem necessary. If deficiencies, or conditions creating nuisances, are found, the owner or Home owners association shall be required to initiate the necessary corrections within fourteen (14) days, and all deficiencies shall corrected within forty-five (45) days.

**Sec. 10.04.025          Safety features**

Designs of detention facilities shall incorporate safety features, particularly at inlets, outlets, on steep slopes, and at any attractive nuisances. These features shall include, but not be limited to, fencing, hand rails, lighting, steps, grills, signs, and other protective or warning devices so as to restrict access.

**Sec. 10.04.026          Responsibility**

The administration of this Article shall be the responsibility of the city.

**Sec. 10.04.027          Interpretation**

In the interpretation and application of this Article, the provisions expressed herein shall be held to be the minimum requirements and shall be liberally construed in favor of the City of Lucas.

**Sec. 10.04.028          Appeals**

The City of Lucas City council is hereby designated as the appeals board for disputes arising from the application of this Article. The council's responsibility shall be to hear appeals where it is alleged by an appellant that there is error in any order, requirement, decision, grant or refusal made by the city in the enforcement of the provisions of this Article.

**Sec. 10.04.029          Penalties**

- (1) General. Any person, firm, organization, association, or corporation violating any of the provisions of this Article , including violation of any variances granted under the authority of this Article , shall be deemed guilty of a violation of a municipal ordinance and each such person or other entity shall be deemed guilty of a separate offense for each and every day or portion thereof that any violation of any of the provisions of this code is committed, continued or permitted, and upon conviction of such violation, such person or other entity may be punished by a fine of not less than two hundred and fifty dollars (\$250.00) and not more than two thousand dollars (\$2,000.00).
- (2) Additional corrective actions. Any building or structure constructed in violation of the provisions of this Article or any use carried on in violation of this Article is hereby declared to be a nuisance per se, with any court of competent jurisdiction having the authority to determine that the owner or developer is guilty of maintaining a nuisance per se and to order such nuisance abated. In this connection, the city is hereby authorized to institute any appropriate action or proceeding in any appropriate court to prevent, restrain, correct, or abate any violations of this Article."

**SECTION 2.** That all provisions of the ordinances of the City of Lucas, Texas, in conflict with the provisions of this ordinance be, and the same are hereby, repealed, and all other provisions of the ordinances of the City not in conflict with the provisions of this ordinance shall remain in full force and effect.

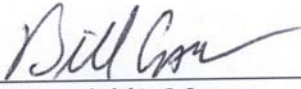
**SECTION 3.** That an offense committed before the effective date of this ordinance is governed by the prior law and the provisions of the Code of Ordinances, as amended, in effect when the offense was committed and the former law is continued in effect for this purpose.

**SECTION 4.** That should any sentence, paragraph, subdivision, clause, phrase or section of this ordinance be adjudged or held to be unconstitutional, illegal or invalid, the same shall not affect the validity of this ordinance as a whole, or any part or provision thereof other than the part so decided to be invalid, illegal or unconstitutional, and shall not affect the validity of the Code of Ordinances as a whole.

**SECTION 5.** Any person, firm or corporation violating any of the provisions or terms of this Ordinance shall be subject to the same penalty as provided for in the Code of Ordinances, as amended, and upon conviction in the municipal court shall be punished by a fine not to exceed the sum of Two Thousand Dollars (\$2,000) for each offense, and each and every day such violation shall continue shall be deemed to constitute a separate offense.

**SECTION 6.** This ordinance shall take effect immediately from and after its passage and the publication of the caption, as the law in such cases provides.

**PASSED AND APPROVED** by the City Council of the City of Lucas, Texas, on the 2<sup>nd</sup>  
day of April, 2009.


  
\_\_\_\_\_  
Bill Carmickle, Mayor

ATTEST:

  
\_\_\_\_\_  
Kathy Wingo, TRMC, City Secretary



APPROVED AS TO FORM:

  
\_\_\_\_\_  
JOSEPH J. GORFIDA, JR., CITY ATTORNEY  
(JJG/cgo/33783)