ORDINANCE NO. 3732-12-2009

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF LEWISVILLE, TEXAS, AMENDING THE LEWISVILLE CITY CODE CHAPTER 6 – LAND DEVELOPMENT BY ADDING SECTION 6-103 ACCESS MANAGEMENT POLICY; PROVIDING FOR A REPEALER; PROVIDING FOR SEVERABILITY; PROVIDING A PENALTY; PROVIDING AN EFFECTIVE DATE; AND DECLARING AN EMERGENCY.

WHEREAS, the City Council of the City of Lewisville has determined that for the public welfare, the Lewisville City Code should be amended by including the City of Lewisville Access Management Policy; and,

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF LEWISVILLE, TEXAS, THAT:

SECTION 1. That the Lewisville City Code is hereby amended by including Section 6-103 Access Management Policy, attached hereto as Exhibit A and incorporated herein.

SECTION 2. REPEALER. Every ordinance or parts of ordinances found to be in conflict herewith are hereby repealed.

SECTION 3. PENALTY. Any person, firm or corporation who violates any provisions of this Ordinance shall be deemed guilty of a misdemeanor and, upon conviction thereof in the Municipal Court, shall be subject to a fine of not more than $2,000.00 for each offense, and each and every day such offense is continued shall constitute a new and separate offense.

SECTION 4. SEVERABILITY. If any section, sentence, clause, or phrase of this ordinance shall for any reason be held to be invalid, such decision shall not affect the validity of

the remaining sections, sentences, clauses, or phrases of this ordinance, but they shall remain in effect.

SECTION 5. EFFECTIVE DATE. This ordinance shall become effective immediately upon its passage and publication as required by law.

SECTION 6. EMERGENCY. It being for the public welfare that this ordinance be passed creates an emergency and public necessity, and the rule requiring this ordinance be read on three separate occasions be, and the same is hereby waived, and this ordinance shall be in full force and effect from and after its passage and approval and publication, as the law in such cases provides.

DULY PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF LEWISVILLE, TEXAS, BY A VOTE OF 4 TO 0, ON THIS THE 21ST DAY OF DECEMBER, 2009.

APPROVED:

_____
Dean Ueckert, MAYOR

ATTEST:

_____
Julie Heinze, CITY SECRETARY

APPROVED AS TO FORM:

_____
Ronald J. Neiman, CITY ATTORNEY

City of Lewisville

Access Management Policy

I. INTRODUCTION AND BACKGROUND

Access management is the combination of practices that control the character of the access allowed to a roadway by applying criteria for the location, spacing, design and operation of driveways, median openings and intersections. In general, access management has the goal of balancing the access intensity with the desired mobility function of a particular roadway. For example, access management criteria would typically allow the least intense access to arterial or high-speed facilities to minimize the interruption to traffic flow that results from frequent access points. Local streets, on the other hand, would typically have the highest allowable access intensity because the mobility function is less of a priority. Access management criteria are applied during the development review process or through an application procedure for modifications to existing access for developed property.

Within the City of Lewisville, the application of access management criteria goes one step further in the management of access along corridors that are undergoing redevelopment. In such corridors, the development of and the granting of access to parcels was done years before access management was understood. As a result, many of the parcels have narrow frontage along roadways and driveways that are spaced much closer than many of the current recommended access management guidelines. As such, the City of Lewisville has developed a driveway spacing standard that takes into account these existing parcels and balances the need for mobility and access along those corridors undergoing redevelopment.

1.1 Benefits of Access Management

Access management is one key to preserving the capacity of a particular facility by minimizing turbulence and speed reduction caused by driveway ingress and egress and proper use of auxiliary lanes at driveway and street intersections. On January 1, 2004, the Texas Department of Transportation (TXDOT) implemented an access management policy that documented many of the benefits of access management. These benefits include improvements in free flow speed and a reduction in the potential for accidents by minimizing speed differentials between vehicles and turning vehicles. Research has shown that accident rates increase consistently with an increase in access density, while accident rates decrease with the construction of raised medians and controlled cross-access.

Finally, access management has been shown to have an overall positive economic effect on communities and transportation corridors. Proper access management preserves the flow of traffic within and through corridors, thus supporting the transportation needs of retail and commercial development while providing improved mobility for commuters. Numerous studies have shown that access management has little or no adverse impact on individual business activity, and that corridors with

completed access management projects had better retail sales when compared to surrounding communities.

1.2 Purpose of the Access Management Policy

This access management policy is needed in Lewisville for four main reasons. First, an access management policy will establish a consistent means of reviewing access requests to achieve the benefits described above. Second, this access management policy will support the City of Lewisville Thoroughfare Plan by allowing different levels of access intensity for roadways based on the intended function. Third, the access management policy will establish guidelines for managing access along redevelopment corridors. And finally, TXDOT will allow municipalities to review and approve access locations and designs on TXDOT roadways within the municipality if the municipality has an approved access management policy and the proposed access is consistent with the approved policy.

1.3 Engineering Basis

The access management criteria are based upon accepted engineering principles and draw upon work included in the TXDOT Access Management Manual and Roadway Design Manual, the AASHTO Policy on the Geometric Design of Highways and Streets, and the Transportation Research Board's Access Management Manual. The criteria are based on satisfying safe stopping requirements, traffic signal operation and the ability to construct deceleration (left-turn or right-turn) lanes for driveways and intersections.

1.4 Application of Access Management Criteria

The City of Lewisville access management criteria are based on the functional classification of a facility as described in the City's Thoroughfare Plan and shown in Table 1 below.

Table 1

Functional Classification	Description
Frontage Roads	2 or 3-lane frontage roadways
Principle Arterials	
P6D	6-lane divided roadway
P4D	4-lane divided roadway
Collectors	
C4U	4-lane undivided roadway
C2U	2-lane undivided roadway
Local Streets	2-lane roadway

1.5 Administration of Policy

This policy will be administered by the City Engineer or his designee.

1.6 Deviation and Dispute Resolution Process

Deviations to these criteria may be approved by the City Engineer. Disputes will be deferred to and resolved by the City Council through the variance process established in the City of Lewisville General Development Ordinance. All access management disputes must be accompanied by a Traffic Impact Analysis paid for by the developer per City of Lewisville development procedures. A deviation may be granted when both the City Engineer and a development interest mutually agree that specific criteria can't be met because of physical limitations on a lot or parcel. In those cases, the deviation will come as close as physically possible to meeting the applicable criteria. A dispute occurs when the City Engineer and a development interest are not able to agree that a deviation is necessary due to physical limitations of the property or is as physically close as possible to meeting the established criteria.

1.7 Engineering Study and TIAs

An engineering study or Traffic Impact Analysis (TIA) may be required by the City Engineer or initiated per the City's General Development Ordinance. Should an engineering study be required, it shall at a minimum include the following elements: trip generation, trip distribution, and traffic assignment at the proposed access point(s). Additionally, the engineering study may require that existing traffic volume data be collected, including turning movement volumes at intersections. The trip generation will be conducted using the latest edition of the Institute of Transportation Engineers Trip Generation manual unless there is acceptable data that supports the use of another trip

generation source. Trip distribution will be performed with input from City staff and may require the use of the City's travel demand model. The traffic assignment will be conducted to determine the forecasted turning movements attributable to the proposed development. The existing traffic counts will be grown using an annual growth rate as agreed to by the City to the build-out year of the proposed development. Pass-by trips will be addressed using accepted practices as recommended in by the Institute of Transportation Engineers. The resulting traffic volumes will be used as background traffic volumes, and the assigned forecasted turning movements will be added to the background traffic volumes resulting in the total traffic volumes.

If a TIA is required by the City, it shall at a minimum include the above mentioned elements as well as the same type of data for intersections adjacent to the proposed site (specific study limits to be defined by the City). Additionally, the TIA may require operational analyses (including LOS and capacity analyses) for the study intersections as determined during the initial meeting between the applicant and the City. Furthermore, the applicant's TIA shall include recommendations for mitigation measures should the impact of the proposed access point(s) result in unacceptable levels of service.

1.8 Permitting

Access to City and State controlled roadways shall require a permit. A permit will be granted only after due consideration of safety, traffic flow, and conflicts with existing and proposed facilities. In addition to the above, Application for a driveway permit can be made as part of the Engineering Site Plan request or as a separate request. Driveway permit applications shall contain sufficient information to allow the City to fully assess the access location and adequacy of the proposed driveway design.

The authority for granting access to state facilities rests with the Texas Department of Transportation (TXDOT). TXDOT may grant permitting authority to municipalities if the municipality has an approved Access Management Policy. TXDOT will use the municipality's access management plan for considering deviations and variances involving access to TXDOT roadways. At a minimum, the City of Lewisville will apply to have its access management spacing criteria applied to state facilities within the City's jurisdiction. Contact the City Engineering Department for the current access permitting procedure for state highways within the City's jurisdiction.

A commercial or multi-family driveway permit application for arterial and collector streets shall include, at a minimum, the following:

1) Drawn to the maximum scale of 1" = 40'.

2) The dimensions, locations and design of the driveway(s) being requested.

3) The location of any building or structure, either existing or proposed.

4) List uses on commercial lots (such as office, retail store, gas station, etc.).

5) The parking lot layout with the proposed internal circulation pattern. There shall be a minimum of 40 feet between the street and the internal traffic lane at driveway locations.

6) All existing or proposed driveways, gutters, storm sewers, manholes, fire hydrants, utility poles, service fixtures, etc., which may affect driveway operations.

7) Any existing driveways or curb cuts located on adjacent lots or lots across the street.

8) All of the geometric design features of the roadway itself, including the presence of a median, the number and width of travel lanes, the presence of a shoulder or a parking lane, etc.

9) The distances to intersecting streets.

10) A traffic control plan.

II. DRIVEWAY LOCATION & GEOMETRY

2.1 General Provisions

The design, configuration or location of driveways, streets, alley, and driveway intersections including auxiliary lanes shall be in accordance with control of access and access management guidelines set forth in this document as well as the construction standards of the City of Lewisville and the Texas Department of Transportation where applicable. Temporary asphalt streets, connections and driveways will be considered on an individual basis and shall be constructed in accordance with approved plans. All street construction shall be in accordance with the criteria and design standards shown on Street Design Criteria, Table 2. Approval for construction of all driveways in the City of Lewisville shall be by City or TXDOT permit only.

Table 2, STREET DESIGN CRITERIA

	STREET CLASSIFICATION				
	RESIDENTIAL	**COLLECTOR (UNDIVIDED)**		**PRINCIPAL ARTERIAL (DIVIDED)**	
NO. OF LANES	2	2	4	4	6
WIDTH OF PAVEMENT	31' (B-B)	37' (B-B)	49' (B-B)	25' (B-B) EACH DIRECTION	37' (B-B) EACH DIRECTION
R.O.W. WIDTH	50'	60'	80'	100'	124'
DESIGN SPEED (MPH)	25	35	40	50	50
MAXIMUM DEGREE OF CURVATURE/OR MINIMUM RADIUS FOR DESIGN (CENTER LINE): (NORMAL CROWN)	28°/200'*****	13°/428'*****	7°/821'*****	4°/1389'*****	4°/1389'*****
MEDIAN WIDTH	---	---	---	25'	25'
PARKWAY WIDTH	9.5'	11.5'	15.5'	12.5'	12.5'
MEDIAN OPENING SPACING	---	---	---	400' - 600'******	400' - 600'******
STREET INTERSECTION RADIUS (CURB)	25'	30'	30'	35'	35'
MINIMUM TANGENT LENGTH BETWEEN HORIZONTAL CURVES	---	100’	100’	100’	100’

NOTES:

1. THE ABOVE DESIGN STANDARDS ARE CONSIDERED TO BE MINIMUM. OTHER DESIGN ELEMENTS SUCH AS STOPPING SIGHT DISTANCE, SUPER-ELEVATION, GRADES, ETC., SHALL BE USED IN DESIGN WHENEVER APPROPRIATE AS DICTATED BY GOOD ENGINEERING PRACTICE.

2. ADDITIONAL RIGHT-OF-WAY WILL BE REQUIRED AT MAJOR INTERSECTIONS FOR LEFT OR RIGHT TURN LANES (IF REQUIRED) TO MAINTAIN TRAFFIC VOLUME CAPACITIES THROUGH THE INTERSECTION.

3. ADDITIONAL RIGHT-OF-WAY WILL BE REQUIRED FOR ACCELERATION OR DECELERATION LANES WHERE APPROPRIATE.

4. RESIDENTIAL PARKING LANES SHALL BE A MINIMUM OF 10 FEET IN WIDTH.

5. MEDIAN AND PARKWAY WIDTHS MAY BE ADJUSTED BY THE CITY ENGINEER TO ADDRESS SPECIAL CONDITIONS.

6. ALL TURN LANES SHALL BE A MINIMUM OF 12 FEET IN WIDTH.

***** UNDER SPECIAL CONDITIONS, THE CITY ENGINEER WILL DETERMINE THE MAXIMUM DEGREE OF CURVATURE. (SUPER-ELEVATION MAY BE REQUIRED.)

****** MINIMUM MEDIAN OPENING SPACING BASED ON TRAFFIC VOLUMES AND TURNING MOVEMENTS. USE 600' MINIMUM WHERE TRAFFIC SIGNALS MAY BE NEEDED AND ON ALL 6-LANE THOROUGHFARES. USE 1320 FT MINIMUMS ON ALL MAJOR TRAFFIC CARRIERS AS IDENTIFIED ON THE THOROUGHFARE PLAN. EXACT MINIMUMS WILL BE REVIEWED ON A CASE BY CASE BASIS.

******* CORNER CLIP DIMENSIONS ARE BASED ON PARKWAY AND RADII DIMENSIONS SHOWN AND WILL BE ADJUSTED ON A CASE BY CASE BASIS WHEN PARKING AND RADII DIMENSIONS VARY FROM THOSE SHOWN ABOVE.

All proposed streets and driveways shall:

a. Be laid out so that street right-of-way lines and curb lines intersect at 90 degrees and so that no centerline curvature is closer to the point of intersection than 35 feet on residential streets and 50 feet on collector and arterial streets.

b. Make use of existing median openings in the thoroughfares if available without any alterations to them except that minimum left-turn lanes shall be provided if not existing.

Proposed streets intersecting existing streets shall be designed and constructed so as to eliminate dips and humps. This may require removal and replacement of a section of the existing street to the extent required to provide uniform pavement profiles that will accommodate emergency vehicles entering the intersection. It must be assumed that emergency vehicles will not come to a stop before entering the intersection, even though the intersection may be controlled by stop signs.

2.2 Right-of-Way Corner Clips

At the intersection of street right-of-way lines, a triangular area shall be dedicated for right-of-way, based on the dimensions contained in table 3. In the event the streets intersect at other than 90 degrees, as approved by the granting of a variance, the required dimensions may be increased as determined by the City.

Table 3 – Intersection Corner Clips

	RESIDENTIAL	COLLECTOR (UNDIVIDED)		PRINCIPAL ARTERIAL (DIVIDED) P4D, P6D
		C2U	C4U	
CORNER CLIP R.O.W. DEDICATION**	15’ X 15’	15’ X 15’	15’ X 15’	20’ X 20’

** CORNER CLIP DIMENSIONS ARE BASED ON PARKWAY AND RADII DIMENSIONS SHOWN AND WILL BE ADJUSTED ON A CASE BY CASE BASIS WHEN PARKING AND RADII DIMENSIONS VARY FROM THOSE SHOWN ABOVE.

At the intersection of a street right-of-way line and an alley right-of-way line, a 15-foot triangular area (measured along each projected right-of-way) shall be dedicated for right-of-way. In the event the street right-of-way and the alley right-of-way intersect at other than 90 degrees, as approved by a granting of a variance, the 15-foot dimension shall be increased as determined by the City Engineer.

2.3 Clear Vision Areas

Adequate stopping sight distance must be maintained at all intersections. All plants and other obstructions located within the required sight lines, shown in Figure 1, of all intersections will be maintained at a height of 3.5 feet or shorter or a canopy height of at least 8 feet such that a clear view is maintained. This allows the planting of low-growing shrubs and trees with a clear canopy high enough to permit drivers an unobstructed view of approaching automobiles. Plantings near intersections will only be allowed after staff review to ensure that adequate sight distance is being maintained.

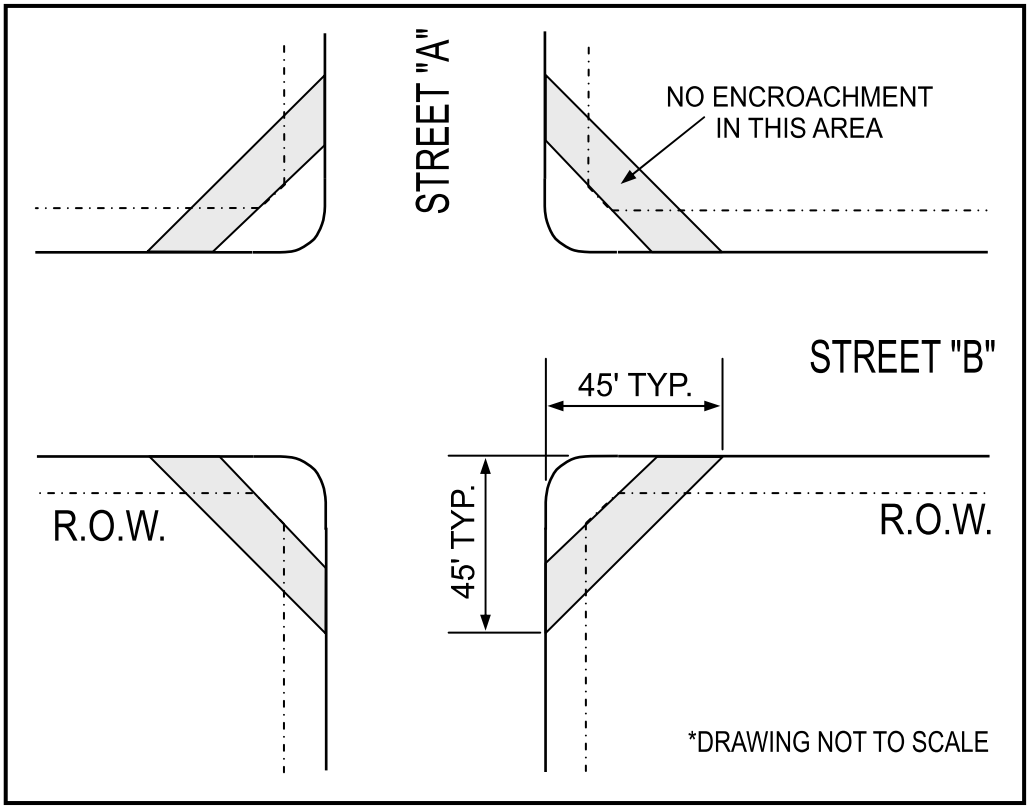

Figure 1 – Clear Vision Area

III. ACCESS MANAGEMENT STANDARDS

3.1 Control of Access

No residential and collector (2-lane) street intersection with arterial streets shall be allowed within 350 feet of a major arterial street intersection (4-lane undivided and above) and/or within proposed right turn lane limits.

Control of access at frontage road ramps will be done in accordance with TxDOT design standards contained in the TXDOT Roadway Design Manual. Control of access lines, at street intersections, for driveway locations, are required to be shown on all plats and engineering site plans and shall be in accordance with the guidelines shown in tables 4 and 5. All dimensions are measured to the near radius or flare point(s) of the driveways. See Figure 2 for commercial and residential control of access limitations.

Table 4 – Control of Access for Commercial Driveways

MINIMUM DISTANCES FROM INTERSECTION OF ROW LINES FOR COMMERCIAL PROPERTY		
Street Classification	**Approaching Intersection**	**Leaving Intersection**
Residential	50 feet	50 feet
Collector (C2U)	75 feet	50 feet
Collector (C4U)	100 feet	75 feet
Principal Arterial (P6D, P4D)	150 feet	100 feet
Select Major Traffic Carriers* and Frontage Roads**	250 feet	250 feet

* Includes FM 1171, FM 3040, FM 407, and SH-121 Business
** Includes IH-35E Frontage Roads and SH-121 Frontage Roads

Table 5 – Control of Access for Residential Driveways

MINIMUM DISTANCES FROM INTERSECTION OF ROW LINES FOR RESIDENTIAL PROPERTY		
Street Classification	**Approaching Intersection**	**Leaving Intersection**
Residential	20 feet	20 feet
Residential*	50 feet	50 feet

* When residential lots side on a collector or arterial

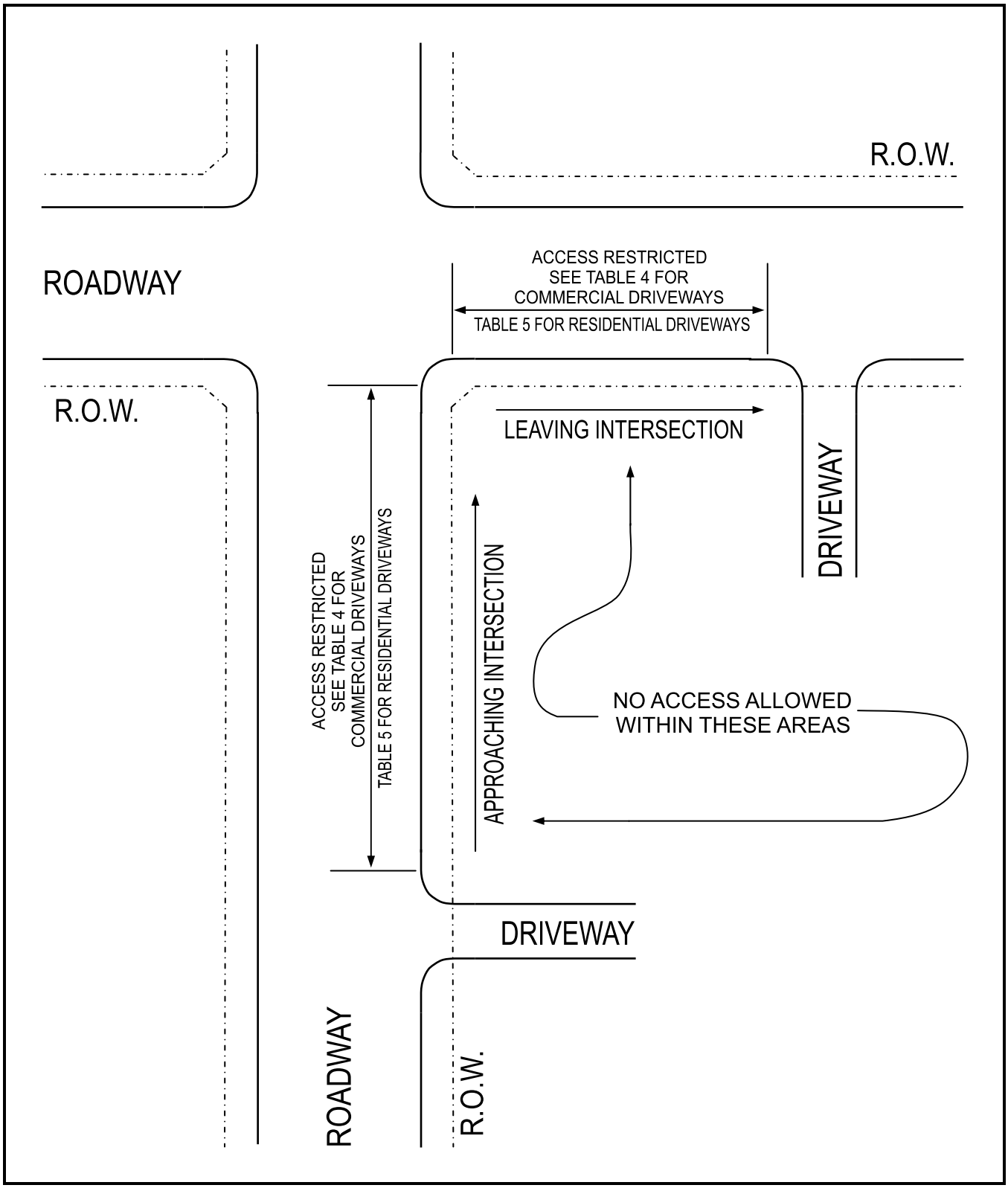
R.O.W.
ROADWAY
ACCESS RESTRICTED
SEE TABLE 4 FOR
COMMERCIAL DRIVEWAYS
TABLE 5 FOR RESIDENTIAL DRIVEWAYS
R.O.W.
LEAVING INTERSECTION
DRIVEWAY
ACCESS RESTRICTED
SEE TABLE 4 FOR
COMMERCIAL DRIVEWAYS
TABLE 5 FOR RESIDENTIAL DRIVEWAYS
APPROACHING INTERSECTION
NO ACCESS ALLOWED
WITHIN THESE AREAS
DRIVEWAY
ROADWAY
R.O.W.

FIGURE 2

3.2 Access Spacing

The minimum spacing (measured to the near radius points of the driveways) between driveways along:

1) Major Traffic Carriers and Frontage Roads shall be 230 feet.

2) Principal Arterials (P6D, P4D) streets shall be 100 feet on the same platted lot, and 50 feet between adjacent lots.

3) Collector (C4U) streets shall be 75 feet on the same platted lot and 50 feet between adjacent lots.

4) Collector (C2U) streets shall be 50 feet.

Under no circumstance will existing platted lots or unplatted stand-alone tracts that are physically unable to meet minimum driveway spacing standards be denied access, however will be limited to one driveway. The driveway will be located such that maximum spacing is achieved.

Table 6 lists the access spacing criteria for the different functional classifications. Control of access requirement listed in Tables 4 & 5 above, shall be used when a street intersection is involved.

Table 6 – Access Spacing Criteria on Platted Lots

Functional Classification	Minimum Access Spacing (same lot)	Minimum Access spacing (adjacent lots)
Frontage Roads	230 feet	230 feet
Major Traffic Carriers	230 feet	230feet
Principle Arterials		
P6D	100 feet	50 feet
P4D	100 feet	50 feet
Collectors		
C4U	75 feet	50 feet
C2U	50 feet	50 feet

The distances listed in the table above are to be measured from the near radius points between driveways as shown in Figure 3.

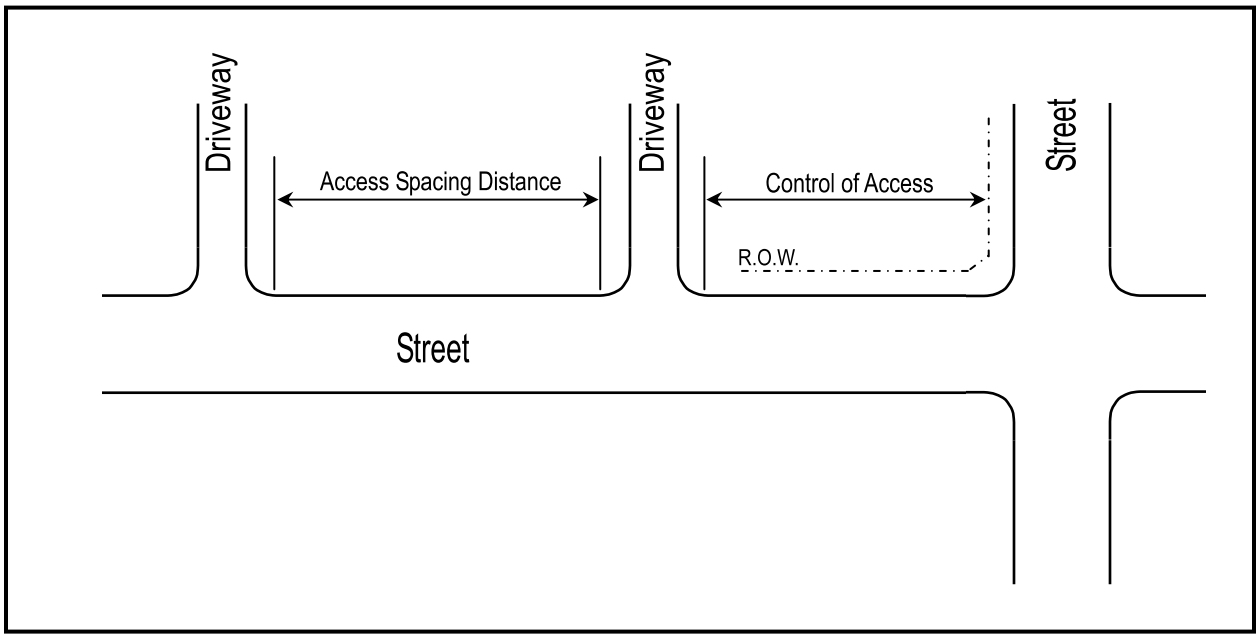

Figure 3 – Access Spacing

In addition to meeting the driveway spacing criteria, all driveways must be located outside the limits of deceleration lanes serving the next adjacent driveway or intersection and designed such that adequate stopping sight distance is provided. Exceptions to the above criteria will be reviewed where properties would be denied access under this criteria and where access through adjacent properties via developers agreements or access easements is not feasible. Requests for deviation to these criteria must be supported by an engineering study and approved by the City Engineer.

3.3 Shared Access

Mutual use access into and across adjacent property boundaries will be required for all new developments where it is deemed feasible. This practice ensures that all properties are allowed full access to the roadway system, thus minimizing undesirable traffic patterns and turning movements at nearby intersections.

3.4 Median Openings

Median openings can be particularly problematic due to the impact on traffic flow from left-turning and crossing maneuvers. For this reason, it is critical that median opening spacing be established to minimize the impacts on nearby intersections or driveways.

Median openings must be spaced in accordance with Table 2, Street Design Criteria and to accommodate fully-developed left-turn bays in both directions (refer to section on Auxiliary Lanes). Median opening spacing must also be sufficient to avoid interfering with the advance detectors of a nearby signalized intersection. Requests for deviation must be supported by an engineering study and approved by the City Engineer. When a dispute arises, requests for a variance to the median opening spacing criteria must be accompanied by a Traffic Impact analysis (TIA) and approved by the City Engineer before consideration by the City Council. TxDOT will continue to have authority over the placement and design of median openings on State facilities.

3.5 Modified (Hooded) Median Openings

In some situations it is beneficial to prevent exiting traffic from making a left-hand or crossing maneuver. Typical applications of hooded median openings would be where cross-access driveways of major retail centers align, adjacent to any intersection that includes an arterial or collector or in a retrofit situation where accident history indicates a safety problem at a median opening. The proposed modified median opening must be located such that fully-developed left-turn bays can be established in both directions of traffic flow. Requests for deviation to the median opening spacing criteria must be supported by an engineering study and approved by the City Engineer. When a dispute arises, requests for a variance to the median opening spacing criteria must be accompanied by a Traffic Impact analysis (TIA) approved by the City Engineer.

IV. DRIVEWAY DESIGN & CONSTRUCTION STANDARDS

4.1 General

The contractor shall construct the proposed driveway within five (5) days of the saw cut and removal of the existing pavement.

4.2 Concrete Strength Requirements

The minimum compressive strength shall be 3500 PSI at 28 days except that in intersections and in areas where hand finishing is required the minimum compressive strength shall be 3750 PSI. The minimum cement ratio shall be 5.5 sacks per cubic yard, except in intersections and in areas where hand finishing is required the minimum cement ratio shall be 6.0 sacks per cubic yard. The use of fly ash shall not be permitted. Early yield high strength concrete having a minimum compressive strength of 4200 psi at 3 days shall be required for panel replacements and for construction of driveways and auxiliary lanes along existing streets. Under special circumstances, a longer cure time may be specified by the City. The minimum current ratio for early yield high strength concrete shall be eight (8) sacks per cubic yard.

4.3 Pavement Thickness Requirements

Street, alley and driveway intersection pavement shall match the pavement section of the existing street however shall not be less than six inches thick. Where right turn, left turn or deceleration lanes are added to existing streets, the pavement thickness shall be ten inches.

4.4 Base Course

All street alley and driveway intersection paving shall be placed on a base course matching that of the existing street however shall not be less than six inches and shall consist of lime or cement stabilization as recommended in the geotechnical report. In small areas where stabilization is not practical, the base course shall consist of six inches of asphalt base as directed by the City. Where the geotechnical report identifies area having high sulfates, the base course shall consist of six inches of asphalt. All base courses shall be on compacted subgrades. Added pavement thickness may be considered for substitution for base course at the discretion of the City Engineer.

4.5 Residential Driveway Guidelines

Residential driveway approaches for single family and two family dwellings shall follow these guidelines:

a. Driveways will not be permitted onto any streets except residential streets.

b. All driveways must access onto alleys where alleys are constructed or will be constructed.

c. Width shall be 12 feet (minimum) and 24 feet (maximum), plus a 5 foot flare for single-family detached; or a 1.5 foot flare for single-family attached (three (3) units or more attached).

d. The radius or flare point at the street or alley of any driveway shall not extend beyond the property line(s).

e. All driveway approaches shall be constructed in accordance with the City standard driveway construction details.

f. Maximum slope of a residential driveway shall not exceed 8 percent within the right-of-way and 14 percent beyond the right-of-way line.

g. Water and sewer services may not be located under a residential driveway.

4.6 Commercial Driveway Guidelines

Commercial driveway approaches (including multifamily residential) shall follow these guidelines:

a. Required widths:

1) One Way: 15 feet plus 20-foot radii.

2) Two Way: 24 feet minimum and 30 feet maximum plus 20-foot radii.

(A maximum width of 35 feet plus 25-foot radii will be allowed at driveways for commercial and industrial sites where significant truck traffic is projected and/or at designated truck entrances, in accordance with Figure 2.)

3) Median Style Driveways: 24 feet on the entrance side and 24 - 48 feet on the exit side depending on the need for dedicated turning lanes. A driveway median shall be no more than 24 feet wide measured at the ROW of the intersecting street.

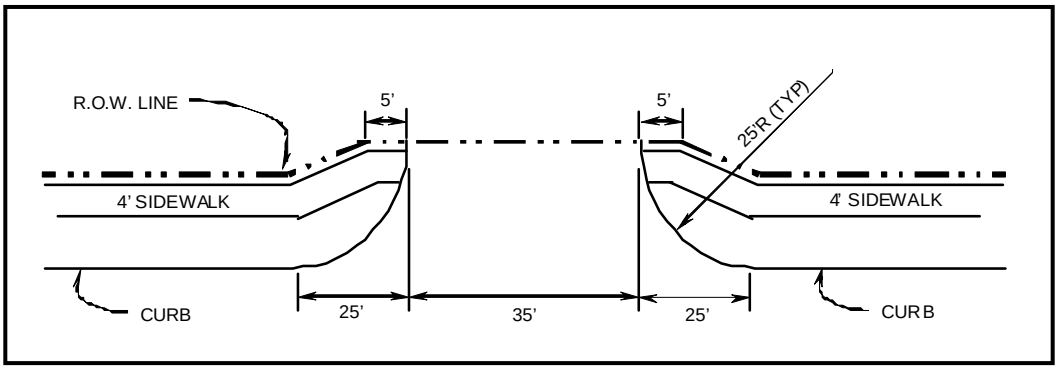

Figure 2 - Commercial & Industrial Driveway Layout - Truck Entrances

b. Maximum slope of a commercial driveway shall not exceed eight percent within the right-of-way and ten percent beyond the right-of-way.

c. All two-way driveways shall intersect streets at 90 degrees.

d. Adequate site distances and on-site maneuvering shall be available from every driveway. The parking lot and driveways shall be so designed to allow vehicles to exit the street in a forward manner; park, load

and unload totally within the site, and shall enter onto the street in a forward manner. In no instance shall vehicles back into the street right-of-way.

e. All driveway approaches shall be constructed in accordance with the City and/or Texas Department of Transportation standard driveway construction details as applicable.

f. Driveways on State maintained highways shall meet the standards within the City of Lewisville Access Management Manual and must be approved by the City based on the finding that the driveway will not create a traffic safety hazard or jeopardize quality of traffic handling. Such factors as vehicular speed, existing traffic patterns, existing and proposed driveway and ramp locations, and existing and future street intersections, shall be considered.

V. AUXILLARY LANES

Auxiliary lanes include right and left turn lanes at street intersections as well as right and left turn deceleration lanes at driveways.

Left turn lanes shall be provided on all approaches to intersections where four or six lane streets cross (as shown on the City's current Thoroughfare Plan). Left turn lanes shall also be provided along all divided streets where median openings provide access to streets, alleys or driveways.

Right turn/deceleration lanes shall be provided on all approaches to intersections of four or six lane streets, and to approaches where a two lane collector street intersects a four or six lane street (as shown on the City's current Thoroughfare Plan). Existing single stand alone lots or tracts of less than 1 acre are exempt from the right turn lane requirement including ROW dedication where required at street intersections.

Right turn/deceleration lanes shall also be provided at driveways to all commercial developments of five (5) acres or more or any commercial development with access on a Major Traffic Carrier. When multiple entries are proposed for a commercial development, and based on the projected traffic patterns of the site determined by an engineering study approved by the City Engineer, staff may waive this requirement at one or more driveways.

Auxiliary lanes shall at a minimum provide for 100 feet of storage plus 110 feet of taper. Longer storage lengths may be required if an engineering study or TIA performed to support a deviation or variance indicates a need for additional storage.

Proposed driveway connections shall be subject to the following:

1. All unplatted tracts of land proposed for commercial use, during the platting process, will create no lot of 5 acres or larger with less than 300 feet of street frontage to provide a full deceleration lane measuring 210 feet, or all access to these properties shall be by mutual access easements which provide a full deceleration lane. Where properties are located near major street intersections, additional control of access limitations will apply as outlined in this ordinance. In the event a developer elects to have more than one driveway, a continuous deceleration lane will be required and where no provision to add a deceleration lane exists, the driveway will be subjected to an exit only condition.

2. All unplatted tracts of land proposed for commercial use along thoroughfares classified as major traffic carriers, during the platting process, will create no lot with less than 300 feet of street frontage to provide a full deceleration lane measuring 210 feet, or all access to these properties shall be by mutual access easements which provide a full deceleration lane. Where properties are located near major street intersections, additional control of access limitations will apply as outlined in this ordinance. In the event a developer elects to have more than one driveway, a continuous deceleration lane will be required and where no provision to add a deceleration lane exists, the driveway will be subjected to an exit only condition.

3. Existing platted lots or unplatted stand-alone tracts proposed for commercial use with less than 300 feet of street frontage and at least 225 feet of street frontage, located mid-block and away from street intersections and requiring a right turn/deceleration lane will provide at minimum a modified deceleration lane measuring 170 feet (60 feet of storage and a 110 foot taper). Where properties are located near major street intersections, additional control of access limitations will apply as outlined in this policy. In the event a developer elects to have more than one driveway, a continuous deceleration lane will be required and where no provision to add a deceleration lane exists, the driveway will be subjected to an exit only condition.

4. Existing platted lots or unplatted stand-alone tracts proposed for commercial use with less than 225 feet of street frontage, no provision to acquire additional street frontage and normally requiring a right turn/deceleration lane will be exempt from the deceleration lane requirements except that a minimum turn-in radius of 40 feet will be required. Where properties are located near major street intersections, additional control of access limitations will apply as outlined in this policy.

5. The street frontages, as outlined above, are defined as frontages usable for access which are free of physical barriers such as bridges, culverts, guardrails, etc. A summary of the above requirements is shown in Table 7.

6. The developer shall be responsible for the dedication of all rights-of-way for the construction of all auxiliary lanes to maintain the standard parkway width for the street

classification. Variances to required right of way dedication on TXDOT maintained roadways will need to be considered by both the City and TXDOT.

7. The City will be responsible for the construction of right and left turn lanes funded by the developer at intersections where the property is developed. The developer shall be responsible for all other construction of turning lanes at intersections where the property is undeveloped.

8. No access will be allowed within the transition segments of a deceleration/right-turn lane. Where a driveway is proposed within a storage segment of a deceleration/right turn lane, the storage segment must be expanded to allow a minimum of 100 feet of storage for each driveway independently.

Table 7 – Auxiliary Lane Requirements Based on Lot Frontage

Total Property Frontage	Right Turn Treatment
Less than 225’	40’ entering radius (no storage or taper)
225 up to 300’	60’ storage + 110’ taper
300’ or greater	100’ storage + 110’ taper

VI. MAJOR TRAFFIC CARRIERS

In addition to the various other requirements listed above, thoroughfares classified as Major Traffic Carriers on the City of Lewisville Thoroughfare Plan shall also meet the following criteria:

6.1 Traffic Signals

a. Minimum spacing of one-quarter mile except where approved by the City, based on an engineering study.

b. Preference will be given to street intersections over private development driveways.

c. Turn lanes and geometrics shall be designed for maximum safety and efficiency of the intersection.

6.2 Median Openings

a. Full median openings shall be at minimum spacing of one-quarter mile except where approved by the City based on an engineering study.

b. Modified median openings designed to restrict cross-access (This allows for left turns along the thoroughfare, but not from the cross street/driveway)

may be allowed between full median openings and shall be spaced no less than 600 feet from any other median openings.

6.3 Driveways

a. A deceleration lane is required on all driveways. No access will be allowed within the storage or transition segments of a deceleration/right-turn lane. Multiple driveways, where approved, shall be served with a weaving/auxiliary lane.

b. The radius for entering traffic (onto the thoroughfare) shall be 40-foot minimum and the radius for traffic from the thoroughfare shall be 20-foot minimum.

6.4 Intersections

Right-turn lanes and traffic islands at intersections shall be provided and designed to allow traffic turning right to enter the cross street after yielding. Signs and markings for traffic islands shall comply with the Texas Manual of Uniform Traffic Signal Devices

6.5 Lane Closures

In instances where the proposed construction necessitates the closure of an existing travel lane, the construction plans shall include specifications for traffic control and a work sequence to minimize the effect on existing traffic. As a minimum, early strength concrete shall be specified along with a work sequence whereby lane closures are of minimal duration. Specific details will be reviewed by City staff and approval will be based on the finding that every step has been taken to accomplish the purpose of this section. Depending on conditions associated with the particular site, City staff may alter those requirements where it is determined that existing traffic will not be significantly affected. On major thoroughfares, a cash bond may be required as a guarantee by the contractor that the specifications will be complied with to the fullest.