

AN ORDINANCE

AN ORDINANCE OF THE MAYOR AND COUNCIL OF THE CITY OF LAGRANGE TO AMEND THE CODE OF THE CITY; TO AMEND THE UNIFIED DEVELOPMENT ORDINANCE IN ORDER TO UPDATE THE THOROUGHFARE DESIGN STANDARDS OF THE CITY; TO REPEAL CONFLICTING ORDINANCES; TO FIX AN EFFECTIVE DATE; AND FOR OTHER PURPOSES.

THE MAYOR AND COUNCIL OF THE CITY OF LAGRANGE, GEORGIA
HEREBY ORDAIN AS FOLLOWS:

SECTION 1:

That Chapter 25C-15 of the Unified Development Ordinance of the City of the City of LaGrange be amended by inserting therein a new Article IV, to be entitled "Thoroughfare Design Standards" and to read as follows:

"25C-15-41. Streets.

Public and private streets.

1. Specifications not covered herein shall be performed in accordance with the latest Georgia Department of Transportation and AASHTO standard specifications.
2. The arrangement, character, extent, width, grade and location of all streets shall conform to the comprehensive plan and zoning ordinance. New streets shall be considered in their relation to existing and planned streets, topographic conditions, public convenience and safety, and in their appropriate relation to the proposed uses of the land to be served by such streets.
3. When such is not shown in the comprehensive plan, the arrangement of streets in a subdivision shall:
 - (a) Extend existing streets or their projections at the same or greater width, but in no case less than the minimum required width, unless variations are deemed necessary by the city for reasons of topography or design;
 - (b) Connect to existing streets if required by the city to create connectivity and traffic circulation; and
 - (c) Provide traffic management features for traffic calming if required at the discretion of the city.
4. Half streets along the boundary of land proposed for subdivision will not be permitted.
5. Where a subdivision abuts or contains an existing or proposed through street with a speed limit greater than 30 mph access shall be limited to ensure adequate protection of residential properties and maintain public safety. The following measures may be required by the Director:
 - (a) Deceleration stacking lane with taper.
 - (b) Acceleration lane with taper.

- (c) Left turn stacking lanes with tapers.
 - (d) Reverse frontage lots with screen planting strip along the rear property line or such other treatment as may be required to afford adequate separation from through street.
 - (e) The Georgia Department of Transportation Driveway Manual "Regulations for Driveway and Encroachment Control" shall be used as a design guide.
6. A subdivision plat involving new or existing streets crossing railroad tracks shall provide adequate right-of-way, including approach right-of-way and slope easements for construction of underpass or overpass unless otherwise determined by the City of LaGrange.
 7. Privately owned reserve strips controlling access to streets shall be prohibited.
 8. Street jogs with centerline offsets of less than 125 feet shall be prohibited.
 9. Street intersections should be as nearly at right angles as practical.
 10. Street right-of-way width shall be no less than 50 feet with curb and gutter. Larger right-of-way widths may be required for certain streets.
 11. Clearing. All trees, stumps, brush, topsoil, old foundations or other building materials shall be cleared from all rights-of-way. No tree stumps, or other debris shall be deposited within the right-of-way.
 12. Grading. Streets shall be graded to provide for a width of pavement in the center of the right-of-way to conform to a profile and cross-section approved by City of LaGrange.
 13. Street grades shall conform with the latest Thoroughfare Design Standards and with allowance for reasonable vertical curves, shall not exceed a maximum of twelve percent (12.0%). No streets shall have a grade of less than one percent (1.0 %) except in vertical curve reversals.
 14. Curb and gutter shall be required on all streets and shall be furnished and installed by the subdivider or his agent in conformance with the latest Thoroughfare Design Standards. Distance from back of curb to back of curb must not be less than 26 feet.
 15. Base and paving: Minimum road width of 26 feet from back of curb to back of curb shall be furnished and paid for by the subdivider or his agent. Installation shall conform to the latest Thoroughfare Design Standards. The minimum acceptable paving cross section, unless otherwise modified by the City of LaGrange for proposed city streets shall be:
 - (a) 1.5" 12.5 mm asphalt wearing course. (2" 9.5mm wearing course optional with approval of LaGrange Public Works Operations Director or his designee).
 - (b) 3" 19mm binder.
 - (c) 8" G.A.B. (Graded Aggregate Base) compacted to 100%. STD Density per ASTM D698.

The asphalt-wearing course must be laid before a period of one year after the streets have passed final inspection and the final plat has been recorded. A performance bond may be required in accordance with the Subdivision Ordinance (Chapter 25C-15).

16. Testing thickness and compaction. The Director of Public Services or his designee shall make as many tests as necessary to determine the average thickness and compaction of the base course prior to placing of surface course. Tests shall also be made on the finished courses if necessary. When the subdivider or his agent or contractor disagrees with the Director's tests and prefers a consulting firm to be employed, said consulting firm shall be employed at the subdivider or his agent's expense.
- (a) Compaction. Fill shall be placed in uniform, horizontal layers not more than six inches thick (loose measurement). Moisture content shall be adjusted as necessary to compact material to 98 percent maximum laboratory dry density as determined by ASTM D698.
 - (b) Utility installation. After the earthwork has been completed, all storm drainage, water, and sanitary sewer utilities have been installed within the right-of-way as appropriate, and the backfill in all such ditches thoroughly compacted, the sub-grade shall be brought to the lines, grades, and typical roadway section shown on the approved plans.
 - (c) Compaction testing. Utility trenches cut in the sub-grade shall be backfilled as specified herein. Compaction tests at the rate of one per 150 feet of trench may be required to verify compaction.
 - (d) Proof-roll. Test 1 Sub-grade must pass roll testing with a fully loaded tandem axle dump truck prior to placement of the base material. With the approval of the department, a geo-textile or grid may be used to stabilize a sub-grade that does not pass proof rolling.
 - (e) Subgrade and Base Inspection - The Owner/Developer/ Contractor shall notify the City of Lagrange Public Work Division a minimum of forty-eight (48) hours in advance to schedule required inspections.
 - (f) Test 2. Base must pass roll testing with a fully loaded tandem axle dump truck prior to placement of the base material.
 - (g) Use of roads as construction roads. When the street is to be used for construction traffic before the paving work is completed, a layer of stone (except crusher run) shall be laid as a traffic surface. This material shall not be used as a part of the base material. It may be worked into the sub-grade, or it shall be removed before the base course is set up for paving.
 - (h) Temporary drainage. Provisions shall be made to drain low points in the road construction when the final paving is delayed. A break in the berm section is required when the curbing has not been constructed. After installation, drainage under the curb to side slopes is required, using minimum four-inch diameter pipe sections.
 - (i) Manhole covers and valve boxes projecting above the intermediate course shall have temporary ramps of cold mix asphalt placed at a five-foot radius. Prior to application of the surface course, the cold mix asphalt shall be removed. The elevation of the top-of-structure shall be inspected by the Director of Public Services or his designee and any needed adjustment to match the final pavement elevation shall be made. The intermediate asphalt course shall be inspected by the city to determine surface uniformity and integrity. Any settlement or other deficiencies found shall be repaired to the city's satisfaction before placement of the surface course.
17. Curb & Gutter Standards.

(a) 24" CURB & GUTTER SIMILAR TO GDOT STD. 9032B TYPE 2.

- (1) Curb & gutter material shall be Portland Cement Concrete, Class "A" as defined by GDOT, and shall have a minimum break strength of 3,000 psi at 28 days. All construction shall be in conformance with Section 430, GDOT Standard Specifications Construction of Transportation Systems, most current edition, with supplements and revisions.
- (2) Base roadway aggregate base 6 inches thick shall extend under the curb and gutter for a distance of 6 inches beyond the back-of-curb.
- (3) Joints ½-inch asphalt-impregnated expansion joints shall be provided at all structures and radius points, and at intervals not to exceed 100 feet in the remainder. Contraction joints shall be provided at intervals not to exceed 10 feet. Curb and gutter shall be set true to the line and grade of the street and finished to the section shown on the plans. Line and grade shall be field staked and set by the developer's engineer or surveyor. All gutters shall drain positively with no areas of ponding.
- (4) Damage to curb and gutter caused by construction or development activity shall be repaired from joint to joint at no cost to the City of LaGrange within 30 days or prior to the issuance of a certificate of occupancy, whichever is earlier.
- (5) Workmanship: Inferior workmanship or unprofessional construction methods resulting in unacceptable curb and gutter will be cause for rejection of the finished work. Unacceptable construction shall be removed and replaced from joint to joint. Disturbed areas along all curbing shall be backfilled, stabilized, and grassed.

(b) Roll Back Curbs and Header Curbs are prohibited.

18. Cul-de-sacs, if approved, shall have a minimum radius of 60 feet to the right-of-way, and a minimum radius of 48 feet to the face of curb.
19. Access to subdivisions shall be provided over a public street. Where subdivisions abut a public street that has a right-of-way width of less than 50 feet (Larger right-of-way widths are required for some streets), the subdivider or his agent shall dedicate additional land to provide a width of 25 feet (or half the total width required) on the subdivider's side of the centerline. Where public streets less than 50 feet in width (larger right-of-way widths may be required for certain roads) traverse subdivisions the subdivider or his agent shall dedicate additional land to provide a width of 25 feet (or half the total width required) on both sides of the centerline. Nothing herein shall be construed to obligate the City of LaGrange or subdivider or his agent to improve such road or street frontage.
20. Approval may be denied of a proposed subdivision if the Director of Public Services or his designee deems a public street to the subdivision as being inadequate due to right-of-way width or construction until such time as the road has been modified to meet city standards.
21. Driveways within the right-of-way shall be constructed according to Chapter 15-5 of the city code and must conform to the latest Georgia Department of Transportation and AASHTO Standard Specifications.

- 22. The developer or his agent shall furnish and install required striping and all regulatory signage (stop signs, yield signs, etc.) at proposed street intersections during construction of the streets. The City will install the street name signs and speed limit signs once the streets have been accepted. Subdivision entrance markers are not permitted within the existing or proposed public right-of-way.
- 23. Inspection. The Director of Public Services or his designee shall be notified prior to each phase of construction. Each developer/contractor shall notify the public work's division a minimum of forty-eight (48) hours in advance of each requested inspection.

25C-15-42. Standard Details and Illustrations.

SECTION 2:

All ordinances or parts of ordinances in conflict with this ordinance are hereby repealed.

SECTION 3:

This ordinance after adoption by the Council and upon approval by the Mayor shall become effective immediately.

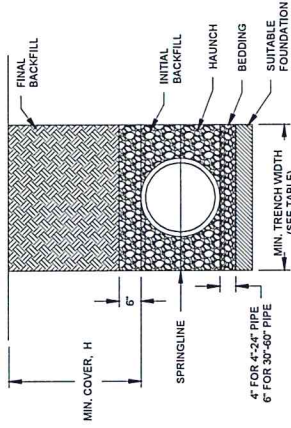
INTRODUCED AND FIRST READING _____

SECOND READING AND ADOPTED/REJECTED _____

SUBMITTED TO MAYOR AND APPROVED/DISAPPROVED _____

BY: _____
Mayor pro tem

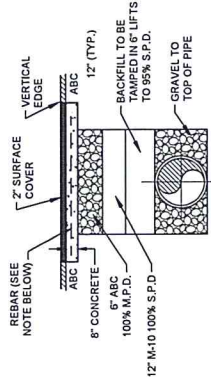
ATTEST: _____
City Clerk



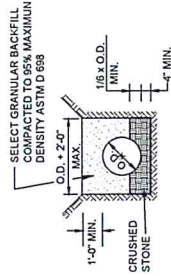
NOTES:

1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION.
2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
3. FOUNDATION, WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER.
4. BEDDING, SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER, UNLESS OTHERWISE NOTED BY THE ENGINEER. MINIMUM BEDDING THICKNESS SHALL BE 4" FOR 4'-2 1/2"; 6" FOR 30" PIPE.
5. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
6. MINIMUM COVER, MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE.

PIPE DIA.	MIN. TRENCH WIDTH
4"	21"
6"	23"
8"	26"
10"	28"
12"	30"
15"	34"
18"	39"
24"	48"
30"	56"
36"	64"
42"	72"
48"	80"
60"	96"

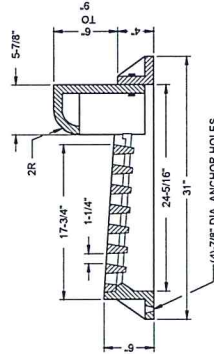
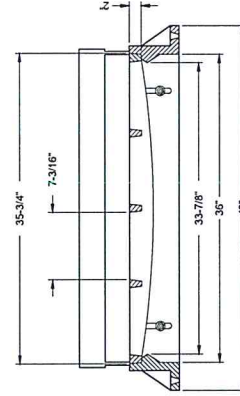


ASPHALT REPLACEMENT DETAIL
N.T.S.

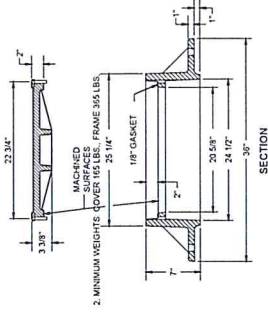
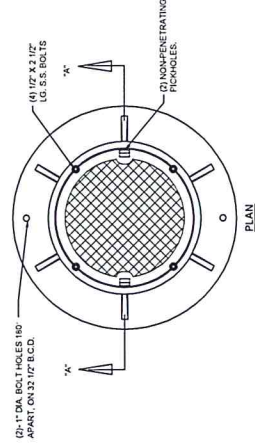


PIPE BEDDING FOR RCP STORM DRAIN
N.T.S.

PIPE LAYING CONDITIONS FOR HDPE STORM DRAIN
N.T.S. (MANUFACTURER'S SPECIFICATIONS)

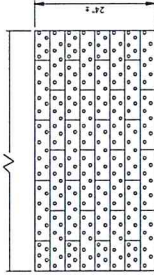


USF 5130 CURB & GUTTER INLET FRAME, HOOD AND GRATE SERIES
N.T.S.



- NOTES:**
1. ALL BEARING SURFACES TO BE MACHINED.

USF 420 MANHOLE RING AND COVER (OR EQUIVALENT)
N.T.S.



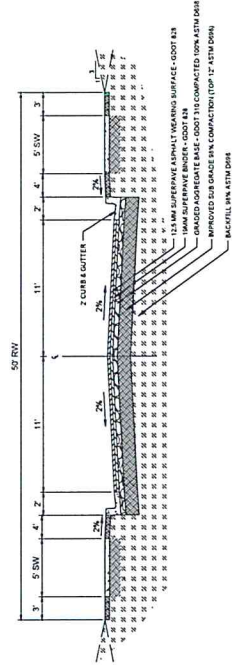
BRICK ARE 7 1/2" X 4 1/2" THICK

NOTES: DETECTABLE WARNING SHALL BE MADE OF BRICK OR GRANITE. DETECTABLE WARNING SHALL BE KEYSTONE HIGHLIGHTS, HOLLAND STONE (60 MM ADA PAVERS CHARCOAL IN COLOR)

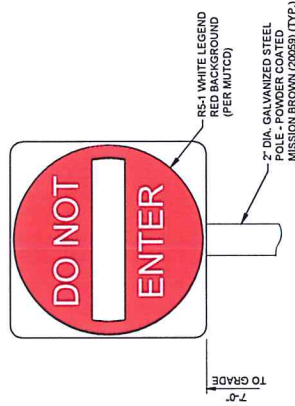
DETECTABLE WARNING SURFACE
N.T.S.

CLASSIFICATION	STREET BUILDUP		WEARING SURFACE (GDOT 828)	BINDER (GDOT 828)	GRADED AGGREGATE BASE (GDOT 310)
	PARKING LOTS	ROADWAYS WITHIN PUBLIC RIGHT-OF-WAYS			
COMMERCIAL & INDUSTRIAL	HEAVY DUTY CLASS V	STANDARD DUTY CLASS IV	2"	3"	10"
HEAVY DUTY CLASS V	ASPHALT/BASE	ASPHALT/BASE	1 1/2"	2"	2"
STANDARD DUTY CLASS IV	ASPHALT/BASE	ASPHALT/BASE	2"	3"	3"
HEAVY DUTY CLASS V	ASPHALT/BASE	ASPHALT/BASE	6"	6"	6"

NOTES: MIXES SHALL COMPLY WITH THE LATEST EDITION OF THE GEORGIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.

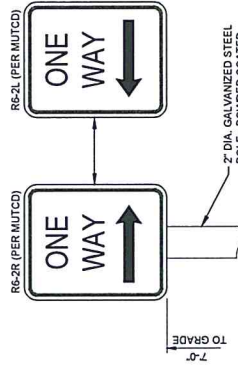


STANDARD ROADWAY DETAIL
N.T.S.



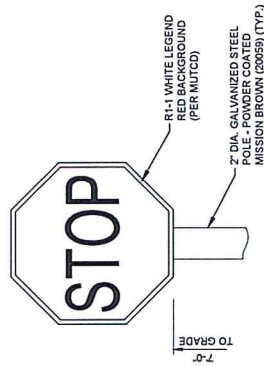
NOTES:
1. MOUNT EACH SIGN W/2 5/16" GALV. STL. BOLTS TO 3-1/2" (4LBFT) "U" CHANNEL SET 1-5" MIN. BELOW FINISH GRADE AND ENCASED IN #3 CONCRETE FILLED HOLE.
2. DO NOT ENTER SIGN PER MUTCD STANDARD RS-1 (30"x30").

REGULATORY STREET SIGN (DO NOT ENTER)
N.T.S.



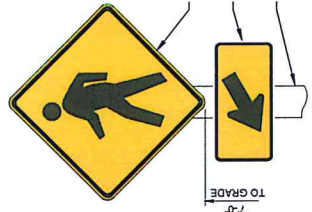
NOTES:
1. MOUNT EACH SIGN W/2 5/16" GALV. STL. BOLTS TO 3-1/2" (4LBFT) "U" CHANNEL SET 1-5" MIN. BELOW FINISH GRADE AND ENCASED IN #3 CONCRETE FILLED HOLE.
2. ONE WAY SIGNS PER MUTCD STANDARD R6-2 (24"x30").

ONE WAY SIGN
N.T.S.



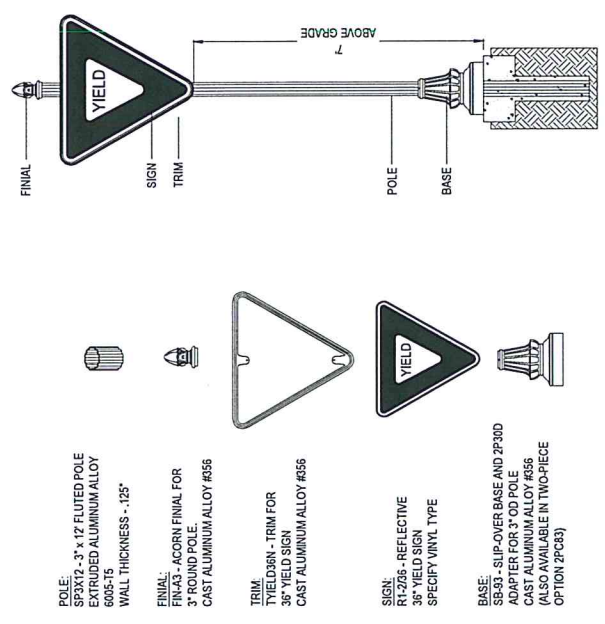
NOTES:
1. MOUNT EACH SIGN W/2 5/16" GALV. STL. BOLTS TO 3-1/2" (4LBFT) "U" CHANNEL SET 1-5" MIN. BELOW FINISH GRADE AND ENCASED IN #3 CONCRETE FILLED HOLE.
2. STOP SIGN PER MUTCD STANDARD 30"x30" R1-1.

REGULATORY STREET SIGN (STOP)
N.T.S.



- NOTES:**
1. MOUNT EACH SIGN W/2.5/16" GALV. STL. BOLTS TO 3-1/2" (4.8FT) "U" CHANNEL SET 1'-0" MIN. BELOW FINISH GRADE AND 1'-0" MIN. ABOVE SIGN PLATE.
 2. PEDESTRIAN WARNING SIGN PER MUTCD STANDARD W1-2 (30"X30") WITH W16-77 (24"X12") ARROW.

WARNING SIGN (PEDESTRIAN)
N.T.S.



- POLE:**
- SPX12 - 3" X 12" FLUTED POLE EXTRUDED ALUMINUM ALLOY 6005-T5 WALL THICKNESS -.125"

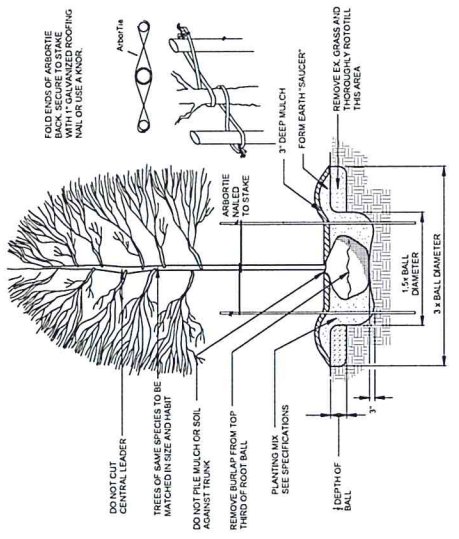
- FINAL:**
- FIN43 - ACORN FINAL FOR 3" ROUND POLE CAST ALUMINUM ALLOY #556

- TRIM:**
- TYIELD36N - TRIM FOR 36" YIELD SIGN CAST ALUMINUM ALLOY #556

- BASE:**
- SB30 - SLIP-OVER BASE AND 2P300 ADAPTER FOR T OD POLE CAST ALUMINUM ALLOY #556 (ALSO AVAILABLE IN TWO-PIECE OPTION 2PC33)

SHOWN WITH Z' BELOW GRADE POLE BURIAL

REGULATORY STREET SIGN (YIELD)
N.T.S.



TREE PLANTER DETAIL
N.T.S.

NOTE:

1. TREES LESS THAN 2" NEED TO BE STAKED WITH A SINGLE HARDWOOD STAKE. TREES GREATER THAN 2" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 4" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 6" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 8" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 10" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 12" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 14" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 16" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 18" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 20" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 22" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 24" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 26" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 28" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 30" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 32" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 34" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 36" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 38" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 40" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 42" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 44" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 46" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 48" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 50" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 52" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 54" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 56" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 58" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 60" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 62" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 64" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 66" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 68" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 70" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 72" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 74" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 76" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 78" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 80" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 82" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 84" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 86" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 88" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 90" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 92" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 94" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 96" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 98" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK. TREES GREATER THAN 100" NEED TO USE THREE METAL, THIN POINTS EQUALLY SPACED AROUND THE TRUNK.
2. STAKE ONLY TREES OF 1/2" CAL OR LARGER.
3. TOP OF ROOT BALL TO BE SLIGHTLY HIGHER THAN EXISTING GRADE.
4. DO NOT PIERCE ROOT BALL WITH STAKES.
5. PRUNE TREE UNDER DIRECTION OF LANDSCAPE ARCHITECT.
6. PRIOR TO STAKING MULTISTEM TREES, SUBMIT ALTERNATIVE TREE DETAIL TO LANDSCAPE ARCHITECT FOR APPROVAL.

- SPECIFIED ABSORBITE GREEN (OR WHITE) STAKING A GIVING MATERIAL IS TO BE FURTHER WORN WHERE 900 LB. BREAK STRENGTH. ABSORBITE SHALL BE FASTENED TO STAKES IN A MANNER WHICH SUPPORTS THE TREE.**

GOOD DETAILS WITH REFERENCE #:

1. PRECAST CB
2. SINGLE WING CB
3. DOUBLE WING CB
4. STANDARD PRECAST HEADWALL
5. CROSS WALK
6. TYPICAL CURB RAMPS
7. CURB AND GUTTER

SIGHT DISTANCE AT INTERSECTIONS, ALIGNMENT

- A) SIGHT DISTANCE REQUIREMENTS AT INTERSECTIONS SHALL BE AS FOLLOWS:

SPEED LIMIT (MPH)	SIGHT DISTANCE (EACH WAY) (FT)
35	550
30	450
25	350
20	250
15	200

DISTANCES SHALL BE MEASURED FROM CENTERLINE OF INGRESS / EGRESS ROAD EXTENDING TO EITHER SIDE OF ABUTTING STREET ALONG THROUGHFARE. INTERSECTIONS WITHIN SUBDIVISIONS SHALL BE DESIGNED FOR A MINIMUM SIGHT DISTANCE OF 200 FEET.

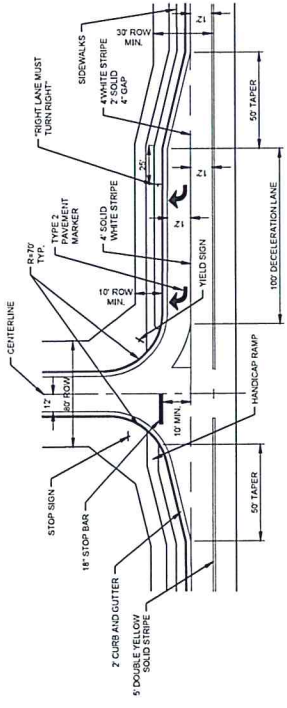
B) VERTICAL ALIGNMENT MUST BE DESIGNED IN CONJUNCTION WITH THE HORIZONTAL ALIGNMENT. ALL CHANGES IN STREET PROFILE GRADES HAVING AN ALGEBRAIC DIFFERENCE GREATER THAN ONE (1%) SHALL BE CONNECTED BY A PARABOLIC CURVE.

C) MINIMUM SAFE STOPPING DISTANCE IS A DIRECT FUNCTION OF THE DESIGN SPEED. TWENTY-FIVE (25) M.P.H. IN RESIDENTIAL AREAS, AND THIRTY-FIVE (35) M.P.H. IN LOCAL, NON-RESIDENTIAL AND COMMERCIAL AREAS. A HEIGHT OF EYE OF THREE AND ONE HALF (3.5) FEET AND HEIGHT OF OBJECT OF ONE-HALF (0.5) FOOT IS USED TO DETERMINE SAFE STOPPING SIGHT DISTANCE.

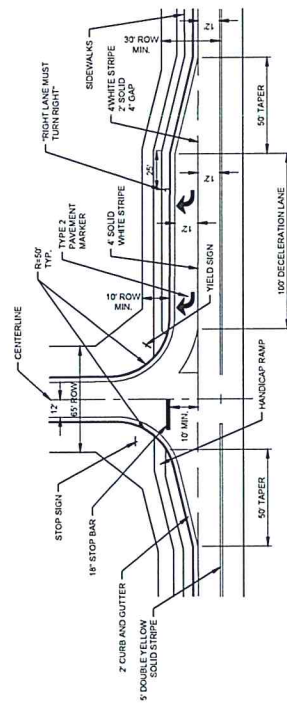
D) THE MINIMUM LENGTH OF VERTICAL CURVE REQUIRED FOR SAFE STOPPING SIGHT DISTANCE SHALL BE CALCULATED USING AASHTO "A" POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS, LATEST EDITION.

SIGHT DISTANCE FOR HORIZONTAL CURVES

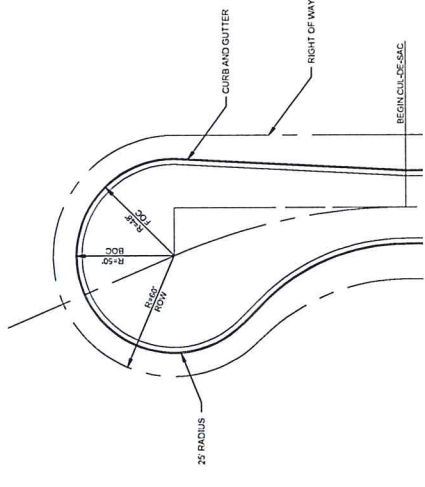
THE SIGHT DISTANCE FOR HORIZONTAL CURVES AT SUBDIVISION ENTRANCES IS DETERMINED BY THE LINE OF SIGHT AVAILABLE TWO (2) FEET ABOVE THE STREET SURFACE. THE SIGHT DISTANCE IS MEASURED ALONG THE EXISTING EDGE OF PAVEMENT BEGINNING AT THE CENTERLINE OF THE PROPOSED ENTRANCE AND ENDING WHERE THE LINE OF SIGHT INTERSECTS THE EXISTING CURVE. THE MINIMUM SIGHT DISTANCE SHALL BE MEASURED TO THE EXISTING CURVE. EXAMPLES OF OBSTRUCTIONS ARE VEGETATION, GROUND COVER, SIGNS, UTILITIES, EXISTING TOPOGRAPHY, ETC.



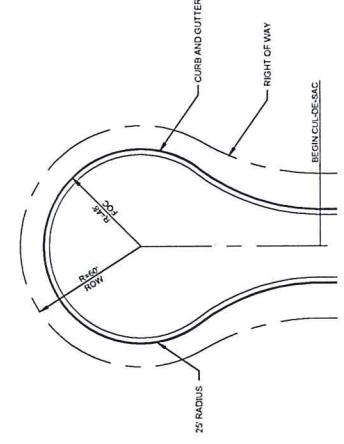
TYPICAL INDUSTRIAL STREET
N.T.S.



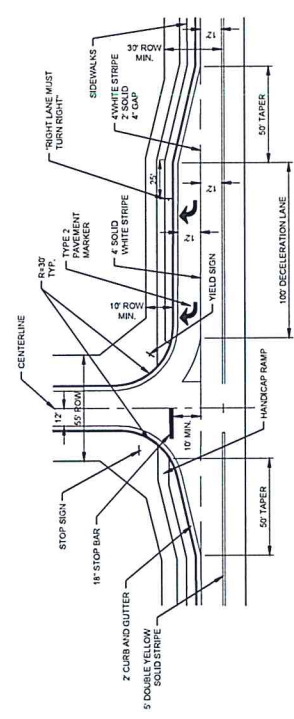
TYPICAL COMMERCIAL STREET
N.T.S.



OFFSET CUL-DE-SAC - 60' ROW
N.T.S.



STANDARD CUL-DE-SAC - 60' ROW
N.T.S.



TYPICAL RESIDENTIAL STREET
N.T.S.

- **Additional Requirements (LaGrange Unified Development Ordinance)**

1. Dead end streets (cul-de-sacs) are discouraged and are considered detrimental to the general good of the community. However, short cul-de-sacs of less than 250 feet in total length may be approved by the City of LaGrange provided that said cul-de-sac does not discharge traffic to a major arterial, collector street, or avenue thoroughfare, as such are defined within the thoroughfare design standards. Cul-de-sac squares (a planted area around which traffic can circle) may be mandated by the City of LaGrange when dead end streets are authorized by the City of LaGrange. The City of LaGrange shall have the right to require the dedication of adequately sized right-of-way to facilitate connection to adjoining property and/or future streets. **(Sec. 25C-15-28)**

2. Private residential streets. If absolutely necessary in a subdivision, private residential streets shall be built to structural standards for Residential Streets. **(Sec. 25C-15-28)**

3. Alleys. Non-residential uses shall provide a service and delivery plan proposed for all uses. Provisions for alleys along the rear of residential lots is encouraged, except where, in the opinion of the City of LaGrange, such alleys are not required. The use of alleys will be assessed by the City of LaGrange in conjunction with the applicable thoroughfare design standards during the application review process. The City of LaGrange reserves the right to require that alleys be developed and maintained as private property and that the developer provide a method and/or structure to finance the maintenance of alleys. All private alleys shall include a municipal easement giving the right of passage for the delivery of service, the right to install, operate and maintain water, gas, electric, and telecommunications and stormwater management facilities in the alleyway. **(Sec. 25C-15-28)**

4. Storm drainage. In connection with the street improvement program in every new subdivision, the subdivider shall do such grading and provide such drainage ponds and structures and storm sewers as may be required by the City of LaGrange. Reinforced Concrete Pipe will be required within all road rights of way. HDPE Pipe will be allowed adjacent to the right of way but not underneath. No storm drainage cast in manhole rings and covers will be allowed in the roadway. **(Sec. 25C-15-28)**

5. Subdivider or developer responsibility. The subdivider or developer shall be responsible for the dedication of land and/or construction of public streets, parks, and recreation, public transit, and school areas and facilities, and other publicly owned areas and facilities required to meet the demands of the proposed project or pay a required fee in lieu of to the City of LaGrange as determine to meet such demands of the project. **(Sec. 25C-15-28)**

6. The naming of streets shall be at the sole discretion of the mayor and council. Developer/applicants may suggest names. However, names that appear confusing, sound similar when spoken, are spelled similarly, may cause offense, or use words or names associated with exiting names in the City's street system are discouraged in the interest of public safety, service delivery, and use by the general public. Proposed streets obviously in

alignment with existing and named streets shall bear the names of existing streets. In no case shall the name of the proposed streets duplicate other existing street names, irrespective of the suffix used. **(Sec. 25C-15-29)**

7. Street improvements in subdivisions shall be required as set forth in the applicable thoroughfare design standards. **(Sec. 25C-15-30)**

a. The City of LaGrange may participate in the paving, curbing and guttering of Avenue thoroughfares to the extent of one-third (1/3) of the cost thereof, if the mayor and council deem such participation advisable. No such participation by the City of LaGrange shall be considered, unless prior to such improvement, the owner of such subdivision and the owners of lots abutting the thoroughfares to be improved in such subdivision shall petition the mayor and council for such participation. **(Sec. 25C-15-30)**

b. The streets in a subdivision or development in the City of LaGrange shall not become public streets until such time as they are constructed, inspected and approved as herein required and then only after acceptance by the City of LaGrange. **(Sec. 25C-15-30)**

c. Any such streets referred to in subsection (b), while construction is in progress, shall be barricaded so as to prevent traffic thereon and shall be clearly marked to indicate that the street is under construction and not open for travel. **(Sec. 25C-15-30)**

d. The barricades and markings referred to in subsection (c) shall remain and be maintained by the subdivider or developer until construction is completed and until such street is accepted as a public street by the City of LaGrange **(Sec. 25C-15-30)**

8. Blocks shall not be more than 600 feet in length. Private drives or streets that are built according to the thoroughfare standards shall be permitted to be utilized to meet the requirements of this section. **(Sec. 25C-15-31)**