

ARTICLE 6

DESIGN AND IMPROVEMENT STANDARDS FOR MAJOR SUBDIVISIONS

6-1 PURPOSE - The purpose of this Article is to establish the basic and minimum design and improvement standards which will be required as a pre-condition to development or in conjunction with development for lots, streets, utilities, and other physical elements in the subdivision. Standards exceeding these minimum requirements may be provided by the developer, or required by the Commission. A major direction of this Article is to promote development that is most harmonious with the existing environment, while providing guidelines and standards to protect the public health, safety and welfare. To achieve this end, development should follow as closely as possible the contour of the land and should be designed to minimize cuts and fills. The project engineer shall design the work. Accuracy, completeness, and construction feasibility of designs and construction plans, and inspection of all improvements during construction are the responsibility of the project engineer. The Division of Engineering will administer the development process and rely on the project engineer to adequately design the infrastructure and comply with the Division of Engineering Technical and Procedures Manuals.

6-1(a) SPECIAL PROVISION FOR STREET CONTINUITY AMENDMENTS - The amendments to sections 6-4(a), 6-8(b), 6-8(d) and 6-8(f) do not apply to development plans approved prior to the date of their enactment.

6-2 ADEQUATE PUBLIC FACILITY STANDARDS - In addition to the specific design standards and requirements contained herein, the following minimum site conditions shall exist prior to Planning Commission approval of any subdivision, whether such facilities are provided by the developer, a private utility, or the Urban County Government.

6-2(a) PUBLIC SANITARY SEWERS - Shall be provided as follows:

(1) TREATMENT PLANT CAPACITY - The projected amount of sewage effluent generated by the proposed development shall not cause the allocated capacity of the treatment plant that will serve the projected development to be exceeded, nor will it cause any violation of Federal, State or local water quality laws or standards in effect at the time of development.

(2) SEWAGE COLLECTION SYSTEM - The proposed development shall be served by a sewer collection line of sufficient size and capacity to

accommodate the effluent projected to be generated by the proposed development in addition to the demands placed on the system by existing development, without exceeding the design capacity of the sewer line and/or sewage pump stations.

For purposes of making this determination, "served" means that there is a sewage collection line in the public way on which the proposed development will have frontage or there is a sanitary sewage collection line otherwise available to serve the proposed development; or the developer will finance and will, at the appropriate time, execute a bond or other surety to guarantee the extension, in accordance with the 201 Master Sewer Plan and any sanitary sewer guidelines established by the Urban County Council, of a sewer line to serve the proposed development; or that construction of the sewer line is scheduled for completion within one year.

(3) DOCUMENTATION - Not later than at the time of execution of the Development Agreement, the developer shall provide written documentation from the Division of Water Quality that adequate sanitary sewer treatment plant capacity exists for the proposed development and that the proposed development is served by a sewer collection line of sufficient size and capacity as required by the LFUCG Capacity Assurance Program.

6-2(b) PRIVATE SANITARY SEWERS - Where a private sanitary sewer system exists and is to serve the proposed development, the developer shall be required to file documentation that the private plant operator has agreed to serve the development and has the existing capacity in the treatment plant to do so. This statement shall be filed in conjunction with the application for preliminary subdivision plan approval (or final subdivision plan, if no preliminary plan is required). The capacity statement shall be subject to the approval of the Lexington-Fayette County Health Department and the Kentucky Division of Water. No subdivision shall be permitted that would require construction of a new private treatment plant or expansion of an existing private treatment plant.

6-2(c) PUBLIC ROADS - The Planning Commission will review each proposed subdivision to determine whether it is served by proper community access roads. The Commission may postpone approval of any such subdivision until it has determined that such needs are properly met.

6-3 PUBLIC NEED STANDARDS AND REQUIREMENTS

6-3(a) RESERVATION OF LAND FOR PARKS, OPEN SPACE, SCHOOLS AND OTHER PUBLIC FACILITIES - The developer, in the design of the subdivision plan, and the Urban County Planning Commission, in its review of the plan, shall consider the adequate provision of sites for parks; open space; schools and other public facilities, as indicated on the Comprehensive Plan. Where such facilities are shown and located on the Comprehensive Plan, or where the Urban County Planning Commission otherwise determines that a portion of the land is required for such public facilities, the developer may be required to reserve such sites for a period not to exceed two (2) years after preliminary subdivision plan approval, during which time the Urban County, or other appropriate public entity, shall either acquire the property, authorize the Planning Commission to release the reservation, or make other arrangements agreeable to the developer.

6-3(b) FENCING ALONG AGRICULTURAL LAND - A standard gauge diamond mesh wire fence, of durable construction, at least 52" in height, set on 7½-foot posts with a required 6" top board, shall be constructed by the developer along the boundary line between any residential subdivision and land that is being actively used for agricultural purposes, unless the owner of the agricultural property agrees to an exemption. Such exemptions may be made in consideration of an agreement over the type of fence to be utilized, the extent of the fence, elimination of the fence, or similar matters of agreement between the developer and the adjoining agricultural landowner. The Commission, however, despite any agreement by the developer and the agricultural landowner to eliminate the fence, shall have the right to require the minimum fence, as specified above, where it finds such is necessary to protect the public health, safety and welfare. The Commission shall also have the right to determine that the existing fencing conditions satisfy the intent of this section to provide protection between the adjoining properties. These provisions also apply to the subdivision of land in the A-R, A-B and A-N zones. The Commission may also determine whether areas of existing vegetation may remain in required buffer yards required under the special provisions of the A-B zone.

6-4 LOT AND BLOCK STANDARDS - The following shall be the minimum standards for lots and blocks:

6-4(a) BLOCK STANDARDS - In general, intersecting streets that determine block length shall be provided at such intervals as necessary to meet existing street patterns, topography, and requirements for safe and

convenient vehicular and pedestrian circulation. Residential blocks ~~generally~~ shall not exceed ~~1,600~~ **one thousand (1,000)** feet in length, ~~nor be less than 500 feet in length,~~ with the block width generally being sufficient to allow two tiers of lots of appropriate depth. Non-residential blocks shall be of such length, width, and other design as the Commission finds necessary for the prospective use, including adequate provision for off-street parking, truck loading and unloading, buffer areas, pedestrian movement, and proper vehicular access to adjacent streets.

6-4(b) LOT SHAPE - Excessive depth in relation to width should be avoided, with a proportion of 2½ to 1 normally being considered as a desirable maximum for lot widths of sixty (60) feet or greater. Pointed or very irregular shaped lots shall be avoided where possible. The Planning Commission may require a lot depth of up to 150 feet on residential lots that back up to railroads, major streets, commercial or industrial areas, or other areas of conflicting land uses, where the Commission finds the additional depth is needed to mitigate the effects of the adjoining land use.

6-4(c) LOT FRONTAGE AND ACCESS - All lots shall abut an approved street for at least the minimum frontage requirement for the zone in which the lot is located. Frontage shall be measured at the street right-of-way line, except that in non-agricultural zones, in cases where curved streets or cul-de-sac radii are involved, the measurement shall be taken at the building line as set forth for the zone in which the lot is located; or if more restrictive, as set forth on the subdivision plan. All lots shall be designed so as to provide safe and convenient vehicular and pedestrian access to the street.

6-4(d) LOT LINES - Side lot lines should generally be at right angles to straight street centerlines and radial to curved street centerlines. However, this design standard is not intended to prohibit the creation of lots at a reasonable angle to the street where the intent of the developer is to create a north-south lot orientation for the purposes of maximizing the potential for use of solar related energy technology and techniques. Rear lot lines should consist of straight lines with a minimum number of deflections.

6-4(e) LOT AREA AND MINIMUM BUILDING SETBACK LINE - Lots for residential or non-residential use shall meet the minimum standards required by the Zoning Ordinance.

6-4(f) CORNER LOTS - Corner lots should be of sufficient width and depth to equal non-corner lots in the subdivision, plus sufficient area to comply with the required minimum building setback line on each street frontage.

6-4(g) DOUBLE FRONTAGE LOTS - Double frontage lots shall be prohibited except where employed to prevent excessive vehicular driveway access to streets or to separate residential areas from other areas of conflicting land or traffic use.

6-4(h) LAND REMNANTS - If remnants of land exist after subdividing, and have no apparent future use which can be properly controlled, they shall be incorporated into the proposed lotting scheme.

6-4(i) STREET ADDRESSES - Street address numbers shall be assigned to each lot in order to provide a separate and distinct address for each lot.

6-4(j) SUBDIVISIONS IN THE A-R, A-B, and A-N ZONES - In addition to other requirements contained herein, subdivision of lots in the A-R, A-B, and A-N zone are subject to the following:

(1) SITE ACCESS - In order to improve public safety by reducing conflict points, subdivision designs utilizing individual access points to existing rural roadways for lots less than forty acres in size are discouraged. The Commission may require subdivision designs utilizing new streets or other means to ensure that the number of potential conflict points is minimized.

(2) INTERNAL STREETS - Shall meet the following standards:

(a) CROSS-SECTIONS AND GEOMETRICS - New public and private streets and access easements serving more than two tracts in the A-R, A-B and A-N zones shall meet the paving specifications required in all subdivisions. Right-of-way widths shall typically be 60'; paving widths shall be 20'; ditch sections shall be provided as necessary for drainage control; and curb, gutter, and sidewalks shall not be required. Streets shall meet the street alignment requirements contained in Exhibit 6-1.

(b) STREET ALIGNMENT - Every attempt shall be made to locate streets so as to minimize disturbance of the natural land contours and trees. Existing and potential future agricultural/rural use patterns (including features such as farm roads, fence and tree lines, crop and pastureland areas, location of environmentally sensitive areas, natural protection areas, and similar features) shall be considered in the siting of streets so as to minimize potential disruption of agricultural activities and rural resources.

(c) STREET LIGHTING - The lighting of streets in the A-R, A-B and A-N zones shall be prohibited

unless a variance is granted by the Commission. In considering any variance, the Commission shall examine the need for the lighting based upon safety concerns. Any permitted lighting shall be the minimum needed to alleviate the safety concern and shall be of minimum intensity and directed away from adjoining properties to the greatest extent feasible. The Commission shall have the authority to specify fixtures and/or lighting intensity restrictions needed to carry out the intent of this section. Nothing in this section shall be deemed to abrogate the authority of the Lexington-Fayette Urban County Government to install any street lighting it deems necessary for public health, safety or welfare.

(d) STREET TREES - Street trees shall be required in conjunction with all public and private streets and access easements which serve more than two (2) tracts of land. The requirements of 6-10(d) shall be applicable.

(e) ALTERNATIVE DESIGNS - The Planning Commission is encouraged to consider granting variances as permitted under Article 1-5(b) for alternative street designs and roadway geometrics for streets that preserve agricultural patterns and features described in Section 6-4(j)(2)(b) above, subject to proper demonstration that such alternatives can be implemented without impairment of the public health, safety, and welfare.

(3) LOT STANDARDS - Shall be as follows:

(a) LOTTING PATTERN - Lotting patterns shall attempt to create tracts of an orientation, location and shape conducive to agricultural use patterns prevalent in the region.

(b) LOT SIZE - Lots shall contain the minimum acreage required for the zone in which they are located; however, calculations of the minimum lot size may include acreage to the centerline of adjoining new or existing roadways, but any lands or rights-of-way sold to a public entity in conjunction with public roadway improvement projects shall be excluded from the calculation.

(4) STRUCTURES - Shall conform to the following standards:

(a) AGRICULTURAL STRUCTURES - Agricultural structures shall meet the required setback from street rights-of-way as specified in the Zoning Ordinance. No agricultural structures shall be located within any flood hazard area, and shall be restricted from areas where such structures could

increase flood heights or obstruct the flow of flood waters. Use of fill or other methods to elevate such structures above the base flood elevation shall only be permitted as provided in Article 19 of the Zoning Ordinance.

(b) NON-AGRICULTURAL STRUCTURES AND DESIGNATION OF BUILDABLE AND NON-BUILDABLE AREAS - The location of non-agricultural structures shall meet the requirements for the zone in which they are located. Further, all subdivision plats for property located within the A-R, A-B, and A-N zones shall have “buildable” and “non-buildable” areas designated on them. These regulations recognize that, under the provisions of KRS Chapter 100, such designations cannot apply to agricultural structures. The designation of buildable areas shall include considerations such as proper location of on-site sewage disposal systems, proper siting of access and driveway locations, provision of site utilities, protection of vistas from designated scenic rural roadways, and similar matters. Non-buildable areas shall include environmentally sensitive areas, such as flood hazard areas; areas of significant tree stands; sinkholes and karst areas; slope exceeding 15%; “special natural protection” areas as designated in the Comprehensive Plan; and stone fences. The Planning Commission shall only permit the designation of buildable areas within such areas as a variance to these Regulations under the terms and conditions outlined in Article 1-5.

(5) LANDSCAPING AND BUFFERING - The Planning Commission shall have the power to impose landscaping and buffering requirements along the perimeter of the subdivided lot and adjoining agricultural land in the A-R, A-B, and A-N zones. The Commission shall determine the nature and extent of such screening and buffering as necessary to achieve the intended purpose of mitigating the potential effects of such subdivisions on adjoining agricultural lands; however, the maximum extent of such landscaping and buffering shall not exceed the requirements of Article 18-3(a)(1)(9) of the Zoning Ordinance.

(6) NOTICE - Notice of the Planning Commission public meeting on the subdivision request shall be posted upon the property in a conspicuous location for fourteen consecutive days prior to the meeting. This shall be the responsibility of the applicant. The sign shall be constructed of durable materials and shall state “SUBDIVISION PLAN” in letters not less than 3” in height; shall state the time, date, and location of the meeting; and the phone number of the Division of Planning in letters at least 1” in height. The applicant shall provide an affidavit to the Planning Commission

at the meeting stating that the sign was posted and maintained as required on the property during the notice period to the best of the applicant’s knowledge and ability. Also, newspaper notice shall be placed not more than twenty-one days nor less than seven days in advance of the hearing.

6-5 UTILITY STANDARDS - The following shall be the minimum standards for utilities such as telephone supply, electric supply, gas supply, water supply or other utilities:

6-5(a) TELEPHONE, NATURAL GAS, AND ELECTRIC SUPPLY - Every subdivision shall be provided with a proper telephone and electric system. Natural gas supply systems shall be provided at the option of the developer, dependent upon the ability of the local gas supplier to meet the demands of new development. All distribution lines or cables for utilities shall be installed below ground within the subdivision. Major facilities, such as high-voltage electric transmission lines; distribution feeder circuits of 200 amps or greater; or major cable/facilities to provide utilities, such as telephone and cable television to the area, as a whole, may be located above ground. The installation of these utilities shall conform to the commonly accepted construction standards and the requirements of the Kentucky Public Service Commission, and utility companies shall work cooperatively with the Division of Engineering during construction. Underground utilities shall be separated from sanitary sewer and/or storm sewer facilities by a minimum of six (6) feet and shall not conflict with designated tree preservation areas, areas where future multi-purpose trails are planned, areas designated for future right-of-way, or construction easements.

6-5(b) WATER SUPPLY - Every subdivision shall be provided with a complete water distribution system adequate to serve the area being developed with pipe lines, valves, fire hydrants, and other water facilities. In the layout or design of the water system, the following factors will be considered: piping characteristics; ground elevations; type of building construction; hydraulic capability of adjacent interconnected piping; fire flow requirements and any unusual requirements peculiar to the specific development. In general, the distribution system will be able to supply peak demands and fire flows without reducing pressures below desirable limits. No pipe smaller than 6-inch nominal diameter will be used where water flow is to a fire hydrant. The standards of the American Insurance Association or applicable state or local fire insurance rating association will be used as a guide in the matter of fire flow requirements and the spacing of fire hydrants. Each residence or business will be provided with a separate service line and meter. Fire hydrants will be of such construction as will conform to applicable specifications of the American Water Works Association and/or the American Standards

Association. The water system shall be designed and constructed of materials that will meet the approval of the Health Department, the Urban County Division of Fire and the Planning Commission.

6-5(c) UTILITY EASEMENTS - Easements for new, or the continuation of existing, utilities shall be provided for all subdivisions with the width or other characteristics as required by the Planning Commission, based upon recommendations from the various utility companies. Generally, easements may run completely through one lot, or split along side or rear lot lines. Where the placement of any utility easement would conflict with locations of existing or proposed trees, every effort shall be made to locate easement lines in such a fashion that the utility facilities within the easement do not result in the destruction of the trees. Any easement labeled as a "utility easement" obtained through the subdivision process shall be for the provision of utility services by a franchised local electric supply company, water supply company, natural gas supply company, telephone service provider, and cable television franchise. The Urban County Government shall also have the right to utilize such easements for the provision of street light and sanitary sewer services. Release or other modification of utility easements shall require the expressed approval of all such parties holding the right to use the easement. Encroachments as to the rights of the Urban County Government to use the easements shall be subject to the approval of the Commissioner of Public Works or the Commissioner's authorized agent. Further, the Urban County Government, through the office of Commissioner of Public Works, may fully dictate standards for and restrictions of use and installation of utility services within any general or specifically labeled utility easement for the purposes of settling disputes between utilities, coordination for major capital improvement projects, and other cases involving the health, safety, and general welfare of Lexington-Fayette County.

6-6 SEWAGE DISPOSAL STANDARDS - Every subdivision shall be provided with a sewage disposal system approved by the Lexington-Fayette County Health Department, the Kentucky Division of Water, the Division of Engineering and the Planning Commission. Construction shall conform to the Standard Drawings prepared and approved by the Division of Engineering and the Commissioner of Public Works and the Division of Engineering Technical Manuals.

6-6(a) SEPTIC TANKS - Septic tanks may be permitted for lots of ten (10) acres or more in size if public sanitary sewers are not immediately available to the property. For any proposed subdivision utilizing septic tanks, the Lexington-Fayette County Health Department and the Division of Planning shall review the general suitability of the site for septic tank use prior to Planning

Commission action. In areas of questionable suitability, the Planning Commission may postpone action on the subdivision plan until the developer has obtained the approval of the Health Department. In all cases, no building permits shall be issued until the Health Department has issued a septic tank permit, and notes shall be required on final subdivision plans to this effect.

6-6(b) SANITARY SEWAGE SYSTEM - Except where septic tanks are permitted, every subdivision shall be provided with a public sanitary sewage disposal system. However, the Commission may approve subdivisions utilizing a privately owned system if the treatment plant is in existence at the time of adoption of these Subdivision Regulations, and the Health Department and the Kentucky Division of Water have determined that the plant has the capacity to serve the development without necessitating the expansion of any plant. Design and construction of the sanitary sewer system, whether public or private, shall conform to the requirements of the Division of Engineering Technical Manuals and the Standard Drawings.

6-6(c) SANITARY SEWER EASEMENTS - Easements for sanitary sewers shall be shown on the final subdivision plan at widths and locations specified in the Sanitary Sewer and Pumping Station Manual. Sanitary sewer easements may be combined with utility and other easements if sufficient widths are provided; however, except for necessary crossing points, no sanitary sewer easement may be combined with a utility easement containing underground electric or natural gas lines, unless sufficient clearance between the facilities is provided and documented. Release or modification of sanitary sewer easements shall require the expressed approval of the Urban County Council. Encroachments and other uses within sanitary sewer easements shall be at the approval of the Commissioner of Public Works or the Commissioner's authorized agent.

6-6(d) RELATIONSHIP OF LOTS AND STRUCTURES TO SANITARY SEWER MANHOLES - Every lot shall be served by a gravity sewer lateral, and the design and layout of the subdivision shall reflect this requirement. A note shall be required on all final record plans, stating: "All structures shall have a floor, that is not partially or completely underground, that is at least one (1) foot above the elevation of the nearest downstream manhole lid. Sewage from plumbing connections below that floor shall be pumped and discharged into the structure's sewer line."

6-7 STORMWATER DISPOSAL STANDARDS - Every subdivision shall provide satisfactory drainage of stormwater by means of underground sewer pipes and/or constructed channels, provided that such stormwater drainage system conforms to the requirements of this

Article, the Division of Engineering Stormwater Manual and Standard Drawings, and the Lexington-Fayette County Health Department. Failure to comply with the requirements of Stormwater Disposal Standards during construction, or to properly maintain the easements and/or facilities required by these standards during or after construction, shall be a violation subject to a civil citation, as provided in Article 1 of these Subdivision Regulations.

6-7(a) FLOODPLAINS AND FLOODWAYS - Any construction within a designated floodplain or floodway shall conform with the provisions of Article 19 of the Zoning Ordinance. Notes and restrictions on the preliminary or final plan may be required by the Planning Commission to implement Article 19.

6-7(b) RELATIONSHIP OF STORM SEWERS TO SANITARY SEWER SYSTEMS - No storm water drainage system may be designed, constructed or connected so as to flow into any public or private sanitary sewer system.

6-7(c) STORMWATER BEST MANAGEMENT PRACTICES - Where required by the Stormwater Manual, stormwater best management practices shall be provided by the developer.

6-7(c)(1) SINGLE FAMILY, TWO-FAMILY, AND CERTAIN MULTI-FAMILY RESIDENTIAL AREAS - In single-family and two-family residential areas, when detention basins, extended detention basins, wet ponds, and constructed wetlands are used for stormwater management, they shall be dedicated to the Lexington-Fayette Urban County Government and shall be located on separate lots with adequate access for maintenance. In multi-family developments, such facilities shall be dedicated to the Lexington-Fayette Urban County Government when each multi-family structure is proposed to be located on a separate lot with access to a public street.

6-7(c)(2) OTHER RESIDENTIAL, OFFICE, BUSINESS AND INDUSTRIAL AREAS - In all other multi-family residential, business, office and industrial areas, all stormwater best management practices shall be owned and maintained by the property owner. No stormwater best management practices shall be subdivided so as to be a part of more than one lot, and all shall be connected to an adjoining buildable lot.

6-7(d) STORM DRAINAGE EASEMENTS - Easements for stormwater drainage systems and access to stormwater best management practices shall be shown on the final record plan. Special notes relating to the maintenance of such easements may be required by the Planning Commission on the final subdivision plan. Drainage easements may be combined with utility and

other easements if sufficient widths are provided. However, no drainage easement containing underground storm sewers may be combined with a utility easement containing underground electric or natural gas lines, except for necessary crossing points, unless sufficient clearance between the facilities is provided and documented. Release or modification of storm drainage easements shall require the expressed approval of the Urban County Council. Encroachments, construction of drainage improvements and facilities shall be at the approval of the Commissioner of Public Works or the Commissioner's authorized agent.

6-7(e) CONSTRUCTED CHANNELS - When surface drainage of one acre or greater is proposed, a constructed channel shall be used. Such channels shall be designed in conformance with the Division of Engineering Stormwater Manual to contain the 100-year storm within the channel.

6-7(f) SOIL EROSION CONTROLS - Control of erosion and sedimentation for subdivisions shall be as required under Chapter 16 of the Code of Ordinances and the provisions of the Division of Engineering Stormwater Manual.

6-7(g) ALTERNATE SOLUTIONS - In situations where off-site storm water improvements are necessary and appropriate for the public health, safety and welfare of the community, and the developer is prevented from making such off-site improvements because 1) right-of-way and easements cannot be acquired; 2) State/Federal approval is required and/or 3) other unusual conditions exist beyond the control of the developer, then the Urban County Government may assist in resolving the problem or developing alternate solutions.

6-8 STREET STANDARDS - All streets (which are classified herein as either expressways, arterials, collectors/connectors or locals) shall conform to the Division of Engineering Roadway Manual, the Standard Drawings and following standards:

6-8(a) STREET GEOMETRICS - All streets shall conform to the applicable geometric, cross-section and sight triangle standards of Exhibits 6-1 through 6-7.

6-8(b) STREET PATTERNS AND CONTINUITY - Streets shall be related to topography and shall **generally** provide for the continuation of existing or dedicated streets in adjoining or nearby tracts **in all directions, especially those which would otherwise be landlocked.** Street continuity shall be provided between subdivision developments with collector streets. In addition, local street connections shall be provided between developments to act as a network to supplement the collector/connector and arterial street systems. Street

patterns shall generally allow for circulation within and between subdivisions that does not require the use of arterial streets. Freeways and arterials shall not penetrate or bisect existing or proposed neighborhoods, but rather shall be located as appropriate boundaries for such. ~~Collectors/Connectors shall carry traffic from arterials into neighborhoods. Locals shall carry traffic from collectors into the neighborhood for the primary purpose of access to individual properties.~~

6-8(c) STREET NAMES - Streets that are obviously in alignment with existing streets shall bear the name of the existing street. Street names, including cul-de-sacs, shall not duplicate or closely approximate the names of other streets in Lexington-Fayette County; and all street names, subdivision names, property and building numbers, etc., shall be as determined by the Planning Commission.

6-8(d) PLANNING FOR ADJACENT LAND USES

6-8(d)(1) PLANNING FOR COMPATIBLE LAND USE - Whenever the proposed subdivision contains, or is adjacent to, an existing or proposed public park, school, or other public facility, the Planning Commission shall require that no less than sixty (60) percent of the total perimeter length of the facility abuts an approved street. Frontage shall be measured at the street right-of-way line. Adjacent street and lotting patterns shall be designed so as to provide safe and convenient pedestrian access to the facility.

6-8(d)(2) PLANNING FOR CONFLICTING TRAFFIC STREET PATTERNS AND/OR LAND USE - Whenever the proposed subdivision contains, or is adjacent to, a railroad right-of-way; arterial or expressway right-of-way; or conflicting changes in land uses, the Planning Commission shall require service roads; reverse frontage lots; lots with rear service alleys; lots with additional depth; or other such treatment as the Commission finds necessary for protection of abutting properties and to afford separation of conflicting types of ~~traffic street patterns~~ or land use.

6-8(e) HALF STREETS AND RESERVE STRIPS - New half or partial streets shall not be permitted. Existing half streets generally shall be completed to full right-of-way requirements. All streets to extend into an adjoining property shall have full right-of-way dedicated and street improvements constructed. When streets are constructed adjacent and parallel to an adjoining property, the right-of-way shall be established at the common property line. Reserve strips shall be prohibited.

6-8(f) CUL-DE-SACS - Cul-de-sacs shall not generally be longer than one thousand (1,000) feet, including the turnaround, which shall be provided at the closed end with a right-of-way radius of fifty (50) feet;

curb radius of forty (40) feet; and a transition curve radius of seventy-five (75) feet. Alternate turnaround designs depicted in these regulations (See Exhibit 6-7) shall also be permitted.

Longer cul-de-sacs may be permitted because of unusual topographic or other conditions; and, in such cases, the Planning Commission may require additional paving width if necessary to prevent over-loading of street capacity. ~~A cul-de-sac shall not be located off of another cul-de-sac.~~ Temporary turnarounds may be required at the end of stub streets as long as they are retained within the street right-of-way.

6-8(g) RURAL ROADS - Where right-of-way has not been previously dedicated or otherwise acquired along a rural road, the owner shall be requested to dedicate right-of-way from the centerline of the road to meet the rural local right-of-way standard. In all cases, the plan shall show the right-of-way which at least meets the statutory right-of-way minimum. The Planning Commission may require the construction of additional pavement, such as turn lanes when necessary, to provide as safe a situation as possible under the circumstances.

6-8(h) MEDIANS - Medians may be permitted in street cross-sections when approved by the Commission. Medians shall only be allowed when the street cross-section is designed to provide for all necessary traffic movements inherent in the standard cross-sections contained in Exhibits 6-1 and 6-3. Provision for the maintenance of any median areas and associated plantings shall be noted on the final subdivision plat of the property. Plantings shall be of a nature that will not conflict with sight distance or other traffic-related requirements. Location and design of medians and the installation of obstructions in the median shall be subject to the approval of the Planning Commission.

6-8(i) BICYCLE ROUTE STANDARDS - Where indicated in the Comprehensive Plan, the Planning Commission shall require the construction of the appropriate bicycle facility in the vehicular right-of-way as determined by the design matrix outlined in the Lexington Are MPO Bicycle and Pedestrian Master Plan in accordance with the Roadway Manual.

6-8(j) STREET AND SIDEWALK LIGHTING AND EASEMENTS - All streets, sidewalks, and walkways shall be properly lighted as required by the Commission. Such lighting shall be installed at the direction and expense of the Urban County Government. Easements necessary for provision of such lighting shall be provided and shall be labeled as "street light easement." Release or modifications of street light easements shall require the expressed approval of the Urban County Council. Encroachments and provision of street light facilities

shall be at the approval of the Commissioner of Public Works or the Commissioner's authorized agent.

6-8(k) STREET NAME / STUB STREET SIGNAGE

- Street name signs, stub street signs, and all other required traffic control signage shall be provided, installed and maintained by the developer as required by the Division of Traffic Engineering prior to plat recordings. Signage shall be in compliance with all requirements of the Manual On Uniform Traffic Control Devices (MUTCD) and LFUCG Traffic Engineering guidelines. All signage shall be maintained in a proper fashion by the developer until the final asphalt surface has been applied and written notification of pavement installation is given to the Urban County Traffic Engineer.

6-8(l) PRIVATE STREETS - Private streets may be permitted by the Planning Commission. Subdivision plans containing private streets shall conform to the same design standards as subdivision plans utilizing public streets and shall conform to all other subdivision regulations, unless different requirements are listed in the following:

(1) NO DISRUPTION TO THROUGH MOVEMENT - Private streets may be permitted only if they meet the definition of "local" streets; if they provide absolutely no present or future impediment to necessary through traffic movement in the general area; and if adjoining properties in the general area already have, or are capable of providing, a proper, efficient and safe street system that will in no way depend upon the private streets.

(2) RIGHT-OF-WAY AND SETBACK - Private street rights-of-way and building setback lines shall be shown on the plat and shall meet at least the minimum requirements of these Subdivision Regulations and the Zoning Ordinance as required for public streets to assure conformance if such streets are ever accepted for public dedication at a later date.

(3) STREET IMPROVEMENT STANDARDS - Any permitted private street also shall conform to the design and improvement standards for public streets. All private street improvements (excepting only the final course of asphalt, as noted below) shall be constructed in compliance with the approved improvement plan before the final subdivision plan is recorded. For the final course of asphalt only, the developer shall be permitted to post a surety in favor of the final maintenance association responsible for the private street, as provided in Article 4 of these Subdivision Regulations, and shall note such requirement on the final plat of the property. The developer shall be required to submit an affidavit to

the Division of Planning, attesting that the surety for the private street has been properly posted prior to recording the final record plan.

(4) MAINTENANCE RESPONSIBILITY - A homeowners' association or other mechanism which provides for equitable common responsibility for private street maintenance and repair shall be required to be established by the developer. The developer's responsibility to create such a mechanism shall be noted on the final plat of the subdivision. A requirement that each property owner be individually responsible for maintenance and repair of the portion of the street abutting the lot shall not be considered as acceptable for fulfilling the requirements of this section.

6-8(m) ACCESS EASEMENT STANDARDS -

Access easements (as opposed to public or private streets) shall be permitted to provide sole access to a lot only in rare and extreme circumstances where the Commission finds that the application of the requirements and standards for public or private streets would clearly be excessive or impossible due to existing development or other just cause. Prior to permitting an access easement as sole access to a lot, the Commission shall first thoroughly examine the possibility of utilizing a public or private street as access, and shall give specific reasons for permitting the access easement in its action on the proposed subdivision. The Commission shall have the right to fully regulate such access easements as to width, construction standards, use and any other relevant factor. Nothing within this section shall be construed so as to abrogate the power of the Planning Commission to deny that the easement will not be adequate to satisfy the traffic needs of the proposed subdivision. Access easements which are not for the sole purpose of access to property and are primarily provided for convenience and/or improved flow of traffic between adjoining properties may also be fully regulated by the Commission; however, no special findings shall be required in these cases.

6-8(n) SIDEWALK AND SHARED-USE PATH STANDARDS -

All sidewalks and shared-use paths primarily provided as part of the transportation system shall conform to the following standards and shall be designed in accordance with the Division of Engineering Roadway Manual, the Division of Engineering Standard Drawings, and in conformance with the Americans with Disabilities Act (ADA).

easement of sufficient width for the construction and use of the path. If a shared-use path is required by the Commission in lieu of a sidewalk, the developer shall

TABLE A: STANDARD SIDEWALK ALIGNMENT

STREET CLASSIFICATION	WIDTH (FEET)	
	DISTANCE FROM ROADWAY	WIDTH OF SIDEWALK
Non-Residential and Industrial Collectors/Connectors (40' Street Width)	10.5	6.0
Non-Residential and Industrial Collectors/Connectors (51' Street Width)	5.0	6.0
Residential Collectors/Connectors and Industrial Locals	5.5	6.0, 8.0 in high use area*
Local Residential	5.5	5.0
Local Residential Cul-de Sac	7.0	5.0
Arterial Major and Minor	7.0	6.0, 8.0 in high use area*

* Downtown and urban environments, near shopping centers, schools, civic centers, etc.

6-8(n)(1) SIDEWALK STANDARDS - Conventional pedestrian sidewalks shall be required on both sides of all roads unless the street is specifically exempted by these Subdivision Regulations, or a specific waiver is granted by the Planning Commission. A meandering sidewalk alignment may be approved by the Planning Commission to save trees or other major plantings, avoid rock outcroppings, or to avoid other physical conditions. Sidewalks shall be constructed of concrete and shall be four and one-half (4½) inches in thickness and a minimum width of five (5) feet. Sidewalks shall be placed adjacent to the street right-of-way line, except as noted in Exhibit 6-7 for cul-de-sacs. Slope toward curb shall be one-quarter (¼) of an inch to the foot. Sidewalks shall include a curb ramp wherever an accessible route crosses a curb. Where sidewalks are required on bridges, they shall have a minimum, barrier-free, width of eight (8) feet. The Standard Sidewalk Alignment shall be determined by the project road classification at the full build as described in Table A.

6-8(n)(2) OTHER PEDESTRIAN WALKWAYS - In addition to the sidewalks paralleling streets, the Commission also may require pedestrian walkways, with at least a 10-foot easement, at mid-block or other locations, to provide better pedestrian access to parks, schools, cemeteries, greenways or other land uses.

6-8(n)(3) SHARED-USE PATH STANDARDS - Where these paths are indicated in the Comprehensive Plan as outlined in the Lexington Area MPO Bicycle and Pedestrian Master Plan and where existing trails provide opportunities for connections, the Commission shall require the dedication of right-of-way, or an

build the shared-use path at a minimum width of ten (10) feet. The shared-use path shall be designed and constructed in conformance with the Roadway Manual.

6-8(o) STREET CONSTRUCTION - Specifications for streets, including grading and embankments, excavation, subgrade preparation, fill materials, curbs and gutters, and street paving, shall be designed and constructed in conformance with the Division of Engineering Standard Drawings, the Technical Manuals, and these Subdivision Regulations.

6-8(p) STREET IMPROVEMENT REQUIREMENTS FOR DEVELOPMENT ADJOINING EXISTING ROADWAYS - Any substantial development of subdivided property may reasonably be anticipated to create a burden on existing public roads, thereby posing a congestion and safety hazard for motorists, pedestrians or bicyclists. In order to ameliorate that hazard and to advance the public's interest in having a safe, equitable and adequate transportation system, the following requirements shall apply whenever a subdivision is proposed for property abutting an existing public roadway which does not meet the right-of-way and pavement width standards for the functional classification of that street:

(1) PROPOSED SUBDIVISIONS WHICH ABUT LOCAL OR COLLECTOR / CONNECTOR STREETS - Whenever a subdivision is proposed for property which abuts a local or collector/connector street, as defined in these Land Subdivision Regulations, the developer shall be required to dedicate right-of-way along the entire street frontage to a width which will provide one-half of the total

right-of-way necessary to comply with the standards as set out in Exhibit 6-1 of these Land Subdivision Regulations. It is assumed that the same right-of-way dedication will be required on the opposite side of the roadway at such time as that property develops, thereby providing the full necessary right-of-way width. Construction of roadway widening improvements (including paving, curb, gutter, sidewalk, and shared-use path, where appropriate) shall also be required as necessary to bring the roadway up to full cross-section requirements as set forth in Exhibits 6-1 and 6-3 of these Land Subdivision Regulations. Upon the recommendation of the Commissioner of Public Works, the Commission may permit a long-term surety to be posted in lieu of construction of such improvements where such are intended to augment programmed improvements to be made by the government.

(2) PROPOSED SUBDIVISION OF PROPERTY ABUTTING AN ARTERIAL STREET - Whenever a subdivision is proposed for property that abuts an arterial street which is, or is proposed to be, four lanes or more in width, the developer may be required to dedicate sufficient right-of-way to permit any necessary widening. In consideration of the fact that such dedication requirement may exceed that which would ordinarily be required for subdivisions abutting local or collector/connector streets, the developer shall not be required to construct roadway widening improvements for the full road frontage; but rather, improvements such as turn lanes for new intersecting streets or other access points may be required when necessary to provide as safe a situation as possible under the circumstances. Construction of sidewalks or shared-use paths shall be required to provide an accessible route in the public right-of-way.

6-8(q) INTERSECTION AND ACCESS SPACING GUIDELINES - The following guidelines shall be the basis for the determination of proper spacing for street intersections and driveway access for subdivisions. It is recognized that these guidelines will not be able to be adhered to in all cases, especially in areas where existing development is present. The Planning Commission shall attempt in all cases, however, to apply these guidelines to the greatest extent feasible in order to create safe and efficient traffic movement systems:

(1) SPACING MEASUREMENT DEFINITION - Distance shall be defined as the distance between the centerlines of intersecting streets and roads. However, in the case of an interchange, distances shall be measured from the centerline of any intersecting roadway to the closest near edge (projected) of the ramp roadway or, in the case of a free flow ramp terminal, to the gore of the nearest ramp.

(2) ACCESS STANDARDS BY FUNCTIONAL CLASSIFICATION

(a) EXPRESSWAYS - Expressways shall have intersections with arterials and/or other expressways. There shall be no intersections with lower type facilities. All intersections shall be of the grade-separation interchange type. The spacing of interchanges on expressways within the Urban County shall be determined jointly by the Lexington-Fayette Urban County Government and the Kentucky Department of Transportation.

(b) PRINCIPAL ARTERIALS - Principal arterials shall have intersections with expressways, other principal arterials, minor arterials and collector streets. Intersections shall be signalized as warranted. Any access to a principal arterial must be located at a minimum of 1,600 feet from any other access along that principal arterial (i.e., principal arterials, minor arterials, collectors/ connectors, major commercial or industrial driveway accesses). No new residential driveway access shall be allowed on a principal arterial. Protected left and right turn lanes with ample storage space must be provided at all intersections. The Kentucky Department of Transportation will be consulted when state maintained roads are involved.

(c) MINOR ARTERIAL - Minor arterials shall have intersections with expressways, principal arterials, other minor arterials and collector/ connector streets. Intersections shall be signalized as warranted. No new residential driveway access shall be allowed on a minor arterial. Commercial or industrial driveways shall be treated according to the non-residential spacing formula. Adequate provisions for left and right turn lanes shall be determined by the Division of Traffic Engineering and the Kentucky Department of Transportation for state maintained facilities. The spacing of intersections along a minor arterial shall be as follows:

1. Between an intersection with an expressway and an intersection with a principal or minor arterial, the distance shall be a minimum of 1,600'.
2. Between an expressway and a collector/ connector -- minimum 1,400'.
3. Between one principal or minor arterial and another -- minimum 1,400'.
4. Between a principal or minor arterial and a collector/connector -- minimum 1,200'.

5. Between a collector/connector and another collector/connector -- minimum 1,000'.

(d) COLLECTOR/CONNECTOR STREETS -

Collector/connector streets shall have intersections with arterials, collectors/connectors and locals. Collector/connector streets shall be designed for system continuity and traffic flow. The spacing of intersections along collectors/connectors shall be as follows:

1. Between a principal or minor arterial and another, the distance shall be a minimum of 1,400'.
2. Between a principal or minor arterial and a collector/connector -- minimum 1,000'.
3. Between one collector/connector and another -- minimum 800'.
4. Between one principal or minor arterial and a local -- 500'.
5. Between a collector/connector and a local - - minimum 400'.
6. Between a local and another local -- minimum 250'.

(e) LOCAL STREETS - Local streets shall have intersections with collectors/connectors and other local streets. Some designs may warrant exceptions. The spacing of intersections on local streets shall be as follows:

1. Between one collector/connector and another collector/connector -- minimum 800'.
2. Between a collector/connector and a local - - minimum 250'.
3. Between a local and another local -- minimum 250'.

6-8(q)(3) LAND USE ACCESS

(a) RESIDENTIAL - All single-family residential structures shall be allowed one access per lot. An additional point of access may be permitted for corner lots, loop driveways, or other instances where public safety will not be impaired by utilizing a second point of access. Duplexes and four-plexes shall be permitted two accesses. Subdivisions shall be designed such that these uses have no direct driveway to either principal or minor arterials.

Apartment complexes, condominium developments, as well as all other developments that are accessed through a common private drive or street system, shall be treated as high density residential developments regardless of the actual overall density of the development. These developments

shall not have access to principal arterials. However, they may be allowed access to minor arterials, provided that the private driveways are allowed, consistent with the access spacing standards governing the access of collector/connector streets to minor arterial streets. The access of these private driveways to collector/connector streets shall be spaced according to the minimum distances produced by the following formula: $A = 50 (\sqrt{x})$

Where:

A = the required access spacing in feet from the nearest intersecting street or another high density private driveway. (This figure should be rounded to the nearest 10 feet).

x = the number of units in the development.

50 = the minimum access spacing (in feet).

The minimum spacing requirement shall not exceed the spacing standards established for the spacing of local streets along a collector/connector street. Distances for high density private driveway access shall be measured from the centerline of the driveway to the right-of-way line of the nearest intersecting street or to the centerline of another high density private driveway access. High density private driveways should not intersect local streets. All other residential accesses shall not be less than 25 feet from any local street intersection (whether public or private streets), nor less than 50' from any public collector street intersection.

(b) NON-RESIDENTIAL - All non-residential land uses may have access to principal arterial streets via service roads. Non-residential land uses may also have access to minor arterials and to collector/connector streets. Non-residential land uses shall generally not have access to residential local streets. The spacing of these accesses shall be measured from the right-of-way line of the nearest intersecting street or the centerline of the nearest intersecting non-residential access point (i.e., driveway). The minimum spacing on non-residential access points shall be based upon the maximum potential trip generation of the contiguous area which has been zoned and/or planned for non-residential land use that abuts the subject road facility and encompasses the area which has been proposed for development by the developer. Access to a minor arterial via a service road shall be allowed only in

accordance with the spacing standards based upon the trip generation of the total area immediately served by the service road. The determination of potential trip generation shall be made using sources and methods approved by the Lexington-Fayette Urban County Government, Division of Planning. The spacing of access points shall be determined as follows: $D = 1400 - (1000 (1 - TE/3000))$

Where:

D = the required distance between access points (in feet).

TE = the maximum potential trip ends of the area in which the development will take place.

If D exceeds 1,400 feet, then the minimum standard of 1,400 feet shall apply to all access points of that development. D shall be rounded to the nearest 50 feet. For properties fronting along street facilities where the required spacing would not allow an individual access to properties adjacent to the property currently being developed, an arrangement shall be made for the joint use of entrances or the construction of service roads by developers.

6-9 TRAFFIC CALMING – Traffic calming measures shall be integrated into all existing and proposed street designs to improve public safety, ensure safe operating speeds, and facilitate context sensitive design that results in a safe multi-modal street network.

The Division of Traffic Engineering will consider traffic calming measures on a case-by-case basis, and make recommendations to the Division of Planning and the Urban County Planning Commission.

Traffic calming measures have been established by the Division of Traffic Engineering in the Neighborhood Traffic Management Manual. Type 2 techniques or additional design measures may include, but are not limited to: bump-outs/curb extensions, pinch points, pavement narrowing (chokers), change in paving materials, roundabouts and/or traffic circles, raised intersections and/or crosswalks, site furniture/bike racks for intersections adjacent to open space, and/or reducing block lengths. Road closures and restrictions (Type 3 techniques) should not be utilized.

6-10 LANDSCAPING AND TREE PLANTING STANDARDS - The requirements for landscaping, land use buffers and tree planting shall be as follows:

6-10(a) LANDSCAPE AND LAND USE BUFFERS - All land subdivision plans shall conform to the requirements of Article 18 of the Zoning Ordinance.

6-10(b) STREET TREE PLANTINGS FOR RESIDENTIAL LOCAL AND COLLECTOR/CONNECTOR STREETS - Street plantings shall be required on all collector/connector and local streets in all residential subdivisions in accordance with the following provisions:

6-10(b)(1) TYPE AND NUMBER - Trees to be planted shall be of the deciduous type, and shall be of a type of root growth pattern that minimizes potential damage to street and utility facilities. A listing of approved trees shall be included in the Planting Manual. Trees shall be required at the standard of one (1) tree per 45 feet of street frontage for large trees, 35 feet for medium trees, and 25 feet for small trees.

6-10(b)(2) LOCATION CRITERIA - Two options shall be permitted at the developer's discretion. The first option shall be to place the trees within a planting easement with a minimum width of 5', to be located immediately adjacent and parallel to the street right-of-way. The second option shall be to plant the trees within the street right-of-way between the street curb and the sidewalk in the area, commonly called the "utility strip." The developer's choice shall be shown on the appropriate subdivision and development plans, and shall be consistent on any given street. Large and small trees may be planted in a utility strip with a width of seven (7) feet or greater. Medium trees may be planted in a utility strip with a width of five (5) feet or greater. No street tree shall be located in the right-of-way within fifty (50) feet of the street intersection.

6-10(b)(3) PLATTING REQUIREMENT - The cross-section to be utilized shall be determined at the time of Commission action on the preliminary subdivision plan, and shall also be reflected on the final subdivision plan. The final subdivision plan shall contain a note stating that the maximum number of any one species of trees to be used is 25, or 25 percent of the total number of trees, whichever is greater. At least four (4), and no more than six (6), alternative species shall be listed on the final plat. The final plan will also indicate (by symbol) the number of trees required on each lot, based on Section 6-10(b)(1) above, and their general location. The final subdivision plan shall also contain a note stating that the street trees required herein, within either the right-of-way or designated easement, shall be maintained by the property owner in accordance with Section 6-10(b)(5) herein below. A note stating that no tree may be removed without the approval of the Urban Forester shall also appear on the final plan. A fee in the amount

of ten dollars (\$10.00) per tree shown on the plat, payable to the Lexington-Fayette Urban County Government, shall be paid by the developer and collected at the time of the recording of the final record plan.

6-10(b)(4) PLANTING - It shall be the responsibility of the developer to plant the required street trees in accordance with the Engineering Manuals.

6-10(b)(5) MAINTENANCE - The developer shall maintain all trees for a period of one year from the date of their planting and shall replace any required tree that dies within one year of its planting. Upon the expiration of one year from the date of planting, the owner of the subject property shall be responsible for the continued proper maintenance of all street trees and shall keep them in a proper, neat, and orderly appearance free from refuse and debris at all times. Topping trees or the severe cutting of limbs to stubs larger than three (3) inches in diameter within the tree crown to such a degree as to remove the normal canopy shall not be permitted for the maintenance of trees required by this section.

6-10(c) STREET PLANTINGS ON ARTERIAL STREETS - Street plantings shall be required for any double frontage lot in any zone, except A-R, A-B, A-N and A-U, that adjoins an arterial street not maintained by the state and which does not provide direct access to the adjoining property.

6-10(c)(1) TYPE, NUMBER, AND LOCATION - A continuous 6' high hedge shall be required with the same species to be used for the entire frontage of the development. Where possible, the hedge should be planted in the right-of-way, and 3' from the right-of-way fence. Trees should be planted in the right-of-way with the exact location to be approved by the Traffic Engineer and the Commercial Landscape Examiner. All trees are to be planted a minimum of 10' from the right-of-way fence. Where there is less than 10' between the right-of-way fence and the sidewalk, or where there is no sidewalk, less than 10' feet between the right-of-way fence and the curb line of the arterial street, no trees are required. No street tree shall be located in the right-of-way within fifty (50) feet of the intersection. Trees shall be required as described in Table B. (The Planting Manual and Plant Materials List shall be used to meet the minimum requirements set forth herein).

Where, due to site restrictions, the planting cannot be placed in the right-of-way, the Commission may allow the landscaping to be placed on the adjacent property.

6-10(c)(2) PLATTING REQUIREMENT - The cross-section to be utilized and tree species shall be determined at the time of Commission action on the preliminary subdivision plan, and shall also be reflected on the final subdivision plan. Tree species shall be consistent for any given development, and at least one alternative species of the same genus shall be specified. The final subdivision plan shall also contain a note stating that the arterial street plantings required herein shall be maintained by the developer for one year from the date of planting. Such maintenance shall include replacing required plantings that die within the first year. After the first year, the Urban County Government shall maintain the plantings.

6-10(c)(3) COMPLETION OF THE ARTERIAL STREET PLANTINGS - The required arterial street plantings shall be considered a public improvement and, as such, shall be fully installed prior to Commission consideration of the final record plan. The Commission may, however, permit the plan to be approved and recorded prior to the completion of the plantings with the posting of a surety as provided in Article 4 herein.

6-10(d) STREET TREE PLANTING IN THE AGRICULTURAL RURAL (A-R), AGRICULTURAL BUFFER AREA (A-B) AND AGRICULTURAL NATURAL AREAS (A-N) ZONES - Rural street tree plantings shall be required for any subdivision of land in an A-R, A-B or A-N zone involving the construction of a public street or private street or utilizing an access easement. Such plantings shall conform to the following standards:

6-10(d)(1) TYPE AND NUMBER OF TREES - Rural street trees shall be required at the standard of one (1) tree for every twenty-five (25) feet of lineal street length. Trees to be planted shall be of the deciduous type, and shall be large tree species as specified in the Planting Manual; however, up to 25% of the total number of trees may be of the small or medium flowering variety.

6-10(d)(2) LOCATION CRITERIA - Developers are encouraged to group rural street trees rather than arrange them in a straight line. The Commission may require the planting of any or all of the trees to adjoin the existing rural road

6-10(d)(3) PLANTING REQUIREMENT - The tree species to be utilized shall be determined at the time of Commission action on the preliminary subdivision plan and shall also be reflected on the final record plan. Tree species are not required to be consistent for the entire length of the street; however, species that are biologically compatible are to be used. The final plan

shall indicate by symbol the number of trees and the general location where they shall be planted. The final subdivision plan shall contain a note stating that the rural street trees required herein shall be maintained by the property owner in accordance with 6-10(b)(5) above. A note stating that no tree may be removed without the approval of the Urban Forester shall also

appear on the final plan. A fee in the amount of ten dollars (\$10.00) per tree shown on the plat, payable to the Lexington-Fayette Urban County Government, shall be paid by the developer and collected by the Division of Planning at the time of the recording of the final record plan.

TABLE B: TYPE, NUMBER AND LOCATION OF TREES

<u>LOCATION DESCRIPTION</u>	<u>REQUIRED TREES</u>
(a) The elevation of the arterial is more than 10' above the elevation of the adjacent property	1 Evergreen tree/20' OFT planted 20' O.C.
(b) The elevation of the arterial is not more than 10' above or is below the elevation of the adjacent property	1 Tree/50' OFT from Group A of the plant list, alternated with 1 flowering tree for every 50' OFT
(c) The intersection of a collector/connector street with the arterial	Three evergreen trees planted in a triangular pattern 20' O.C., three deciduous trees from Group A of the plant list planted 40' O.C., and three flowering trees 25' O.C.
(d) Culverts and other wet locations	1 riparian tree/40' OFT

6-10(d)(4) PLANTING AND MAINTENANCE - Planting and maintenance of rural street trees shall be as provided in 6-10(b)(4) and (5) herein above.

6-11 STANDARDS FOR ENVIRONMENTALLY SENSITIVE AREAS AND GEOLOGIC HAZARD AREAS -

It is recognized that in certain areas environmental or geologic conditions may pose problems to providing safe development. Where such conditions are encountered on the land to be developed, all work shall conform to the Division of Engineering Technical Manuals. The locations of most environmentally sensitive and geologic hazard areas are shown in the Comprehensive Plan. Additional maps and other information regarding such areas are on file with the Division of Planning. Whenever a subdivision is proposed on land containing such areas, the requirements of this section shall apply. Failure to comply with these standards or with requirements established by this section, during or after construction, shall be a violation subject to a civil citation, as provided in Article 1 of these Subdivision Regulations.

6-11(a) ENVIRONMENTALLY SENSITIVE AREAS

- This term applies to any area, which, due to its natural or physical setting, may have environmental problems with regard to development. This is not to say that the land cannot be developed; but if it is determined that development can occur, then some safeguards, such as detailed site planning, will be necessary to overcome the physical limitations of the land. Lands in question shall include (but shall not be limited to) areas of steep slope (over 15%), floodplains, sinkholes, areas of poor soils, improper fill, wetlands, significant areas of tree stands, aquifer recharge areas, etc.

6-11(a)(1) REVIEW BY THE COMMISSION - All environmentally sensitive areas shall be identified and located on the preliminary subdivision plan as

provided in Article 5. In addition, the developer shall be required to file with the application a general statement describing the nature of the environmentally sensitive areas, and the manner in which such area is to be handled during development of the property, as well as any special design measures taken by the developer to attempt to minimize the development's impact on the environmentally sensitive areas. If, after a review of this general statement and any other available information, the Planning Commission finds that questions remain concerning the development's impact on the environmentally sensitive area, or the health and safety of future users of the area, the Commission shall refuse to fully approve the preliminary subdivision plan until it is satisfied that the hazards have been eliminated or adequate safeguards provided to ensure the least negative impact on the environmentally sensitive area.

To assist it in making this determination, the Commission may require the developer to have comprehensive and detailed environmental assessment studies prepared by qualified professionals for Commission consideration. The Division of Planning shall review all such studies and make specific comments and recommendations to the Commission. Such studies shall be submitted to the Division of Planning no later than five (5) working days prior to the established date of the public hearing at which the Division's comments will be presented.

6-11(a)(2) AREAS OF ALLUVIAL SOILS - Where areas of alluvial soils, as shown in the Soil Survey, Fayette County, Kentucky, U.S. Department of Agriculture, Soil Conservation Service, 1968, are found in the area to be developed, the boundaries of the soils shall be delineated on the final record plan. Structures to be built within the areas of alluvial soils

shall be required to have the foundation and footer detail prepared by a licensed professional engineer prior to the issuance of a building permit and to comply with the provisions of Article 19 of the Zoning Ordinance. Areas of alluvial soils are as follows: Armour Silt Loam (ArA), when adjacent to a stream or other alluvial soil; Armour Silt Loam (ArB and ArC), when along the Kentucky River; Captina Silt Loam (CaA), Captina Silt Loam (CaB), Egam Silt Loam (Ea), Egam Silt Loam (Ec), Huntington Silt Loam (Hu), Lanton Silt Loam (La), Lawrence Silt Loam (Lc), Linside Silt Loam (Ld), Melvin Silt Loam (Mt), and Newark Silt Loam (Ne).

6-11(a)(3) FLOODPLAIN AREAS EXCEPTED - Floodplain areas along streams that have Special Flood Hazard Areas or where detailed hydrologic and hydraulic calculations have been done to calculate the floodplain shall not be required to be contained in reports required above for environmentally sensitive areas, except to the extent they impact or are impacted by another environmentally sensitive area. Restrictions for floodplain areas shall be as required by Article 19 of the Zoning Ordinance and the Stormwater Manual.

6-11(a)(4) SINKHOLES - In locations where a sinkhole, a sinkhole cluster, or an immediate sinkhole drainage area is found, the following requirements shall apply:

(a) PLAN REQUIREMENTS - A sinkhole, the immediate sinkhole drainage area, a sinkhole cluster area or portions of such areas shall be shown on any development plan or preliminary subdivision plan. Sinkhole-related non-buildable areas and restricted fill areas shall be shown on final subdivision plans and final development plans.

(b) STUDIES REQUIRED - In locations where a sinkhole, a sinkhole cluster, or an immediate sinkhole drainage area is found, the developer shall provide recommendations from the project engineer based upon substantial and state-of-the-art field studies and evaluation of the specific sinkhole system. Such studies and recommendations shall be prepared in conformance with the Geotechnical Manual and submitted to the Planning Commission as a part of the Improvement Plan Progress Report.

(c) SINKHOLE-RELATED NON-BUILDABLE AREAS - Based upon the topography, geology, soils, and known history of the sinkhole (such as past filling) and the project engineer's storm water analysis and plan, the Planning Commission shall, when appropriate, establish sinkhole-related non-buildable areas. No buildings, parking areas or other structures shall be permitted within the

sinkhole-related non-buildable area. The non-buildable area shall follow the limits of the sinkhole in most cases. However, the non-buildable area may be expanded or contracted by action of the Planning Commission, where warranted, due to the nature of the specific sinkhole; the underlying geology; soils; drainage and any related information, such as depth to bedrock.

(d) DEVELOPMENT IN SINKHOLE DRAINAGE AREAS - Development may occur in the immediate sinkhole drainage area if the developer provides alternative surface drainage away from the sinkhole, while keeping the water in the same surface drainage basin; and provided further that the water shall not go into another sinkhole drainage area off the petitioner's property, nor into another stream of known flooding problems. The immediate sinkhole drainage area (or portion thereof) which cannot be provided with an alternative drainage system can be deleted from the development area and be used to meet the normal open space requirements. The developer may request that the Planning Commission increase the density on the remainder of the developable area with the total resulting density no greater than if the entire area were developed to the permitted density. For portions of the immediate sinkhole drainage area where alternative surface drainage methods cannot be provided, as determined by the project engineer, the developer may choose one of the alternatives described in Section 5 below based upon the information derived from the studies, evaluation, and recommendations required above.

(e) SINKHOLE SURFACE DRAINAGE ANALYSES - The sinkhole can be used for surface runoff drainage of a proposed development if the conditions of either of the following alternatives are met:

(1) ALTERNATIVE 1 - A sinkhole can be used for surface runoff of a proposed development with or without retention or detention facilities, as recommended by the project engineer, provided that any increase in the quantity of surface runoff due to development of the entire sinkhole drainage area in question will not aggravate flooding on the proposed development, adjacent existing development, or connected/adjacent sinkhole subsurface systems. The Planning Commission shall not approve a development using this alternative unless the study, evaluation and recommendations required above meet the requirements of this subsection.

(2) ALTERNATIVE 2 - A sinkhole can be used for surface drainage of a proposed development if all of the following conditions and provisions are met:

- a. That the runoff from the development area is either completely retained in a retention basin or detained in a detention basin. The flow rate out of the above basins shall be regulated so that it is no greater than the flow rate into the sinkhole for the development area prior to development for the 100-year/24-hour storm. The outflow rate shall not aggravate flooding on downstream properties for this storm.
- b. The developer may elect to divert enough of the sinkhole drainage area so that the development of the remaining area does not increase the total quantity of runoff into the sinkhole. Where additional runoff is anticipated, the project engineer shall evaluate and show the effect of any additional quantity of runoff to the sinkhole and sinkhole system. For approval, the study must show the development will not aggravate flooding on the proposed development, adjacent lands, or connected/adjacent sinkhole systems.
- c. Where the sinkhole outlet is off site, either the runoff leaving the subject property must be shown to be no greater in flow, or in quantity, than existed before development; or written approvals must be submitted from owners of the property where any increase in flow or quantity of water must go to reach the sinkhole outlet. Easement areas shall be based upon the project engineer's calculations of proposed ponding elevation.

(f) FILLING IN SINKHOLES AND SINKHOLE DRAINAGE AREAS - Development may involve some filling of the sinkhole drainage area or sinkhole based on the study, evaluation and recommendation of the project engineer, and when such filling is done in conformance with the Geotechnical Manual. However, no principal or accessory buildings with soil bearing foundations shall be permitted to be constructed on fill within the limits of any sinkhole.

(g) REQUIRED PLAN NOTES - For any land that includes a sinkhole-related, non-buildable area, or restricted fill area, the developer shall place the following note on the final subdivision plan or development plan:

(1) "Based upon the evidence presented to them, the Planning Commission has identified sinkhole related non-buildable areas on this plan. However, approval of this plan is not to be interpreted as any guarantee that future sinkhole problems will not occur due to either natural or human activities."

Based upon the facts of each case, the following notes may be required, in whole or part, by the Planning Commission, depending upon the nature of the sinkhole and the method of treatment (if any) proposed by the project engineer. Additional notes may be required, or the language of the following notes may be modified, as required by the Planning Commission:

(2) "Any sinkhole-related, non-buildable area identified here has been determined to be unsuitable for any construction activity; and no buildings, parking areas or other structures shall be permitted within this area."

(3) "Any sinkhole or restricted fill area identified here has been determined to be unsuitable for soil-bearing foundations, and the entire structure of any building (including the floor system) constructed therein must be founded on solid rock."

(4) "No basement or first floor elevations shall be lower than an elevation, USGS datum, to be determined on a case-by-case basis, said elevation being at least two (2) feet above the 100-year/24-hour storm, assuming no outflow from the sinkhole."

(5) "Geological remediation took place on portions of lots ____ as a part of the infrastructure installation. A geotechnical report concerning the investigation and remediation, prepared by (name of the individual or firm), is on file with the Lexington-Fayette Urban County Government Division of Engineering. Construction on these lots should exercise reasonable caution in relation to particular project needs and the previous remediation. Since the exact nature of building or development in the remediation area is unknown at this time, (project engineer) and the Lexington-Fayette Urban County Government

Division of Engineering can make no representation as to the extent, adequacy, or appropriateness of the remediation for future uses.”

6-11(b) GEOLOGIC HAZARD AREAS - A geologic hazard area differs from an environmentally sensitive area in that the environmental problems are so numerous that development, even with severe limitations, would pose a serious problem to the immediate area or the surrounding areas. Examples of these areas are areas of excessive floodplain, areas that have potential collapse problems due to caves underneath the rock strata but close to the surface, cliff areas, etc. All geologic hazard areas shall be identified and located on the preliminary subdivision plan as provided in Article 5. As a general rule, development shall be designed such that any geologic hazard area shall be left in its natural state as permanent open space. However, if the developer intends to develop within, or otherwise impact the geologic hazard area, a comprehensive environmental assessment study of the geologic hazard area prepared by a qualified professional shall be required to be filed at the time of application for plan consideration by the Commission. The Division of Planning shall not accept applications if this report is not provided. The Division of Planning shall review the contents of the study and make specific comments and recommendations to the Commission. The Commission shall refuse to fully approve the subdivision plan unless and until it is satisfied that the safeguards will be provided such that future residents will experience no loss of health, safety or welfare due to development within the geologic hazard area.

6-12 SURVEYING AND MONUMENTATION STANDARDS - All vertical and horizontal control shall be tied to the Lexington-Fayette Urban County Government Control Network, shall be at least Third Order, and installed in accordance with the standards of the Division of Engineering. All surveying and monumentation shall comply with the *Standard of Practice for Professional Land Surveyors (201 KAR 18.150)*.

6-13 SUBDIVISION STANDARDS WITHIN THE URBAN SERVICE EXPANSION AREAS - Subdivision of land within the designated Urban Service Expansion Areas shall comply with all provisions of these Land Subdivision Regulations, the Zoning Ordinance and the Division of Engineering Technical Manuals as normally

applicable to property within Fayette County, except as expressly modified as follows:

6-13(a) STORMWATER STANDARDS - All subdivisions shall comply with Article 6-7 above, except when located within a System-Wide Storm Water Management District, in which case the requirement for such District shall take precedence.

6-13(b) CONTINUITY BETWEEN SUBDIVISION DEVELOPMENTS - Subdivisions within the Expansion Area shall be connected to other developments with collector streets. In addition, it is intended that local street connections shall be provided between developments to act as a network to supplement the collector/connector and arterial street systems.

6-13(c) STREET CROSS-SECTIONS AND GEOMETRICS - Developers within the Expansion Areas are encouraged to pursue alternative street cross-sections, street geometrics and development designs which achieve the basic purposes of these Regulations; subject to proper demonstration that such alternatives can be implemented without impairment of the public health, safety and welfare. The reviewing agencies, Committees and Planning Commission are directed to earnestly consider such alternatives under the provisions of 1-5(b) herein. Where specific street cross-sections, including bikeways, are shown in the Expansion Area Master Plan for major roadways, the cross-sections depicted shall be utilized for construction of the applicable roadway as determined by the Planning Commission.

6-13(d) RURAL SCENIC ROADS - The provisions of Article 6-8(p), Street Improvement Standards, of the Land Subdivision Regulations, shall not generally apply to Rural Scenic Roads as established in the Expansion Area Master Plan. Should roadway improvements be needed as a project improvement, as defined in Zoning Ordinance Article 23, the Commission shall require only the minimum improvement to the existing roadway needed to mitigate concerns regarding safety.

EXHIBIT 6-1: STREET GEOMETRICS

	COLLECTOR/ CONNECTOR STREETS		LOCAL STREETS				
	RESIDENTIAL	NON- RESIDENTIAL	CONTINUING	CONTINUING OR CUL-DE-SAC	COMMERCIAL SERVICE ROAD	NON- RESIDENTIAL	RURAL LOCAL
STREET DIMENSIONS							
Right-of-Way Width	60'	70'	50'	50' (*3)	40' – 50'	60'	60'
Roadway Width (face to face)	36' - 40' (*5)	40' - 50'	30'	27' – 30' (*3)	30'	40'	20'
Curbs and Gutters	Yes	Yes	Yes	Yes	Yes	Yes	No
Sidewalk (width and sides)	6-8' (both)	6' (both)	5' (both)	5' (both)	5' (*1)	6-8' (both)	No
Driveway Access	(*1) Yes	(*1) Yes	Yes	Yes	Yes	Yes	Yes
Double-Frontage Lots	(*1) No	(*1) No	No	No	No	No	No
Street Grade (Maximum)	8%	8%	10%	10%	10%	6%	8% (*4)
Street Grade (Minimum)	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%
Pavement Cross Slope	¼" / ft.	¼" / ft.	¼" / ft.	¼" / ft.	¼" / ft.	¼" / ft.	¼" / ft.
Cut Slopes (Minimum)	2:1	2:1	2:1	2:1	2:1	2:1	2:1
Fill Slopes (Minimum)	2:1	2:1	2:1	2:1	2:1	2:1	2:1
STREET ALIGNMENT							
Horizontal Curve Radius	500'	500'	250'	100'	150'	300'	250'
Stopping Sight Distance	250'	250'	200'	200'	200'	200'	250'
Crest Vertical Curve Formula	(*6)	(*6)	(*6)	(*6)	(*6)	(*6)	(*6)
Crest Vertical Curve (Minimum)	100'	100'	100'	100'	100'	100'	100'
Sag Vertical Curve Formula	(*7)	(*7)	(*7)	(*7)	(*7)	(*7)	(*7)
Sag Vertical Curve (Minimum)	100'	100'	100'	100'	100'	100'	100'
STREET INTERSECTION							
Maximum Street Legs	4	4	4	4	4	4	4
Intersection Angle (Preferred and Minimum)	90° - 80°	90° - 80°	90° - 80°	90° - 80°	90° - 80°	90° - 80°	90° - 80°
Intersection Spacing	(*2)	(*2)	(*2)	(*2)	(*2)	(*2)	(*2)
Curb Radius Along Street	(*1)	(*1)	20'	20'	20'	20' – 40'	N/A
Max. Grade within 50' of Intersecting Gutter	3%	3%	3%	3%	3%	3%	N/A
Max. Tangent Offset within 100' of Intersecting Gutter	8.3'	8.3'	11.3'	11.3'	11.3'	11.3'	N/A

(*1) As approved by the Planning Commission.

(*2) Intersection spacing shall apply as described in Section 6-8(q).

(*3) The 27' cross-section shall restrict on-street parking to one side of the roadway.

(*4) The Planning Commission may grant a variance in conformance with Section 1-5 to permit grades of up to 12% in the Rural Service Area and greater than 12% in areas near the Kentucky River.

(*5) The 36' cross-section shall be used for transition to older sections of collector/connector streets. See Exhibit 6-3: Typical Cross-Sections for further information.

(*6) Refer to the Division of Engineering Roadway Manual for design controls for crest vertical curves.

(*7) Refer to the Division of Engineering Roadway Manual for design controls for sag vertical curves.

Note: Typical cross-section applications are described in Exhibit 6-3.

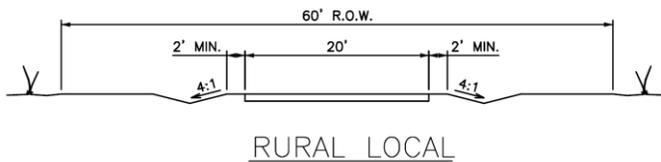
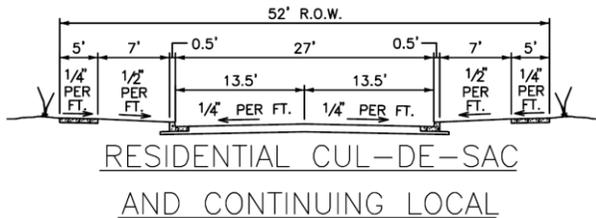
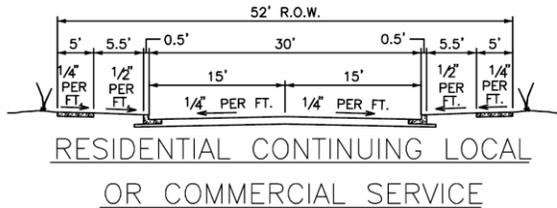
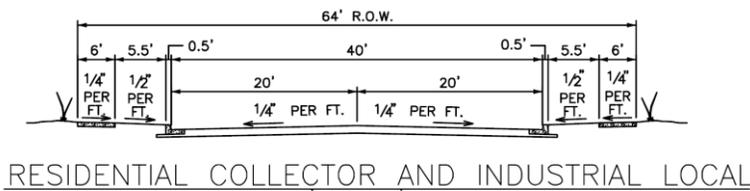
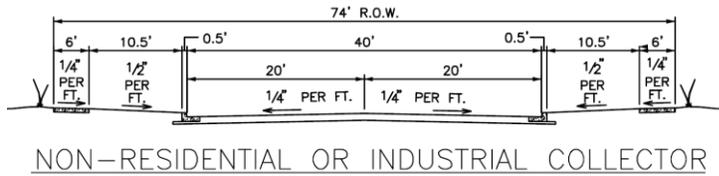
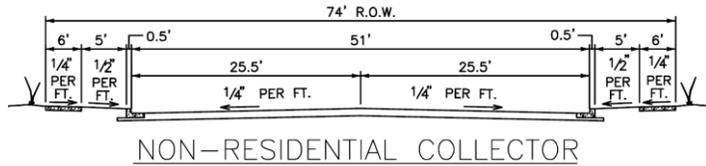
EXHBIT 6-2: RESERVED FOR TRAFFIC CALMING or SPEED REDUCTION GRAPHICS

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EXHIBIT 6-3: TYPICAL STREET CROSS-SECTIONS

Note: The following cross-sections shall be considered typical for the situations listed. Other cross-sections may be required by the Planning Commission upon advice from the Division of Traffic Engineering and the Division of Planning, based upon the design of the actual situation encountered. Some existing stub streets were constructed using cross-sections that are now obsolete. These streets should be completed using the obsolete cross-section to an appropriate stopping point, which is customarily the next street intersection. Cross-sections for arterial streets or other roadways, larger than those shown in this exhibit, shall be designed by the LFUCG or the Kentucky Department of Transportation, as appropriate.

CROSS-SECTION



APPLICATION

Collector/Connector street in non-residential areas; intersection with an arterial street for at least 250'. A transition section is required to the normal collector/connector street cross-section.

Collector/connector street in non-residential areas; industrial area collectors/ connectors and locals. (Note: Sidewalk may be eliminated on one side when street is completely contained within an industrial area)

Residential collector/connector street depicted in the Comprehensive Plan; industrial area locals and cul-de-sacs. (Note: Sidewalk may be eliminated on one side when street is completely contained within an industrial area).

Residential local street or commercial service roads.

(parking allowed on both sides of the roadway)

Residential cul-de-sacs and continuing residential local streets.

(parking restricted to one side of roadway)
(Note: 4-foot dimension is sidewalk)

Rural Local Streets are intended to carry a low volume of traffic.

EXHIBIT 6-4

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EXHIBIT 6-5: CORNER SIGHT DISTANCES AT INTERSECTIONS

<u>TYPE OF ROADWAY(*1)</u>	<u>PUBLIC OR PRIVATE STREET(*2)</u>	<u>DRIVEWAY(*2)</u>
MAJOR ARTERIAL	325L/150R/15M(*3)	325L/150R/15M
MINOR ARTERIAL	275L/150R/15M	275L/150R/15M
COLLECTOR	200L/150R/15M	200L/150R/15M (non-res.) 150L/120R/15M (res.)
LOCAL	175L/130R/15M	75L/55R/10M

(*1) This column considered as "major" street or intersection.

(*2) This column considered as "minor" street or intersection.

(*3) 325L/150R/15M - Sight triangle to the left/Sight triangle to the right/Distance from edge of curb on minor street or drive approach.

Note: This table assumes right angle intersections and straight major street movement within the sight distance. Situations involving skewed intersections, curvilinear streets and other mitigating factors shall have sight distances determined by the Division of Traffic Engineering.

EXHIBIT 6-6: MINIMUM PAVING SPECIFICATIONS

FUNCTIONAL CLASSIFICATION	ASPHALT SURFACE COURSE/ASPHALT BASE COURSE/GRANULAR BASE	PORTLAND CEMENT SINGLE COURSE/ GRANULAR BASE
RESIDENTIAL LOCAL STREETS (URBAN AND RURAL)	1”/3”/9”	6”/4”
RESIDENTIAL COLLECTOR/CONNECTOR STREETS (URBAN AND RURAL)	1”/6”/8”	7”/4”
ARTERIALS AND NON-RESIDENTIAL STREETS (ALL CLASSIFICATIONS)	1”/9”/6”	8”/4”

NOTE: These paving specifications are the minimum. The project engineer shall design the granular base and asphalt/ concrete thickness in conformance with the standards of the Division of Engineering Roadway Manual. In no case shall the thickness of the granular base and asphalt/cement course be less than shown above.

EXHIBIT 6-7: ALTERNATE CUL-DE-SAC DESIGNS

Note: For all cul-de-sacs, the width of utility strip shall remain constant around the ball of the cul-de-sac, or around the hammerhead, to match the utility strip width in the tangent section.

