

TOWN OF SHARPSBURG
SITE DEVELOPMENT REGULATIONS
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Subject Matter: Site Development Regulations
Date First Presented to Council at Public Meeting: September 18, 2006
Date of Second Reading Before Town Council: October 2, 2006
Date of Adoption: October 2, 2006

TOWN OF SHARPSBURG
COUNTY OF COWETA
STATE OF GEORGIA

ORDINANCE NUMBER 06-12
(as enacted)
TOWN OF SHARPSBURG, GEORGIA

PREAMBLE AND FINDINGS

WHEREAS, the Mayor and Town Council of the Town of Sharpsburg (“Town”) desires to protect and promote the public health, safety, and general welfare by enacting site development regulations “Regulations”; and

WHEREAS, the Mayor and Town Council believe the Regulations shall provide a system for the subdividing of lands and the accurate recording of land titles; and

WHEREAS, the Regulations intend to assure that those lots shown on recorded subdivision plats are usable by the purchasers for their intended and permitted functions; and

WHEREAS, the Regulations intend to encourage economically sound and orderly land development in accordance with the policies and objectives of the Comprehensive Plan of the Town of Sharpsburg; and

WHEREAS, the Regulations intend to assure the provision of required streets, utilities, and other facilities and services to new land developments in conformance with public improvement policies of the Town; and

WHEREAS, the Regulations intend to assure the adequate provision of safe and convenient traffic access and circulation, both vehicular and pedestrian, in new land developments; and

WHEREAS, the Regulations intend to assure the provision of needed open spaces and public facility sites in new land developments through the dedication or reservation for purchase of land for public purposes; and

WHEREAS, the Mayor and City Council believe the Regulations will assure equitable review and approval of all subdivision and site plans by providing uniform procedures and standards for the developer.

WHEREFORE, THE TOWN OF SHARPSBURG HEREBY ADOPTS, ORDAINS AND ENACTS THE FORGOING SITE DEVELOPMENT REGULATIONS ORDINANCE AS FOLLOWS:

ARTICLE 1

AUTHORITY, TITLE, PURPOSE AND INTENT

1.1 AUTHORITY AND TITLE

1.1.1 These rules and regulations are adopted under the authority of the Constitution of the State of Georgia and laws enacted pursuant thereto.

1.1.2 These regulations shall be known as "The Site Development Regulations of the Town of Sharpsburg, Georgia," and may be referred to generally as "The Development Regulations," or, as used herein, "Regulations."

1.2 PURPOSE

1.2.1 These regulations are intended to serve the following purposes:

1. To protect and promote the public health, safety, and general welfare.
2. To provide a system for the subdividing of lands and the accurate recording of land titles.
3. To provide assurance those lots shown on recorded subdivision plats are usable by the purchasers for their intended and permitted functions.
4. To encourage economically sound and orderly land development in accordance with the policies and objectives of the Comprehensive Plan of the Town of Sharpsburg.
5. To assure the provision of required streets, utilities, and other facilities and services to new land developments in conformance with public improvement policies of the Town.
6. To assure adequate provision of safe and convenient traffic access and circulation, both vehicular and pedestrian, in new land developments.
7. To assure the provision of needed open spaces and public facility sites in new land developments through the dedication or reservation for purchase of land for public purposes.
8. To assure equitable review and approval of all subdivision and site plans by providing uniform procedures and standards for the developer.

1.3 INTENT AND APPLICATION

It is the intent of these regulations that they apply to and provide guidance for the development of any lands within the incorporated area of the Town of Sharpsburg, whether the development involves the subdivision of the land for sale to individual users or pertains only to the construction of buildings or other improvements on a single parcel.

ARTICLE 2 DEFINITIONS

2.1 USE OF WORDS AND INTERPRETATION

2.1.1 For the purposes of these regulations, the following shall apply to the use of all words:

- a) When appropriate to the context, words used in the singular shall include the plural, and the plural the singular; words used in the present tense shall include the future tense, and vice versa.
- b) Words in the masculine gender shall include the feminine.
- c) The word "shall" is mandatory and not discretionary.
- d) The word "may" is permissive.
- e) Use of the word "and" is inclusive and requires that all of the component phrases so connected must be present or fulfilled for sufficiency.
- f) Use of the word "or" is not exclusive (as in "either ... or"), and requires that at least one of the component phrases so connected must be present or fulfilled for sufficiency. The word "or" may allow more than one component phrase to be present or fulfilled, as is implied by the common term "and/or."

2.1.2 The following shall control the interpretation of words and phrases as used in these regulations:

- a) Words and phrases defined in this article shall be interpreted as defined herein.
- b) Words or phrases not defined herein shall be interpreted as defined in the Zoning Ordinance of the Town of Sharpsburg, or as defined in the Town's Soil Erosion and Sediment Control Ordinance and Tree Protection and Landscape Ordinance as applicable to the use of the word within the context of these Regulations.

2.2 DEFINITIONS

Certain words or phrases in these Regulations are defined for their use herein as follows:

Alley or Service Drive - A minor, permanent, public service-way which is used primarily for vehicular service access to the back or the side for properties otherwise abutting on a street.

Applicant - A person, either the owner or the bona fide representative of the owner of land or structures governed by these regulations, who seeks authority to use, develop, construct upon or otherwise enjoy the use of property through any of the procedures established under these regulations.

Arterial - A Principal Arterial, Major Arterial, or Minor Arterial street as defined and designated in the Comprehensive Plan of the Town of Sharpsburg.

"As-Built" Survey - See Record Drawing.

"Base Flood" - The flood which has a one percent probability of occurring in any calendar year (i.e., the 100 year frequency flood).

Base Flood Elevation - The highest water surface elevation anticipated at any given point during the base flood.

Block - A piece or parcel of land entirely surrounded by public streets, other than alleys.

Buildable Lot of Record - A lot or parcel of land which existed as a single parcel of ownership, recorded as such in its entirety and present boundaries with the Clerk of Superior Court.

Building Setback Line - A line across a lot parallel to a street right-of-way or other property line establishing the minimum open space to be provided between any principal building and the street or other property line. All building setback lines shall be at least as restrictive as the corresponding minimum yard setbacks required in the Zoning Ordinance. On corner lots, the minimum required front yard setback shall be provided along all abutting streets.

Certificate of Occupancy - Final approval by the Town for the use or occupancy of a structure for which a Building Permit was issued.

Clearing - The removal of trees or other vegetation, but not including grubbing activities.

Comprehensive Plan - A plan summarizing and illustrating the adopted goals and objectives of the Town Council regarding the future location and character of anticipated land uses, transportation, and other public facilities in the Town of Sharpsburg. The term "Comprehensive Plan" includes component or functional plans for the Town, including but not limited to a plan for land use (i.e., Land Use Plan) or a plan for transportation facilities, and includes the classification of streets and thoroughfares.

Concept Plan - A drawing which shows the overall concept (e.g., a concept plan) of a proposed development, and which may include lots and streets in a subdivision or the general location of buildings and improvements for a multi-family or non-residential project, and which may be drawn to approximate dimensions in a freehand style.

County - Coweta County, Georgia.

Cul-de-Sac - A street having one end open to traffic and being permanently terminated within the development by a vehicular turnaround. For the purpose of designation, a cul-de-sac street shall be interpreted to begin at the intersection of two or more streets nearest to the vehicular turnaround.

Department of Transportation - The Georgia Department of Transportation.

Developer - Any person, individual, firm, partnership, association, corporation, estate, trust, or any other group or combination acting as a unit who directs the undertaking or purposes to undertake development activities as herein defined, whether the development involves the subdivision of the land for sale to individual users, the construction of buildings or other improvements on a single land ownership, or both.

Development - 1. (verb) All activities associated with the conversion of land or the expansion or replacement of an existing use to any new use intended for human operation, occupancy or habitation, other than for agricultural purposes devoted strictly to the cultivation of the land, dairying or animal husbandry. Such activities include land disturbance (clearing and grubbing the land of vegetation and stumps, and grading) and the construction of improvements such as but not limited to streets, driveways or parking areas, water or sewer mains, storm water drainage facilities, sidewalks or other structures permanently placed on or in the property. 2. (noun) Where appropriate to the context, the term "development" also may be used to denote a specific subdivision or project which is a single entity or intended to be constructed as an interrelated whole, whether simultaneously or in phases.

Development Permit - An official authorization issued by the clerk's office permitting clearing, grubbing, grading, or construction of storm drainage facilities, access drives, streets, parking or other improvements exclusive of buildings.

Development Plans - The detailed and professional plans showing the layout and design, site work and construction activities proposed for a project (other than architectural building plans) and including the Preliminary Plat or Site Plan (as applicable), Grading Plan, Tree Protection and Landscape Ordinance, Soil Erosion and Sedimentation Control Ordinance, and construction drawings for streets, storm water drainage facilities, sanitary sewers, water supply facilities, and other site improvements.

Drainage Improvements - Those facilities and structures intended to control and direct the passage of storm waters and other surface water flows from and across a property; including, but not limited to, swales and ditches, cross drains and other piping systems, catch basins, detention ponds, and velocity dissipation devices.

Dripline - A line on the ground established by a vertical plane extending from a tree's outermost branch tips down to the ground; i.e., the line enclosing the area directly beneath the tree's crown from which rainfall would drip.

Driveway - A vehicular access way in private ownership, other than a Private Street, which provides access primarily to only one property, or to no more than 2 single-family detached residences.

Easement - Recorded authorization for a specified purpose by a property owner for the use of any designated part of the real property by another entity.

Erosion Control Regulations - The Town of Sharpsburg Soil and Sedimentation Control Ordinance.

Exemption Plat - A subdivision plat drawn to Final Plat standards, as contained herein, prepared in accordance with one of the exemptions provided under Article 3 of these Regulations.

Fee Simple - A form of property ownership in which the buildings and surrounding lands are owned by the same person.

Federal Emergency Management Agency (FEMA) - The Federal Agency which administers the National Flood Insurance Program. This Agency prepares, revises and distributes the maps and studies referenced in these Regulations.

Final Plat - A finished drawing of a subdivision showing completely and accurately all legal and boundary information and certification required by these Regulations.

Flood or Flooding means a general and temporary condition of partial or complete inundation of normally dry land areas from:

- a. the overflow of inland or tidal waters; or
- b. the unusual and rapid accumulation or runoff of surface waters from any source.

Flood Hazard Boundary Map or "FHBM" means an official map of a community, issued by the Federal Insurance Administration, where the boundaries of areas of special flood hazard have been defined as Zone A.

Flood Insurance Rate Map or "FIRM" means an official map of a community, issued by the Federal Insurance Administration, delineating the areas of special flood hazard and/or risk premium zones applicable to the community.

Flood Insurance Study or "FIS" means the official report by the Federal Insurance Administration evaluating flood hazards and containing flood profiles and water surface elevations of the base flood.

Floodplain means any land area susceptible to flooding.

Floodproofing means any combination of structural and non-structural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

Floodway or Regulatory Floodway means the channel of a stream or other watercourse and the adjacent areas of the floodplain which is necessary to contain and discharge the base flood flow without cumulatively increasing the base flood elevation more than one foot.

Future Conditions Flood means the flood having a one percent chance of being equaled or exceeded in any given year based on future-conditions hydrology. Also known as the 100-year future-conditions flood.

Future-conditions Flood Elevation means the flood standard equal to or higher than the Base Flood Elevation. The Future-conditions Flood Elevation is defined as the highest water surface anticipated at any given point during the future-conditions flood.

Future-conditions Floodplain means any land area susceptible to flooding by the future-conditions flood.

Future-conditions Hydrology means the flood discharges associated with projected land-use conditions based on a community's zoning map, comprehensive land-use plans, and/or watershed study projections, and without consideration of projected future construction of

flood detention structures or projected future hydraulic modifications within a stream or other waterway, such as bridge and culvert construction, fill, and excavation.

Flood Related Definitions - See the Floodplain Management Ordinance, for specific definitions of terms used in relation to flooding, alteration of floodplains, and construction of structures in or adjacent to floodplains, etc.

Freeboard - The distance between the base flood elevation and the top of a storm water detention structure.

Grading - The movement, removal or addition of earth on a site by the use of mechanical equipment.

Grading Permit - An official authorization issued by the Town permitting grading of a site, and may include installation of attendant storm water drainage facilities.

Grubbing - The removal of stumps or roots from a property.

Health Department - The Environmental Health Services Division of the Georgia Department of Human Resources for Coweta County.

Hot Spot - An area where the use of the land has the potential to generate highly contaminated runoff, with concentrations of pollutants in excess of those typically found in storm water or to violate water quality standards.

Impervious Surface - Any paved, hardened or structural surface, including but not limited to, buildings, dams, decks, driveways, parking areas, patios, streets, swimming pools, tennis courts, walkways, and other structures.

Land Disturbance Permit - Any permit other than a Building Permit issued by the Town of Sharpsburg that authorizes clearing or grading activities on a site or portion of a site.

Lot - A portion of a subdivision, or any other parcel of land, intended as a unit for transfer of ownership or for development or both. In determining the area and dimensions of a lot, no part of the right-of-way of a road or crosswalk may be included.

Lot, Corner - A lot abutting upon two or more streets at their intersection.

Lot, Double Frontage - A lot other than a corner lot abutting upon two or more streets.

Major Intersection - The intersection of two or more public streets in which at least one of the streets is an arterial or major collector as designated by the Comprehensive Plan.

Major Thoroughfare - Any public street, existing or proposed, which is shown in the Comprehensive plan as an arterial or major collector.

Mean Sea Level - The average height of the sea for all stages of the tide. It is used as a reference for establishing various elevations within the floodplain. For purposes of these Regulations, the term is synonymous with National Geodetic Vertical Datum (NGVD).

Minor Collector - A through street having the primary function of connecting subdivisions or other areas to Major Collector streets or other major thoroughfares, or functioning as a central route within a subdivision channeling traffic from the local streets to an abutting major thoroughfare or another Minor Collector street. For the purposes of these Regulations, a central but non-through route within a subdivision or other project will be considered as a Minor Collector, if the Average Daily Traffic generated by the development on the route will exceed 2000 trips.

Open Space - A parcel of land set aside, designated and reserved which shall remain in its natural state, undisturbed and unoccupied by any structures or impervious surfaces.

Owner - A person having a majority fee simple interest in real property, or a majority interest through any other form of ownership.

Pedestrian Way - A right-of-way within a block dedicated to public use, intended primarily for pedestrians and from which motor propelled vehicles are excluded.

Person - An individual, firm, partnership, corporation, joint venture, association, social club, fraternal organization, estate, trust, business trust, receiver, syndicate, or other group or combination acting singly or collectively for a common purpose, and the duly authorized agents thereof.

Plat - A map indicating the subdivision, resubdivision, or recombination of land.

Preliminary Plat - A drawing which shows the perimeter boundary, topography, lotting arrangements, street layout, and other features of a proposed subdivision, as specified in these Regulations.

Project - A principal building or structure, or group of buildings or structures, planned and designed as an interdependent unit together with all accessory uses or structures, utilities, drainage, access, and circulation facilities, whether built in whole or in phases. Examples include: a principal building on a lot, a residential subdivision, a multi-family development, a shopping center or an office park.

Project Access Improvement - Any improvement or facility that is planned and designed to provide service or access for a particular project and which is necessary for the use and convenience of the occupants or users of the project and is not a System Improvement. A Project Access Improvement includes but is not limited to: pedestrian access improvements; site driveways; new streets; median cuts; right turn lanes, left turn lanes, acceleration lanes, and deceleration lanes made necessary to serve site driveways or new streets leading to or from the project; traffic control measures made necessary to serve site driveways or new streets; intersection improvements whose primary purpose at the time of construction is to provide access to the Project; and, necessary right-of-way dedications required for any Project Access Improvement.

Record Drawing - A survey or other drawing based on a field survey which shows existing features or components and horizontal or vertical information (grades or location of improvements).

Redevelopment - Development on a previously developed site; but excludes ordinary maintenance activities, remodeling of existing building interiors, resurfacing of paved areas, and exterior building changes or improvements which do not materially increase or concentrate storm water runoff, or cause additional nonpoint source pollution.

Responsible Party - In the context of enforcement procedures, a person (as defined above) who is alleged to have committed, caused, continued or created a violation of the terms, requirements, regulations, or provisions of these Regulations whether as a direct act, through lack of action or neglect, or at the direction of or on behalf of others. A responsible party may be the owner of a premises where a violation has occurred; an occupant whether through ownership, lease or other tenancy; a contractor, builder or developer; an agent of or person otherwise acting on behalf of the aforementioned parties; or other person acting in violation of these regulations.

"Road" - See "Street, Public".

Roadway - The paved portion of a street from back of curb to back of curb (or edge to edge of pavement for streets not having curbs) but excluding driveway aprons, bridges, and large single and multi-cell culverts which in a hydrologic sense can be considered to function as a bridge.

Sheet Flow - Diffused water running overland to a defined watercourse.

Site Work - Development activity to prepare a property for construction of buildings or finished structures, including clearing, grubbing, grading, and installation of soil sedimentation and erosion control facilities.

Sketch Plan - See Concept Plan.

Street jog - Streets with sections that do not intersect normally. While traveling along a street, you run into a street, turn right, go a short distance on another street, and then turn left back on that first street, which still uses the same name and numbering.

Street, Private - An access way similar to and having the same function as a public street, providing access to more than one property, but held in private ownership (as distinct from a "driveway").

Street, Public - A right-of-way dedicated to and accepted by the Town of Sharpsburg for vehicular traffic or over which the Town of Sharpsburg may hold a prescriptive easement for public access, and including designated and numbered U. S. and State Highways. For the purposes of these Regulations, the term "public street" shall be limited to those which afford or could afford a direct means of vehicular access to abutting property, and exclude limited access roadways which abut a property but from which direct access may not be allowed under any circumstances.

Street, Local Nonresidential - A surface street intended primarily to provide local access to adjacent existing or planned commercial or industrial development and not for through traffic.

Street, Local Residential - A surface street intended primarily to provide local access to adjacent residential development and not for through traffic.

Street, Marginal Access - A local street which is parallel to and adjacent to a major thoroughfare and which provides access to adjacent properties and protection from through traffic.

Stub - A dead end street.

Structure - Anything constructed or erected on the ground or attached to something on the ground.

Subdivider - Any person, individual, firm partnership, association, corporation, estate, trust, or any other group or combination acting as a unit dividing or proposing to divide land so as to constitute a subdivision as herein defined, includes an agent of the subdivider.

Subdivision - 1. (verb) Any division or re-division of a lot, tract or parcel, regardless of its existing or future use, into 2 or more lots, tracts or parcels. The term, "subdivision" shall mean the act or process of dividing property. Lots that do not abut or are not directly across a public street from other subdivided lots shall be considered a separate distinct subdivision with a separate name. 2. (noun) Where appropriate to the context, the term "subdivision" also may be used in reference to the aggregate of all lots held in common ownership at the time of division.

Subdivision Entrance - A public street, or publicly approved private street, that provides access to subdivided lots.

System Improvement - Any improvement or facility such as streets, bridges, or rights-of-ways identified on the Long Range Road Classification Map (i.e. "the System"), and any traffic control measures, landscaping or other features to same, that is included in the Comprehensive Plan and which is further designed to provide service to the community at large.

Tie Point - The point of reference for a boundary survey. Said point of reference shall be an established, monumental position which can be identified or relocated from maps, plats, or other documents on public record.

Town - The Town of Sharpsburg, a municipal corporation of the State of Georgia.

Tree Protection/Replacement Plan - A plan that identifies Tree Protection Areas, existing trees to be retained and proposed replacement trees to be planted on a property to meet minimum requirements of the Tree Protection Ordinance, as well as methods of tree preservation to be undertaken on the site and other pertinent information.

Watercourse - A channel with a defined bed and banks, including lakes, ponds, and marshes.

Wetlands - Those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas. The ecological parameters for designating wetlands include hydric soils, hydrophytic vegetation, and hydrological conditions that involve a temporary or permanent source of water to cause soil saturation.

Zoning Ordinance - The adopted Zoning Ordinance of the Town of Sharpsburg, Georgia, as amended from time-to-time.

**ARTICLE 3
APPLICATION OF THE REGULATIONS**

3.1 APPLICATION

Any land disturbance activity or any development activity must first comply with these regulations.

3.2 DEDICATION OF PUBLIC LANDS AND FACILITIES

3.2.1 No land dedicated as a public street or other public purpose shall be opened or accepted as a public street or for any other public purpose, and no subdivision of land shall be made, nor subdivision plat, nor part thereof, shall be recorded before obtaining final approval from the Town of Sharpsburg. Said approval shall be entered in writing on the Final Plat by the Town of Sharpsburg. The Town Administrator is hereby authorized to accept such dedications of lands and public facilities on behalf of the Town of Sharpsburg and to cause such dedications to be recorded by the Clerk of Superior Court of Coweta County, subject to ratification by the Mayor and Town Council.

3.3 TRANSFER OF LAND OWNERSHIP

3.3.1 No person, firm, partnership, association, corporation, estate, trust, developer, subdivider or any other owner or agent shall transfer title or attempt to record the title to any land in incorporated Sharpsburg, and no building permit may be issued on said land, unless:

- a) Said land existed as a single parcel of ownership, recorded as such in its entirety and present boundaries with the Clerk of Superior Court of Coweta County prior to the 2006 Zoning Ordinance; or,
- b) Said land is shown in its entirety and present boundaries on a Final Plat as approved (under these or any previous applicable regulations) and duly recorded with the Clerk of Superior Court of Coweta County; or,
- c) Said land is shown in its entirety and present boundaries on a plat authorized by the Administrator and recorded with the Clerk of Superior Court of Coweta County pursuant to the regulations governing Subdivision Exemptions contained herein; or,
- d) Said land is an aggregation of properties for land assembly purposes, and no building permit will be requested prior to the filing of an application for an issuance of a development permit, pursuant to these regulations.

3.3.2 No person, firm, partnership, association, corporation, estate, trust, developer, subdivider or any other owner or agent shall transfer title to any property by reference to, exhibition of, or any other use of any map of plat illustrating the subdivision of land without a Final Plat of said land showing said property first having been duly approved

under the procedures of these Regulations or any previously applicable regulations and recorded with the Clerk to Superior Court of Coweta County.

3.4 SUBDIVISION EXEMPTIONS

3.4.1 General Requirements

For the purpose of these Regulations the types of activities contained in this Section shall be considered subdivisions but exempt from the "procedures" and "required public improvements" portions of these Regulations, except as noted. Each such subdivision shall be drawn as an Exemption Plat in accordance with Final Plat standards (except Sections 3.4.4 b and 3.4.6) pursuant to the requirements of these regulations and shall be submitted in an appropriate number of copies together with the appropriate fees to the Town for review and approval. Upon approval, the Town of Sharpsburg shall authorize the recording of the Exemption Plat with the Clerk of Superior Court of Coweta County and grant the issuance of building permits pursuant to the Codes and Ordinances of the Town of Sharpsburg.

3.4.2 Recombinations

The combination or recombination of all of two or more buildable lots of record, where the total number of lots is not increased and the resultant lots or parcels are in compliance with the Zoning Ordinance. An Exemption Plat shall not be required for aggregations of properties for land assembly purposes where no building permit will be requested prior to issuance of a development permit.

3.4.3 Minor Subdivision

The division of a buildable lot of record into five (5) or fewer lots, provided:

- a) Each proposed lot complies with all requirements of the Zoning Ordinance and is limited to single family detached residential use.
- b) Each proposed lot abuts upon an existing Public Street.
- c) All project related slope and utility easements as well as necessary street right-of-way as determined by the Town based on the Comprehensive Plan are provided at no cost to the town.
- d) Each lot thus created may not be resubdivided pursuant to the provisions of this subparagraph. Such resubdivision shall be accomplished only through the procedures contained in Article 11 of these regulations.
- e) Each proposed lot shall comply with the requirements of the Town of Sharpsburg and the Environmental Health Department, as appropriate, whose certification of approval shall be required prior to approval of the Exemption Plat by the Town.

3.4.4 Nonresidential Project Management

The creation of a lot for recording within an overall nonresidential development, provided:

- a. The overall nonresidential development is being undertaken as a single multi-phase or multi-use project under the unified control of a single developer, is zoned for such use or development, and an overall Concept Plan for the entire project has been approved by the Town of Sharpsburg.
- b. The proposed subdivision is clearly intended to transfer title for financing or building management purposes and not for the sale of the property for future development, to the satisfaction of the Town of Sharpsburg.
- c. The proposed lot has been approved by the Town of Sharpsburg to be provided permanent vehicular access by private drive. Said access shall be established by easement or acceptable covenant prior to or concurrently with recording of the Exemption Plat.
- d. The proposed lot must encompass a principal structure which has been granted a building permit and which is under construction or has been completed.
- e. The Exemption Plat shall be drawn to include the entirety of the overall development and shall clearly identify those lots to be recorded, those lots previously recorded and the remainder of the development which shall be labeled "not included." All easements, dedications, etc., shall be shown as appropriate or as required. Each lot shall be consistent with the zoning approved for the overall development and the applicable requirements of the Zoning Ordinance.

3.4.5 Amnesty Lots

The designation of a lot as a buildable lot of record if the lot was recorded before the effective date of these Regulations provided:

- a. The Exemption Plat is limited to one (1) individual lot and no property which adjoins the lot is or has been owned by the applicant in whole or in part.
- b. The lot meets all requirements of the Zoning Ordinance, and the applicant demonstrates to the satisfaction of the Town of Sharpsburg that approval of the lot will not create nonconformity to the requirements of the Zoning on any other portion of the original property from which the lot was subdivided.
- c. The lot abuts upon an existing public street.

d. All project related slope and utility easements as well as necessary street right-of-way as determined by the Town Engineer based on the Comprehensive Plan is provided at no cost to the Town.

e. The lot shall comply with the requirements of the Town of Sharpsburg and the Environmental Health Department, as appropriate, whose certification of approval shall be required prior to approval of the Exemption Plat by the Town Clerk.

f. A Record Survey certified by a Land Surveyor currently registered in the State of Georgia shall be submitted to and approved by the Town of Sharpsburg showing the lot.

ARTICLE 4
PERMITS REQUIRED FOR DEVELOPMENT OR CONSTRUCTION

4.1 AUTHORIZATION REQUIRED FOR LAND DISTURBANCE OR DEVELOPMENT ACTIVITIES

4.1.1 Permit Required; Exemptions

No disturbance of the land, including clearing, grubbing, or grading activities, shall commence or proceed except in accordance with the provisions of these Development Regulations, unless the activity for the construction of an individual single-family detached or duplex residence on a buildable lot of record.

4.1.2 Plan Review and Approval

Any developer of land within incorporated Town of Sharpsburg shall first submit to the Town Administrator such plans, plats, or construction drawings as may be required by these Regulations and shall have been granted a permit consistent with these Regulations and approved by the Town prior to the initiation of development activities. Approval of plans by Town of Sharpsburg officials or employees shall not imply nor transfer acceptance of responsibility for the application of the principles of engineering, architecture, landscape architecture, or any other profession, from the professional corporation or individual under whose hand or supervision the plans were prepared and sealed. Article 11 of these Regulations details the elements of the required plans.

4.1.3 Interdepartmental Review and Approval

The Town of Sharpsburg shall not issue a permit for any development activities until the plans, plats, or construction drawings, as applicable, have been approved by such other departments or agencies as may have authority or jurisdiction over said activities in whole or in part.

4.1.4 Activities Limited to Permit Authorization

Development activities shall be limited to those as authorized by the applicable permit and as may be further restricted by conditions of approval pertaining thereto attached by the Town or other department or agency as may have authority or jurisdiction over said activities in whole or in part.

4.1.5 Developer's Responsibility for Compliance

No permit shall be interpreted to relieve any developer or subdivider of the responsibility of maintaining full compliance with all codes, ordinances, and other regulations of the Town of Sharpsburg except as amended by an approved Waiver, Variance, or other relief granted through applicable formal appeal procedures for a specific property or application. Any permit issued in error or in contradiction to the provisions of an adopted code, ordinance, or regulation of the

Town of Sharpsburg shall be considered to have been null and void upon its issuance.

4.2 LAND DISTURBANCE PERMITS

4.2.1 Clearing Permit, Clearing and Grubbing Permit, and Grading Permit.

The following permits covering portions of the land development process may be issued in accordance with the requirements of these Regulations:

a. Clearing Permit:

(1) A permit limited to clearing only with no grubbing or other land disturbance except for such activities necessary to install and maintain erosion and sediment control practices (as defined in the Georgia Soil Erosion and Sedimentation Act) may be issued upon identification of the property, the limits of the area to be cleared and the type of activities to be undertaken, an Erosion and Sedimentation Control Plan unless exempt under the Soil and Sedimentation Control Ordinance, a hydrology study if an Erosion and Sedimentation Control Plan is required, and approval of a Tree Protection Plan as may be required under the Tree Protection and Landscaping Ordinance. All clearing activities are to be consistent with the provisions of these regulations, the Soil and Sedimentation Control Ordinance, the Zoning Ordinance and any conditions of zoning approval.

(2) A clearing permit shall expire unless activities are commenced within 60 consecutive calendar days of issuance of the permit or if activities lapse and are abandoned for a period exceeding 30 consecutive calendar days.

(3) A clearing permit shall not be construed as approval of or authorization to construct any improvements, buildings, or other structures on the property.

b. Clearing and Grubbing Permit:

(1) A clearing and grubbing permit may be approved based on approval of a Concept Plan, Tree Protection and Replacement Plan for the development, Erosion and Sedimentation Control Plan, and hydrology study. Appropriate soil erosion and sedimentation controls and tree protection measures shall be placed and maintained as required.

(2) A permit for clearing and grubbing shall expire unless activities are commenced within 60 consecutive calendar days of issuance of the permit or if activities lapse and the project is abandoned for a period exceeding 30 consecutive calendar days.

(3) A clearing and grubbing permit shall be limited to the removal of vegetation and stumps and the placement of required tree protection measures and soil erosion and sedimentation control facilities, and may authorize the removal of existing structures on the property at the option of the developer. No grading or construction activities may be started under a clearing and grubbing permit

except for such activities necessary to install and maintain erosion and sedimentation control practices. The approval of a clearing and grubbing permit shall not imply the approval of or authorization to construct any improvements, buildings, or other structures on the property.

c. Grading Permit:

(1) A grading permit, which may include clearing and grubbing, may be issued prior to approval of a development permit, as provided under Article 10 of these Regulations. A grading permit may also be issued for earth burrow or storage, where no development or construction is proposed or imminent, based on approval of a grading plan, soil erosion and sediment control plan, and hydrology study, consistent with the requirements of the Tree Protection and Landscaping Ordinance, the zoning category of the site, and the provisions of the Comprehensive Plan (as applicable).

(2) A permit authorizing but limited to grading (and clearing and grubbing) shall expire unless activities are commenced within 60 consecutive calendar days of issuance of the permit or if activities lapse and the project is abandoned for a period exceeding 30 consecutive calendar days. Any site for which the grading permit expires shall immediately be stabilized to prevent erosion.

(3) A grading permit shall be limited in its authorization to land grading activities along with associated tree protection, clearing and grubbing, and demolition activities, and may authorize the construction of storm drainage improvements and soil erosion and sedimentation facilities as allowed by the permit itself.

4.2.2 Development Permit

a. Development Activities Authorized

Development Permit shall be issued to authorize all activities associated with the land development process, including clearing and grubbing, grading, and the construction of such improvements as streets, surface parking areas and drives, sewer systems, storm water drainage facilities, sidewalks, or other structures permanently placed on or in the property except for buildings or other structures requiring the issuance of a building permit. Water system improvements shall be authorized solely by the Town of Sharpsburg.

b. Development Permit Approval

Development Permit (which may include grading, clearing, and grubbing) shall be issued at the developer's request following approval of a Preliminary Plat for a subdivision or a Site Plan for a nonsubdivision project, along with approval of all other development plans and documents required to be submitted under Article 11 of these Regulations. All plans approved for a development permit shall expire after six months if no permit is issued within said time period.

c. Expiration of Development Permits

Development Permit shall expire 12 consecutive calendar months after issuance unless development activity as authorized by the permit is initiated within the twelve-month

period or if such authorized activities lapse and the project is abandoned for a period exceeding 60 consecutive calendar days. The Town Administrator may approve one (1) extension not exceeding three (3) consecutive calendar months within which time development activity must commence or the permit shall expire. Said extension shall be applied for within the first twelve consecutive calendar months after the permit's issuance.

d. Lapse in Construction Activity

For the purposes of these Regulations, a lapse in or suspension of development activity as authorized by a development permit, as a direct result of action or inaction on the part of the Town of Sharpsburg completely beyond the control of the developer, shall not be considered as a lapse in activity causing the development permit to expire. The twelve months within which development activity must begin shall exclude any such time period during which the activity is prohibited or has been caused to lapse by said Town action or inaction.

4.3 BUILDING PERMITS

4.3.1 Applicable Codes

Building permits for all structures or interior finishes are issued after meeting the applicable requirements of the fire prevention and life safety codes, and the various health, water, sewer, and building codes of the Town of Sharpsburg.

4.3.2 Health Department: On-Site Sewage Disposal

For any structure for which on-site sewage disposal will be provided, a permit issued by the Coweta County Environmental Health Department shall be required prior to issuance of a building permit. Said permit may first require approval by the Coweta County Environmental Health Department of a plan showing the location of the sewage disposal system and other site improvements, in accordance with their regulations.

4.3.3 Single-Family and Duplex Residences

a. A building permit for a single or two-family residence may be issued after the recording of a Final Plat or after the lot upon which the building is to be located has otherwise become a buildable lot of record.

b. The approval by the Town of Sharpsburg Consulting Engineer of a House Location Plan (HLP), Residential Drainage Plan (RDP), or Residential Drainage Study (RDS), may be required prior to issuance of the building permit, as noted and conditioned on the Final Plat. For such lots, a Certificate of Occupancy shall not be issued until conformance to the HLP, RDP, or RDS has been field verified by the Town of Sharpsburg as shown on a certified foundation survey prepared by Registered Land Surveyor. (See Article 11 for plan and study specifications.)

4.3.4 Swimming Pools

Issuance of a building permit for a swimming pool as an accessory use to a single or two-family residence, whether to be issued at the same time as or subsequent to the permitting or construction of the house or duplex, shall first require approval of a Swimming Pool Location Plan. The plan shall show the proposed location of the swimming pool and enclosing fence relative to the residence, the property boundaries, setback lines, septic tank and septic tank drain field (if any), and any easements on the site, and shall comply with all requirements of the Zoning Ordinance. Based on site conditions, a Residential Drainage Study (RDS) may also be required prior to issuance of the building permit. A Certificate of Occupancy shall not be issued until conformance to the Swimming Pool Location Plan (and to provisions of the RDS, if applicable) has been field verified by the Town of Sharpsburg.

4.3.5 Multi-Family and Nonresidential Structures

a. Issuance of a building permit for any principal building other than a single-family detached or duplex residence (and associated accessory structure) shall first require issuance of a Development Permit for the building site, and the building permit shall be consistent with said Development Permit.

b. Building plans must be reviewed and approved by the Town of Sharpsburg prior to permitting for all structures, except for accessory structures. Building Plan approval shall expire after one year, after which rereview and approval by the Town of Sharpsburg shall be required prior to issuance of a building permit for the building or additional buildings.

4.3.6 Issuance on Buildable Lots of Record; Exceptions

Building permits shall only be issued on buildable lots of record, as defined in these Regulations, except under special circumstances limited to and as specifically described in this Section, below.

a. In single-family detached and duplex residential subdivision, building permits for no more than two (2) model home buildings, except by approval of a Modification application, on specific lots may be issued by the Town of Sharpsburg on the basis of an approved Preliminary Plat after the approval of the Environmental Health Department, as appropriate, and subject to all limitations or requirements as may be established by the Town of Sharpsburg. A Certificate of Occupancy shall not be issued for the completed model home until the Final Plat encompassing the model home building lots has been approved and recorded.

b. In nonresidential subdivisions, building permits may be issued by the Town of Sharpsburg on the basis of an approved Preliminary Plat and after a Development Permit has been approved reflecting the site plan and construction drawings for specific buildings and associated site improvements. Issuance of the building permits shall be conditioned on the following:

(1) A performance bond or other approved surety shall have been received in a form acceptable to the Town Attorney, drawn in favor of the Town of Sharpsburg and in an amount not less than 110 percent of the cost of completing all public improvements as authorized and required by the Preliminary Plat.

(2) The performance bond or other approved surety shall not exceed an aggregate total for all required public improvements of \$12,000 per acre for the total acreage included within the subdivision or portion of the subdivision wherein the improvements are proposed, except by approval of the Town of Sharpsburg

(3) Approval of the Health Department for on-site sewage disposal or by the Sharpsburg Public Utility for a building to be served by public sewer shall be required prior to issuance of any building permit.

(4) Construction of the required public improvements shall proceed concurrently with construction of the buildings.

(5) No Certificate of Occupancy shall be approved for any structure within the subdivision prior to recording of the Final Plat without the express approval of the Town of Sharpsburg.

(6) The Town of Sharpsburg shall have found that the public interest is best served and that a public purpose is involved in the acceptance of the performance bond.

c. In fee-simple townhouse subdivisions, a building permit may be issued on a buildable lot of record established for each building (containing any number of townhouse dwelling units) through recording of a Final Plat following completion of all required public improvements. Upon completion of the buildings, the Final Plat shall be rerecorded to establish individual lots for the townhouse units, based on their actual locations, prior to issuance of Certificates of Occupancy.

4.3.7 Vinyl Siding Guidelines

Any vinyl siding used within the Town of Sharpsburg must meet the Vinyl Siding Institute's certification processes and must emulate traditional wood grain lap siding. Builders may be required to submit appropriate documentation to verify that the product is a VSI -certified material. The Town reserves the right to have the material reviewed by the Towns' Architect to determine if the product is acceptable for use within the Town.

**ARTICLE 5
GENERAL REQUIREMENTS**

5.1 SUITABILITY OF THE LAND

5.1.1 Unsuitable Land May Not Be Developed

Land subject to flooding, improper drainage or erosion, and any land deemed to be unsuitable for development due to steep slope, unsuitable soils or subsurface conditions, etc., shall not be subjected to development for any uses as may continue such conditions or increase danger to health, safety, life, or property, unless steps are taken to eliminate or abate these conditions.

5.1.2 Unsuitable Land Must Be Included in Buildable Lots

a. Land within a proposed subdivision or development which is unsuitable for development shall be incorporated into the buildable lots as excess land. Lots which do not comply with the requirements of the Zoning Ordinance are prohibited.

b. Exceptions:

(1) Signage and landscape features

The creation of an unbuildable lot in a proposed subdivision for the exclusive purpose of subdivision identification signage or subdivision entrance landscape features is authorized only under the following circumstances (modification applications from the circumstances of this exception shall not be accepted):

- (a) The lot shall be located at an entrance to the subdivision as an "island" in the right-of-way of a local or minor collector street; and,
- (b) A mandatory homeowner's association shall be required for the subdivision for ownership and maintenance of the lot as common area; and,
- (c) The lot shall meet the requirements of the Zoning Ordinance or as may be approved by a zoning variance; and,
- (d) Right-of-way of a minimum width of 6 feet from back of curb shall be provided adjacent to the perimeter of the lot.
- (e) Landscape plantings within the right-of-way of the Town of Sharpsburg way shall not extend more than 3 feet above the street grade.

(2) Storm Water Management Facilities

The creation of an unbuildable lot for the exclusive purpose of providing and maintaining a storm water management facility is authorized.

5.2 OFFERS OF LAND DEDICATION

5.2.1 Whenever a developer proposes the dedication of land to public use, and the Town of Sharpsburg or the appropriate agency finds that such land is neither required nor is it suitable for public use, the Town of Sharpsburg shall require the rearrangement of lots to include such land in private ownership.

5.3 ZONING AND OTHER REGULATIONS

5.3.1 Whenever there is a discrepancy between minimum standards or dimensions required herein and those contained in zoning regulations, building codes, or other official regulations or resolutions, the most restrictive shall apply. In those instances where the required right-of-way width or roadway improvements for a specific project have been established as a condition of zoning approval, the requirements of the zoning condition shall control, whether more or less restrictive than the requirements of these Regulations.

5.3.2 Building setback lines shall at least conform to the minimum yard requirements of the Zoning Ordinance.

5.4 REQUIRED PUBLIC IMPROVEMENTS

5.4.1 General Requirements

Every developer of lands within the jurisdiction of these Regulations shall provide the Project Access improvements included in these Regulations as shall be appropriate to serve the project, in accordance with these Site Development Regulations and other pertinent Codes, Ordinances, and regulations of the Town of Sharpsburg. Said improvements and associated lands shall be provided at no cost to Town of Sharpsburg, and shall be dedicated to Town of Sharpsburg or otherwise transferred, as required, to the public in perpetuity and without covenant or reservation, except as otherwise provided herein.

5.5 LOTS

5.5.1 Lots shall at least conform to requirements of the Town of Sharpsburg Zoning Ordinance.

5.5.2 Double frontage and reverse frontage lots shall be required for residential subdivisions along major thoroughfares where internal access can be provided. A no-access easement of at least ten feet in width, across which there shall be no right of access, shall be provided along the line of lots abutting such a traffic artery. When located along a major thoroughfare, the no-access easement shall be planted and/or screened as required by the Buffer Plan and the Tree Protection and Landscape Plan. In no-access easements along minor collectors or local streets, planting or other screening treatments may be required by the Town of Sharpsburg.

5.6 SURVEY MONUMENTS

5.6.1 All corners shall be marked with an iron rebar or pin, at least one-half inch in diameter and 18 inches long and driven so as to extend no less than one inch above the finished grade.

5.6.2 On subdivisions containing floodplains, flood elevation references shall be set in accordance with the requirements of the Town of Sharpsburg Floodplain Management Ordinance.

5.7 STANDARD DRAWINGS

5.7.1 The Town shall maintain on file for consultation and distribution a set of Standard Drawings illustrating details of construction and design of streets, storm water drainage facilities, site improvements and other elements related to the development of land in accordance with these regulations and under the jurisdiction of the Town.

5.7.2 The Standard Drawings shall illustrate minimum acceptable standards for land development activities authorized under these regulations, but shall not supersede more restrictive prudent design requirements or good engineering practice as applied to specific situations on a case-by-case basis.

5.7.3 The Standard Drawings shall be treated as though a part of these regulations for application to the minimum standards for design and construction of improvements required herein and subject to the modification and appeal provisions of Article 14, Administration, Appeal and Violations.

5.8 BUFFERS, LANDSCAPING, TREE PRESERVATION AND TREE REPLACEMENT

5.8.1 General Applicability

The standards and requirements contained in this section shall apply to tree preservation and replacement, buffers, and landscape areas specifically required by Town code, ordinance or resolution.

5.8.2 General Requirements

Any property required by the Tree Protection and Landscaping Ordinance, the Zoning Ordinance or conditions of zoning special use or variance approval to provide a buffer or other specific landscaping shall do so in compliance with the standards included in the Tree Protection and Landscaping Ordinance and this Section.

a. For any such property, a Tree Protection and Landscape Plan shall be prepared by those individuals as required and shall be approved by the Town prior to issuance of a Development Permit on the subject site.

b. At the discretion and option of the applicant, the required Buffer Plan and Tree Protection and Landscaping Plan may be combined into a single document,

as long as the details and elements of the plans can be clearly and easily identified.

c. Buffer areas or portions of buffer areas where natural vegetation provides an adequate visual screen as required by the Tree Protection and Landscaping Ordinance, shall remain natural and undisturbed by any clearing, grading or other construction activity except as authorized by the Development Permit. Dead and diseased trees and vegetation should be removed.

d. In buffer areas where natural vegetation is nonexistent or inadequate to provide a visual screen, replanting or supplemental planting shall be required in accordance with the Tree Protection and Landscaping Ordinance. The Town may also approve additional or alternative screening elements such as planted earthen berms or solid fences where appropriate to the intent of the requirements of the Tree Protection and Landscaping Ordinance.

e. New plantings in buffers shall be selected for natural survival expectancy for the Coweta County environment and for their ability to meet the screening standards established in the Tree Protection and Landscaping Ordinance.

f. Landscape areas or strips shall include trees and shrubs to the extent required by the Tree Protection and Landscaping Ordinance, the Zoning Ordinance or conditions of zoning, special use or variance approval. Plant materials may be grouped or arranged so as to achieve aesthetic results following professional landscaping standards, provided sight distances as required by any of the above mentioned regulations are preserved.

g. Tree plantings required by the Tree Protection and Landscaping Ordinance for parking lots may be grouped or arranged so as to achieve aesthetic results, or may be located in landscape islands within the parking lot.

5.8.3 Tree Preservation and Replacement Requirements

a. Any property required to preserve and protect existing trees or to plant replacement trees under the provisions of the Tree Protection and Landscaping Ordinance shall do so in compliance with said ordinance.

b. Areas set aside for the preservation of existing trees or the planting of new replacement trees, in fulfillment of any portion of the tree density standard of a property other than the property upon which the areas are located, shall be established within an easement drawn in favor of the other property, and appropriately recorded.

5.8.4 Landscape Performance Surety

In the event that the requirements of this section have not been met at the time that a Certificate of Development Conformance otherwise can be approved by the Town of Sharpsburg, and the certificate is requested, the Town of Sharpsburg shall require a Landscaping Performance Bond. The owner/developer or the contractor employed by

the owner/developer shall post a Landscaping Performance Bond or other Town approved surety in an amount equal to 110 percent of the cost of materials, labor, and other attendant costs, incidental to the installation of the required landscaping as part of the owner's Development Performance and Maintenance Agreement with the Town. The surety shall:

- a. Be drawn in favor of Town of Sharpsburg
- b. Be in a form satisfactory to the Town Attorney.
- c. Specify the time for the completion of the landscaping, which shall not be longer than 3 months following approval of the Certificate of Development Conformance or be in accordance with such other time table for completion acceptable to the Town.

5.9 Open Space

Open space provided in projects located in the Town of Sharpsburg shall meet the following requirements:

- a. Open Space Shall be Natural and Undisturbed - Open space shall be permanent and shall remain in its natural state, undisturbed and unoccupied by any structures or impervious surfaces to include septic tanks and septic tank drain fields and except for approved access or utility crossings or multiuse trails and other improvements permitted by the Zoning Ordinance. Dead and diseased trees and vegetation should be removed.
- b. Ownership Requirements - Open space provided in a development shall be owned and maintained by the property owner, or in the case of a subdivision, by a property owner's association. The association shall be established by the developer prior to or concurrent with the recording of the Final Plat of the subdivision. The association bylaws shall include the following provisions:
 - 1) Automatic (mandatory) membership of all purchasers of lots therein and their successors; and,
 - 2) Conditions and timing of transferring control of the association from the developer to the lot owners shall be specified which shall not exceed four (4) years from the date of recording of the Final Plat of the subdivision; and,
 - 3) Responsibility for maintenance, insurance and taxes; and,
 - 4) Sharing of the costs of maintenance among the lot owners with shares defined by the association bylaws; and,
 - 5) Authority to place liens on the real property of members who fail to pay their dues or assessments; and,

6) Prohibition on the dissolution of the association without the approval of the Town Council.

c. Maintenance

The property owner, or the property owner's association, shall be responsible for the maintenance of open space. Open space shall be kept in reasonable order and condition and shall be maintained free from refuse, junk and debris.

5.10 WETLANDS

5.10.1 National Wetland Inventory Maps

The National Wetland Inventory Maps, prepared by the United States Fish and Wildlife Service, shall be the official wetland maps of the Town of Sharpsburg. These maps show the general locations of wetlands and should be consulted by persons contemplating activities in or near wetland areas.

5.10.2 Plans

Design professionals, after consulting the National Wetland Inventory maps, shall indicate wetlands on plans required for land disturbance permit applications.

5.10.3 Design Professional Statement

Prior to the issuance of a land disturbance permit, the design professional who prepared the required plans accompanying the permit application, shall add a statement to the plan sheet indicating land disturbance and the statement shall read as follows:

Wetland Certification:

The design professional, whose seal appears hereon, certifies the following:

- 1) The National Wetland Inventory maps have been consulted; and,
- 2) The appropriate plan sheet DOES / DOES NOT (circle appropriate box) indicate wetlands as shown on the maps; and,
- 3) If wetlands are indicated, the land owner or developer has been advised that land disturbance of protected wetlands shall not occur unless the appropriate federal wetlands alteration ("Section 404") permit has been obtained.

5.10.4 The issuance of land disturbance permits by the Town shall be coordinated with the US Army Corps of Engineers Section 404 permitting process. If the "wetland certification" above indicates the presence of wetlands as shown on the NWI generalized wetlands maps, no land disturbance permit will be issued by the Town until a Section 404 Permit or Letter of Permission is obtained from the US Army Corps of Engineers.

ARTICLE 6
ACCESS AND RIGHT-OF-WAY REQUIREMENTS; AND STREET IMPROVEMENT AND
CONSTRUCTION REQUIREMENTS

6.1. ACCESS

6.1.1 When land is subdivided into larger parcels than ordinary building lots, such parcels shall be arranged and designed so as to allow for the opening of future streets and to provide access to those areas not presently served by streets.

6.1.2 No subdivision shall be designed so as to completely eliminate street access to adjoining parcels of land. Every development shall be designed to facilitate access to adjoining properties which are developed or anticipated to be developed in a manner substantially similar to the subject property. Locations of interparcel access shall be as required by and subject to the approval of the Town of Sharpsburg.

6.1.3 Any lot required to provide minimum frontage by the zoning district in which the lot is located shall provide vehicular access directly from a public street along the frontage or along any other property line which abuts a public street, except as provided in Section 6.1.5.

6.1.4 Private streets as may be approved under the provisions of the Zoning Ordinance shall be constructed to the roadway construction standards of the Town of Sharpsburg, as contained herein.

6.1.5 Vehicular access easements may be provided from a public street indirectly via easement in any one or more of the following circumstances:

- a. The property is not required to provide a minimum frontage by the applicable zoning district, provided that the easement shall be in a location and the access driveway shall have a width and alignment acceptable to the Coweta County Fire Department and the Town.
- b. The property is a buildable lot of record, as defined herein, but does not meet the minimum frontage requirement of the applicable zoning district. The property must be served by an exclusive access easement which shall be limited to the provision of access to only one principal use or structure.
- c. The access easement serves a single-family residence on a lot which is otherwise a buildable lot of record, and which is sharing a common driveway with no more than one other single family residence.
- d. The access easement was lawfully established as such under the code, ordinances, or regulations of Town of Sharpsburg prior to the adoption of these Development Regulations.
- e. The access easement coincides with a private roadway approved under the code, ordinances, or regulations of Town of Sharpsburg. All new

private roadways must be constructed to the roadway standards of these Development Regulations, and their ownership and maintenance responsibility by private party(s) must be clearly established on the Final Plat of the development.

f. The access easement serves a buildable lot of record which meets the minimum frontage requirements of the Zoning Ordinance, but at which point the access is not achieved.

6.2. STREETS

6.2.1 Dedication of Street Right-of-Way

Right-of-Way for all Project Public streets, existing and proposed, shall be dedicated in accordance with the street classifications as shown in the Comprehensive Plan or as indicated on Coweta County's Joint Comprehensive Transportation Plan.

6.2.2 Street Improvements

- a. Streets, whether existing or new, shall be constructed or improved under those circumstances and to the standards as established in these Regulations. Roadway improvements shall be in accordance with the street classifications.
- b. Maintenance bond for existing streets
 - i. Prior to the start of construction The Town of Sharpsburg may require a maintenance bond to ensure that certain roads that will serve as an entrance for construction traffic through existing sections of a subdivision are restored to the condition existing at the time of construction in the new section or new subdivision was started. The Mayor and Council shall consider the age of the road in determining the need for maintenance bond. The maintenance bond amount shall be determined by the Mayor and Council and maybe amended from time to time.
 - ii. Said maintenance bond shall cover the time period beginning at the date of issuance of the land disturbance permit and ending concurrently with maintenance bond. The maintenance bond shall only be released by the Town Engineer after completion of necessary repairs.

6.3 MINIMUM RIGHT-OF-WAY AND STREET IMPROVEMENTS

6.3.1. Right-of-Way and Pavement Widths.

Minimum widths for new construction (new streets or project access improvements) shall be as shown on Table 6-A (unless a modification is granted by the Town of Sharpsburg).

Exception No. 1: new local streets in subdivisions developed in the TND and TC or PCD/TND or TC District shall be in conformance with Article 10:

- a. Right-of-Way Width of New Interior Local Streets.

Entrance Streets: At least 46 feet for a depth of 300 feet from the subdivision entrance (measured from exterior road right-of-way) after which street right-of-way width shall be at least 46 feet.

Other Interior Streets: at least 42 feet.

Right-of-Way Radii: at least 45 feet for cul-de-sac or “eyebrow” turnarounds.

Alleys: 20 foot minimum easement width.

b. Pavement Width of New Interior Local Streets.

Entrance Streets: At least 24 feet (measured to back of curb) for a depth of 300 feet from the subdivision entrance (measured from exterior road right-of-way) after which pavement width shall be at least 24 feet (measured to back of curb).

Other Interior Streets: at least 20 feet (measured to back-of-curb).

Curb and Gutter: at least 1.5 feet.

Pavement Radii: at least 40 feet for cul-de-sac or “eyebrow” turnarounds (measured to back of curb).

Alleys: at least 14 feet (concrete or asphalt), with 1” concrete curb, and necessary drainage improvements. All driveways and garage aprons to connect to driveway pavement;

Exception No. 2: New Local Residential Streets in a PCD District – New local residential street within a PCD District shall be approved as a component in conjunction with the Master Plan. Minimum Rights of Way and Pavement width shall be indicated on the Master Plan and the developer will be required to design streets accordingly. In no case will the street right of way or pavement widths be less than the rights of way or pavement widths listed in Exception No. 1.

Exception No. 3: New Local Non-Residential Streets in the PCD Planned Community Development District

New Local Non-Residential Streets developed in a PCD Planned Community District shall meet the following:

a. Right-of-Way Width

Interior Streets: at least 48 feet.

Right-of-Way Radii: at least 55 feet for cul-de-sac or “eyebrow” turnarounds.

Alleys: at least a 20 foot easement if not to be dedicated to the Town; at least 15 feet of right-of-way if to be dedicated to the Town.

b. Pavement Width

Interior Streets: at least 26 feet (measured to back-of curb).

Pavement Radii: at least 45 feet for cul-de-sac or “eyebrow” turnarounds (measured to back of curb).

Alleys: at least 12 feet (concrete or asphalt), with a 1 foot concrete curb;

c. Additional Pavement & Right-of-Way Width

Additional Travel Lanes: at least 11 feet of pavement width.

On-Street Parallel Parking: at least 9 feet of pavement width.

On-Street Angled Parking: at least 18 feet of pavement width.

Right-of-Way: additional right-of-way shall be provided to accommodate additional travel lanes, on-street parallel parking, on-street angled parking, sidewalks and underground utilities.

**TABLE 6-A
MINIMUM RIGHT-OF-WAY AND ROADWAY WIDTHS FOR NEW STREETS AND
PROJECT ACCESS IMPROVEMENTS**

STREET CATEGORY	MINIMUM RIGHT-OF-WAY(1)	MINIMUM ROADWAY (2)
PRINCIPAL ARTERIAL	120' TO 150'	6 THROUGH LANES WITH MEDIAN
MAJOR ARTERIAL	100' TO 120'	67' -4 TO 6 THROUGH LANES WITH MEDIAN
MINOR ARTERIAL	80' TO 100'	52' TO 66'- 4 THROUGH LANES WITH MEDIAN
MAJOR COLLECTOR	80'	52'
MINOR COLLECTOR	60' TO 80'	28'
LOCAL STREET		
NONRESIDENTIAL	60' (3)	32'
NONRESIDENTIAL CUL-DE-SAC	60' RADIUS	50' RADIUS
LOCAL STREET		
RESIDENTIAL	60'	28'
RESIDENTIAL URBAN CUL-DE-SAC	60' RADIUS	40' RADIUS
(1) The greater right-of-way width shall apply under circumstances as described in Section 6.3.2 (c).		
(2) Roadway width dimensions are back-of-curb to back-of-curb except where noted.		
(3) Utility easement shall be provided in a location and size as required by the Town of Sharpsburg		

6.3.2 Street Rights-of-Way

a. The minimum width of street right-of-way shall be dedicated based upon the street categories as shown on Table 6-A of these Regulations.

b. Additional street right-of-way width shall be required to be dedicated at intersections or other locations which the property abuts upon where deceleration lanes, turning lanes, storage lanes, medians, or realignments are required for traffic safety and minimum right-of-way standards would be inadequate to accommodate the improvements.

c. If a new street or thoroughfare is proposed by the Comprehensive Plan, the Coweta County Joint Comprehensive Transportation and Implementation Program, or the State of Georgia to adjoin or traverse the property, permits shall not be issued until the Town Administrator has submitted the project to the Town Engineer for review in order to seek a determination if the right-of-way should be acquired or if a study of alternate routes should be undertaken. The review period by Town of Sharpsburg shall not exceed 90 days from the date of permit application. If, after the 90 day review, the Town of Sharpsburg is unable to reach a decision, there shall not be any further delay of a requested permit for this situation.

6.3.3 Project Access Improvements - Single Family Detached, Single Family Attached, and Duplex Residential Subdivisions

a. When property that abuts upon an existing or proposed Town road is to be developed or redeveloped as a single family detached or duplex subdivision and the Town street will provide access to the property, Project Access Improvements to the Town road (deceleration lanes, turn lanes, etc.) shall be provided by the developer as required herein.

b. A deceleration lane shall be required to be provided at each subdivision street entrance that is provided street access to a Minor Collector Street or Major Thoroughfare. In the event a street has an existing or proposed median, and the developer desires to construct a median break to serve the subdivision, a left turn lane leading to the median break shall be required to be provided by the developer and shall meet the standards contained herein.

c. Deceleration lanes shall have a length of 200 feet, with an additional 50 foot taper length, a pavement width of 12 feet (exclusive of curb and gutter) and shall be provided with curb and gutter. Additional right-of-way to accommodate the deceleration lane and an 11 foot shoulder shall be dedicated by the developer to Town of Sharpsburg at no cost. Associated drainage improvements as deemed necessary by the construction of the deceleration lane shall also be required.

d. Other Project Access Improvements may be required by Town of Sharpsburg upon the recommendation of the Georgia Department of Transportation or Georgia Regional Transportation Authority in order to ensure adequate site access, pedestrian access, convenience and safety to the motoring public.

e. The developer shall be responsible for the relocation of public or private utilities and drainage structures, as may be occasioned by the required Project Access Improvements.

6.3.4 Project Access Improvements - Multifamily and Nonresidential Developments

- a. When property that abuts upon an existing or proposed County road is to be developed or redeveloped for multi-family or nonresidential uses and the Town road will provide access to the property, access improvements to the Town road (deceleration lanes, turn lanes, etc.) shall be provided by the developer.
- b. A deceleration lane shall be required to be provided at each project driveway or subdivision street entrance, as applicable, that is provided street access to a Minor Collector Street or Major Thoroughfare. In the event a street has an existing or proposed median, and the developer desires to construct a median break to serve the project, a left turn lane leading to the median break shall be required to be provided by the developer and shall meet the standards contained herein.
- c. Deceleration lanes shall have a length of 200 feet, with an additional 50 foot taper length, pavement width of 12 feet (exclusive of curb and gutter) and shall be provided with curb and gutter. Additional right-of-way to accommodate the deceleration lane and an 11 foot shoulder shall be dedicated by the developer to Town of Sharpsburg at no cost. Associated drainage improvements as deemed necessary by the construction of the deceleration lane shall also be required.
- d. Other Project Access Improvements may be required by Town of Sharpsburg upon the recommendation of the Department of Transportation in order to ensure adequate site access, pedestrian access, convenience and safety to the motoring public.
- e. The Developer shall be responsible for the relocation of public or private utilities and drainage structures as may be occasioned by the required Project Access Improvements.

6.3.5 New Streets

- a. All new streets proposed to be constructed in a subdivision or other development, whether to be public or private, shall be designed and constructed at least to the standards contained in these Regulations in accordance with the category of said streets.
- b. In residential subdivisions, a dead end ("stub") street required under Section 6.4.4 to provide access to an abutting property may be exempted from construction of roadway improvements and public utilities under the following circumstances:
 - (1) No lot within the proposed subdivision will gain access from the "stub" street.
 - (2) A Concept Plan has not been submitted or approved on the neighboring tract.
 - (3) The "stub" street shall be fully designed as part of the Development Plans. However, the right-of-way shall only be cleared and rough graded in accordance with the approved plans, and all disturbed areas grassed.

(4) Connections for future extension of all public utilities shall be constructed as part of the subdivision. Curb returns shall be constructed as part of the subdivision. Curb returns shall be provided to the future "stub" street roadway location, and curb and gutter shall be installed across the roadway stub at the right-of-way line (extended).

(5) The right-of-way for the "stub" street shall be dedicated as part of the Final Plat. Slope easements or construction easements, if required by the street design, shall be shown on the Final Plat.

6.3.6 Substandard Streets

a. In the event that a development has access to a substandard street (i.e., a dirt or gravel road), the following Project Access Improvements shall be required:

(1) If the abutting substandard street provides access to the development and is dirt or gravel, the street shall be upgraded by the developer to a paved roadway from the project entrance to the nearest standard paved road along the route of access.

b. Off-site Project Access Improvements required under a.(1), above, shall at a minimum, result in a full-section roadway meeting the requirements of a Local Residential roadway (28 feet of pavement, with drainage improvements as needed). Responsibilities shall be as follows:

(1) The Developer shall design the road and provide the labor, equipment, and materials required for roadway improvements and necessary drainage improvements.

(2) If the Town desires the roadway to be improved to a standard greater than that for a Local Residential roadway, the Town shall provide or pay the cost of the additional materials and labor.

(3) All right-of-way required for these off-site improvements shall be acquired by the developer at no expense to the Town. If the developer is unable to acquire the right-of-way, the Department of Transportation shall initiate acquisition proceedings, at the expense of the developer, after authorization by the Town of Sharpsburg.

6.3.7 Improvements Along State Highways

For any development which abuts a state highway or other right-of-way controlled by the State of Georgia, improvements to the roadway and the location and design of any street or driveway providing access from the state highway shall comply with the standards and requirements of the Georgia Department of Transportation. A permit for the proposed access or improvements shall be required to have been approved by the Georgia D.O.T. and incorporated into the construction drawings for the project prior to issuance of a development permit by the Town.

6.4 GENERAL LAYOUT REQUIREMENTS

6.4.1 Conformance

The arrangement, character, extent, width, grade, and location of all streets shall conform at a minimum to the Comprehensive Plan and these Regulations.

6.4.2 Local Streets and Minor Collectors

Local streets shall be so laid out that their use by through traffic will be discouraged. Minor collectors shall be provided to channel through traffic movements within a development, where appropriate to the design and a major thoroughfare is not proposed by the Comprehensive Plan. Minor collectors also may be provided as central routes within large residential subdivisions, where appropriate to the design, based on project traffic demands exceeding 2000 trips per day (ADT).

6.4.3 Cul-de-sac Streets

- a. Dead end streets designed to have one end permanently closed shall provide a cul-de-sac turnaround and may be no more than 1000' in length. Additional length necessitated by topography or property configuration may be approved by the Town of Sharpsburg.
- b. The length of a cul-de-sac street shall be measured from the center of the cul-de-sac to the center of the intersection with another street, whether a through street or another cul-de-sac or dead-end street.
- c. Eyebrow cul-de-sac (half cul-de-sacs) will be allowed only at "right-angled" intersections having an interior angle between 80 degrees and 100 degrees.
- d. Cul-de-sacs shall conform to the layout and dimensional requirements as shown in the Standard Drawings, except where indicated on an approved PCD Master Plan.
- e. Alternative cul-de-sac shapes maybe approved by the Town of Sharpsburg on a case by case basis.

6.4.4 Other Dead End Streets

- a. A dead end street shall be provided to the boundary of a subdivision where necessary to provide access to a landlocked abutting property, for planned continuity of future circulation, for improved access for public safety vehicles, or for the extension of public water or other utilities to neighboring lands. Such dead end streets shall be designed so as to allow their reasonable extension, and shall be located so as to be reasonably incorporated into a street design for the neighboring property. The stub street requirement may be waived by the Town of Sharpsburg, provided the Town of Sharpsburg Public Utilities and Coweta County Fire Department concur.
- b. Dead end streets on abutting property shall be extended into a proposed subdivision and incorporated into the street design of the development. This

requirement may be modified by the Town of Sharpsburg in cases of serious topographical hardship or dissimilar zoning which would create unacceptable land use conflicts between the two developments. This modification may be conditioned on the provision of easements necessary for the extension of public utilities, the provision of cul-de-sac or other permanent turnaround on the dead end street, or the removal of the dead end street back to its nearest intersection.

c. Where a dead end street (other than a cul-de-sac) serves more than three lots, the developer shall be required to provide a temporary vehicular turnaround within the right-of-way. This requirement may be waived if extension of the dead end street is approved and under construction prior to its inclusion in a Final Plat.

d. Where a street dead ends at the property boundary and the street exceeds 500' in length, a permanent cul-de-sac shall be required. In this situation, right-of-way to the property boundary shall be required, but the pavement shall not be extended to the property boundary beyond the edge of the paved cul-de-sac turnaround. In no case shall a dead end street exceed 1000' in length unless approved by the Town of Sharpsburg due to unusual topographic conditions or property configuration.

6.4.5 Service Roads

Where a development borders on or contains a railroad right-of-way, or limited access highway right-of-way or major thoroughfare, a public street may be required to be constructed and dedicated within the development approximately parallel to and on each side of such right-of-way.

6.4.6 Half-Streets

Half-streets (new boundary streets having one-half of the minimum required right-of-way or pavement width) shall not be allowed nor access to same be permitted should it exist.

6.4.7 Reserve Strips

Land in private ownership adjacent to public rights-of-way which could control or are intended to control access to streets, alleys, or public lands shall not be permitted unless their control is given to the Town of Sharpsburg under ownership, dedication, or easement conditions approved by the Town Attorney or acceptable to the Town of Sharpsburg. No development shall be designed so as to deny access to abutting properties.

6.4.8 Alleys

Alleys shall be provided where required by the Zoning Ordinance and shall be constructed to the minimum standards expressed in Section 6.3.1.

6.4.9 Street Jogs.

- a. Street jogs shall either directly align or have offsets of a minimum of 125 feet for residential subdivision streets and a minimum of 200 feet for nonresidential subdivision streets, as measured between centerlines of said streets.
- b. All major thoroughfares shall provide offsets as required by the Town of Sharpsburg, where alignment is not desirable or feasible, but in no case be spaced less than 600 feet apart as measured between centerlines of said streets.

6.5. TRAFFIC CONTROL DEVICES

6.5.1 Traffic Control Signs

Street signs, traffic control signs, and devices such as striping and signalization, shall be provided through payment of fees to the Town of Sharpsburg for the installation thereof.

6.5.2 Street Name Signs

Street name signs shall have a green background with white legends mounted on channelized posts. Alternate post and signage material shall be subject to the review and approval of the Town of Sharpsburg. The posts and signs will be furnished and installed by the Town of Sharpsburg at all street intersections. The developer (or homeowners association in the event an alternate signpost is chosen at a later date) shall pay the Town of Sharpsburg costs.

6.5.3 Traffic Signals and Signs

All traffic signals and signs shall conform to the Manual on Uniform Traffic Control Devices.

6.5.4 Striping Requirements

All newly constructed streets having 4 or more lanes (including auxiliary lanes) and existing streets being widened with one or more additional lanes shall be striped or the payment of said striping costs shall be required from the Developer by the Town of Sharpsburg prior to the Approval of Development Conformance for the project. Striping shall be accomplished with paint meeting Georgia DOT standards conforming to the Manual on Uniform Traffic Control Devices.

6.5.5 Payment of Fees

Payment for materials and installation of street name and traffic control signs in new developments shall be required by the Town of Sharpsburg prior to the Approval of Development Conformance.

6.5.6 Street Lights

Street lights shall be provided by the developer in new subdivisions which propose the construction of a new street to be dedicated to the Town or which propose lot access to existing Town streets.

a. Prior to the approval of a preliminary plat, the developer shall submit a street lighting plan, prepared by a Professional Engineer registered in Georgia. The Town shall forward the design to the appropriate power provider and the developer shall pay the power provider the appropriate cost for materials and installation. Proof of payment to the power provider shall be required.

b. All fixtures and poles shall meet the requirements of the Town of Sharpsburg and all maintenance shall be the responsibility of the power provider. Fixtures shall be mounted a maximum of 16 feet above the ground and each fixture shall have appropriate arm length to illuminate the street. The Town of Sharpsburg, in addition to other requirements, may require a light to be located at street intersections within the development.

6.6 SPECIFICATIONS

Unless otherwise specifically set forth herein, all of the materials, methods of construction, and workmanship for the work covered in reference to street construction shall conform to the latest specifications of the Georgia Department of Transportation (Georgia DOT).

6.7 SUBGRADE PREPARATION FOR ALL STREETS

6.7.1 Subgrade preparation shall be in accordance with Georgia DOT specifications and these Regulations.

6.7.2 If any sections of the subgrade are composed of topsoil, organic, or other unsuitable or unstable material, such material shall be removed and replaced with suitable material and then thoroughly compacted as specified for fill or stabilized with stone or a geo-textile or geogrid.

6.7.3 Fill shall be placed in uniform, horizontal layers not more than 8" thick (loose measurement). Moisture content shall be adjusted as necessary to compact material to 95% of maximum dry density except for the top 12" which shall be compacted to 100% of maximum dry density.

6.7.4 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 subgrade shall be brought to the lines, grades, and typical roadway section shown on the plans.

6.7.5 Utility trenches cut in the subgrade shall be backfilled as specified herein. Compaction tests at the rate of one per 150 feet of trench shall be provided to verify compaction.

6.7.6 The subgrade must pass roll testing prior to placement of the base material. With the approval of the Town, a geo-textile or grid may be used to stabilize a subgrade that does not pass proof rolling.

6.7.7 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 subgrade, or it shall be removed before the base course is set up for paving.

6.7.8 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 4 inch diameter pipe sections.

6.8 PROJECT ACCESS IMPROVEMENT STANDARDS

6.8.1 For sections 4 feet or greater in width, the section shall comply with the construction standards for new streets, in accordance with the street's category as shown on Table 6-A of these Regulations. The base course must pass roll testing prior to paving. If a delay in paving is reasonably expected by the Developer or the Town of Sharpsburg, the base shall be primed with 0.25 gallon of R.C. 70 per square yard and cured for 78 days before paving.

6.8.2 For sections less than 4 feet wide, 7 inches of Class "A" concrete base (5 inches on local and minor collector streets) and 1.5 inches of "E" or "F" topping shall be required.

6.9 NEW LOCAL AND MINOR COLLECTOR STREETS

6.9.1 Local and Minor Collector Streets Within a Residential Subdivision.

a. Asphalt Streets/Alleys:

The following types of base materials may be used:

(1) Crushed Stone Base

Two-Pass Street:

The base course shall consist of at least 5 inches of graded aggregate base. After being thoroughly compacted and brought to proper section 2 inches of "B" binder shall be applied. If a delay in paving is reasonably expected by the Developer or the Town of Sharpsburg, the base shall be primed with 0.25 gallon of R.C. 70 per square yard the same day it is compacted, and cured for 7 days prior to paving. The final 1 inch of type "E" or "F" wearing course shall be applied after 90% of the houses on the street have been built, or prior to the end of the maintenance period (but after the 11th month), whichever occurs first. Prior to applying wearing course, a tack coat shall be applied to the binder course at a rate of

no less than 0.05 gallons per square yard. Type of tack shall be approved by the Town prior to placement.

(2) Soil Cement Base

(a) If the base material (resident soil) is unsatisfactory to the Town of Sharpsburg then a soil cement mix design with engineer test results acceptable to the Town of Sharpsburg. The design must come from a geo-technical firm with the results certified by a Professional Engineer registered in the State of Georgia. The tests required for the design are ASTM D558 or AASHTO T134 or ASTM D559 and/or 560 or AASHTO T135 and 136.

(b) The minimum base course shall consist of at least 6 inches of suitable soil (high mica content not suitable) stabilized with 10 percent of Portland Cement by volume (approximately 42.3 pounds per sq. yd.) Where the grade of the street is 5 percent or greater, a single surface treatment course must be applied before the binder.

b. Concrete Streets/ Alleys:

Five (5) inches of 3500 psi concrete is to be applied on a stabilized subgrade, consisting of at least 150 pounds of stone per square yard mixed in four inches deep and compacted. The design and construction of the street shall comply with the Portland Cement Association standards.

6.9.2 Nonresidential Subdivision or Development Streets

The following standards shall apply to new local and minor collector streets in nonresidential subdivision and other nonresidential projects.

a. Asphalt Streets:

The following types of base materials may be used:

(1) Two-Pass Street (Crushed Stone Base):

The base course shall consist of at least 7 inches of graded aggregate base. After being thoroughly compacted and brought to proper section 2 inches of "B" binder shall be applied. If a delay in paving is reasonably expected by the Developer or the Town of Sharpsburg, the base shall be primed with 0.25 gallon of R.C. 70 per square yard the same day it is compacted, and cured for 7 days prior to paving. The final 1 inch of type "E" or "F" wearing course shall be applied after 90% of the buildings on the street have been built, or prior to the end of the maintenance period (but after the 11th month), whichever occurs first. Prior to applying wearing course, a tack coat shall be applied to the binder course at

a rate of no less than 0.05 gallons per square yard. Type of tack shall be approved by the Town of Sharpsburg prior to placement.

b. Concrete Streets/ Alleys:

Seven (7) inches of Class "A" 3500 psi concrete is to be applied on a stabilized subgrade, consisting of at least 150 pounds of stone per square yard mixed in four inches deep and compacted. The design and construction of the street shall comply with the Portland Cement Association standards.

6.10 NEW MAJOR THOROUGHFARES.

6.10.1 Minor collectors shall be constructed in accordance with designs prepared by Town of Sharpsburg or Georgia DOT, or, if no design has been prepared, to the following standards as indicated by Table 6-B:

**TABLE 6B
CONSTRUCTION STANDARDS FOR MAJOR THOROUGHFARES**

STREET CATEGORY	BASE	BINDER	TOPPING
PRINCIPAL ARTERIAL	10 " GAB	5"*	1.5" E OR F
MAJOR ARTERIAL	10" GAB	4" B	1.5" E OR F
MINOR ARTERIAL	10" GAB	3" B	1.5" E OR F
MAJOR COLLECTOR	10" GAB	3" B	1.5" E OR F
MINOR COLLECTOR	8" GAB	2" B	1.5" E OR F

* 2 ½ "type "B" binder and 2 ½" asphaltic concrete base.

6.11 CURB AND GUTTER

All new streets and Project Access Improvements shall be provided with curb and gutter. All gutters shall drain smoothly with no areas of ponding.

6.11.1 Residential Curbing

Residential curbing shall meet the following requirements:

- a. Concrete shall be Class "A" (as defined by Georgia D.O.T.)and have a minimum strength of 3,000 PSI at 28 days.
- b. Typical minimum section shall be 6" x 24" X 12".
- c. Vertical curbing only.

6.11.2 Industrial or Commercial Curbing

Industrial or commercial curbing shall meet the following requirements:

- a. Concrete shall be Class "A" (as defined by Georgia D.O.T.) and have a minimum strength of 3,000 PSI at 28 days.
- b. Typical minimum section shall be 8" X 24" X 14".
- c. Vertical curbing only.

6.11.3 Principal Arterial and Major Arterial Curbing

Principal Arterial and Major Arterial curbing shall meet the following requirements:

- a. Concrete shall be Class "A" (as defined by Georgia D.O.T.) and have a minimum strength of 3,000 PSI at 28 days.
- b. Typical minimum section shall be 8" X 30" X 14".
- c. Vertical curbing only.

6.11.4 Construction Methods:

- a. Curb and gutter shall be set true to line and grade, horizontal be field staked, and finished to the section shown on the plans. Along the Project Access Improvements of a road which the Town of Sharpsburg has identified for resurfacing within 1 year of the new construction, the grade of the new gutter shall be placed 1" above the Project Access Improvement pavement grade in areas where drainage will not be adversely affected.
- b. Line and grade shall be set by developer's engineer or surveyor on grade less than 2% and over 12%, and within 100 feet in both directions from all low points.
- c. One-half inch expansion joints or premolded bituminous expansion joint material shall be provided at all structures and radius points and at intervals not to exceed 250 feet in the remainder of the curb and gutter.
- d. Inferior workmanship or unprofessional construction methods resulting in unacceptable curb and gutter will be cause for rejection of the finished work.
- e. Disturbed areas along all curbing shall be backfilled, stabilized, and grassed.

6.12 UNDERGROUND UTILITIES

6.12.1 All water and sanitary sewer utilities and storm drain facilities within the curbs shall be installed and the ditches backfilled and thoroughly compacted before any pavement or base is installed.

6.12.2 Once the base has been placed, all further installation of utilities under the roadway shall be bored or other wise comply with Section 7.5, Street Cuts.

6.12.3 All utility manholes and valve boxes shall be brought flush to the finished grade within the roadway section.

6.12.4 All utility locations shall adhere to the details found in the Standard Drawings.

6.13 SIDEWALKS

1. Permit Required

- a. It is unlawful for any person to lay, construct, or build any sidewalk, driveway crossing, curb ramps or curb and gutter within the Town of Sharpsburg without securing a permit from the Town Clerk.
- b. If the proposed sidewalk, curb and gutter and/or driveway is to be installed as a requirement to convert a residential structure or use into a non-residential use, then the building permit issued shall also constitute approval to install the sidewalk, curb and gutter or driveway improvements.
- c. If the sidewalk, curb and gutter and/or driveway is to be installed as a part of an individual lot development or a subdivision, then the land disturbance permit issued, after procedures have been followed in Article 12 of the Development Regulations have been satisfied, shall constitute permission to install the sidewalk, curb and gutter and/or driveways.
- d. If a person, entity, developer or other agency wishes to install a sidewalk to connect to an existing sidewalk section, then the Town Administrator shall confer with the Town Engineer to determine the appropriate permit to be issued and the level of plans or other information needed to process the permit.

2. Design Required

- a. Sidewalks, curb and gutter and or driveways to be installed as a component of an individual site development or a subdivision project shall be included on the construction plans required under Articles 11 and 12 of the Development Regulations.
- b. Sidewalks, curb and gutter and or driveways to be installed as a part of the conversion of a residential structure or use into a non-residential use shall provide design plans for these improvements when the building plans are submitted for review by the Town's Engineer.

3. Grade Establishment Required for Curb and Gutter

No permit for construction of curb and/or gutter shall be issued until required grades have been established or approved by the Town of Sharpsburg.

4. Inspection and Grade Stake Procedures

- a. No inspections shall be performed until the sidewalk construction permit fees or other fees outlined in the Development Regulations have been paid.

- b. The request for an inspection shall be given to the Building Inspector three (3) working days prior to placing of concrete or otherwise constructing the sidewalk in order that necessary sub-grade and form inspections, etc. can be made.

5. Use Standards

- a. When required, all sidewalk design plans submitted must show provision for the mobility, safety, and comfort of all pedestrian.
- b. When required, all sidewalk design plans submitted must show provision for adequate pedestrian access to abutting properties and shall show how the connection to the abutting sidewalk will be accomplished.

6. Sub-Grade Preparation

Where a fill condition exists, all topsoil and unsuitable material shall be removed. Subgrade shall be rolled or tamped before granular fill is placed. Fill shall be placed in six (6) inch layers to the proper subgrade elevation. Side slopes of fill material shall not exceed one (1) foot vertical to two (2) feet horizontal. Where a cut condition exists, all topsoil and unsuitable material shall be removed. Subgrade shall be removed to the proper elevation to allow sufficient width to accommodate the forms.

7. Forms

Side forms shall be of lumber of not less than two (2) inches nominal thickness or steel of equal rigidity. The minimum depth of the side forms shall be equal to the sidewalk thickness. No two (2) inch by four (4) inch lumber forms shall be permitted. Forms shall be held securely in place by stakes or braces with the top edge true to line and grade. The forms for the sidewalk shall pre-set so that the slab will have a fall of one (1) inch vertical to four (4) feet horizontal from the edge nearest the property line toward the edge farthest from the property line, except as may be otherwise directed by the Building Inspector.

8. Expansion Joints

Expansion joints of the thickness specified below shall consist of a premolded filler strip with the top strip placed one-fourth (1/4) inch below the surface of the sidewalk or driveway apron.

Expansion joints one half (1/2) inches thick shall be placed between sidewalks and all structures which extend through sidewalks, such as light standards, traffic light standards, and traffic poles. One-half (1/2) inch thick expansion joints shall also be provided at the junction of the driveway apron and the sidewalk and at the junction of the driveway apron and the curb.

Expansion joints three-eighths (3/8) inches thick shall be placed at maximum intervals of thirty (30) feet in sidewalks and where specified by the Building Inspector. Where sidewalks are constructed adjacent to pavement or curbs that have expansion joints, the expansion joints in the sidewalk shall be placed opposite the existing expansion joints as

nearly as practicable. Expansion joints shall also be placed where the sidewalk abuts existing sidewalks, between driveway pavement and sidewalk, and between sidewalk and curbs where the sidewalk abuts a curb.

9. Design and Construction Standards and Procedures

a. Land Use Classification

Sidewalk designs are generally set by land use classification. This classification system is set by the definitions contained within the Zoning Ordinance and/or the Sidewalk Regulations Ordinance.

b. Sidewalk and Right of Way Planting Strip Width

Requirements for sidewalk and planting strip width are provided in Town's Sidewalk Regulations Ordinance.

c. Sidewalk Location

On all streets, sidewalk location is to be determined using the sidewalk classifications in the Town's Sidewalk Regulations Ordinance.

d. Right-of-Way Constraints

1. Where sufficient right-of-way is not available, the Town of Sharpsburg may set a special sidewalk location standard within the right-of-way.
2. Where sufficient right-of-way is not available or is only large enough to accommodate utilities in their most efficient placement, sidewalk easements may be established provided that sufficient front yard setback area exists. Sidewalk easements are granted in perpetuity for public access. Such easements shall be wide enough to accommodate the required sidewalk width plus one additional foot on each side of the facility. Such easements shall be clearly indicated on all plats and protected via the use of covenants clearly stated on the plat and each relevant property deed stating the right to unimpeded public access in perpetuity. Sidewalks in easements shall match with sidewalks in adjacent developments and right-of-way cross sections must show match lines. The Town of Sharpsburg must definitively determine that within the established right-of-way, that sidewalks cannot be accommodated even if the road were narrowed from curb to curb to the minimum required.

e. Slope and Transverse Slope

The sidewalk slope shall be no greater than five (5) percent. The transverse slope of the walk and planting strip shall be 0.25 inch per foot, sloping toward the street.

f. Materials

1. All materials shall comply with the following standards of quality:
2. Portland Cement: ASTM C150 Type I, Normal ASTM C150 Type II, High-Early-Strength
3. Fine Aggregate: ASTM C33, clean sand graded between #100 and #4 sieve limits.
4. Coarse Aggregate: ASTM C33, uncoated crushed stone or washed gravel. Slag shall not be permitted.
5. Water: Potable and fit to drink.
6. Water-Reducing Admixture: ASTM C494 Type A (normal) or Type D (retarder).
7. Air Entraining Agent: ASTM C260
8. Pre-molded Filler Strips: ASTM D994
9. Curing Compound: ASTM C309, Type 2 (white, pigmented)
10. Reinforcement: ASTM A615, Grade 40

g. Concrete Quality

1. Ready-mixed concrete that complies with ASTM C94 shall be used for sidewalks, driveways, and driveway aprons. The concrete shall be supplied by a ready-mixed source, which is inspected yearly by the Georgia Department of Transportation (GDOT).
2. Concrete mix shall be designed using the following data:
 - a) Minimum compressive strength of three thousand (3000) psi at twenty-eight (28) days.
 - b) Minimum of six (6) sacks of cement per cubic yard.
 - c) Maximum size aggregate of one (1) inch.
 - d) Air entrainment of six (6) percent $\pm 1\%$.
 - e) Maximum slump of four (4) inches.
 - f) Maximum water content including moisture in the aggregate of six (6) gallons per sack of cement.

- g) All concrete shall contain a water-reducing admixture with no reduction in cement Content permitted.

- h. Site Preparation and Inspection.

The Building Inspector shall be given three (3) working days notice before any material is placed in order that an inspection may be made of the sub-grade, the forms, and the spacing for expansion-contraction joints. The excavating and grading shall be smoothly and neatly done, and to the proper depth, all large stones, boulders, roots, other vegetation, and rubbish of every description being removed from the sub-grade and the entire work made to conform to the profile and grade of the walk when finished. Soft, spongy, or loamy areas in the sub-grade must be removed, and the space refilled with stable material thoroughly compacted.

- i. Placing and Finishing Concrete.

- 1) The Building Inspector shall be notified when the subgrade has been finished. A minimum of twenty-four (24)hours notice shall be given prior to placing concrete. No concrete shall be placed until the subgrade has been inspected and approved by the Building Inspector.

- 2) Materials should not be placed on ice or frozen subgrade.

- 3) The subgrade shall be moistened just before the concrete is placed. The concrete shall be placed in successive batches for the entire width of the slab, struck-off from one-half ($\frac{1}{2}$) to three-fourths ($\frac{3}{4}$) inch higher than the finished slab, tamped until all voids are removed and free mortar appears on the surface, thoroughly spaded along the edges, struck off to the true grade, and finished to a true and even surface with floats and trowels. The final troweling shall be done with a steel trowel, leaving a smooth, even surface. After the water sheen has disappeared, the surface shall be given final finish by brushing with a fine-hair broom. The broom shall be drawn across the sidewalk or driveway apron at right-angles to the edges of the slab, with adjacent strokes slightly overlapping, producing a uniform, slightly roughened surface with parallel marks.

- 4) Control Joints

- 1. Sidewalks—Control joints shall be constructed at right angles to the center line of the sidewalk and shall extend one-fourth (0.25) the depth of the sidewalk. They shall not be less than one-eighth (0.125) inch nor more than one-fourth (0.25) inch in width, and shall be edged with an edging tool having a one-fourth (0.25) inch radius. All slabs shall be six (6) feet long on any one side, unless otherwise ordered by the Town Engineer.

2. Driveway Aprons—Control joints shall be constructed so as to divide the driveway apron into sections which are approximately square, with no side longer than fifteen (15) feet. The control joints shall be not less than one-eighth (0.125) inch nor more than one-fourth (0.25) inch in width and shall be edged with an edging tool having a one-fourth (0.25) inch radius. The minimum depth shall be one and one-fourth (1.25) inch.

j. Curing

Sidewalks and driveway aprons shall be cured by one of the following methods:

1. Burlap shall be placed on the finished surface saturated with water and covered with an impermeable covering.
2. Polyethylene sheeting shall be placed as soon as the concrete has sufficiently hardened to prevent marring of the surface. The surface of the concrete shall be wet immediately before the sheeting is placed. The edges of the sheeting shall be weighted securely with a continuous windrow of earth or any other means satisfactory to the Town of Sharpsburg to provide an air tight cover.
3. Specified curing compound shall be applied with brush, roller, or spray at the rate of one (1) gallon for every two hundred fifty (250) square feet of surface. Any of the above curing methods must remain in place for not less than six (6) days.

k. Backfill

After the concrete has been cured, forms shall be removed and the space near the edges of the sidewalk or driveway apron shall be backfilled, stabilized, and sodded 24 inches beyond the sidewalks width and to the required elevation with material approved by the Town of Sharpsburg. The material shall then be compacted until firm and the surface evenly graded.

l. Disposal of Surplus Material

Surplus or waste material resulting from the sidewalk or driveway apron construction shall be disposed of by the developer according to applicable local, state, and/or federal regulations regarding construction waste and debris.

m. Control of Materials

The developer shall, when requested by the Town and at his expense, have a commercial testing laboratory prepare and test samples of delivered concrete. One (1) set of tests shall be taken for the first twenty-five (25) cubic yards, or fraction thereof, and one (1) set of tests shall be taken for each additional fifty (50) cubic yards. A set of tests shall consist of four (4) standard cylinders, two (2) shall be broken at seven (7) days, two (2) shall be broken at twenty-eight (28)

days), one (1) slump test and one (1) air content test. The laboratory shall perform tests in accordance with recognized ASTM standards and shall submit written reports of such test to the Town Engineer for review.

n. The Town of Sharpsburg shall establish and promulgate other appropriate design and construction standards and regulations for sidewalks, Driveway Crossings, and curb and gutter not inconsistent herewith or other applicable ordinances.

o. Handicapped Provisions

All new sidewalks shall meet or exceed standards for handicapped access set by the Americans with Disabilities Act and any other applicable federal, state, or local standards.

10. Projects within the Georgia DOT Right-of-Way.

Sidewalks located in the right-of-way of roads under the jurisdiction of the Georgia DOT shall be constructed in accordance with Georgia DOT design and construction standards.

6.14 Multi-Use Trail Design Standards

When required by the Town Zoning Ordinance or by the Mayor and Council, multi-use paths shall be installed by the developer in accordance with the standards adopted with the Multi-Use Trail System Master Plan.

**ARTICLE 7
UTILITIES AND EASEMENTS**

7.1 PLACEMENT OF UTILITIES

7.1.1 All authorized public underground utilities shall be located within the right-of-way of a public street or within an easement designated for such use. Within public street right-of-way, placement of the various authorized utilities (power, gas, cable TV, water and sewer) shall conform to the specific locations designated for such use by Town of Sharpsburg, as illustrated in Appendix A.

7.1.2 No other underground utilities, such as private lawn sprinkler systems, yard lighting, etc., shall be installed within a public right-of-way or easement except by authorization of the Town of Sharpsburg. Such authorization, if issued, shall require the applicant to assume all repair costs of the applicant's facilities should they be damaged during the course of installation, maintenance or repair of any of the public utilities authorized to occupy said right-of-way or easement.

7.2 WATER SYSTEM AND FIRE HYDRANTS

7.2.1 The developer shall install or have installed a system of water mains connected to a public water supply system in accordance with the Town of Sharpsburg Standard Details for Water Installation and Improvement.

7.2.2 All water mains, fire hydrants and appurtenances shall be designed in accordance with the policies, standards, plans and specifications of the Town of Sharpsburg Development Regulations and Zoning Ordinance and the Town of Sharpsburg Standard Details for Water Installation and Improvement. Where jurisdiction resides with the Town of Sharpsburg, the public water mains and appurtenances shall be designed upon submittal of the Development Plans for the project.

7.2.3 Within the Town of Sharpsburg Public Utilities jurisdiction, water mains and appurtenances shall be installed after installation of the curbs and gutters and before paving, or after staking of the curb line and submission to the Town of Sharpsburg of an as-graded survey of the street profile accompanied by a certification executed by the owner as required by the Town of Sharpsburg that the subgrade will not change. Water mains shall be relocated as necessary to meet the Town of Sharpsburg regulations prior to Approval of Development Conformance, if improperly located to final curb line or grade.

7.3 SANITARY SEWER DISPOSAL

7.3.1 Connection to an approved sewage disposal system shall be made, which may require the construction of an on-site system or the extension of public sanitary sewerage and associated appurtenances, as required under the Standard Details of Sewer Installation of the Town of Sharpsburg or as required by the Coweta County Health Department.

7.3.2 No septic tanks shall be allowed if public sewer is available. All structures shall connect to public sewer when such sewer is available, in accordance with the Development Regulations of the Town of Sharpsburg. Sewer availability shall be determined by the Town of Sharpsburg.

7.3.3 Lots with septic tanks and tile drain-field sewerage disposal systems shall contain the contiguous area outside of the 100-year floodplain as required by the Coweta County Health Department.

7.3.4 The Health Department may require notation that certain lots must meet additional requirements prior to issuance of a building permit, or other wise limit development relative to Coweta County Health Department regulations.

a. Such lots may include lots upon which adequate depth to water table must be demonstrated during the appropriate season of the year, adequate percolation tests must be performed, limitations upon the number of bedrooms in a dwelling, etc.,

b. No lot shall be included on a Final Plat which the Health Department is not confident will meet all Health Department regulations at a reasonable cost or within a reasonable period of time, except lots proposed to be served by sanitary sewer in subdivision where "dry" sewer has been installed. Such lots shall be noted - "Approval by the Town of Sharpsburg for connection to sanitary sewer required prior to issuance of a building permit."

7.4 EASEMENTS

7.4.1 Temporary construction easements and permanent easements for public utilities, drainage or other public facilities shall be dedicated to the Town of Sharpsburg in accordance with Town requirements. All easements shall be stabilized in accordance with the Manual for Erosion and Sediment Control in Georgia.

Drainage easements are required for any part of the drainage system which is designed to carry storm water runoff from more than one parcel, existing or proposed. Drainage easements for improved ditches, pipe construction, and detention facilities shall be cleared, opened, and stabilized at the time of development to control surface water runoff (See also Article 8). Run-off slope and side slopes shall be specified by the Developer's Engineer, according to good engineering practice. Drainage easements for storm drain pipes that carry water shall be provided according to the minimum requirements found in Table 7-A below, and shall conform to Town Standards. The minimum easement width shall be based on the pipe diameter (span) plus 2 feet plus two times the pipe invert depth. This value shall be rounded up to the nearest 5 feet. For pipes exceeding 16 feet in depth, a pre-submittal conference shall be held with the Town to determine what additional requirements may be required.

TABLE 7-A EASEMENTS FOR STORM DRAIN PIPES													
PIPE SIZE (FT)	MAXIMUM PIPE INVERT DEPTH (FT) MINIMUM EASEMENT WIDTH (FT)												
	4	5	6	7	8	9	10	11	12	13	14	15	16
NA													
1.25	20	20	20	20	20	25	25	30	30	30	35	35	40
1.5	20	20	20	20	20	25	25	30	30	30	35	35	40
2.0	20	20	20	20	20	25	25	30	30	30	35	35	40
2.5	20	20	20	20	25	25	25	30	30	35	35	35	40
3.0	20	20	20	20	25	25	25	30	30	35	35	35	40
3.5	NA	20	20	20	25	25	30	30	30	35	35	40	40
4.0	NA	20	20	20	25	25	30	30	30	35	35	40	40
4.5	NA	NA	20	25	25	25	30	30	35	35	35	40	40
5.0	NA	NA	20	25	25	25	30	30	35	35	35	40	40
5.5	NA	NA	NA	25	25	30	30	30	35	35	40	40	40
6.0	NA	NA	NA	25	25	30	30	30	35	35	40	40	40

7.4.3 Permanent sanitary sewer easements shall be no less than 20 feet in width when no other parallel utilities are located therein. When warranted, temporary construction easement widths shall be determined by the Town of Sharpsburg.

7.4.4 A common easement for sanitary sewer and drainage purposes may be allowed if the pipes are parallel and at least 10 feet is provided between pipes (on center). The easement width shall be equal to the width shown in Table 7-A plus the width distance separating the pipes (minimum of 10 feet).

7.4.5 Drainage easements shall be provided where a development is traversed by or contains a water course, impoundment, detention facility, improved channel, floodplain, natural stream or channel. It shall conform substantially to the flooding limits of the 100 year storm based on fully developed conditions per the Town’s Future Land Use Plan and any approved development projects, but shall be no less than 20 feet in width.

7.4.6 Drainage easements off the street right-of-way shall be clearly defined on the Final Plat. The property owner will be required to keep the easement free of obstruction in such a way as to assure the maximum designed flow at all times. The property owner shall not alter any drainage improvements without the prior written approval from the Town. Structures, except driveways, shall not be constructed or erected in an easement without the prior written approval from the Town. Driveways shall cross an easement as close to perpendicular as practical. Property owners may plant landscaping in an easement that is piped; however, the Town is not responsible for replacing the landscape material located in the easement when it is removed to maintain the drainage system.

7.4.7 All drainage, sewer, access or other easements which were required to be cleared shall be fine graded and grassed within 10 days of completing construction work. The use of sediment control measures may be required to protect the area until a comprehensive vegetative cover is obtained.

7.5 STREET CUTS

7.5.1 All utility construction plans within Town right-of-way shall be reviewed and approved by the Town and/or its Consulting Engineer before construction begins. Street cuts shall not be allowed unless deemed absolutely necessary due to the presence of rock, the need to tap into an existing line beneath the road surface, or other circumstance which makes boring impossible or infeasible.

7.5.2 No street cut shall be made without the payment of fees as may be determined from time to time by the Town of Sharpsburg.

7.5.3 If approved, all trenches shall be backfilled and compacted the same day the trench is opened.

- a. Trenches under the paving shall be returned to 95% compaction.
- b. Trenches elsewhere shall be returned to 90% compaction.
- c. See Section 6.7 for trench compaction and test requirements.

7.5.4 All trenches under paving shall be concreted with 8" of Class "A" concrete base and 12 inch of type "E" or "F" wearing course asphalt is to be spread.

- a. The paving cut shall be widened to a minimum of 9" beyond the edges of the trench.
- b. The edges of the paving cut shall be smooth.

7.5.5 Contact the Town of Sharpsburg for public utility extension information from the existing to the proposed development. Contact the Town of Sharpsburg at least 24 hours in advance of closure of traffic lanes.

ARTICLE 8
SITE GRADING, STORMWATER DETENTION, CULVERTS AND
PIPED DRAINAGE SYSTEMS AND EROSION CONTROL

8.1. SITE GRADING.

8.1.1. Grading shall be done in accordance with the lines and grades shown on the approved Grading Plan.

8.1.2. Grading plans shall show existing and proposed contour lines at an interval of no more than 2 feet. Grading plans shall outline the areas that are required to remain undisturbed (i.e., Tree Protection Areas, buffer, etc.) and shall indicate protective fencing or staking to be placed surrounding such areas.

8.1.3. Embankments shall be placed in uniform layers not to exceed a compacted thickness of 6 inches per layer and shall be compacted to a density of 95 percent of the maximum laboratory dry weight per cubic foot as determined by AASHTO Method T-99 in all areas where structure, parking lots and drives, streets, and utilities are to be placed. All other embankments are to be compacted to at least 85 percent.

8.1.4. The maximum slopes for cut or fill shall be 2:1 (two feet of horizontal run for each foot of rise or fall), except 1) for earthen dam embankments, 2) for rock cuts, 3) where certified by a professional geotechnical engineer or 4) as discussed in Section 8.1.6 below. Earthen dam embankments shall be 3:1 maximum unless a modification application is approved. The intent of the earthen dam embankment slope regulation is to provide for public safety, soil stability, and dam maintenance considerations. The depth of cut referred to herein shall be the maximum cut or fill that shall be allowed to occur in any one section of cut or fill. The slope of cut or fill shall be uniform throughout for each section of cut or fill unless benching is approved by the Town. When a cut is made in rock that requires blasting, the slope may be steeper if pre-splitting is employed and upon submission of a geotechnical report which substantiates the integrity of the rock in the steeper condition, subject to the review and approval of the Town of Sharpsburg. (Note: No blasting shall occur unless a permit has been obtained from the Fire Marshall's office.) Refer to the Town's Standard Drawings for grading section and retaining wall details.

8.1.5. While most soils in the area can be safely stabilized at a 2:1 slope, some soils exhibit a low shearing resistance and a low cohesiveness. These soils typically are micaceous silts and sandy soils with little or no clay. If the 2:1 slope shows evidence of shearing, noncohesiveness, sliding, or inability to maintain compaction, the slope shall be stabilized at 3:1 or by using such mechanical methods as needed (such as retaining walls or "grow mats" stapled in place) to maintain slope, height, and integrity.

8.1.6. A grading plan showing building pad locations shall be submitted for residential subdivisions, unless a modification application is approved, zoned for a lot size of less than 12,000 square feet or a density of 4 units per acre or more. The intent of this regulation is to ensure adequate lot-to-lot drainage. Granting a modification will not nullify the intent of these regulations when the layout has a minimum lot area of 14,520 square feet and a minimum lot width of 90 feet. The grading plan may be used as a construction document prior to approval of

the Final Plat or as a guidance document for individual lot grading after approval of the Final Plat.

8.1.7. Grading for roads and improved ditches shall be shown.

8.2. STORM WATER MANAGEMENT.

8.2.1. Storm Water Management Report Required.

a. A Storm Water Management Report shall be provided for every project. The purpose of this report shall be to formulate a plan to manage storm water runoff so that storm water runoff hazards are not created and existing runoff-related problems are not exacerbated, either upstream or downstream from or within the boundaries of the property being developed. The engineer shall be responsible for obtaining all information necessary for the report. Hydrologic analysis and detention pond hydraulics (excluding dams as defined in Section 8.6 of these regulations), pipe and open channel hydraulics, culvert hydraulics and water quality best management practices shall be certified by either a professional engineer or landscape architect registered in the State of Georgia. Flood studies for any floodplain or flood prone areas, and hydrologic and hydraulic analysis and design calculations which are performed for the design of a dam as defined in Section 8.6 of these regulations, shall be certified by a professional engineer registered in the State of Georgia.

b. The Storm Water Management Report shall identify the locations and quantities of storm water runoff entering and exiting the site for both pre- and post- developed conditions. Analysis of the offsite properties shall anticipate future development in addition to addressing existing conditions.

All culverts, pipe systems, and open channel flow systems shall be sized based on all on-site upstream areas being developed in accordance with the development plans and the off-site upstream areas being fully developed in accordance with the Town's Future Land Use Plan and any approved development projects with no detention. Upstream detention may be included when determining flows, provided the engineer calculates the reduced flows by routing the developed flows through any storm water facility included in the analysis rather than assuming the reduction will occur. The engineer shall show that detention facilities used in the analysis will remain, be properly maintained and the storage volume and outlet structure is based on current conditions.

Detention facilities shall be designed using predevelopment flows based on existing conditions for all upstream areas including existing on-site lakes and detention. Post-development flows, except the 100-year flow, shall be based on on-site upstream areas being developed per the development plans and existing conditions for off-site upstream areas. The 100-year flow shall be based on on-site upstream areas being developed per the development plans and the off-site upstream areas being developed per the Town's Future Land Use Plan and any approved development projects with no detention. Upstream detention may be included if it meets the conditions as described for culverts and pipe systems. Existing

conditions shall be defined as the conditions of the site at the time of application for a land disturbance permit. The existing condition includes on-site lakes and ponds. Pre-development flows shall be determined by routing the pre-development flows through these storm water facilities. Flows used to size the outlet structures for detention facilities that exceed the 25-year design flow shall be sized as described for culverts and pipe systems.

When more than 50% of the property of a developed project site is disturbed for either redevelopment or improvement, the Storm Water Management Report shall be prepared for the entire site and existing impervious areas shall be treated as forest in the pre-developed analysis. When 50% or less of the property is disturbed, detention shall be provided as required by these regulations for the disturbed area and existing impervious areas which are disturbed shall be treated as forest in the pre-developed analysis.

The report shall contain drainage area delineation maps and other exhibits at satisfactory scale and sufficient in quantity and scope to define the boundaries of the site, and off-site areas, relative to water courses, drainage divides, drainage structures, and other pertinent features.

c. For the purposes of these regulations, the words "downstream" and "analysis" shall have the following meanings. The analysis of downstream conditions in the report shall address each and every point or area along the project site's boundaries at which runoff will exit the property. The analysis shall focus on the portion of the drainage way "immediately" downstream from the project. This area shall extend downstream from the project to a point in the drainage basin where the project area is 10 percent of the total basin area.

(1) The report shall examine the conditions downstream from the project to a point where the project area is 10 percent of the total drainage basin.

(a) The analysis shall include all culverts, obstructions, existing and potential erosion problems, elevations of existing improvements, existing drainage complaints and any other existing modifications to natural conditions. The downstream water courses and receiving conveyance shall be analyzed to ensure that the channel velocities do not exceed values recommended in the Design Manual nor does the pipe system exceed current design criteria of these regulations; and,

(b) If the existing downstream conditions are overburdened by the pre-developed flows in the stream, then the developer and the Town shall jointly participate to resolve the problem. The meaning of "overburdened" shall include but not be limited to situations where 25-year velocities exceed the non-erosive velocity of the stream, habitable structures are shown to be subject to flooding for any frequency up to and including the regulatory flood and storm water facilities that can not carry the design storm in accordance with these regulations; and,

(c) If there are any problems identified downstream that are a result of the development, then the developer shall eliminate the conditions causing the problem.

(2) Hydrographs shall be analyzed at least at two points. One study point shall be at the downstream property line where the watercourse crosses the project site's downstream property line. The second study point shall be downstream of the project at the point where the project area is 10 percent of the total drainage basin.

(a) The study will compare pre-developed hydrographs with post-developed hydrographs for the 2, 5, 10, 25, 50 and 100-year flood frequencies; and,

(b) Comparison of peak flows shall include the timing of hydrographs; and,

(c) Hydrographs shall be based on a 24 hour storm.

(d) The analysis shall be in accordance with the Georgia Stormwater Management Manual.

d. The following criteria shall be evaluated by the authorized registered professional (refer to Subsection 8.2.1. Paragraph a.) preparing the Storm Water Management Report, and in determining whether or not detention should be required for any portion of any site:

(1) Existing land uses downstream;

(2) Anticipated future land uses downstream;

(3) Magnitude of increase in peak flows due to development;

(4) Presence of existing drainage problems;

(5) Capacity of existing and anticipated drainage systems;

(6) Creation of concentrated flows where none had occurred previously;

(7) Availability of feasible locations for detention facilities;

(8) Existing flows generated off-site which pass through the project site; and,

(9) The nature of the receiving watercourse.

e. When a development uses an existing facility where the last approved certification and record drawing of the facility was over 18 months prior to the new development's submittal, the engineer shall provide one of the following.

1) A new survey, drawing and certification showing that the outlet structure is constructed as approved and the flood storage and water quality volume of the facility is equal to or greater than the volume required when the facility was approved.

2) Construction plans and calculations showing that the outlet structure will function as designed and the flood storage and water quality volume of the facility will be equal to or greater than the volume required when the facility was approved once the proposed maintenance has been performed.

3) A new record survey, drawing, study and certification showing that the facility meets the development requirements when the facility was approved.

f. Design Criteria - General

All design related to storm water shall be in accordance with the Georgia Storm Water Design Manual.

g. Evidence of Acquisition of Applicable Non-Local Permits

The applicant shall certify and provide documentation that all other applicable environmental permits have been acquired for the site prior to approval of the Storm Water Management Report.

8.2.2. Storm Water Detention Required.

a. Whenever a Storm Water Management Report indicates that an adverse impact from storm water runoff is expected to result from the development of a property, that project shall be provided with storm water detention facilities. The meaning of "adverse impact" shall apply when pre-development flows did not cause difficulties and postdevelopment flows do. Difficulties shall include but not be limited to situations where 25-year velocities exceed the non-erosive velocity of the stream, habitable structures are shown to be subject to increased depth of flooding for any frequency up to and including the regulatory flood, and storm water facilities that can not carry the design storm in accordance with these regulations.

b. Storm water detention facilities required in section 8.2.2.a shall be provided, unless the authorized registered professional (refer to Subsection 8.2.1. Paragraph a.) certifies and provides certified documentation supporting the conclusion to the Town of Sharpsburg that at least one of the following is true and correct as applicable.

(1) The non-detained, post-development runoff will leave the project site as sheet flow, and will not have an adverse impact upon downstream properties. The increase for a 25-year storm should not exceed 1 cfs over a length perpendicular to the flow of 100 feet.

(2) The effect of detention would be to concentrate flows where sheet flow had occurred under pre-developed conditions, and any impact of increase sheet flows upon downstream properties would be less adverse than that which would result from the concentrated flows from a detention facility even if energy dissipation devices were employed.

(3) The undetained flow will pass through downstream properties, in drainage easements obtained by the developer, to an existing detention facility which has been designed to manage the upstream property's runoff or to the point in the downstream analysis (see 8.2.1.c) which shows that detention is not required.

(4) Where the site runoff will flow directly into a stream or lake without crossing off-site properties:

a. 24-hour detention of the 1-year storm is required if water quality protection is required for the project. In this case, the post-development peak flows in the receiving channel may exceed pre-development flows by the smaller value of up to 0.1% of the predevelopment flows or 3 cfs in the downstream analysis.

b. Only peak detention for the 2-year through the 25-year storm is not required if the downstream analysis using timing of the hydrographs shows no adverse impact from the exit of the site to the point immediately downstream from the project in the drainage basin where the project area is 10 percent of the total drainage basin area.

c. Should the authorized registered professional conclude that storm water detention may not be necessary because of anticipated compliance with Section 8.2.2.b., rigid compliance with all of the following criteria is mandatory:

(1) A storm water management report shall always be required whether or not storm water detention is required.

(2) If the applicant proposes to show that the detention requirement may be eliminated for all or a portion of a project, then a presubmittal conference with the Town's staff, planners or engineers is required prior to preparation and submittal of construction plans for the project.

(3) At the pre-submittal conference with the staff, the consultant shall be prepared to discuss the downstream analysis findings as follows:

(a) The affected stream must be analyzed downstream from the project to a point where the project area is 10 percent of the total drainage basin. The analysis must include all culverts, obstructions, existing and potential erosion problems, elevations of existing improvements, and any other existing modifications to natural conditions; and,

(b) If the existing downstream conditions are overburdened by the pre-developed flows in the stream, then detention shall be required unless the developer elects to eliminate the downstream overburdened conditions at his or her expense when the development occurs; and,

(c) If there are any existing drainage complaints downstream, then detention shall be required unless the developer elects to minimize the conditions causing the complaint at his or her expense when the development occurs.

8.2.3. Detention Design Criteria - General.

a. All storm water detention pond hydrologic and hydraulic analysis and design calculations shall be certified by the Developer's authorized registered professional (refer to Subsection 8.2.1. Paragraph a.).

b. All storm water detention facilities shall be designed to detain the 1-year storm runoff, for the area draining to the pond, for 24 hours. For the project, this volume called the channel protection volume, shall be equal to or greater than the 1-year storm runoff volume from the project. In addition, these facilities shall control the peak flow rates associated with storms having 2-year, 5-year, 10-year, and 25-year return frequencies so that flows from the developed site do not exceed those associated with pre-development conditions at the project boundary nor increase the peak flows downstream from the project to the point in the drainage basin where the project area is 10 percent of the total basin. Where adverse impacts, as defined in section 8.2.2.a, occur during the 100-year storm, the 100-year storm shall also be regulated.

c. A variety of methods of achieving storm water management goals shall be acceptable in providing detention facilities. The type of facility provided shall be based on the following criteria:

(1) The type of development which the detention facility is being provided;

(2) The type of development which the detention facility is intended to protect;

(3) Volume of storm water to be stored;

(4) Origin and magnitude of the flows to be managed;

(5) Topographic opportunities and limitations;

(6) Safety considerations;

(7) Maintenance requirements;

- (8) Aesthetic considerations;
- (9) Likelihood of facility operation interfering with access to public or private facilities;
- (10) Proximity of facility to property lines, utilities, buffers, etc.; and,
- (11) Similar site-specific constraints.

d. Detention facilities may be of any of the following types, and two or more types may be used in combination with one another:

- (1) Normally-dry basins, whether excavated or created by damming a natural drainage feature, or a combination of both methods;
- (2) Lakes and ponds, whether excavated or created by damming a natural drainage feature, or a combination of both methods;
- (3) Parking lot facilities;
- (4) Underground facilities; and,
- (5) Roof top facilities.

e. Reservoir routing methods shall be used for all detention facility design. The size of the orifice to detain the 1-year storm for the facility shall be computed using the following orifice equation with a 24 hour draw down time from the elevation of the total channel protection volume (CPV) and an orifice coefficient of 0.60. The minimum elevation of the 2-year control shall be at the maximum routed pool elevation of the 1-year storm and not pool elevation of the total 1-year storm volume.

h = head measured in feet from the elevation needed to store the total 1-year runoff volume (CPV) to the centroid of the orifice;

Q_a = average CPV outflow rate in cfs;

$Q_a = CPV / (3600 \times 24)$;

A = required orifice area in square feet;

$A = Q_a / (0.6 \times (64.4 \times h/2)^{0.5})$.

f. The hydrologic methodology used for any given project shall conform to the Georgia Storm Water Design Manual.

g. Runoff coefficients and runoff Curve Numbers used for pre- and post- development conditions shall be consistent with those shown in the Georgia Storm Water Design Manual. The USGS Method shall be used where applicable to check the magnitude of peak flows when other hydrologic methods recommended in the manual are used.

h. Calculations shall be provided showing how all times of concentration or lag times were computed, both for pre- and post-developed conditions. Likewise, adequate support must be provided for all composite runoff coefficients or curve numbers used.

i. If a computer program is used for hydrologic and hydraulic analysis and design, including generating and routing hydrographs, the output from the program shall be summarized in the Storm Water Management Report, and the name and version of the program shall be indicated. Computer output sheets may be attached to the report if desired by the authorized registered professional (refer to Subsection 8.2.1. Paragraph a.) or if requested by the Town of Sharpsburg.

j. The design of every detention facility of any type shall consider the effects both of inflows in excess of those the facility is designed to accommodate and of malfunctioning of the primary outlet system. A safe path for overflow condition flows shall be provided.

k. Weirs shaped like a "V" ("V" notch weirs) shall be used where practical, considering structural or hydrological concerns.

l. In residential subdivisions, no more than 50% of the basin perimeter may be a wall of any type unless a drive is provided to the bottom of the pond. The drive shall be a minimum of 15 feet wide with a maximum slope of 20%.

8.2.4. Detention Facility Location Criteria.

a. For purposes of these Regulations, a detention facility shall be deemed to consist of the area within the maximum design ponding limits unless a modification application is approved, the dam (if one) including all embankment slopes and wall footings (if applicable), primary and emergency outlet works, any drainage and access easements, and any energy dissipation devices. The intent of these regulations is to ensure that the extent of the facility is defined to allow flooding, access and maintenance. Granting of a modification will not nullify these regulations when the facility is a wet pond or lake, the area within the maximum design ponding limits is reduced to a few feet inside the normal pool elevation, and easements are provided on the perimeter properties to allow for flooding, access and maintenance around the lake. In addition, granting of the modification shall only be considered when the wet pond is an amenity and under no circumstances shall the dam and outlet structure lie on private property.

b. Detention facilities, to the greatest extent feasible, shall be located so as to minimize the amount of flow generated on-the project site that by-passes the facility.

c. No portion of any detention facility shall disturb any required (as opposed to voluntary) buffer, landscape strip, or tree protection area, except that natural bottom detention ponds and its appurtenant structures, which require no grading and removal of trees, may encroach into a required construction buffer.

d. The 100-year ponding limits of a detention facility shall not encroach upon a public right-of-way.

e. Detention facilities may be located within utility easements or rights-of-way, or encroach upon utility easements or rights-of-way, upon receipt by the Town of written permission from both the property and utility owners.

f. Detention facilities are encouraged to be constructed within recreation or amenity areas, if the following criteria are met:

(1) Ownership of the area will be held by a Qualified Property Owner's Association, Homeowners Association, or other private parties.

(2) Permanent structures, such as buildings and swimming pools, will not be constructed within the boundaries of the detention facility.

(3) Permanent detention features shall not interfere with the intended used of the recreation amenity, (i.e., a ditch or large swale shall not traverse a ball field, an inlet structure shall not be in a tennis court, etc.).

g. If a residential subdivision is provided with an on-site detention facility not located within a recreation area as specified in 8.2.4.f above, a mandatory property owners' association shall be established for its ownership and maintenance. The facility shall be located on a single lot within the development and owned by the property owners association. The lot shall have a minimum of 30 feet of public road frontage and a minimum lot width of 30 feet. Access to the facility shall be located on this lot. If the project is provided with an off-site detention facility, a mandatory property owners' association shall be established for its maintenance. The association bylaws shall be recorded concurrently with the recording of a final subdivision plat. The association bylaws shall include the same provisions as specified in Section 5.9 of this regulation.

h. A non-residential subdivision is not required to locate an on-site detention facility on a separate lot. The property owners served by a detention facility that provides detention for more than one property owner or is located off-site shall enter into a maintenance agreement acceptable to the Town for the facility's maintenance. However, if desired by the developer, the facility may be located on a separate lot if it is owned and maintained by a mandatory property owners' association.

8.2.5. Detention Facility Easement Requirements.

a. In a non-residential subdivision or project, an easement at least 20 feet in width shall be required so as to provide access to all detention facilities from a public street.

b. In a residential subdivision, an easement at least 30 feet in width shall be required so as to provide access to all detention facilities from a public street.

c. Access Easement.

(1) The access easement shall be cleared, grubbed and graded so that it can be utilized by rubber-tired construction vehicles.

- (2) The minimum drive width shall be 15 feet.
- (3) The drive shall be paved.
- (4) The maximum slope shall be 20% (5H:1V).
- (5) Access easements may be combined with drainage easements containing an open channel; however, the combined easement shall be a minimum of 30 feet in width and shall be wide enough for the drainage channel and the drive.
- (6) A drive to the bottom of the pond shall be provided when the facility is over 10 feet deep from the bench elevation or the facility is wider than 50 feet as measured from bench to bench.

d. Every normally-dry detention basin, lake, or parking lot detention facility shall be completely enclosed within a drainage easement. The drainage easement shall extend at least 10 feet beyond the 100-year flooding limits of the detention facility.

8.2.6. Detention Facility Maintenance.

- a. The detention storage capacity or function of any detention basin, pond or other impoundment, whether natural or man-made, shall not be removed or diminished without the express approval of the Town.
- b. In a residential subdivision, it shall be the responsibility of the mandatory property owner's association to maintain the operational characteristics of any facility constructed on their property for storm water detention pursuant to Town of Sharpsburg requirements, to keep the access drive free of obstructions, and to maintain the facility free of obstruction, silt or debris.
- c. In a non-residential subdivision or project served by a detention facility that provides detention for more than one property or by an off-site facility, the property owners shall enter into a maintenance agreement with the Town of Sharpsburg for maintenance of the operational characteristics of the facility pursuant to Town requirements, to keep the access drive free of obstructions, and to maintain the facility free of obstruction, silt or debris.
- d. In a non-residential project with an on-site detention facility which serves only that project, the property owner shall be responsible to maintain the operational characteristics of the facility pursuant to the Town requirements, to keep the access drive free of obstructions, and to maintain the facility free of obstruction, silt or debris.
- e. Where no maintenance agreement has been recorded, it shall be the responsibility of the property owner to maintain the operational characteristics of any facility constructed on their property for storm water management pursuant to Town

requirements, to keep the access drive free of obstructions, and to maintain the facility free of obstruction, silt or debris.

f. Prior to the issuance of a Development Permit, the owner shall submit a detailed schedule of long-term maintenance and inspection activities. This schedule of activities shall be incorporated into a maintenance agreement to be entered into between the Town and the owner. The schedule shall describe all maintenance and inspection activities and the parties responsible. The maintenance agreement shall be in a form acceptable to the Town and shall be recorded in the deed records of the Clerk of Superior Court of Coweta County.

8.2.7. Detention Facility Construction Standards.

a. Storm water detention facilities shall be constructed in accordance with plans reviewed and approved by the Town of Sharpsburg, and shall be in place and inspected prior to the initiation of other improvements. If the detention facility is planned to be a lake, temporary detention facilities shall be provided and shall remain in place until such time as the lake has become effective in providing storm water management.

b. Within a detention basin, all stumps are to be cut flush with the ground or removed and all debris is to be removed below a 1.2" rainfall event ponding elevation. Trees or shrubs may be allowed to remain below this ponding elevation only upon certification of the survivability of the vegetation.

c. Detention slopes that are disturbed are to be grassed. The ground cover within the basin shall be well established with all exposed areas covered prior to the end of the maintenance period.

d. If the developer desires to place a fence around a detention facility, it shall be a minimum 4-foot high fence of durable material, with a 12-foot wide access gate. The fence shall be contained within an easement at least 20 feet wide, shall not encroach upon the detention facility (although their easements may overlap by up to 10 feet), and shall comply with the location requirements of the Zoning Ordinance.

e. The side slope in graded areas is recommended to be 3H: 1V or flatter. The normal ponding surface elevation shall be defined as the elevation when the volume contained in the facility equals the runoff from a 1.2" rainfall event. When the depth to the normal ponding surface is greater than 4 feet and the side slope is steeper than 4H:1V, a bench shall be provided. The bench shall be at least 10 feet in width and is recommended to be 15 feet in width. The slope of the bench shall be 10H: 1V. The bench shall be located so that the normal ponding surface elevation is between the top and bottom edge of the bench. See Storm Water Standard Drawing.

f. The bottom of the pond shall be graded for positive drainage (See Storm Water Standard Drawings).

8.2.8. Detention Facility Certification and Record Drawings.

a) When a new facility is constructed in a development, a certified record survey of each detention facility shall be prepared by a land surveyor currently registered in the State of Georgia. A certified record drawing of the facility shall be prepared based upon this survey. Based on the actual parameters established on the record drawing, an addendum to the Storm Water Management Report shall be prepared which demonstrates that the facility, as constructed, complies with the requirements of these Regulations. The amended Storm Water Management Report shall be certified by the authorized registered professional (refer to Subsection 8.2.1. Paragraph a.). The survey shall be performed after substantial completion and stabilization of the project has occurred. The record drawing and addendum to the Storm Water Management Report shall be submitted to the Town at least one week prior to the issuance of a Certificate of Occupancy or Final Plat approval (as appropriate to the project).

b) When a development uses an existing facility without an existing storm water maintenance bond, the facility shall be cleaned out if necessary and a new record survey, drawing and certification showing that the outlet structure exists as approved and the flood storage and water quality volume of the facility is equal to or greater than the volume required when the facility was approved. As an alternative, a new record survey, drawing, study and certification showing that the facility meets the development requirements when the facility was approved shall be submitted. The survey shall be performed after substantial completion and stabilization of the project has occurred. The certification and supporting data shall be submitted to the Town at least one week prior to the issuance of a Certificate of Occupancy or Final Plat approval (as appropriate to the project).

8.3. CULVERTS AND PIPED DRAINAGE SYSTEMS.

8.3.1. Drainage Improvements Required.

Storm water conveyance facilities, which may include but are not limited to culverts, storm drainage pipes, catch basins, drop inlets, junction boxes, headwalls, gutter, swales, channels, and ditches, shall be provided for the protection of public right-of-way and private properties adjoining project sites and/or public rights-of-way. Storm water conveyance facilities that are designed to carry runoff from more than one parcel, existing or proposed, shall meet the requirements of these regulations.

8.3.2 Standard Specifications.

a. Unless otherwise specifically set forth herein or in the Town of Sharpsburg Standard Drawings, all of the materials, methods of the construction, and workmanship for the work covered in reference to stormwater conveyance facility construction shall conform to the most recent Standard Specifications of the Georgia Department of Transportation (Georgia DOT).

b. Allowable pipe material for all applications in drainage easements and public street rights-of-way, except as specified below, are Smooth Lined Corrugated Polyethylene Pipe (PE), or Reinforced Concrete Pipe (RCP). Usage is summarized in the table below

titled Pipe Material Alternatives. Allowable pipe materials are indicated by an "X" in the table.

c. For roads constructed with public funds, either wholly or in part, or roads classified as Major Thoroughfares, materials which meet the Georgia DOT design standards shall be used unless an alternative is specifically approved by the Georgia Department of Transportation.

d. Only Reinforced Concrete Pipe (RCP) shall be used for all dams 9 feet or more in height with an impounding capacity of 20 acre-feet or more unless the Georgia Safe Dams Program requires another material.

e. Reinforced Concrete Pipe (RCP) shall be used under non-local roads.

f. The Department of Public Utilities may approve an alternative pipe material. (Shown on next page.)

Pipe Material Alternatives

TYPE OF PIPE INSTALLATION		CONCRETE	PLASTIC		
			CORRUGATED POLYETHYLENE AASHTO M-252	SMOOTHED LINED CORRUGATED POLYETHYLENE TYPE "S" AND "D" AASHTO M-294 & AASHTO MP7	
STORM DRAIN	LONGITUDINAL INTERSTATE AND TRAFFIC BEARING	X			
	LONGITUDINAL NON INTERSTATE & NON TRAFFIC BEARING	X		X	
	NON LOCAL ROAD	CROSS DRAIN GRADE < 10%	Refer to Coweta County or Georgia DOT Specifications		
		CROSS DRAIN GRADE > 10%			
	LOCAL ROAD	CROSS DRAIN GRADE < 10%	X		X
		CROSS DRAIN GRADE > 10%			X
SIDE DRAIN		X		X	
PERMANENT SLOPE DRAIN				X	
PERFORATED UNDERDRAIN			X	X	
DAMS H > 9' AND V > 20 Ac Ft		X			

8.3.3. Design Criteria – General.

- a. All storm water conveyance facility design calculations shall be certified by the authorized registered professional (refer to Subsection 8.2.1. Paragraph a.).
- b. Methods to calculate storm water flows shall be in accordance with the Georgia Storm Water Design Manual. The USGS Method shall be used where applicable to check the magnitude of peak flows when other hydrologic methods recommended in the manual are used.
- c. All portions of a storm water conveyance system which drain areas falling within the same size category above shall be analyzed using the same methodology.
- d. Run-off coefficients used for the Rational Method and runoff Curve Numbers used for the SCS Method shall be consistent with those shown in the Georgia Storm Water Design Manual.

8.3.4. Design Criteria – Culverts.

- a. Culverts or pipe systems designed to convey water from one side of a public right-of-way to the other shall be designed to pass the fully developed peak flow associated with a 100-year storm with at least 1.5 feet of freeboard between the 100-year ponding elevation and the centerline of the road, without raising the 100-year flood elevation on upstream properties, and in accordance with the Floodplain Management Ordinance. Fully developed flows shall be based on the Town's Future Land Use Plan and any approved development projects adopted by the Town Council.
- b. The 100-year ponding limits at and upstream of the culvert shall be shown on the Development Plans and on the Final Plat (if applicable).
- c. The minimum allowable culvert diameter shall be 18 inches.
- d. Culvert design is to be in accordance with the methods contained in the Georgia Storm Water Design Manual and shall include a thorough analysis of both inlet and outlet control conditions.

8.3.5. Piped Collection Systems.

- a. The preliminary design (initial pipe sizing and profile design) of piped collection systems required under 8.3.1 herein shall be based upon conveyance of the peak flows associated with a fully developed 25-year storm with the hydraulic grade line (HGL) being one foot or more below the top of each structure, gutter line or proposed final ground surface elevation, whichever is lowest.
- b. Once the preliminary design of a piped collection system has been prepared, it shall be analyzed for its behavior during conditions of 100-year flow, with the objective of this analysis being to ascertain the quantities of flow and flow paths followed by flows exceeding the capacity of the system, whether these pond at inlets or flow along the ground's surface.

c. Based on the analysis of 100-year conditions, the preliminary design shall be revised where necessary to produce a final design for which the likelihood of dwelling flooding, major property damage, or substantial public access and/or utility interruption shall be less than one chance in 100 years.

d. The minimum allowable pipe diameter shall be 18 inches.

e. Catch basins shall be spaced so that the spread in the street for a 10-year design flow shall not exceed 8 feet as measured from the face of the curb. Gutter spread calculations shall be submitted to the Town of Sharpsburg for review and approval prior to issuance of a Development Permit.

f. Complete flow, velocity, and hydraulic grade line computations, shall be provided for all portions of a piped collection system. Hydraulic grade lines shall be shown on the storm drainage profiles contained with the Development Plans for the 25-year storm.

8.3.6. Energy Dissipation - Piped Systems and Culverts.

a. Energy dissipation devices, such as splash pads, rip-rap, stilling basins, etc., shall be provided at the outlet of every culvert and piped collection system (please refer to the Standard Drawings.) Velocity protection shall be in accordance with the Georgia Storm Water Design Manual. Velocities for the fully developed 25-year flow shall not exceed the non-erosive velocity as shown in the design manual for the receiving conveyance.

b. Energy dissipation devices shall be located entirely within the project site, and shall not encroach upon any required buffer.

c. When uniform, graded stone rip-rap is used for energy dissipation, ultraviolet resistant filter fabric (200-pound test) shall be used between the stone layers.

8.3.7 Minimum Pipe and Pipe Coating Requirements

The type of pipe material used shall be in accordance with section 8.3.2 of these regulations.

a. Reinforced concrete pipe shall be in not less than 8 foot joint lengths. All joints shall be bell and spigot type, with a rubber gasket conforming to ASTM C-443. Pipe shall be manufactured in accordance with AASHTO M-170 and/or ASTM C-76. Class of pipe and wall thickness shall be in accordance with 1030-D, Georgia DOT specification, Table No.1.

b. Smooth Interior Corrugated Polyethylene Pipe

(1) This specification applies to high density polyethylene corrugated pipe with an integrally formed smooth interior (PE).

(2) This pipe shall conform to the requirements of AASHTO M-294 and AASHTO MP7, Type S and D.

(3) Joints shall be as recommended by the manufacturer and approved by the Town. Connections shall create a soil tight joint at a minimum and shall use a rubber gasket, which conforms to ASTM F-477.

(4) Installation shall be in accordance with ASTM Recommended Practice D-2321, AASHTO Section 30, or as specified by the Town.

(5) Certification from the manufacturer that the product was manufactured, tested, and supplied in accordance with this specification shall be furnished to the Town upon request.

8.3.8. Pipe Length.

a. Culverts carrying live streams shall extend to where the crown of the pipe intersects the roadway slope.

b. Pipes that do not carry live streams shall extend at least 50 feet beyond the front building setback lines, and may be required to extend farther where necessary to provide an adequately protected building site on the property. In nonresidential subdivisions, these pipes may temporarily end at the right-of-way line, but shall be extended as part of a subsequent development permit approved for the individual site.

c. The length requirement, however, shall be subject to requirements for maintaining stream buffers in accordance with Georgia law or Town regulations.

8.3.9 Pipe Installation

Reinforced concrete pipe and smooth interior corrugated polyethylene pipe shall be installed in accordance with Section 550 of the Georgia DOT Standard Specifications, Construction of Roads and Bridges. Prior to approval of a Final Plat, the Town may require the submittal of certification from a mandrel testing agency indicating that all installed pipe does not exceed 5% deflection. Based on field inspections, video surveillance may be conducted by the Town or required by the Town on storm drain installations before approval of the Final Plat or issuance of the Certificate of Occupancy. If required, video surveillance should be done after completion of all activities that may damage the pipe but prior to placement of base, paving or landscaping over or near the pipe. If video surveillance indicates problems such as pipe deformation, cracking or joint separation, the pipe shall be removed and replaced before approval.

a. Bedding:

All pipe structures shall be placed on stable earth or fine granular foundation, the characteristics of which would be expected to provide long-term stability. In all live stream pipe installations, in areas of low bearing solid or non-uniform foundations, in area where rock is encountered at the foundation level, or in other locations where conditions warrant, a minimum of 6" of crushed stone bedding is required, (maximum size of stone shall be 3/4"). Geotextiles or geogrids may also be required by the Town in problem areas.

b. Backfilling:

Backfill on all pipe installations shall be constructed using foundation backfill material Type I or Type II, as specified in Section 812.01 and 812.02 respectively, in Georgia DOT Standard Specifications. These materials shall be placed in layers of not more than six inches loose. Compaction of these materials shall be accomplished by hand tamping or machine tamping. Required compaction levels are as follows:

(1) Backfill within all street rights-of-way shall be compacted to 95% maximum density, tested using the AASHTO Method T-99.

(2) Backfill in all other areas shall be compacted to 85% maximum density, tested using the AASHTO Method T-99.

c. Construction loads and minimum covers:

If drainage pipe is installed prior to the completion of grading, a minimum of 4 feet of fill should be provided where needed to adequately protect the drainage structure during the land development phase, unless the structure itself is designed to withstand the anticipated live load during construction.

8.3.10. End Finish.

Headwalls or other end treatments are required on all culverts (except under residential driveways) and at the outlet of all piped collection systems.

a. Headwalls are to be precast concrete, stone masonry with reinforced concrete footings, or poured-in-place, reinforced concrete with reinforced concrete footings. Precast concrete headwalls for corrugated aluminum coated steel pipe or aluminum alloy pipe shall be made with aluminum coated steel or aluminum alloy pipe stubs.

b. End treatments that conform to the slope may be pre-cast concrete end sections, aluminum coated steel or aluminum alloy end sections, masonry, PE end sections, reinforced poured-in-place slope collars, or grouted rip-rap. Concrete and metal flared end sections shall conform to Georgia DOT Standard Drawing 1120.

8.3.11. Junction Boxes and Catch Basins.

a. Junction boxes and catch basins shall have metal manhole frames and lids for access.

b. Lids for storm drainage facilities shall be engraved in accordance with the Town of Sharpsburg Standard Drawings.

8.3.12. Other Structures.

Natural bottom arches and box culverts may be used in accordance with the latest Standard Specifications of the Georgia Department of Transportation.

8.4. SURFACE DRAINAGE.

8.4.1. Design Standards.

- a. All new proposed channels shall be designed to carry at least the fully developed 25-year storm with freeboard equal to 20% of the design flow depth.
- b. Transition channels shall be provided at the inlet and outlet ends of all culverts and pipe systems, unless otherwise provided herein.
- c. The maximum flow velocity at the project site's downstream property line shall not exceed the predeveloped velocity.
- d. In cases of potential erosion due to irregular channel alignment, extreme velocities, or excessive slopes, a paved ditch may be required. However, if, in the opinion of the Town, the expected long-term maintenance of a surface drainage system could prove impractical, a pipe design may be required.
- e. The cross-sectional shape of channels shall be as found in the Standard Drawings. "V" shaped crosssections are not permitted in grassed channels.
- f. If the channel will be affected by backwater from culverts, bridges, other structures or floodplains, backwater curves shall be shown in profiles of the channel.
- g. All channels must be capable of conveying flows sufficient to ensure that overflow of the channel would not result in a likelihood of dwelling flooding, property damage or public access and/or utility interruption shall be greater than one (1) chance in 100 years.
- h. Channels shall be designed to carry the fully developed 25-year flow in accordance with the Georgia Storm Water Manual.

8.4.2. Construction Standards.

- a. The channel shall be shaped to the dimensions specified on the approved plans and shall be free of overfalls, gullies, or other irregularities.
- b. Channels in fills shall be lined.
- c. Protective cover in grassed channels shall be installed as soon as the earthwork is completed.

8.5. EROSION CONTROL.

8.5.1. Design Standards.

The procedures and requirements of the Soil and Sedimentation Control Ordinance, as may be amended from time to time, shall be applicable whenever any land disturbance is proposed to

occur which requires a permit to be obtained by these regulations and shall continue to apply until the project has been completed.

8.5.2. Abandoned Projects.

Any project whose permit has lapsed under the terms expressed in Article 4, shall immediately have all disturbed areas stabilized. This responsibility shall fall upon the owner, developer, contractor, or any and all other responsible parties involved in the land disturbance activity.

8.6. DAMS.

Any land disturbing activity that involves a property which is proposed to contain a dam shall comply with the provisions of this Article as well as the provisions contained in Article 3, Section 3.1 of these Regulations.

8.6.1. New Dams Which Become Subject to the Requirements of the Georgia Safe Dams Act and Rules for Dam Safety.

Dams proposed to be 25 feet or more in height or proposed to have an impounding capacity of 100 acre-feet or more at maximum water storage elevation shall be subject to the following:

a. The developer of any new dam in which development exists within the proposed breach zone shall be subject to the requirements of the Georgia Safe Act and Rules for Dam Safety adopted by the Georgia Department of Natural Resources. The developer shall obtain necessary approvals and permits from the Environmental Protection Division of the Georgia Department of Natural Resources for the project and the dam prior to securing a Development Permit from the Town. The developer of any new dam as to which development does not exist within the proposed breach zone shall submit construction plans to Town of Sharpsburg for review of the project and the dam prior to securing a Development Permit from the Town.

b. If the developer elects to construct the new dam in accordance with the design standards for new dams as contained in the Rules for Dam Safety, then new development shall be permitted within the dam breach zone. However, the dam shall meet the design standards for new dams as contained in the Rules for Dam Safety if development currently exists or is proposed in the dam breach zone.

c. If the developer elects not to construct the new dam to the design standards for new dams as contained in the Rules for Dam Safety, then a dam breach analysis for the dam shall be submitted along with the construction plans for review prior to securing a Development Permit from the Town. The design engineer shall utilize the computer model entitled "DAMBRK" for the dam breach analysis.

d. Should the new dam not meet the design standards for new dams as contained in the Rules for Dam Safety, then only the following uses and structures shall be permitted within the dam breach easement:

- (1) Agriculture which requires no structures for human habitation within the dam breach zone including forestry, livestock raising, and

agricultural and forestry access roads.

(2) Fences.

(3) Outdoor advertising signs provided they are located no closer than 100-feet from any residence or place of business.

(4) Roads, driveways and parking areas.

(5) Utility poles, towers, pipelines, water treatment outfalls and facilities, or other similar facilities and structures.

e. For any new dam that is proposed not to meet the design for new dams as contained in the Rules for Dam Safety, the developer shall obtain a dam breach easement, recorded with the Clerk of Superior Court, from any offsite property owner where it is proposed for the dam breach zone to extend off the property where the dam is being constructed. The developer shall also cause a dam breach easement to be recorded upon the property being developed.

f. Prior to recording of a Final Plat or issuance of a Certificate of Occupancy, as appropriate, an as built certification from a registered professional engineer shall be submitted to the Town. The certification shall state that the dam is constructed in accordance with the provisions of these regulations as well as the authorized construction plans. If the project is for the development of a subdivision, the developer shall also establish a legal entity, acceptable to the Town of Sharpsburg, such as a mandatory Property Owners Association, prior to approval of the Final Plat, responsible for the maintenance of the dam and its impoundment.

8.6.2. New Dams Subject to Regulation by the Town of Sharpsburg.

Dams proposed to be 9 feet or more in height, but less than 25 feet in height, in combination with an impounding capacity proposed to be 20 acre-feet or more at maximum water storage elevation, but less than 100 acre-feet, shall be subject to the following:

a. If the developer elects not to construct the new dam to the design standards for new dams as contained in the Rules for Dam Safety, then a dam breach analysis for the dam shall be submitted with the construction plans for review and authorization prior to securing a Development Permit from the Town. The design engineer shall utilize the computer model entitled "DAMBRK" for the dam breach analysis.

b. Should the new dam not meet the design standards for new dams as contained in the Rules for Dam Safety, then only the following uses and structures shall be permitted within the dam breach zone:

(1) Agriculture which requires no structures for human habitation within the dam breach zone including forestry, livestock raising and agricultural and forestry access roads.

(2) Fences.

(3) Outdoor advertising signs provided they are located no closer than 100-feet from any residence or place of business.

(4) Roads, driveways and parking areas.

(5) Utility poles, towers, pipelines, water treatment outfalls and facilities, or similar facilities and structures.

c. If the developer elects to construct the new dam in accordance with the design standards for new dams as contained in the Rules for Dam Safety, then new development shall be permitted within the dam breach zone. However, the dam shall meet the design standards for new dams as contained in the Rules for Dam Safety if development currently exists or is proposed in the dam breach zone.

d. Construction plans for new dams defined herein shall be submitted to the Town of Sharpsburg for review for the project and the dam prior to securing a Development Permit from the Town.

e. For any dam that is proposed not to meet the design standards for new dams as contained in the Rules for Dam Safety, the developer shall obtain a dam breach easement, recorded with the Clerk of Superior Court, from any offsite property owner where it is proposed for the dam breach zone to extend off the property where the dam is being constructed. The developer shall also cause a dam breach easement to be recorded upon the property being developed.

f. Prior to recording of a Final Plat or issuance of a Certificate of Occupancy, as appropriate, an asbuilt certification from a registered professional engineer shall be submitted to the Town. The certification shall state that the dam is constructed in accordance with the provisions of these regulations as well as the authorized construction plans. If the project is for the development of a subdivision, the developer shall also establish a legal entity, acceptable to the Town of Sharpsburg, such as a mandatory Property Owners Association, at time of recording of the Final Plat, responsible for the maintenance of the dam and its impoundment.

8.6.3. Existing Dams.

Existing dams that are located on a project site and will remain after construction is complete, shall comply with the provisions of this article and all referenced articles as if they were new dams.

8.6.4. Existing Category II Dams.

When an existing Category II dam may be reclassified to a Category I dam because of a proposed development downstream of the dam, the following shall be provided by the developer for review by the Georgia Safe Dams Program.

a. Location of the Category II dam and the proposed development; and,

b. A surveyed cross-section of the stream valley at the location of the proposed development including finished floor elevations; and,

c. A dam breach analysis using the Dam break computer model to establish the height of the flood wave in the downstream floodplain. The Dam break modeling shall be completed in accordance with the Safe Dams Program Quality Assurance Program by a qualified registered engineer.

8.7. EXTENDED DETENTION.

8.7.1. Wet Extended Detention Facility Design Requirements. Wet extended detention facilities shall be designed and constructed to meet the following requirements:

a. Minimum and Maximum Drainage Area.

The minimum drainage area for a wet detention facility should be at least 20 acres. The maximum drainage area should be 100 to 300 acres. The maximum drainage area of highly impervious drainage areas should be restricted to the lower end of the range (100 acres) and low density residential watersheds should be restricted to a maximum of 300 acres.

b. Storage Volume of Permanent Pool.

The permanent pool storage (V_b) shall be at least 50% of the Water Quality Volume (WQV) defined in section 8.9.1. The part of the WQV (50% or less) not used in the permanent pool shall be detained for 24 hours and the storage volume may be used as part of the detention requirements. The WQV to be stored shall be based upon the project area. The project area compensated for in a pond shall not exceed the total drainage area draining to the pond. Off-site areas that do not drain through other water quality BMP's may be used to compensate for areas that by-pass the pond. Bypassed areas shall be minimized as much as practical. Off-site areas exceeding the project site area may bypass the pond.

c. Depth of Permanent Pool.

(1) Mean Depth.

The mean depth (Z) of the permanent pool shall be between 3 feet and 7 feet and is calculated by dividing the permanent pool storage volume (V_b) by the surface area (A_s) ($Z = V_b / A_s$).

(2) Maximum Depth.

The maximum depth of the permanent pool shall be no greater than 12 feet unless a modification is approved. The intent of these regulations is to ensure that the depth of the facility is not out of proportion with the surface area of the facility. Granting of a modification will not nullify these regulations when the depth and surface area of the facility is based on existing natural topography.

d. Minimum Surface Area of Permanent Pool.

The minimum surface area (A_s) of the permanent pool should be 0.25 acres. The minimum ratio of surface area to drainage area used to calculate the permanent pool (A_w) in residential watersheds shall be 1% unless a modification is approved. The intent of these regulations is to ensure that the depth is minimized to increase removal efficiencies. Granting of a modification will not nullify these regulations when the depth and surface area of the facility is based on existing natural topography. A_s/A_w ratios in excess of 3% are desirable for nonresidential watersheds with relatively high levels of imperviousness.

e. Side Slopes Along the Shoreline.

(1) The side slope in graded areas is recommended to be 3H: 1V or flatter. When the depth of the permanent pool is greater than four feet and the slope is steeper than 4H:1V, a bench shall be provided. The bench shall be 10 feet in width and is recommended to be 15 feet in width. The bench shall have a slope of 10H:1V. The bench shall be located so that the permanent pool elevation is between the top and bottom edge of the bench. See Storm Water Standard Drawing.

(2) Side slopes shall be topsoiled, nurtured or planted from 2 feet below to 1 foot above the permanent pool control elevation to promote wetland vegetative growth. Below the safety ledge, the pond side shall be sloped to meet topographic or volumetric constraints.

f. Length: Width Ratio of Permanent Pool.

The minimum length: width ratio of the permanent pool shall be 2:1. The length shall be measured at the shortest flow path from the inlet to the outlet. The width shall be calculated as the surface of the pond divided by the length. In addition, the location of the outlet structure within the basin shall maximize travel time from the inlet to the outlet. Baffles or islands may be installed within the permanent pool to increase the flow path length and to minimize short-circuiting.

g. Soil Permeability.

In cases where relatively permeable soils are encountered, water drawdown rates should be minimized by either compacting the permanent pool soils during construction, incorporating clay into the soil, or by installing an artificial liner.

h. Spillway and Dam Design.

The principal spillway, emergency spillway, and dam shall be designed in accordance with Sections 8.2, 8.6 and 9.8 of these regulations.

i. Forebay.

(1) To facilitate major cleanout activities, a sediment forebay shall be constructed near the inlet to the permanent pool to trap coarse sediment particles. The forebay volume may be included in the permanent pool volume requirements. The forebay storage capacity shall be 10 percent of the water quality volume (WQV) defined in section 8.9.1.

(2) The facility shall be dredged to ensure that all of the permanent pool storage volume is available after the upstream area has been stabilized. All temporary sediment control measures employed during land disturbing activities to trap sediment shall be located outside of state waters.

(3) The forebay shall be distinguished from the permanent pool. Options which may be used include: a lateral sill with wetland vegetation; two (2) ponds in series; differential pool depth; rock-filled gabions or a retaining wall; or a horizontal rock filter placed laterally across the permanent pool.

j. Inlet and Outlet Structures.

(1) The inlet design shall dissipate flow energy and diffuse the inflow plume where it enters the forebay or permanent pool. Options that may be used include: drop manholes; energy dissipaters at the bottom of paved ditches; a lateral bench with wetland vegetation; and the placement of large rock deflectors at each inlet.

(2) The outlet design shall consist of a riser with a hood or trash rack to prevent clogging and an adequate antivortex device for facilities serving large drainage areas. The outlet may be sized to achieve the flood control performance standards contained in Sections 8.2, 8.6 and 9.8 of these regulations. An emergency spillway shall be provided in accordance with Section 9.8.4 of these regulations.

(3) The channel which receives the discharge from the basin's outfall pipe shall be protected from erosive discharge velocities. Options which may be used include: rip-rap lining of the channel; or, the provision of stilling basins, check dams, rock deflectors or other devices to reduce outfall discharge velocities to non-erosive levels.

(4) An orifice for any required extended detention volume shall be sized using the same criteria as required in section 8.7.2.

k. Access.

Access requirements shall be as specified in Section 8.2.5 of these regulations.

l. Easement Requirements.

Easement requirements shall be as specified in Section 8.2.5 of these regulations with the change that the easement enclosing the facility shall be named a Best Management Practice (BMP) easement.

m. Engineer's Certification and Record Drawings.

A certified record survey of each facility shall be prepared by a land surveyor currently registered in the State of Georgia. A certified record drawing of the facility shall be prepared based upon this survey. The design engineer shall certify that the facility functions hydraulically as designed. The record drawing shall be submitted to the Town at least one week prior to the issuance of a Certificate of Occupancy or Final Plat approval (as appropriate to the project). Record drawings of off-site facilities shall be recorded at least one week prior to the recording of the Final Plat.

8.7.2. Dry Extended Detention Facilities

Extended detention facilities with wetland plantings shall be designed and constructed to meet the following requirements:

a. Maximum Drainage Area.

The maximum drainage area for which the facility shall be allowed to be constructed should be 20 acres (DA = drainage area in acres);

b. Storage Volume.

The Water Quality Volume (WQV) to be stored is defined in section 8.9.1. Up to fifty percent (50%) of the storage volume shall be detained for 24 hours and may be used for detention requirements. The remaining portion (50% or greater) shall be drained through a filter drain in 24 hours. The filter drain shall be the only outlet draining the WQV.

S = BMP storage volume in cubic feet;

c. Minimum Surface Area.

The facility should have a minimum surface area of one (1) percent of the total drainage area when the volume contained in the facility equals the required BMP storage volume.

d. Side Slopes Along the Shoreline.

The side slope in graded areas is recommended to be 3H: 1V or flatter. The normal ponding surface elevation shall be defined as the elevation when the volume contained in the facility equals the required water quality volume. When the depth to the normal ponding surface is greater than 4 feet and the side slope is steeper than 4H: 1V, a bench shall be provided. The bench shall be at least 10 feet in width and is recommended to be 15 feet in width. The slope of the bench shall be 10H:

1V. The bench shall be located so that the normal ponding surface elevation is between the top and bottom edge of the bench. See Storm Water Standard Drawing.

e. Length: Width Ratio.

The length: width ratio shall be maximized. The length shall be measured as the shortest flow path from the inlet to the outlet. The width shall be calculated as the surface area of the pond divided by the length.

f. Depth of Facility.

The average cross-sectional area of the facility shall be calculated as the volume of the pond divided by the length. The water velocity shall be determined by dividing the maximum outflow rate by the average cross-sectional area. The maximum desired water velocity shall be 0.5 feet per second.

g. Spillway and Dam Design.

The principal spillway, emergency spillway and dam shall be designed in accordance with Sections 8.2, 8.6 and 9.8 of these regulations.

h. Forebay.

The forebay requirements are the same as for wet extended detention (section 8.7.1.i)

i. Inlet and Outlet Structures.

(1) Inlet and outlet structures shall meet the same requirements as wet detention facilities.

(2) The size of the orifice for the facility shall be computed using the following orifice equation with a 24-hour draw down time from the full pool BMP volume (S) and an orifice coefficient of 0.60:

h = head measured in feet from the elevation at the required BMP storage to the centroid of the orifice;

Q_a = average BMP outflow rate in cfs;

$Q_a = S/3600 \times 24$;

A = required orifice area in square feet;

$A = Q_a / (0.6 \times (64.4 \times h/2)^{0.5})$.

(3) An allowance for base flow shall be provided. The designer either shall determine the base flow using a factor of 1.6 cfs per square mile or may use another standard engineering practice if warranted.

j. Access.

Access requirements shall be as specified in Section 8.2.5 of these regulations.

k. Easement Requirements.

Easement requirements shall be as specified in Section 8.2.5 of these regulations with the exception that the easement enclosing the facility shall be named a Best Management Practice (BMP) easement.

l. Engineer's Certification and Record Drawings.

A certified record survey of each facility shall be prepared by a Land Surveyor currently registered in the State of Georgia. A certified record drawing of the facility shall be prepared based upon this survey. The design engineer shall certify that the facility functions hydraulically as designed. The record drawing shall be submitted to the Town at least one week prior to the issuance of a Certificate of Occupancy or Final Plat approval (as appropriate to the project). Record drawings of off-site facilities shall be recorded at least one week prior to the recording of the final subdivision plat.

m. Wetland Plantings.

The facility bottom shall be planted with plantings indigenous to local wetlands.

n. The bottom of the pond shall be graded for positive drainage. See Storm Water Standard Drawing.

8.7.3. (RESERVED)

8.7.4. Stream Buffers and Impervious Surface Setbacks.

Refer to the Zoning Ordinance and the Stream Buffer Protection Ordinance for buffer and impervious surface setback requirements from streams.

8.7.5. Wet and Extended Detention Facility Maintenance.

Maintenance requirements shall be as specified in Section 8.2.6 of these regulations.

8.8. (RESERVED)

8.9. WATER QUALITY BEST MANAGEMENT PRACTICES.

8.9.1. Treatment of Runoff.

a. All projects, unless exempt pursuant to 8.9.1.d below, that meet one or more of the following criteria, shall provide water quality treatment based on the modeled Total Suspended Solids (TSS) load of the project for post construction conditions. The determination of the TSS load shall be in accordance with the Storm Water Design Manual. The modeled TSS load shall not exceed 850 pounds/acre/year.

- (1.) New development that involves the creation of 5,000 square feet or more of impervious cover, or that involves other land development activities of 1 acre or more;
- (2.) Redevelopment that includes the creation, addition or replacement of 5,000 square feet of more of impervious cover, or that involves other land development activity of 1 acre or more; or,
- (3.) Land development activities that are smaller than the minimum applicability criteria set forth in items 1 and 2 above, if such activities are part of a larger common plan of development, even though multiple, separate and distinct land development activities may take place at different times on different schedules.

b. The water quality volume (WQV) shall be the runoff from 1.2 inches of rain from the project site. The volume shall be calculated as:

$$WQV = 1.2 (Rv)As/12 \text{ (ft}^3\text{)}$$

Where $Rv = 0.05 + I (0.009)$

I = Percent Impervious as a whole number

As = On-site area to be treated (ft²).

c. Runoff from any new development or redevelopment, regardless of size, that is defined by the Town of Sharpsburg to be a hotspot land use or activity shall be adequately treated and addressed through the use of structural storm water controls, nonstructural practices and pollution prevention practices.

d. The following activities are exempt from providing treatment:

- (1.) Individual single-family or duplex residential lots that are not part of a subdivisions or phased development project;
- (2.) Additions or modifications to existing single family or duplex residential structures; and,
- (3.) Repairs to any storm water management facility or practice deemed necessary by the Town of Sharpsburg.
- (4.) Utility projects such as electrical, gas, water and sanitary sewer line installations that do not require detention.
- (5.) Activities to restore and enhance stream bank stability, vegetation, water quality and/or aquatic habitat, so long as native vegetation and bioengineering techniques are used.

8.9.2. Facility Location Criteria.

a. Facility location criteria shall be as specified for detention facilities in Section 8.2.4 of these regulations.

b. In a residential subdivision, the following Best Management Practices must be located on a separate lot in accordance with Section 8.2.4.g if not located on a recreation area lot as specified in 8.2.4.f:

- (1) Extended detention ponds;
- (2) Retention ponds;
- (3) Sand filters;
- (4) Constructed wetlands;
- (5) Infiltration trenches;
- (6) Oil/grit separators.

8.9.3. Easement Requirements.

a. Facility easement requirements shall be as specified in Section 8.2.5 of these regulations with the exception that the easement enclosing the facility shall be named a Best Management Practice (BMP) easement.

b. Stream Buffer Easements shall be shown on the final plat for areas that are claimed in the TSS model as Undisturbed Stream Buffers for the site. These areas shall be left in a natural, undisturbed condition except for walking trails. Trails shall not be allowed within 25 feet of a stream bank without a state waters buffer variance.

c. Upland Area Easements in non-residential subdivisions that are claimed as undisturbed upland areas for the site, shall be recorded in an easement acceptable to the Town. These areas shall be left in a natural, undisturbed condition except for walking trails.

8.9.4. Facility Maintenance.

a. Maintenance requirements shall be as specified in Section 8.2.6 of these regulations.

b. Prior to or concurrent with the recording of a Final Plat for a subdivision, or issuance of a Certificate of Occupancy for a non-subdivision project, the developer shall provide acceptable surety such as a bond or letter of credit providing for the maintenance of the facility for a period of not less than 18 months. The amount of the surety shall be the greater of fifty (50) percent of construction costs of the facility or 100 percent of the cost to clean out the facility. At the end of 18 months, the Town may require the surety to be renewed due to anticipated maintenance caused by such concerns as future construction activity in the basin draining to the facility. A renewed surety may be required up to a total maximum of ten (10) years. The surety for a facility shall be renewed during the ten years until:

- (1) The surface water drainage area within the project has undergone final stabilization and all planned construction activity has been completed;

- (2) All storm water runoff in the surface water drainage area within the project is coming from undisturbed or stabilized areas;
- (3) At least 90% of the lots in that surface water drainage area within the project have been sold to an unrelated party, permanent structures completed and final stabilization achieved;
- (4) The accumulation of acreage of undeveloped lots, lots with no completed permanent structure and no final stabilization, within the surface water drainage area within the project is less than five acres or 10 percent of the total area of the common development draining to the facility, whichever is greater; and,
- (5) Within two (2) months of surety release, the facility shall be cleaned out, if necessary, and a new record survey, drawing and certification showing that the volume of the facility is equal to or greater than the volume shown in the record survey, drawing and certification when the facility was approved. As an alternative, a new record survey, drawing and certification showing that the facility complies with these regulations as specified in Section 8.2.8 shall be submitted.

8.9.5. Facility Certification and Record Drawings.

Requirements for a certified record survey and addendum to the Storm Water Management Report shall be the same for water quality facilities as for detention facilities in section 8.2.8.

8.9.6. Existing Subdivisions without Regional Water Quality Facilities.

Where drainage is treated in a regional detention facility approved before the date of the adoption of these regulations, lots in nonresidential subdivisions (or phases in residential subdivisions) shall conform to the current water quality regulations as stated in section 8.9.

8.9.7. Retrofitting of Existing Detention Facilities for Water Quality Treatment.

If water quality treatment for a proposed development is to be provided in an existing detention basin then treatment must be provided for the entire original project basin. A modification to the 25-year detention requirement may be granted for the purpose of retrofitting the detention pond to meet current water quality regulations. Granting of a modification will meet the intent and purpose of these regulations when:

- (1) The detention requirements of the current regulations are provided in the facility for the 1-year, 2-year, 5-year and 10-year storm. For a retrofitted basin, the volume of the 1-year storm shall be based on the original project area being detained instead of the total area draining to the basin;
- (2) The water quality requirements of the current regulations as stated in section 8.9 are provided for the original project area in the facility;
- (3) The ponding limits create a hardship if no modification is granted; and,

(4) The outlet structure meets the requirements of the current regulations.

8.9.8. Retrofitting of Existing Water Quality Facilities.

If water quality treatment for a proposed development is provided in an existing water quality facility then water quality treatment conforming to the current regulations must be provided for the entire original project basin.

8.9.9. Redevelopment.

a. When 5,000 square feet or more of impervious surface is created, added, or replaced, or 1 acre or more of a developed project site is disturbed for redevelopment, and the disturbed area is more than 50% of the property, the water quality requirements of this section must be met for the entire site.

b. When less than 5,000 square feet of impervious surface area is created, added, or replaced, or less than 1 acres of land of a developed project site is disturbed for redevelopment, the project is exempt from having to provide the water quality requirements of this section for the project or for the rest of the site.

c. When 5,000 square feet or more of impervious surface area is created, added, or replaced, or 1 acre or more of a developed project site is disturbed for redevelopment, and the disturbed area is less than 50% of the property, the project shall provide water quality treatment for just the improvements on the site.

**ARTICLE 9
PERFORMANCE GUIDELINES**

9.1 GENERAL

9.1.1 Purpose

The sections enumerated in this article are guidelines, and are intended to be benchmark indicators of what standards could be acceptable. They are further intended to allow alternate designs which could produce results similar to these performance standards and similar protection to the public. The objective of these performance standards is not to suggest a single methodological standard of acceptance exclusive of all others. Rather they establish what would otherwise be allowed in the absence of an acceptable alternative.

9.1.2 Constraints

The alternative design solutions are constrained by the Design Requirements of Article 5, the Access Requirements and Street and Right-of-Way Requirements and the Street Construction Standards of Article 6, and the Grading, Detention, Drainage Requirements of Article 8, as well as the Purpose and Intent of these Regulations.

9.1.3 Documentation Required

In the event that an alternative is suggested by the applicant, studies and reports conducted by professionals currently certified in the State of Georgia will be required to be submitted to and approved by the Town. These studies and reports must clearly relate to the desired results and purposes expressed or implied in the applicable performance standard. Once an alternative has been approved by the Town of Sharpsburg, it shall become a required standard applicable to the specific approved permit only.

9.2 LOTS

9.2.1 Lots should be designed generally such that they are no more than three times as deep as they are wide at the building setback line, unless accepted by the Town of Sharpsburg.

a. The Town of Sharpsburg may require notation that a House Location Plan (HLP) is required to be approved prior to issuance of a building permit on certain lots when particular care in locating the house or other improvements will be necessary. Such lots include, but are not limited to:

- (1) a lot which presents particular or unusual difficulties for a builder to meet minimum required building setbacks;
- (2) a lot upon which is located an easement of unusual configuration;
- (3) a lot containing floodplain but upon which no fill or other encroachment into the floodplain is anticipated at the time the Final Plat is filed;

- (4) a lot upon which is located all or a part of a stormwater detention facility;
- (5) a lot upon which is located a buffer which was required by the Zoning Ordinance as a condition of zoning approval;
- (6) all duplex lots;
- (7) all lots within the PCD Districts

b. The Town of Sharpsburg may require notation that a Residential Drainage Plan (RDP) is required to be approved prior to issuance of a building permit on certain lots where additional (site specific) engineering will be necessary to properly grade the lot or locate the building or other improvements. Such lots include, but are not limited to:

- (1) a lot containing floodplain where fill or other encroachment into the floodplain is planned or reasonably expected;
- (2) a lot containing severe topographic features interdicting the building site;
- (3) a lot containing a drainage easement with a pipe discharge or other facilities, or flow characteristics which may adversely affect the location of a building or other site improvements.

c. The Town of Sharpsburg may require notation that a Residential Drainage Study (RDS) is required to be approved prior to issuance of a building permit on certain lots where particular attention to site grading will be necessary, but formal engineering is not needed. Such an RDS is conducted in the field where the effect of the site grading must be accomplished with adequate care so as not to create a drainage problem on neighboring property.

9.2.2 Side lot lines generally should be at right angles (90 degrees) to straight street lines or radial to curved street lines as much as practical. Side lot lines should be radial to the radius points of all cul-de-sacs. Variations of more than 10 degrees shall require approval of the Town of Sharpsburg, but shall be approved when appropriate to the reasonable loading pattern of the subdivision, efficient use of the land relative to topographic conditions, or provisions of improved building sites over those which would result without variation of the side lot lines.

9.2.3 Corner lots shall be sufficiently larger so that they have the same width between minimum side setback lines as an interior lot, but in no case shall more than 75 feet between side setback lines on a corner lot be required.

9.3 BLOCKS

9.3.1 The lengths, widths, and shapes of blocks shall be determined with regard to:

- a. Provision of adequate building sites suitable to the special needs of the type of use contemplated,
- b. Applicable zoning requirements as to lot size and dimensions,
- c. Needs for convenient access, circulation, control, and safety of street traffic,
- d. Limitations and opportunities of topography.

9.3.2 In blocks over 1,000 feet long, the Town of Sharpsburg may, when existing or proposed pedestrian circulation patterns or public gathering places so justify, require pedestrian ways or pedestrian access easements, as appropriate, through the block.

9.4 ACCESS

9.4.1. A maximum number of 100 residential dwelling units shall be allowed to be constructed with only one street outlet to an existing public street. If a second access to an existing public road is not available or, in the opinion of the Town of Sharpsburg, could induce non-residential traffic through the development, a single entrance may be allowed if designed with a traffic signal and/or sufficient right-of-way and improvements to provide a protected left-turn lane, subject to the approval of the Town Consulting Engineer.

9.4.2. Planned Community (PCD) District.

Developments in a PCD District shall be designed with vehicle and pedestrian access between or among all uses within the development and between or among all contiguous external commercial, office, or multifamily property, developed or undeveloped. The Town of Sharpsburg may grant a Modification if it is demonstrated that a specific inter-parcel connection is not feasible due to traffic safety, topography or other development consideration.

9.5 ROADWAY DESIGN

9.5.1 Street Grades and Design Speeds

a. Minimum grade for all local and minor collector streets shall be 1.5%. Minimum grades for all major collector and arterial streets shall conform to Georgia D.O.T. practice.

b. Minimum grade of less than 1.5% on a local street may be approved by the Town of Sharpsburg, based on adequate engineering designs, where at least 1.5% cannot reasonably be achieved due to topographical limitations imposed by the land. In such cases, a Record Drawing and such computations as necessary shall be provided after construction to establish that the street will drain in accordance with these Regulations. Street sections where unacceptable pooling, excessive spread at catch basins, or other

hazardous conditions occur shall be reconstructed or otherwise improved to eliminate such conditions.

c. Minimum vehicle design speeds and maximum grades allowable in Town of Sharpsburg by street classification shall be as shown in Table 9-A.

d. Maximum grade on any cul-de-sac turnaround shall be 6%.

**TABLE 9-A
MINIMUM DESIGN SPEEDS AND MAXIMUM GRADES**

STREET CATEGORY	MAXIMUM GRADE	DESIGN SPEED
Principal Arterial	6%	60 MPH
Major Arterial	8%	50 MPH
Minor Arterial	10%	40 MPH
Major Collector	10%	40 MPH
Minor Collector	10%	30 MPH
Local	15%*	20 MPH

* Grades between 12% and 14% shall not exceed a length of one hundred and fifty feet (150') and shall require an "as graded" survey prior to the installation of the curb or utilities. The distance shall be measured as the tangent length between points of curvature.

9.5.2 Vertical Street Alignment

a. All changes in street profile grades having algebraic difference greater than 1% shall be connected by a parabolic curve having a minimum length (L) equal to the product of the algebraic difference between the grades in percent (A) and the design constant (K) assigned to the street according to its category (i.e., $L=KA$).

b. Constant (K) values are shown in the Table 9-B for both desirable and minimum acceptable ("hardship") conditions. In all cases, the "desirable" value shall be used, unless it cannot be achieved due to topographic conditions beyond the developer's control. In such hardship situations, the Town of Sharpsburg may approve a lesser value to the extent required by the hardship situation, but in no event less than the value shown in the Table as "minimum."

**TABLE 9-B
CONSTANT (K) VALUES FOR VERTICAL CURVES**

STREET CATEGORY	CREST CURVES		SAG CURVES	
	MINIMUM	DESIRABLE	MINIMUM	DESIRABLE
Principal Arterial	200	320	125	155
Major Arterial	100	170	80	110
Minor Arterial	55	80	55	70
Major Collector	55	80	55	70
Minor Collector	30	30	35	35
Local	10	10	20	20

9.5.3 Horizontal Street Alignment

a. All new streets shall adhere to the following standards governing horizontal curvature and superelevation:

TABLE 9-C
HORIZONTAL CURVES

STREET CATEGORY	MINIMUM RADIUS (FT)	MAXIMUM SUPERELEVATION
Principal Arterial	1333	0.06
Major Arterial	833	0.06
Minor Arterial	560	0.04
Major Collector	560	0.04
Minor Collector	300	0.04*
Local	120	0.00

 * No superelevation will be allowed on Minor Collectors internal to residential subdivisions.

b. Superelevation for horizontal curves shall be calculated utilizing the following formula:

- R = minimum radius curve
- v = vehicle design speed (MPH)
- e = rate of superelevation (decimal of a foot rise per foot roadway)
- f = side friction factor

$$R = \frac{v^2}{15 (e + f)}$$

Vehicle Design Speed (v)	30	40	50	60
Side Friction Factor (f)	.16	.15	.14	.12

c. Widening section along existing streets shall be designed reflecting existing curvature and superelevation, if any, unless the existing street has been included in a specific design by the Town or Georgia D.O.T. which calls for different standards, in which case the project will be coordinated with the overall design.

d. Superelevation Runoff

Roadway edge curves shall be provided for tangent runout (bringing edge from a normal crown to centerline elevation) and superelevation runoff (from the end of tangent runout to the point of design superelevation) in accordance with design standards of the Georgia Department of Transportation or other professional engineering standards.

e. Tangents and Compound Curves

Between reverse horizontal curves there shall be not less than the minimum centerline tangents shown in Table 9-D unless otherwise specified by the Georgia Department of Transportation. Compound radii curves are prohibited. At least the "desirable" length shall be provided unless hardship conditions of topography or property configuration will not allow lengths greater than those shown as "minimum." For compound circular curves, the ratio of the flatter radius to the sharper radius shall not exceed 1.5 to 1.

**TABLE 9-D
TANGENTS**

STREET CATEGORY	MINIMUM TANGENT LENGTH	DESIRABLE TANGENT LENGTH
Principal Arterial	150	180 Feet
Major Arterial	125	150 Feet
Minor Arterial	100	120 Feet
Major Collector	100	120 Feet
Minor Collector	75	90 Feet
Local	50	60 Feet

NOTE: Minimum tangents are based on the distance traveled in 1.7 seconds at the design speed for each category of street. Desirable length is based on distance traveled in 2.0 seconds.

9.5.4 Horizontal and Vertical Clearances

a. Horizontal Clearances

(1) A shoulder of no less than 11 feet from the back of curb or edge of pavement, appropriately graded and having gentle slopes of not more than 0.5 inch per foot and rounded cross-sectional design shall be maintained along all streets. Beyond the shoulder but within the right-of-way, slopes shall not exceed one foot of rise for each two feet of horizontal distance on a cut slope, and one foot of fall for each three feet of horizontal distance on a fill slope.

(2) Along all public streets, a clear zone shall be provided for a minimum distance of six (6) feet from back of curb or edge of pavement wherein nothing may be located above ground level except traffic/street signs, public utility structures, and mail boxes.

(3) At selected locations, such as the outside of a sharp curve a wider clear zone with greater horizontal clearances provided to any roadside obstruction may be required.

(4) The Department of Transportation, in accordance with Georgia Law 32-6-51, is authorized to remove or direct the removal of any sign, signal, device, or other structure erected, placed, or maintained on the right-of-way of a public road which because of its nature, construction, or operation, constitutes a danger to, or interferes with the vision of, drivers of motor vehicles.

b. Vertical Clearances

Vertical clearance at underpasses shall be at least 14.5 feet over the entire roadway width.

9.5.5 Alleys

a. Alleys shall be provided where required by the Zoning Ordinance or as a conditional of zoning approval. Alleys, unless otherwise specified in the Zoning Ordinance, shall conform to the following standards:

Total Pavement Width	Travel Lane(s) (width in Feet)	Parking Lane (Width in Feet)	Shoulder (Width in Feet)	Total Width of Easement
12'	One 12' One Way Only	None	3'	15'
16'	One 9' (One Way Only)	One 7'	4'	20'
20'	Two 10'	None	5'	25'

b. Alleys are to be maintained by a mandatory property owner's/homeowners association and easements shall be indicated on the Final Plat along with other common property.

c. Alleys shall be constructed in conformance with Section 6.9.1 of the regulations.

9.6 STREET INTERSECTIONS

9.6.1 Angle of Intersection

Intersections shall generally be at right angles and shall not be at an angle of less than 85 degrees unless approved by the Town, nor less than 80 degrees unless the intersection is signalized in which case the angle of the intersection may be reduced subject to the review and approval of the Town of Sharpsburg.

9.6.2 Maximum Grade

Street intersections should be designed with a flat grade wherever possible, but in no case should the grade exceed 2% in normal situations (or 4% in topographical hardship situations on local streets).

9.6.3 Intersection Approaches: Horizontal Alignment

a. New local streets which approach an intersection with a street in a category higher than itself on a horizontal curve having a centerline radius less than 240 feet shall provide a tangent section of roadway at least 30 feet long. Minor collectors approaching an intersection with a major thoroughfare on a horizontal curve having a centerline radius of less than 550 feet shall also provide the 30 foot tangent section. The tangent length shall be measured along the centerline of the street, from the right-of-way line of the intersecting street, extended, to the point of tangency with the centerline of the curve section.

b. New major thoroughfares shall provide tangent sections at intersections with streets in equal or higher categories as needed to provide adequate stopping distances at their design speeds.

9.6.4 Intersection Approaches: Vertical Alignment

a. For intersections with local or minor collector streets, a leveling of the street at a grade not exceeding 2 percent shall be provided but no level approach distance is required for streets approaching at less than 7 percent, and a minimum 25 foot level approach distance shall be provided for streets approaching at a grade of 7 percent or more. (See Standard Drawings).

b. As a street approaches an intersection with a major thoroughfare, there shall be a suitable leveling of the street at a grade not exceeding 2 percent and for a distance not less than the following minimums:

TABLE 9-E
APPROACH DISTANCES AT MAJOR INTERSECTIONS

APPROACHING STREET CATEGORY	MINIMUM APPROACH DISTANCE
Principal Arterial	100 Feet
Major Arterial	100 Feet
Minor Arterial	100 Feet
Major Collector	75 Feet
Minor Collector	75 Feet
Local	50 Feet

* Distance of the approach is measured from edge of pavement of the intersecting street to the point of curvature in the approaching street.

9.6.5 Intersection Radii

Intersection radii for roadways measured at back of curb and for the right-of-way lines shall be as follows. For intersecting streets of difference classification, the larger radii shall be provided.

In all cases, adequate right-of-way shall be provided to maintain minimum of 11 feet from back-of-curb. Larger radii may be required for streets intersecting at angles less than 90 degrees.

TABLE 9-F
INTERSECTION RADII

STREET CATEGORY	ROADWAY RADII R/W RADII	
Arterial	40 Feet	20 Feet
Major Collector	40 Feet	20 Feet
Minor Collector-Residential	25 Feet	9 Feet
Minor Collector-Nonresidential	40 Feet	20 Feet
Local-Residential	20 Feet	9 Feet
Local-Commercial or Office	25 Feet	11 Feet
Local-Industrial	40 Feet	25 Feet

 * Intersecting right-of-way lines may be joined by an arc having the minimum radius shown, or by a miter which cuts across the right-of-way lines connecting the points where the required radius would have otherwise been tangent.

9.6.6 Islands

Islands in street intersections shall conform to the design requirements of the standard drawings. In no case shall anything in an island extend more than 3 feet above the street grade within the right-of-way, except traffic regulatory devices and other infrastructure erected or approved by Town of Sharpsburg. No island shall be approved which contains less than 100 square feet.

9.6.7 Intersection Corner Sight Distance

- a. Intersections shall be designed with adequate corner sight distance for each street which approaches a street in an equal or higher street category (except an intersection of two local streets). Where necessary, backslopes shall be flattened and horizontal or vertical curves lengthened to provide the minimum required sight distance.
- b. The minimum corner sight distance from the approaching street shall be equal to or exceed 10 times the regulated speed of the intersecting street, as measured from the center of the approaching street in both directions along the right-of-way line of the intersecting street. As an alternative, the minimum corner sight distance requirement may be calculated using AASHTO "Policy on Geometric Design of Highways and Streets," Chapter 9 (at-grade intersections), latest edition. The sight distance shall provide clear visibility of an object 4 feet above the intersecting street viewed from the centerline of the approaching street at the right-of-way line of the intersecting street, at a height of 3.5 feet above the ground.

9.6.8 Obstructing Visibility at Intersections

On any corner lot, within an area formed by the lot lines on the street sides of such lot and a line (miter) joining points on such lot lines located at a distance of 20 feet from the point of their intersection, the following shall apply:

- a. There shall be no fence or wall or hedge higher than three feet.
- b. There shall be no obstruction to vision, other than a post or column or tree (except standards erected by Town of Sharpsburg) not exceeding one foot in greatest cross-sectional dimension, between a height of three feet and a height of 15 feet above the established grade of either of the intersecting streets.

9.6.9 Turning Lanes at Intersections

Left turning lanes shall be provided on all new internal project streets, classified as a minor collector or major thoroughfare, intersecting a major thoroughfare, and may be required in other locations to meet traffic demand and safe operations. Right turning lanes may be required to meet traffic demands or safety concerns. When provided, turning lanes shall meet the following criteria:

- a. Storage length - A minimum of 150 feet of storage length for turning lanes on any arterial roadway shall be used. A minimum of 100 feet of storage length for turning lanes on all collectors shall be used.
- b. Taper Length - The minimum taper length shall be 50 feet.
- c. Left turning lanes from arterial roads shall be subject to longer storage lengths and tapers as determined on a case by case basis.

9.7 DRIVEWAY INTERSECTIONS

9.7.1 Angle and Improvements

Driveways shall generally intersect streets at right angles. The portion of a driveway located within a public right-of-way shall be paved, if any. Driveways providing access to parking lots which contain six (6) more spaces shall be paved in accordance with the parking lot requirements of the Zoning Ordinance.

9.7.2 Driveway Design Standards

- a. Driveways serving single-family detached or duplex residences may be no less than ten feet wide at the right-of-way line and shall provide a radius to the back of curb or edge of pavement of the roadway of no less than five feet. All other driveway curb cuts on public streets shall conform to the standards shown on the driveway details contained in the Standard Drawings, by land use type as follows:

(1) Driveway Detail 1 (32' Width, 25' Radius) for:

- (a) Service Stations;
- (b) Commercial Sites (over 80,000 Square Feet);
- (c) Office/Institutional Complexes (Over 100,000 Square Feet);
- (d) Apartment/Condo Complexes (Over 200 Units); and;

(2) Driveway Detail 2 (28' Width, 25' Radius) for:

- (a) Commercial Sites (80,000 Square Feet or Less);
- (b) Office/Institutional Complexes (100,000 Square Feet or Less);
- (c) Apartment/Condo Complexes (200 Units or Fewer); and,

(3) Driveway Detail 3 (32' Width, 40' Radius) for:

- (a) Industrial Sites

(4) Driveway Detail 4 (Optional Design with Island) for:

- (a) Private Commercial/Office Street Entrances; and
- (b) Private Entrances to Apartment/Condo Complexes (Over 200 Units);

b. All driveways and driveway curb cuts on State highways shall conform to Georgia DOT standards unless Town requirements are more restrictive.

9.7.3 Auxiliary Lanes

Along any major thoroughfare, a deceleration lane, acceleration lane, larger turning radius, traffic islands, or other devices or designs may be required to avoid specific traffic hazards which would otherwise be created by the proposed driveway location.

9.7.4 Corner Sight Distance

All driveways approaching a minor collector or major thoroughfare shall provide adequate corner sight distance. The minimum corner sight distance from the driveway shall be equal to or exceed 10 times the regulated speed of the intersecting street, as measured from the center of the driveway in both directions along the right-of-way line of the intersecting street. As an alternative, the minimum corner sight distance requirement may be calculated using AASHTO "Policy on Geometric Design of Highways and Streets," Chapter 0 (at grade intersections), latest edition. The sight distance shall provide clear visibility of an object 4 feet above the intersecting street viewed from the centerline of the driveway at the right-of-way line of the intersecting street, at a height of 3.5 feet above the ground.

9.7.5 Separation and Spacing

All driveways except those serving residential units on individual lots shall be recommended to meet the following criteria:

- a. Minimum separation from a street intersection: 100' from centerline of driveway to nearest right-of-way line of the intersecting street, extended. For any driveway on a major thoroughfare having a centerline between 100' and 200' from the intersecting street right-of-way line, access restriction may be imposed to avoid traffic hazards. Greater separation may be required for safe operation of a free-right lane, acceleration or deceleration lane, etc.
- b. Minimum separation between driveways along the same side of a major thoroughfare: 100' between centerline as measured along the roadway edge or back of curb.
- c. Whenever possible, proposed driveways along one side of a street shall coincide with existing or proposed driveways on the opposite side of such street.
- d. Maximum number of driveways serving a single project: one (1) for each 400' of property frontage, or fraction thereof per street, along a major thoroughfare. This is not meant to be a spacing standard but only an expression of the total number of driveways that are permitted serving a single project.

9.8 STORMWATER DETENTION GUIDELINES

9.8.1 General

- a. Storm water detention facilities shall be designed so that their peak release rates, when combined with those of all detention bypass areas in the same basin, produce peak flow rates and flow velocities at the site's boundary line no greater than those which occurred at the same location for pre-developed conditions.
- b. The positive effects of storm water management via on-site detention facilities diminish rapidly as the distance downstream from the point of discharge increases, and the smaller the facility's contribution is, as a percentage of the total runoff contributing to downstream flow, the shorter the distance downstream that the benefits are realized. Because of these limitations, on-site detention is effective at controlling flooding only when flow from the facility is a significant percentage of the total flow at the point of interest, and only if the point of interest is immediately downstream. The concepts of immediately downstream and significant percentage of total flow are inseparable. The portion of a receiving watercourse (one which receives and conveys runoff from a site) which lies downstream from the site to the point where the area of the site is 10 percent of the total drainage area, shall generally be considered to constitute that portion of the watercourse which is immediately downstream. However, the total flow in the receiving watercourse may become very large, relative to the flow contributed by the site, within a much shorter distance. For this reason, the significant percentage test must also always be applied. For purposes of these Regulations, the flow from a site represents a significant percentage of the total flow in a watercourse only when the ratio of the peak flow rate from the site to the peak flow rate in the watercourse (including the contribution from the site) is greater than 5 percent.

c. Peak flow rate control shall normally be provided only for the 2-year, 5-year, 10-year, and 25-year frequency storm events. However, under certain conditions, the 100-year event must also be detained to the pre-developed rate. Such control of the 100-year event shall be provided when failure to do so would result in flooding of other habitable dwellings, property damage, or public access and/or utility interruption.

d. For any storm water analysis, the composite "C" (Rational Method) or CN (SCS Method) used for analysis of pre-development conditions shall not exceed 0.15 or 55, respectively, unless prior approval has been obtained from the Town. A pre-design conference between the design engineer and appropriate Town personnel, which may in certain straightforward cases be conducted via the telephone, is required.

e. Rational Method runoff coefficients used for analysis of pre- and post-development conditions shall be consistent with those shown in the Storm Water Design Manual.

9.8.2 Dam Design and Construction Criteria

a. Detention facilities which take the form of normally-dry basins, ponds, or lakes usually are created by damming a drainage way or watercourse. Such dams can take a variety of different forms, the most common being earthen embankments and reinforced concrete walls. Each type of dam has different characteristics, and the selection of the most appropriate type for a particular site should be made by a Professional Engineer and based on the physical features of the dam site, the purpose of the dam, the type of impoundment, safety, and maintenance requirements.

b. For purposes of these Regulations, dams will be addressed separately for each of the three most frequently encountered types of detention facilities: normally-dry basins, ponds, and lakes. A normally-dry basin is one designed to impound storm water runoff for only a brief period of time following a storm event. The vast majority of the time the basin will be completely dry except for any normal stream flows which pass through unimpeded. Lakes and ponds, on the other hand, are designed to impound a body of water at least several feet in depth on a more-or-less permanent basis. Lakes and ponds vary from one another only in terms of magnitude. The magnitude of a lake is determined primarily from the height of its dam, the size of its contributing drainage area, and the volume of water it is capable of impounding. For purposes of these Regulations, a pond is any lake having a dam height of less than 9 feet and which is incapable of impounding more than 20 acre-feet of water.

c. All dam design shall be certified by a Professional Engineer currently registered in the State of Georgia.

d. Dams for normally-dry detention basins shall conform to the following:

(1) Dams for normally-dry detention basins may be constructed of earth, reinforced concrete, mortared rubble, or other suitable materials.

(2) The design of any concrete or rubble wall over 5 feet in height shall be certified by a Structural Engineer currently registered as a

Professional Engineer in the State of Georgia, and the structural design shall be based on soil tests certified by a Geotechnical Engineer currently registered as a Professional Engineer in the State of Georgia.

(3) Any non-earthen structure shall be designed to prevent piping failure through its subgrade and abutments.

(4) The construction of walls over 5 feet in height shall be monitored and approved by a qualified materials testing company.

(5) Earthen dams for normally-dry detention basins shall have a top width of no less than 8 feet.

(6) For earthen dams for normally-dry detention basins, there shall be at least 1.5 feet of vertical separation between the 100-year ponding elevation in the basin and the low point on the top of the dam. One (1) foot of this distance is to provide a margin of safety against overtopping of the dam and the other 6 inches is to allow for settlement. Separation is not required for a non-earthen dam if it has been designed to overtop safely.

(7) More stringent design and construction criteria shall be used for dams for normally dry detention basins whenever the probable consequences of dam failure are severe.

e. Dams for ponds shall conform to the following:

Any engineer responsible for the design of a dam for a pond is expected to be knowledgeable of the criteria contained within the Georgia Safe Dams Act, Georgia Department of Natural Resources "Rules for Dam Safety" publication, and the U.S.D.A. Soil Conservation Service's Technical Release No. 60 "Earth Dams and Reservoirs." The provisions of each are to be applied wherever applicable. Applicability shall be determined based upon site specific constraints and downstream conditions. Consultation with the appropriate Town personnel both prior to and throughout the design process is encouraged.

f. Dams for lakes shall conform to the following:

Any engineer responsible for the design of a dam for a lake is expected to be thoroughly familiar with the criteria contained within the Georgia Safe Dams Act, Georgia Department of Natural Resources "Rules for Dam Safety" publication, and the U.S.D.A. Soil Conservation Service's Technical Release No. 60 "Earth Dams and Reservoirs." All design is to be in accordance with the applicable requirements contained in each of the above referenced publications.

9.8.3. Detention Facility Outlet Devices

a. Because of the variables that may be associated with the choice of an outlet device for any given condition, the design consultant is responsible for the selection of the device, subject to the review and approval of the Town of Sharpsburg.

b. The Town will include in its consideration the ease of maintenance, longevity of the system, and freedom from congestion, practicality, and aesthetics in its review of the outlet device. The consultant should be guided by the Town preference of vertical weir designs since they have proven to generally meet most of the considerations expressed herein.

c. Orifices smaller than 3 inches in diameter shall have inlet protection such as Standard Detail 629 or equivalent inlet protection. An orifice smaller than 15 inches in diameter shall be protected by a trash rack. A trash rack protecting an orifice shall have surface area of at least 10 square feet. Design shall be in accordance with the Storm Water Design Manual. No opening in the trash rack shall have an area more than one-half the size of the area of the orifice being protected. Two-stage trash racks, or screens having progressively smaller openings placed in series, are suggested. To facilitate outlet operation, curved or inclined trash racks designed to allow debris to rise with the water level are preferred. In all cases, trash racks shall be either hinged or removable to facilitate maintenance operations.

d. If the primary detention facility outlet is a conduit through a dam, and there is not an orifice, weir-box, or other flow-control device affixed to the upstream end, then the conduit shall be analyzed for both inlet and outlet control conditions. If an orifice or weir-box is affixed, then the conduit shall be analyzed to determine if any flows will occur for which outlet control conditions in the conduit, rather than the hydraulic characteristics of the flow-control structure, will determine the total flows occurring. In any case where the conduit through the dam is less than 15 inches in diameter, the trash rack provisions of "c" above shall be followed.

e. Unless the 100-year maximum flow velocity in a conduit through a dam forming a pond or a lake is less than 10 feet per second, and the hydraulic grade line for the 100-year condition is at or below the crown of the conduit for at least 90 percent of its length, the conduit must be equal or superior to Class V reinforced concrete pipe in its structural characteristics.

9.8.4 Emergency Overflow Requirements

a. For every type of detention facility, a planned safe flow path must be provided for conveyance of flows of water in excess of those for which the detention facility was designed. In many instances, this function can be provided through installation of an emergency spillway. Emergency spillways are usually excavated open channels, either vegetated or paved with reinforced concrete.

b. Every earthen dam shall be provided with an open channel emergency spillway, unless all of the following apply:

- (1) The principal spillway is a closed conduit having a cross-sectional area that can pass 125 percent of the 100-year storm routed peak discharge.
- (2) The principal spillway is a closed conduit having a cross-sectional area of at least one square foot per each three acres of drainage area, or a maximum of twenty square feet of surface area, whichever is less.
- (3) The principal spillway capacity is at least equal to the capacity required for an open channel emergency spillway.
- (4) The low point of the dam crest is not in a fill section except for roadway embankments.
- (5) A trash rack or other debris protection is provided on the outlet control.

c. Any portion of any emergency spillway excavated into a dam embankment or other fill section must be paved. Pavement material shall be either reinforced concrete or asphalt, as dictated by the design life of the dam and the potential consequences of its failure. Any portion of any emergency spillway excavated into natural ground shall be vegetated in accordance with the practices described in the "Manual for Erosion and Sediment Control in Georgia."

d. In determining the necessary dimensions of an open channel spillway for a normally-dry basin, a pond, or a lake, the methodology contained in the "Earth Emergency Spillway Design Data" section of the "Manual for Erosion and Sediment Control in Georgia" should be used.

e. Emergency spillway capacity for dams shall be as follows:

(1) For normally-dry detention basins, ponds, and lakes, having a dam height of less than 9 feet and which are incapable of impounding more than 20 acre-feet of water, and for which the probable sequences of dam failure are not severe, an emergency spillway should be provided. Its capacity should be at least equal to the routed 100-year peak flow out of the detention facility assuming the principal spillway is blocked.

(2) For normally-dry detention basins, ponds, and lakes, having a dam height of 9 feet or more and which are capable of impounding 20 acre feet or more of water, an emergency spillway should be provided. Its capacity should be at least equal to the greater of either the routed 100-year peak flow rate out of the facility assuming the principal spillway is blocked, or the routed one-fourth PMF hydrograph out of the facility. In cases when State or Federal regulations may require greater spillway capacity, those more stringent regulations shall govern.

f. Emergency overflow for non-earth dams may take the form of planned structure overtopping. In such cases, however, care must be taken to prevent flows from eroding supporting soils along the toe of or immediately downstream from the

dam so as the cause it to be undermined. The profile of the top of the dam shall be so designed as to prevent flows along the ends of the structure that might result in abutment erosion.

9.8.5 Parking Lot Detention Facilities

a. Parking lot detention facilities shall generally be of one of the two following types:

(1) Depressed areas of pavement at drop inlet locations; and,

(2) Ponding areas along sections of raised curbing. The curbing in these areas is usually higher than a standard curbed section.

b. The detention methodology utilized for all parking lot detention facility design shall conform to the Storm Water Design Manual.

c. Parking lot detention areas shall be located so as to restrict ponding to areas other than parking spaces near buildings, and to not encroach upon entrance drives.

d. The maximum depth of detention ponding in a parking lot, except at a flow control structure, shall be 6 inches for a 10-year storm, and 9 inches for a 100-year storm. The maximum depth of ponding at a flow control structure shall be 12 inches for a 100-year storm.

e. In truck parking areas, the maximum depth of ponding shall be 12 inches for the 10-year storm.

f. Detention ponding areas are to be drained within 30 minutes after the peak inflow occurs.

g. Parking lot detention areas shall have a minimum surface slope of 1 percent, and a maximum slope of 5 percent.

9.8.6. Underground and Rooftop Detention Facilities

The design of underground or rooftop detention facilities shall be in accordance with current engineering standard practice, and shall conform to the general spirit and intent of this Article. In the case of rooftop detention, permissible structural loads and weather proofing shall be governed by the Georgia State Building Code as may be amended by the Town of Sharpsburg.

9.8.7. Sediment Basins

a. Stormwater management and sediment trapping functions should be separated whenever possible. Every erosion control design should seek to: first, prevent erosion from occurring; second, trap sediments as close to their sources as possible, and; third, provide a second-tier or backup line of defense against sediments leaving the project site. This backup defense will usually consist of check dams/and or sediment basins.

b. Whenever a sediment basin and a detention facility are both required on the same watercourse, the sediment basin should be located immediately upstream of the detention facility.

c. In unusual cases where a normally-dry detention basin is planned to be used to trap sediment as well as provide storm water control, the basin may be undercut to accommodate the sediment so that the required detention characteristics, particularly volume, will be maintained.

d. The design of sediment basins shall be in accordance with Appendix C of the "Manual for Erosion and Sediment Control in Georgia."

9.8.8 Ponds and Lakes Not Used for Detention.

In such cases where a pond or lake is provided as part of a development, but is not planned to function as a stormwater detention facility, the same general and specific criteria contained in these Regulations shall apply, but may be modified in instance where a specific requirement is clearly detention oriented rather than safety-based.

9.9 CULVERTS AND PIPE COLLECTION SYSTEM GUIDELINES

9.9.1 Culverts

a. Single barrel or single cell culvert structures are less prone to clogging and require less maintenance than multi-barrel or multi-cell installations and should therefore be used whenever feasible.

b. The maximum velocity in a corrugated metal culvert for the 100-year flow shall be 15 fps (feet per second). Velocities over 10 fps in a pipe of any material shall be considered a special design with particular attention required to pipe or structure invert protection and to fill slope, stream bed, and stream bank stability.

c. The minimum allowable slope shall be in accordance with the Storm Water Design Manual.

9.9.2 Pipe Collection Systems

a. The maximum velocity in a corrugated metal pipe system for the design flow shall be 15 fps. Velocities over 10 fps in a pipe of any material shall be considered a special design with particular attention required to pipe invert protection and the ability of the receiving waterway or detention facility to accept the flow without damage.

b. The minimum allowable slope shall be in accordance with the Storm Water Design Manual.

c. The maximum allowable slope for a concrete storm drainage pipe shall be 10 percent and for a HDPE pipe shall be 14 percent. Greater slopes may be approved if installation

is in accordance with manufacturer's recommendations. In cases where the slope is in excess of 10 percent, anchor collars may be required.

d. A minimum pipe cover of one (1) foot shall be required.

9.9.3 Outlet Location - Culverts and Pipe Systems

a. Outlet structures (such as headwalls) shall not be located closer to the project site's property line with an adjoining property than the greater of the distance necessary to construct any velocity protection or a flow distance equal to six (6) pipe diameters. For non-circular conduits, this distance shall be six (6) times the rise dimension of the conduit.

b. The invert elevation of a culvert or pipe outlet shall be no more than 2 feet above the elevation of the bottom of the receiving watercourse at the outlet.

9.9.4 Energy Dissipation.

The maximum developed condition flow velocity at the project site's downstream property line with an adjoining tract shall not exceed the maximum pre-developed condition velocity. Calculations may be required to support this velocity standard on a case-by-case basis.

9.9.5 Discharge of Concentrated Flows.

a. The discharge of concentrated flows of storm water into public roadways shall be avoided. In no case shall such concentrated flows, including flows from swales, ditches, draws, driveways, or piped systems, exceed the allowable peak flow rates in Table 9-G, below.

**TABLE 9-G
MAXIMUM FLOWS INTO STREETS**

STREET CLASSIFICATION	ALLOWABLE PEAK FLOW RATE FOR A 2-YEAR STORM
Local	2.0 cfs
Minor Collector	1.0 cfs
Other	0.5 cfs

b. In residential subdivisions, the drainage area contributing to the peak flow along any property line between lots within 50 feet of the building setback line for either lot shall not exceed 2 acres, unless contained within a piped drainage system or maintained in a natural watercourse. The storm water conveyance shall be in a drainage easement.

ARTICLE 10
TRADITIONAL NEIGHBORHOOD DISTRICT CRITERIA

10.1 INTRODUCTION

1. Purpose of TND Design Criteria

The design criteria within this chapter contains the administrative rules for a Traditional Neighborhood District (TND) and includes supplemental information and illustrations on the standards for planning, civic design criteria, streets and streetscapes, open space, location of utilities, drainage, and landscaping.

The standards established in this criteria manual should be used by the private sector in planning and designing a TND or TND areas within an approved Planned Community District (PCD). These standards will guide the review and approval of the TND preliminary and final development plans, construction plans, site plans, and final plats.

2. Applicability of Other Design Standards

All of the design criteria in the other chapters of this manual apply to development within a TND except as otherwise provided by Section 5.4 of Chapter 94 (Zoning) of the Town of Sharpsburg Code of Ordinances or by this chapter.

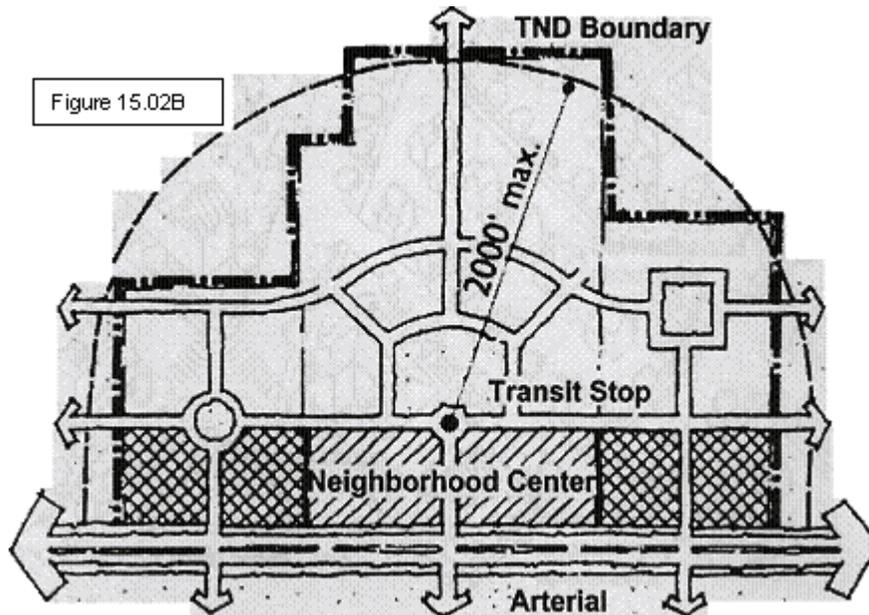
10.2 DEVELOPMENT CRITERIA

1. Summary

A Traditional Neighborhood District has specific development characteristics that result in a mixed-use, pedestrian oriented community. This section describes those characteristics and illustrates development patterns that may produce those characteristics.

2. Neighborhood Size

TND neighborhoods are limited in size to encourage pedestrian activity. The optimal size of a neighborhood is 1/4 to 1/3 of a mile from center to its edge, a distance equal to a 5 to 10 minute walk at an easy pace. Its limited area gathers the population within walking distance of many of its daily needs.



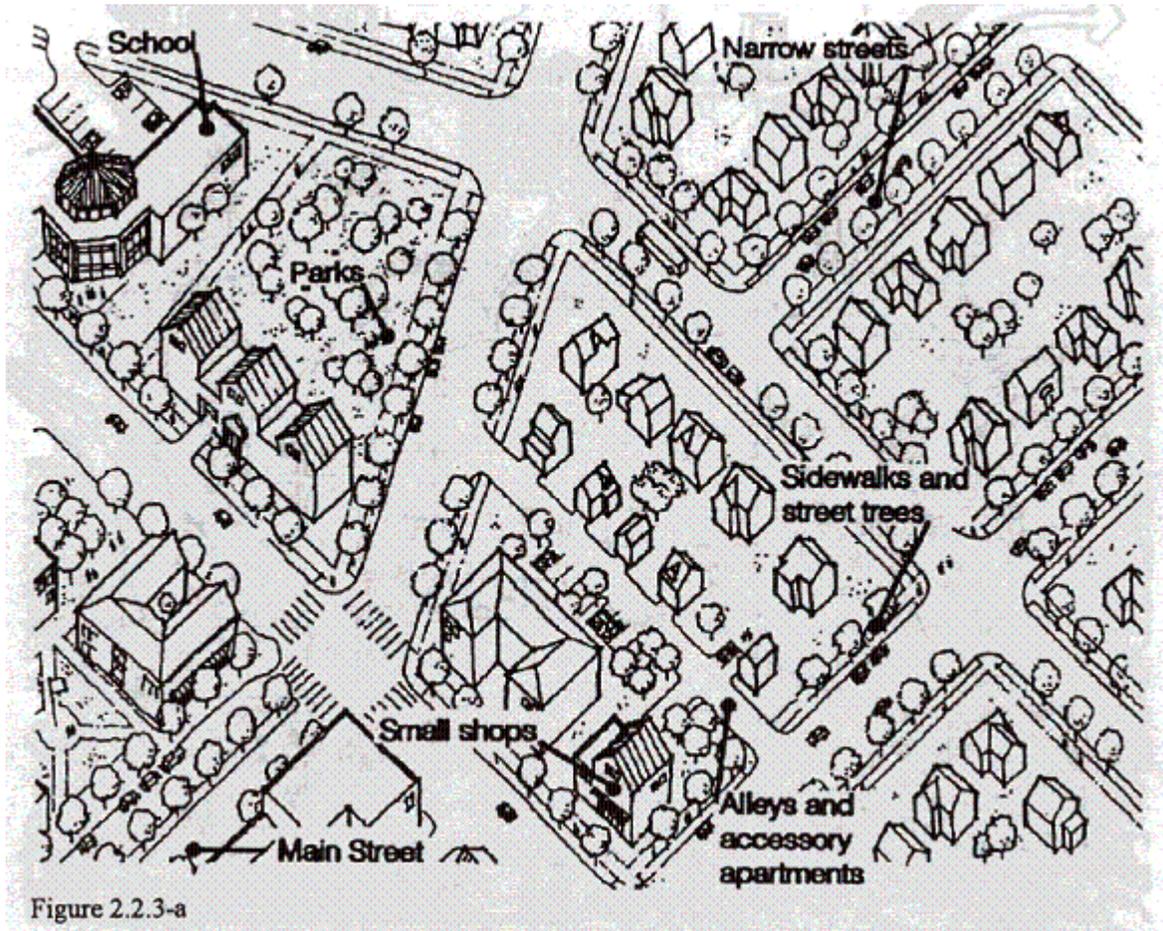
3. Street Pattern and Multi-modal Transportation System

Streets in a Traditional Neighborhood District are designed to accommodate the needs of all modes of transportation. The neighborhood consists of an interconnected network of local streets. An interconnected street pattern with smaller blocks provides multiple routes, diffusing automobile traffic and shortening walking distances. This pattern keeps local traffic off arterial roads and through traffic off local streets. Neighborhood streets of varying types are designed to provide equitably for pedestrian comfort and automobile movement. Slowing the automobile and increasing pedestrian activity encourages the casual meetings that form the bonds of community.

4. Mix of Land Uses and Diversity of Housing Types

A TND is structured to provide a balanced mix of residences, shops, workplaces, civic uses, and recreation within the neighborhood. The integration of multiple land uses allows residents to meet more of their daily needs through shorter trips.

A variety of housing is provided in a TND. This includes single-family residential, duplex, town-homes, condominiums, and apartments. With a variety of housing types, the needs of varied age and income groups are more easily accommodated within a TND, and a greater diversity of residents is encouraged.



5. Open Space

Formal and informal open space is located throughout a TND. The design of the neighborhood gives priority to open space. These spaces enhance community activity, identity, and civic pride. The neighborhood plan creates a hierarchy of useful open spaces: a formal square in the Neighborhood Center, parks and playgrounds throughout the neighborhood, and streets that promote walking and encourage informal meetings.

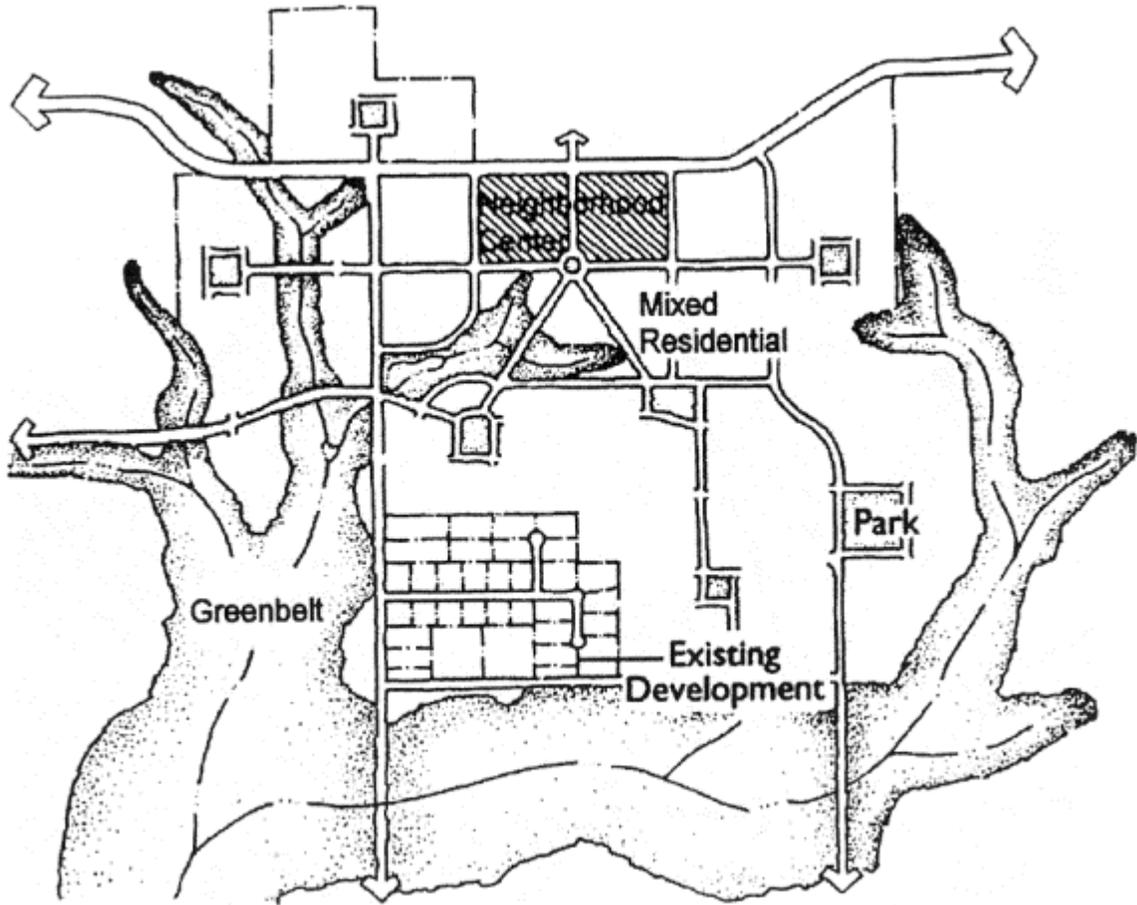


Figure 2.2.4-a

6. Civic Buildings and Landmarks

Important civic buildings that are open to the public should be located on prominent sites throughout a TND. These uses, including government offices, libraries, museums, schools, and churches, serve as focal points and landmarks for the community.

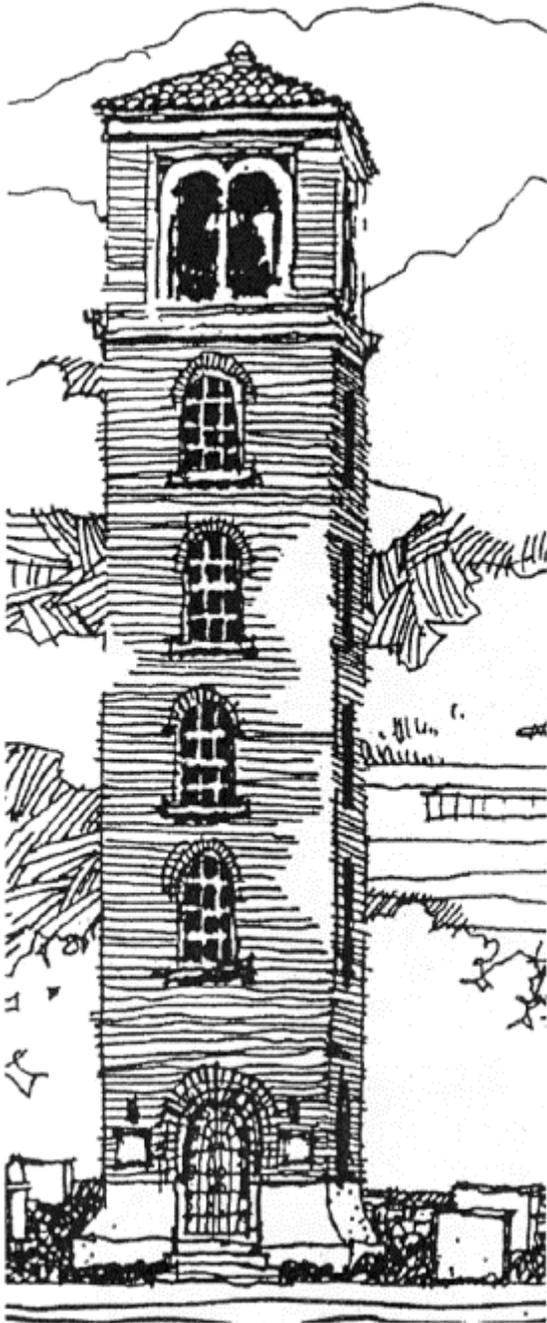


Figure 2.2.5-a



Figure 2.2.5-b

7. Location of Buildings and Relationship Between Building Types

The private building is used to form a distinct street edge and define the border between the public space of the street and the private space of the individual lot. This helps to promote active streets, provides visual interest to the pedestrian in commercial areas, and encourages informal encounters between neighbors in residential areas.

The integration of varied land uses within a TND requires a common architectural vocabulary. The consistent use of compatible urban design and architectural elements helps to relate individual structures to other structures resulting in a coherent overall

development pattern and streetscape.

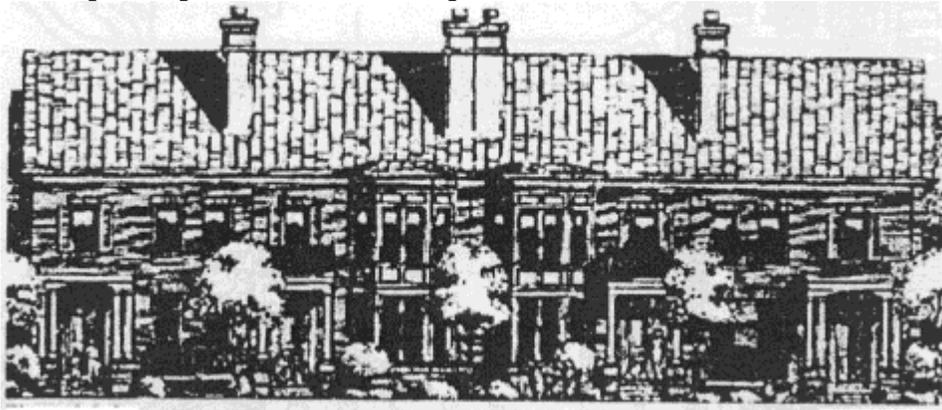
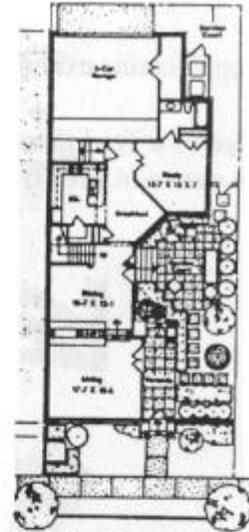


Figure 2.2.6-b

Single Family



Figure 2.2.6-c



Detailed Zero Lot Line

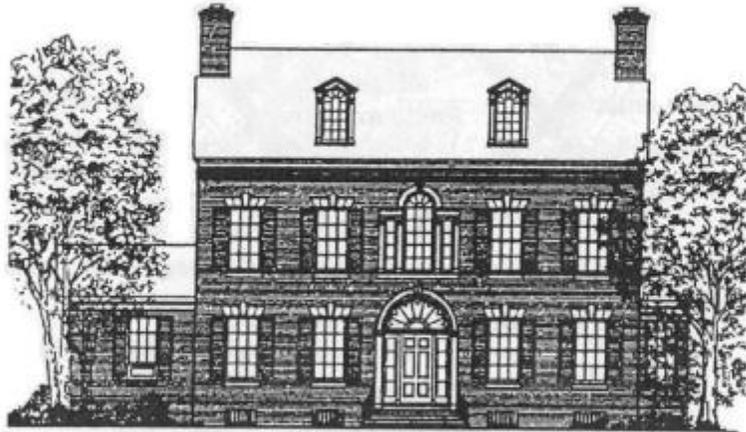


Figure 2.2.6-d

Multi-family/Condominiums/Flats



Figure 2.2.6-e

Duplex/Multi-family

8. TND Development Patterns

Design of a Traditional Neighborhood District

This section contains examples of typical TND development patterns

(Too much curve in the streets in this figure)

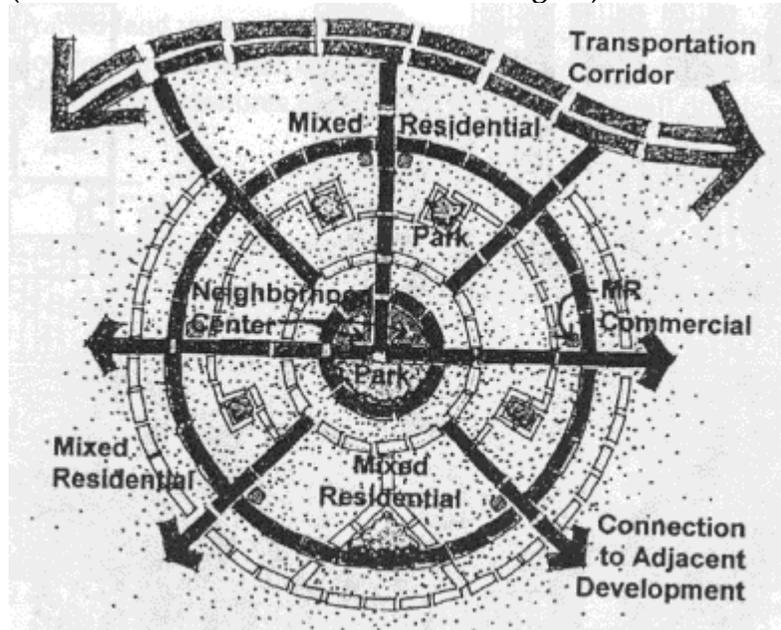


Figure 2.3.1-a Neighborhood Center Removed From Major Traffic Route

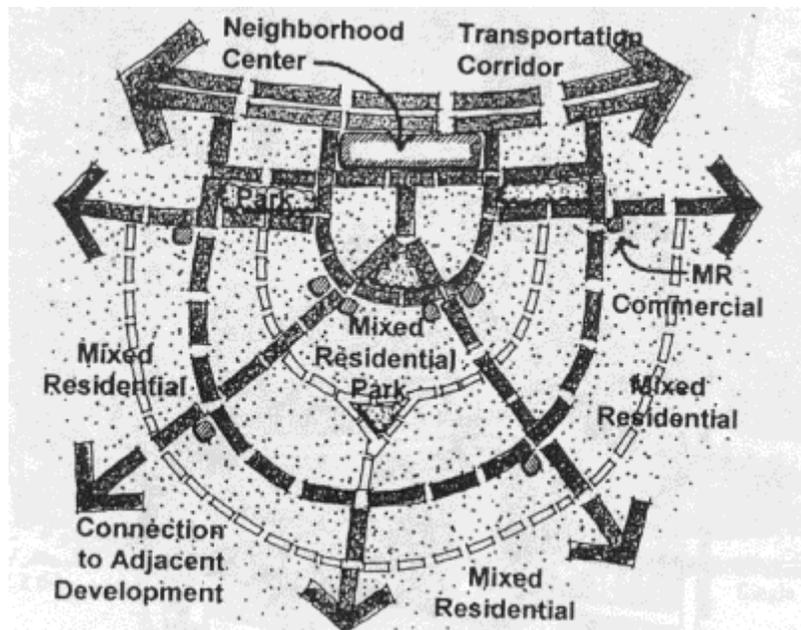


Figure 2.3.1-b Neighborhood Center Adjacent From Major Traffic Route

A Group of Traditional Neighborhood Districts

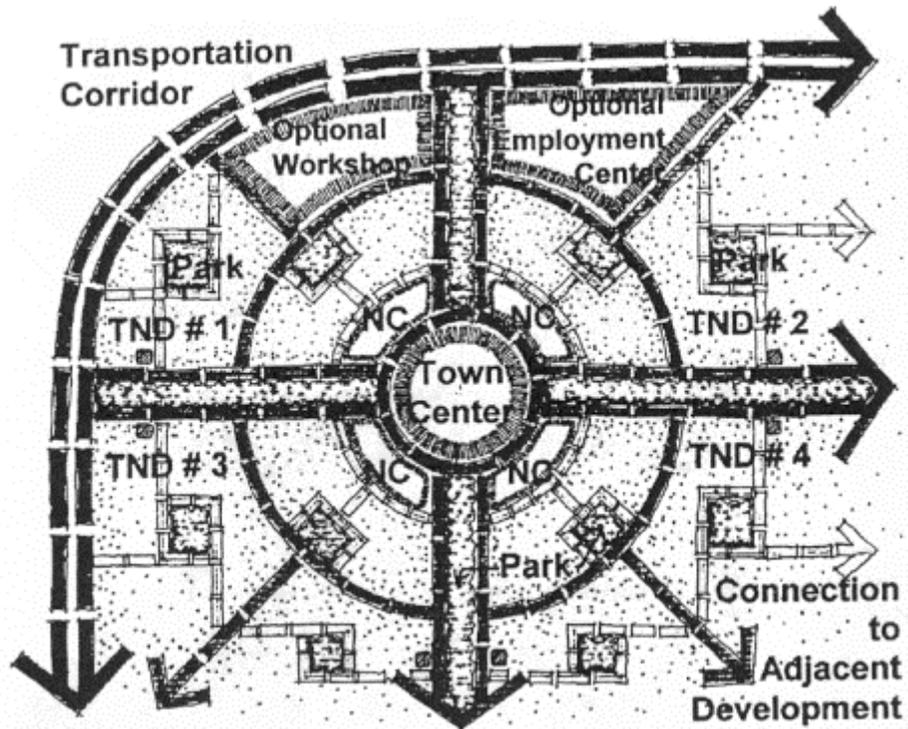


Figure 2.3.2-a Town Center Serving Multiple Neighborhoods

A Neighborhood Center Area



Figure 2.3.3-a

A Mixed Residential Area

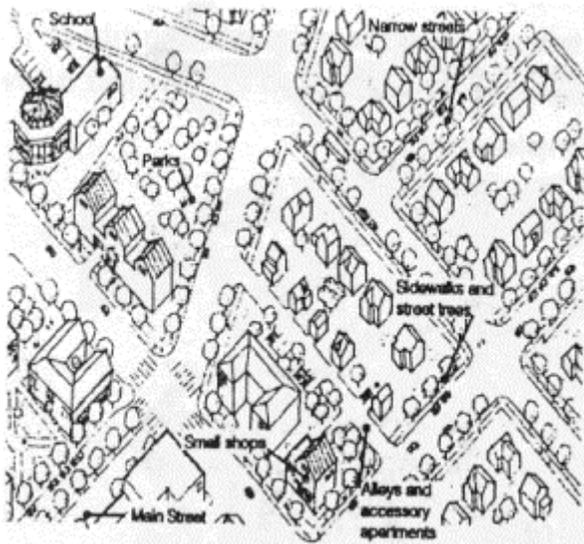


Figure 2.3.4-a

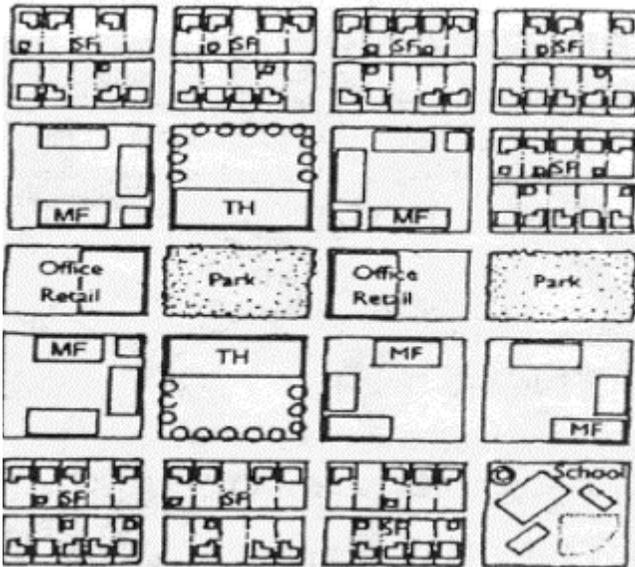


Figure 2.3.4-b

A Workshop Area or Employment Center

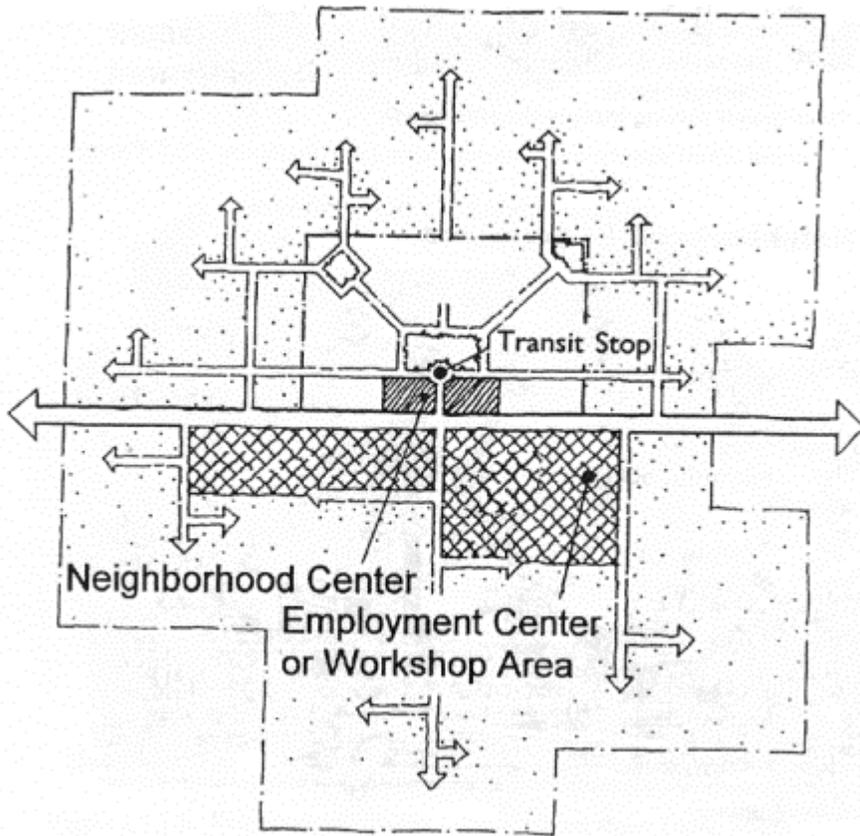


Figure 2.3.5-a

A Town Center within a Group of Traditional Neighborhood Districts

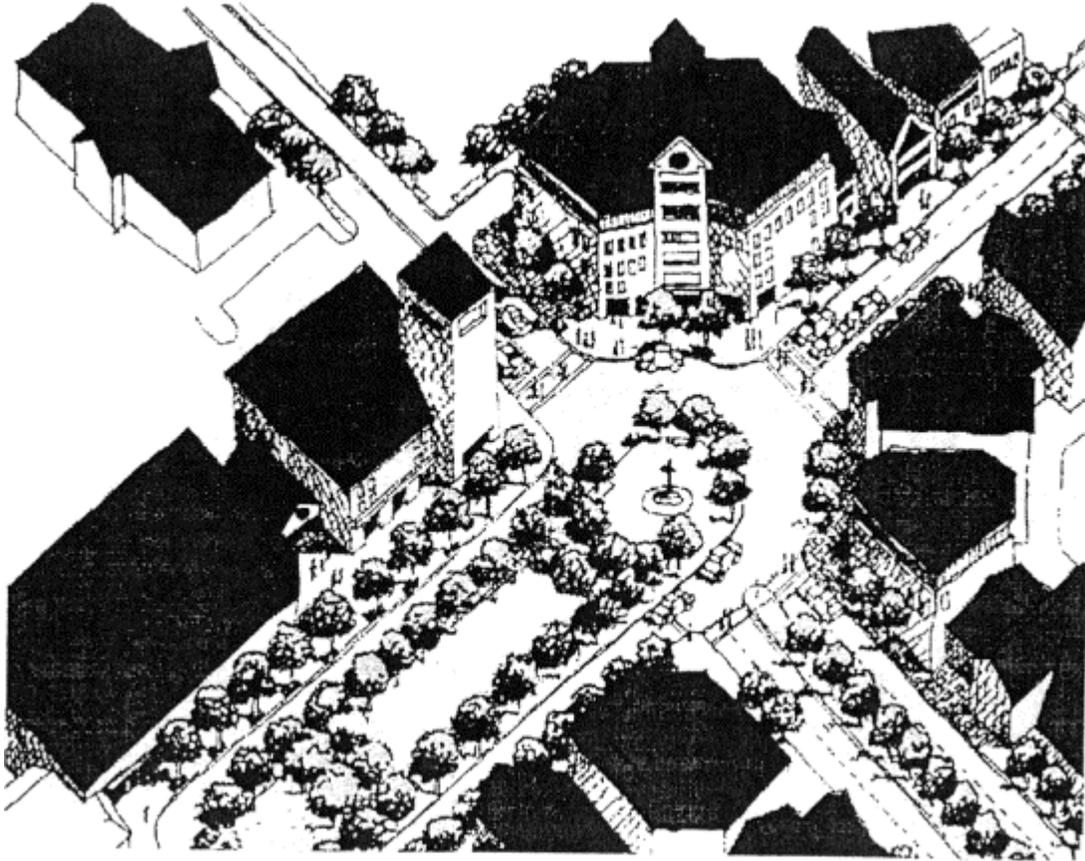


Figure 2.3.6-a

10.3 Civic Design Criteria

Section 3 describes the objectives of the TND and provides illustrated guidelines for each objective. These guidelines must be used in formulating the civic design standards for a Traditional Neighborhood District. Considerations for the formation of optional architectural standards as part of any project covenants, conditions and restrictions are also described in Section 3.

Objective 1: Civic design Compatibility

Guideline A: A building must incorporate architectural styles, building materials, and colors used in surrounding buildings.



Figure 3.2.1.A-a

Preferred

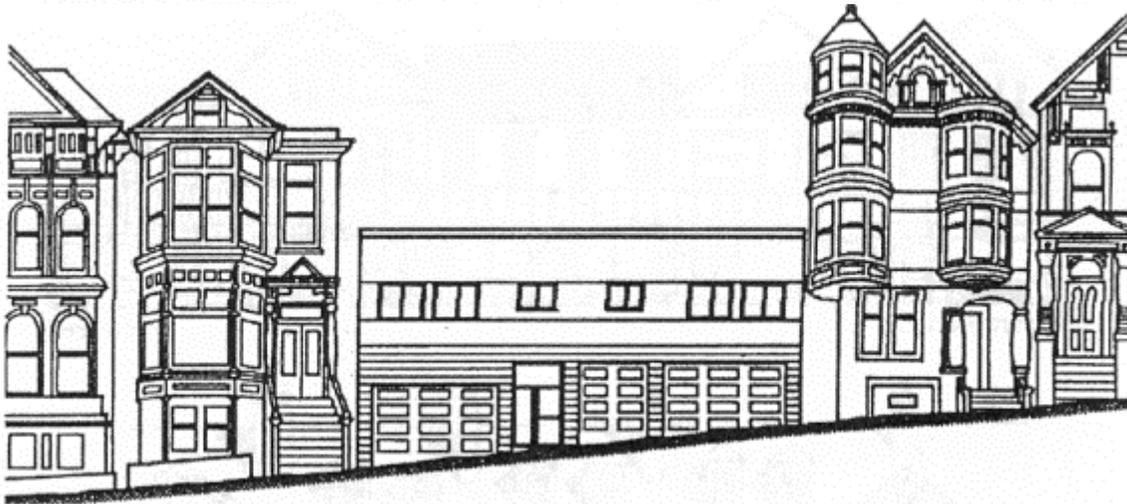


Figure 3.2.1.A-b

Discouraged

Guideline B: A building greater than one story shall clearly delineate the boundary between each floor of the structure through belt courses, cornice lines, or similar architectural detailing.



Figure 3.2.1.C-a

Preferred

Guideline C: Attached buildings within the same block must maintain consistent cornice lines in buildings of the same height within multi-family, townhome, non-residential, or mixed use structures.



Figure 3.2.1.B-a

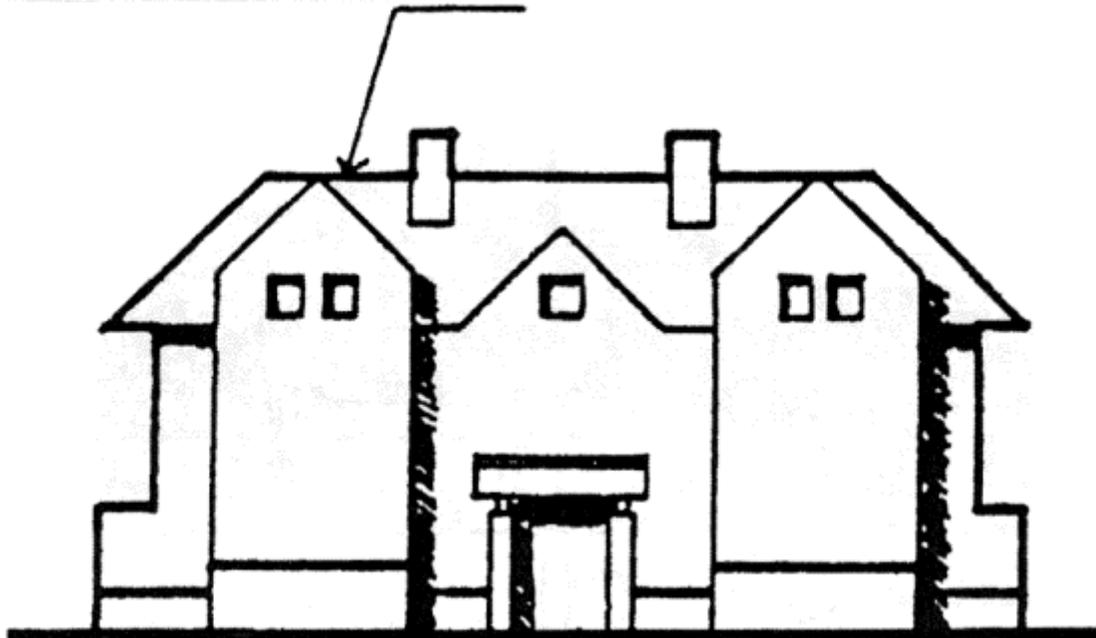


Figure 3.2.1.C-b

Preferred

Guideline D: In Mixed Residential Areas, rooflines must be pitched or gabled. Overhanging eaves must be provided to the greatest extent possible.

Pitched Roofline



Guideline E: Signs are limited to wall, awning, or hanging signs

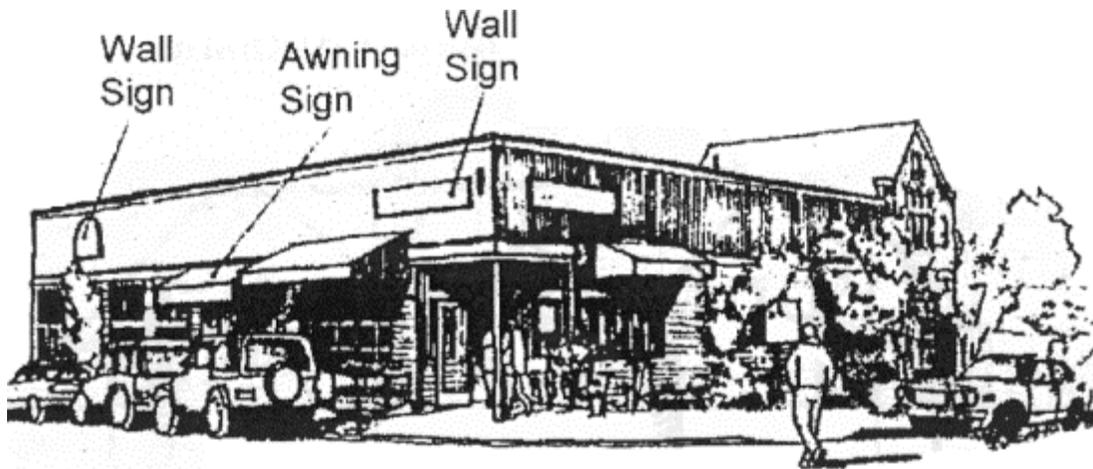


Figure 3.2.1.E-a

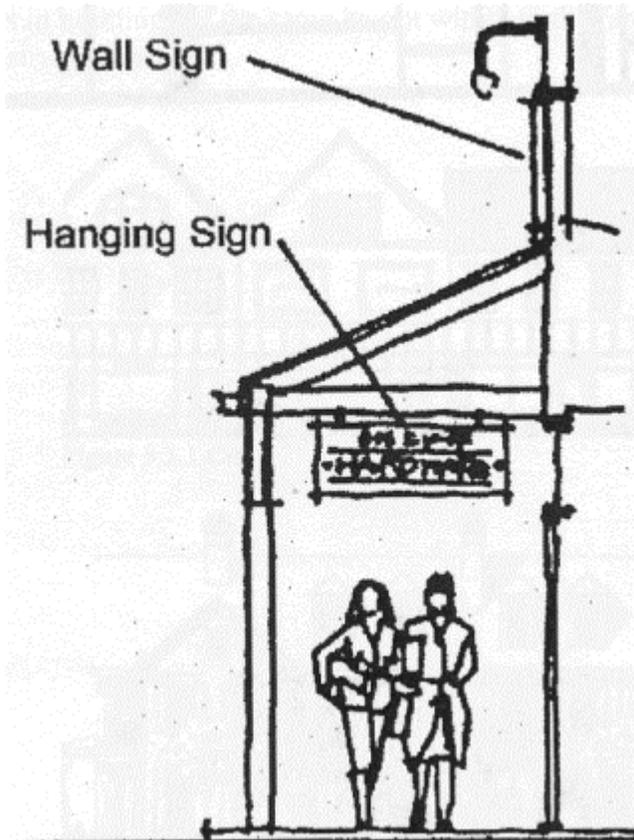


Figure 3.2.1.E-b



Figure 3.2.1.E-c Berm sign



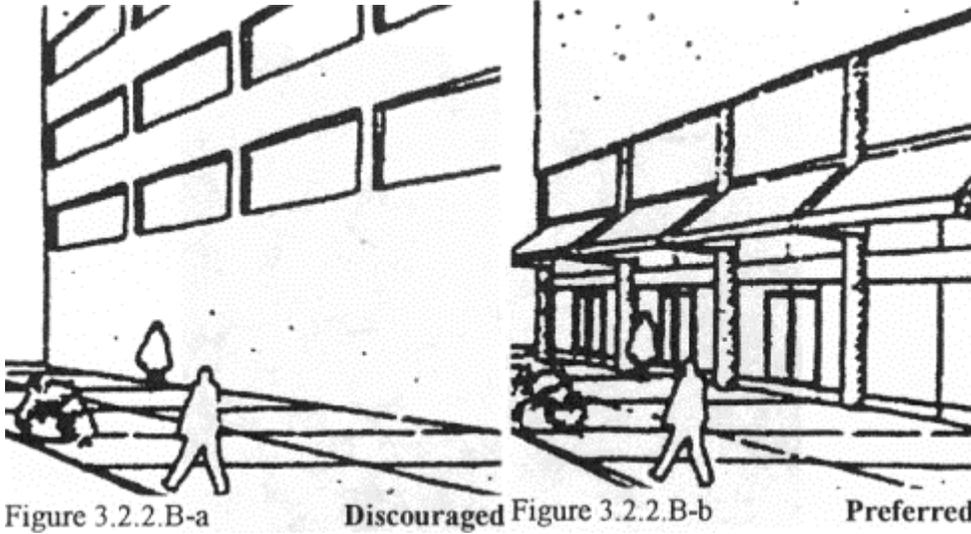
Figure 3.2.2.A-a

Preferred

Objective 2: Human Scale Civic Design

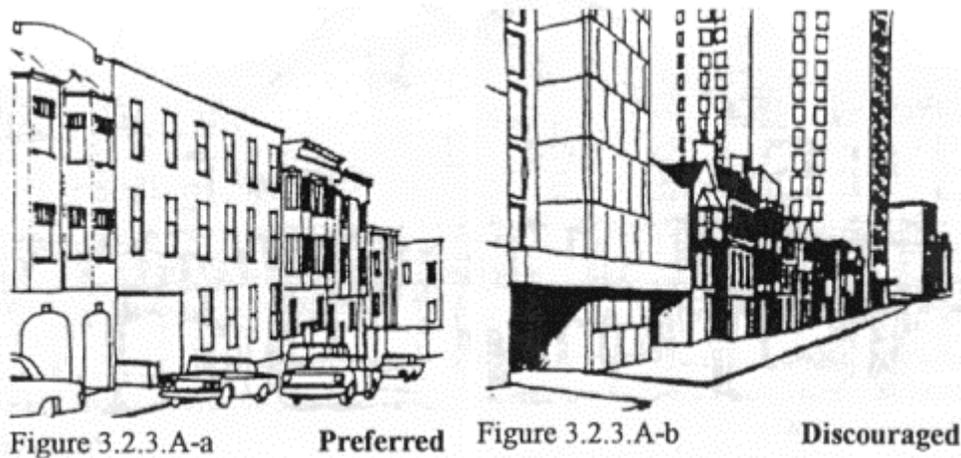
Guideline A: Doorways, windows, and other openings in the facade of a building shall be proportioned to reflect pedestrian scale and movement, and to encourage interest at the street level.

Guideline B: A building shall avoid long, monotonous, uninterrupted walls or roof planes. The facade of a building should be divided into distinct modules no longer than 100 feet.



Objective 3: Integration of Uses

Guideline A: A building that is located on the periphery of the Neighborhood Center shall generally not exceed twice the height and massing of adjacent structures in the Mixed Residential Area.



Guideline B: A commercial or mixed-use building that is located within the Mixed Residential Area must integrate its appearance with the area and generally must not exceed twice the

height and massing, of adjacent structures.



Figure 3.2.3.B-a

Guideline C: The finished floor elevation of a townhome shall be a minimum 18 inches above sidewalk elevation to insure privacy for the occupants of the dwelling.

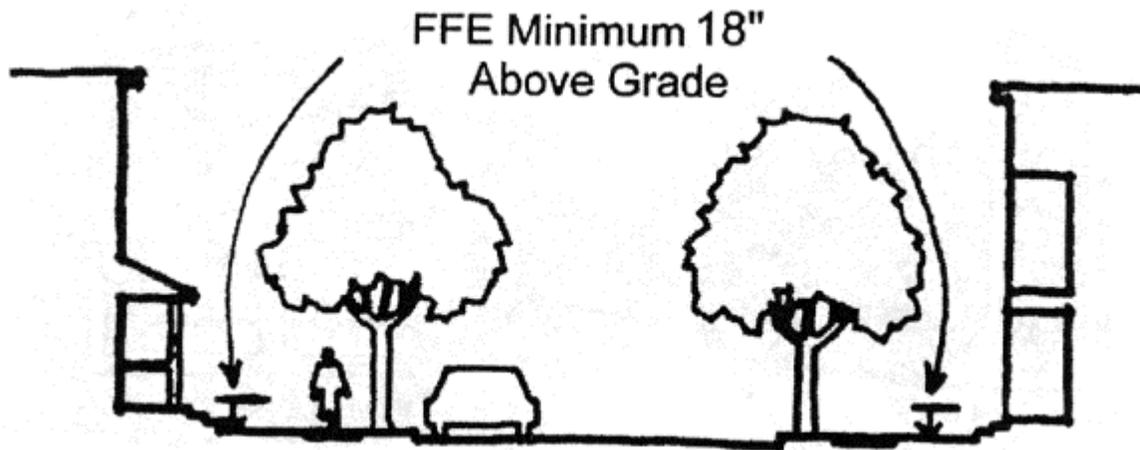


Figure 3.2.3.C-a

Objective 4: Encouragement of Pedestrian Activity

Guideline A: A parking lot must be located to the rear or side of the structure. If located at the side of the structure, the parking must be screened through the use of solid streetwalls or landscaping. Streetwalls should not exceed 4 feet in height.

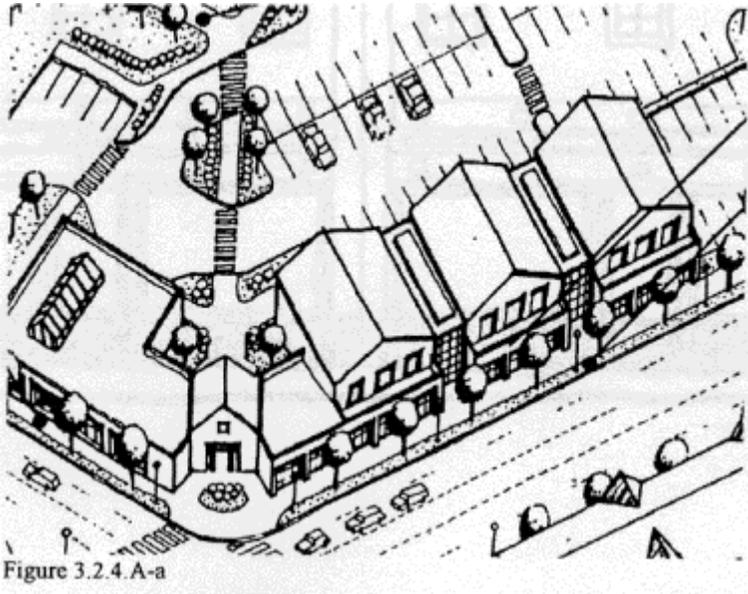


Figure 3.2.4.A-a

Guideline B: Awnings, covered walkways, open colonnades, or similar weather protection must be provided by commercial structures.



Figure 3.2.4.B-a



Figure 3.2.4.B-b

Guideline C: A commercial use must provide a minimum 50 percent of the front facade on the ground floor as clear or lightly tinted windows, doors, or other treatments sufficiently transparent to provide views into the interior of buildings.

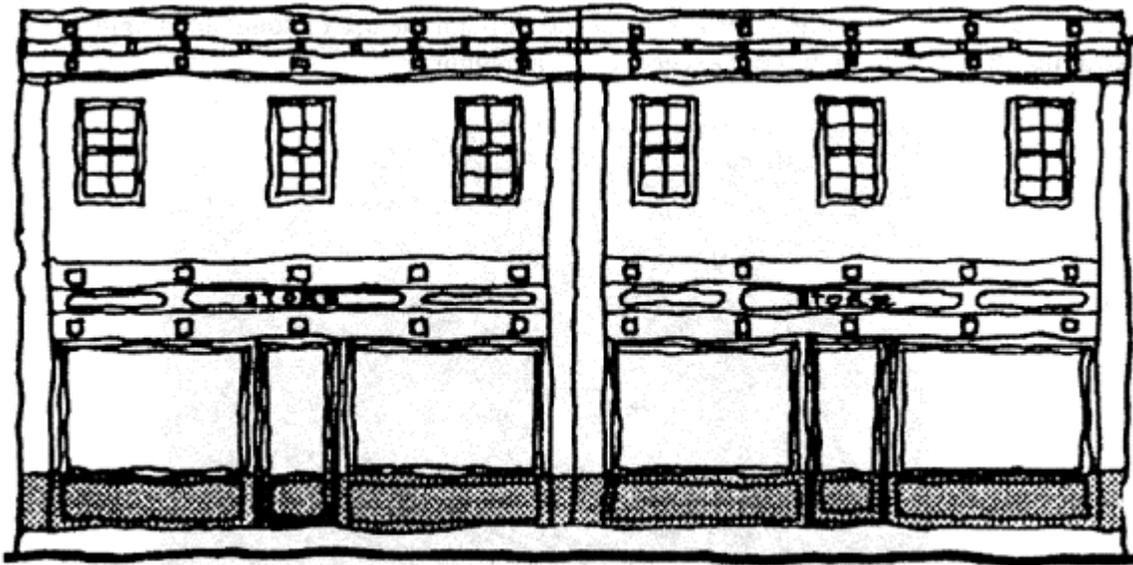


Figure 3.2.4.C-a

Guideline D: A residential structure with a front setback of 5 to 15 feet, must provide a front porch or stoop on the front facade of the structure. Minimum depth of a porch is 8 feet covering a minimum width of $\frac{3}{4}$ front of the house.



Figure 3.2.4.D-a



Figure 3.2.4.D-b

Guideline E: Rear access from an alley, where provided, is required. If driveway access is provided from the street, the garage or carport may not face the street, unless it is located a minimum 15 feet behind the front facade of the principal structure.

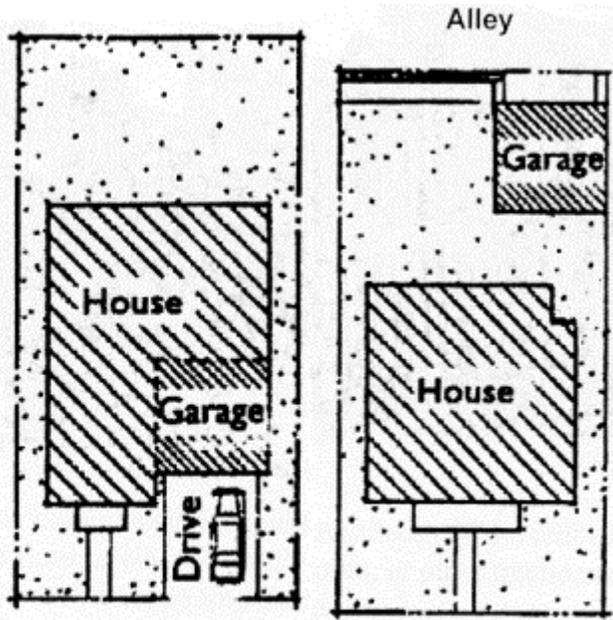


Figure 3.2.4.E-a
Not Permitted

Figure 3.2.4.E-b
Required

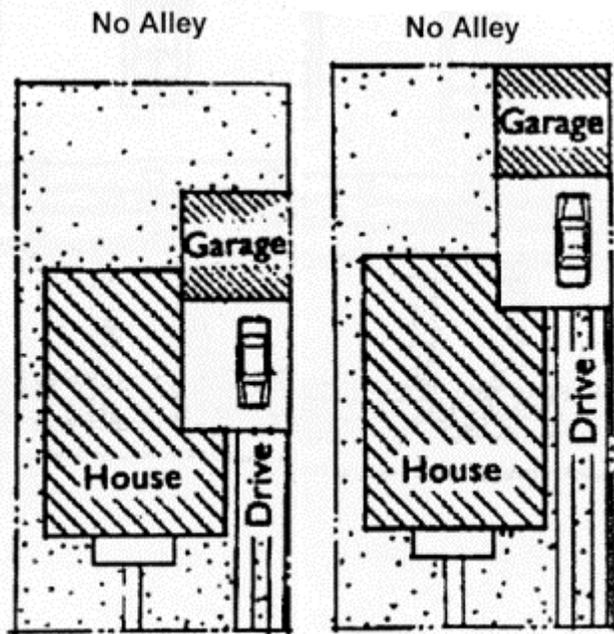
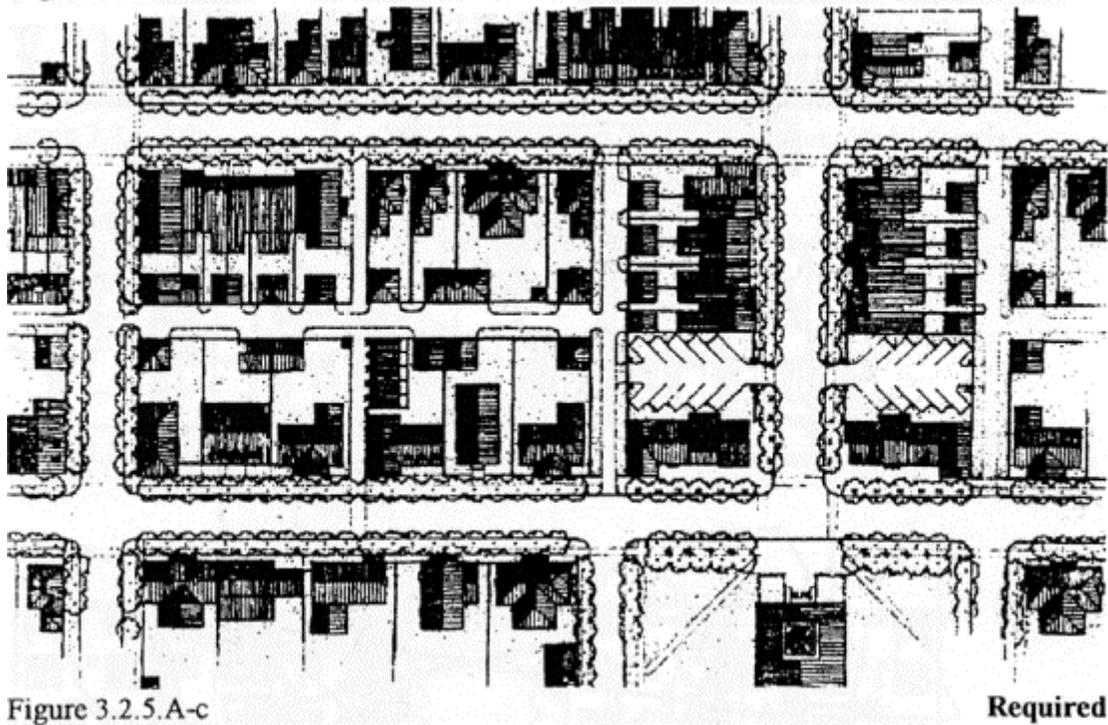
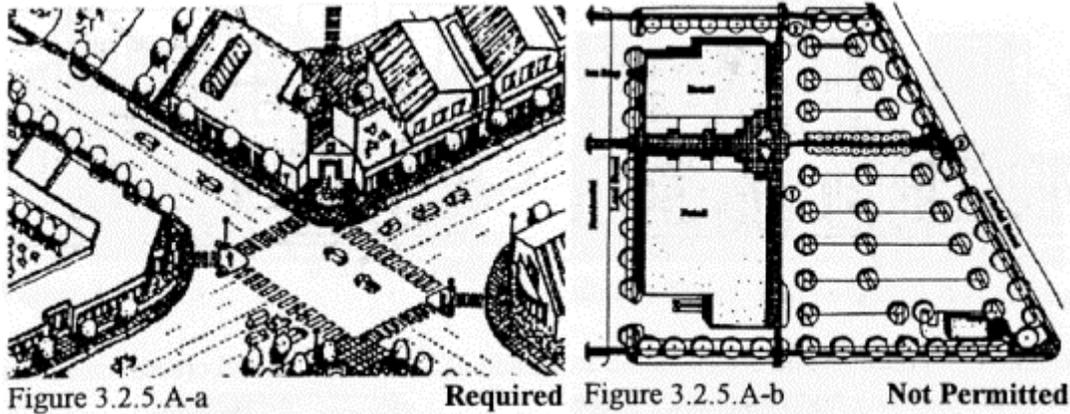


Figure 3.2.4.E-c
Permitted

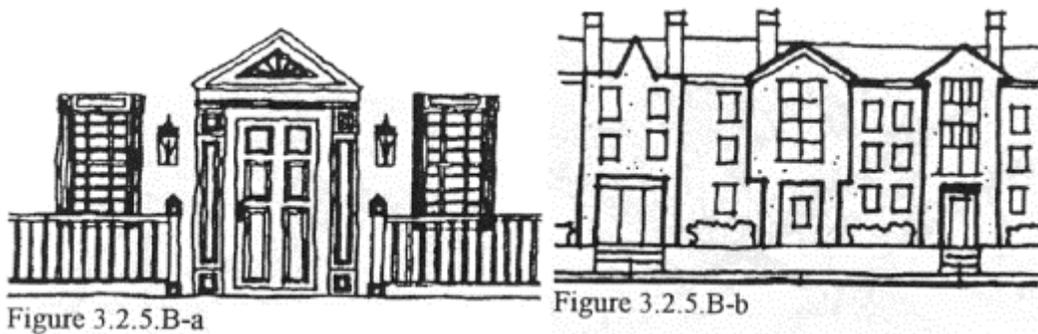
Figure 3.2.4.E-d
Permitted

Objective 5: Buildings that relate to and are oriented toward the street and surrounding buildings.

Guideline A: The structure must be located at the required setback line.



Guideline B: The main entrance of a structure must face the street and be clearly articulated through the use of architectural detailing.



Guideline C: Windows and doors on the front facade of a building should create lines of sight between the building and the street.



Figure 3.2.5.C-a

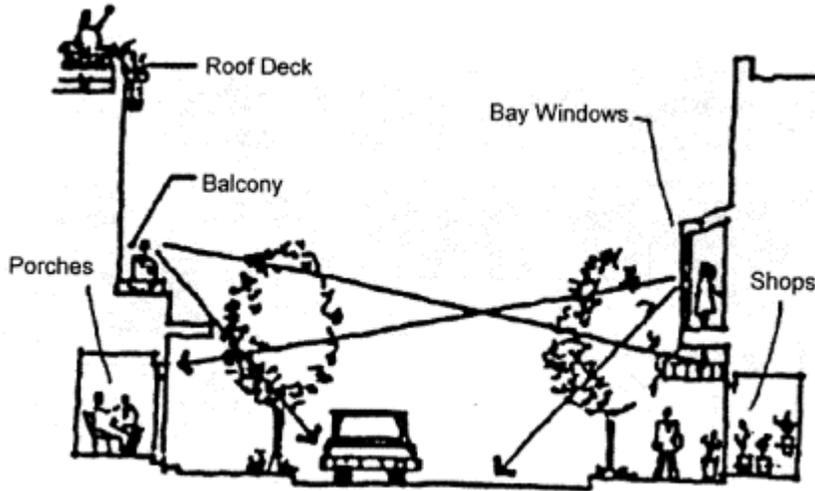


Figure 3.2.5.C-b

Objective 6: Residential scale buildings in Mixed Residential Area.

Guideline A: The height and massing of a building are not more than twice the height and massing of structures adjacent to, or across the street.



Figure 3.2.6.A-a

Building Type: Single-family Residential



Figure 3.2.6.A-b

Building Type: Duplexes, Multi-family



Figure 3.2.6.A-c

Building Type: Townhomes, Flats

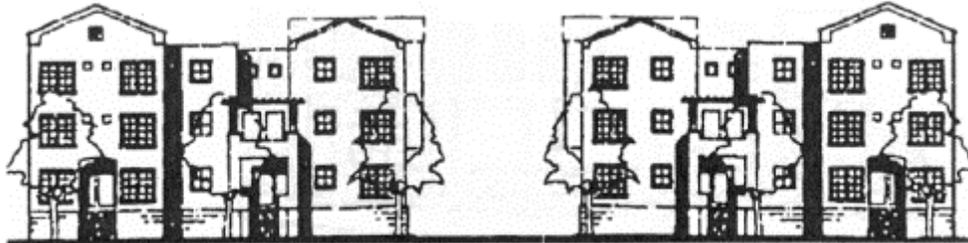


Figure 3.2.6.A-d

Building Type: Condominiums, Apartments, Flats

Objective 7: Buildings that contain special architectural features to signify entrances to the Neighborhood Center Area and important street intersections.

Guideline A: A building at an entrance to a Traditional Neighborhood District, an entrance to the Neighborhood Center, or an intersection of a main street or other significant intersection should use special architectural features to emphasize the importance of the location. Special architectural features include corner towers, cupolas, clock towers, spires, balconies, colonnades, or other similar architectural features.



Figure 3.2.7.A-a

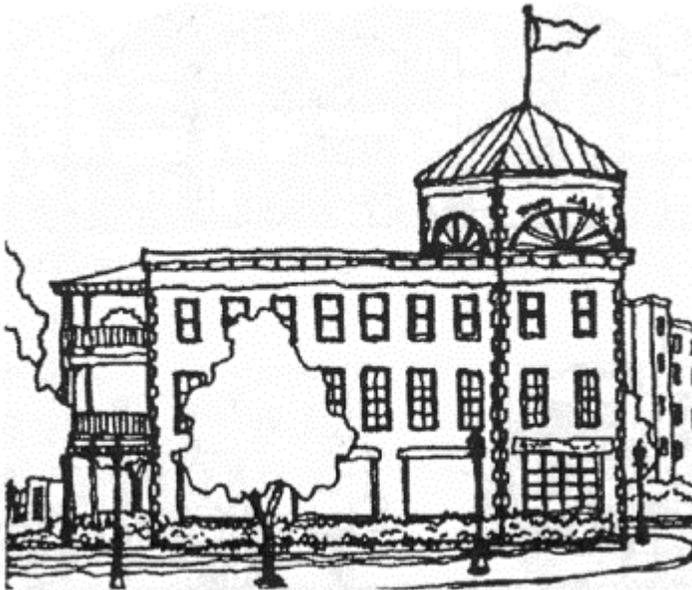


Figure 3.2.7.A-b

Objective 8: Neighborhood Center Area buildings that focus activity on the neighborhood square.

Guideline A: Structures that are located on or adjacent to a Neighborhood Square shall be a minimum of 2 stories.



Figure 3.2.8.A-a

Optional Architectural Standards

Developers may establish architectural standards for inclusion in the covenants, conditions, and restrictions developed as part of a homeowner's association for a TND. If architectural standards are developed, the developer should consider establishing an architectural review committee as part of a homeowner's association. This committee could guide future implementation and maintenance of the architectural standards in the TND. While local governments will not utilize these standards as part of the project review, the standards shall be recorded at the time of the final plat to ensure understanding and compliance of future property owners. Any architectural standards developed for a TND should consider the following:

- Permit varied, yet complimentary architectural design that promotes the integration and compatibility of land uses and building uses within a TND.
- Insure the design of buildings that provide human scale.
- Establish the importance of shared space, such as streets, streetscapes, squares, plazas, and connective open space through building location, orientation, massing and architectural design
- Architectural Character / Style(s)
- Regional or Vernacular Architectural Elements

All Buildings

- Building Materials and Exterior Finishes
- Exterior Colors
- Rooflines and Materials
- Height and Massing
- Guidelines for Architectural Compatibility

Commercial or Mixed Use Buildings:

- Proportions of Doorways, Windows and Other Openings
- Front and Corner Facade Treatments
- Awnings and Covered Walkways
- Architectural Elements to Insure Compatibility with Residential Uses
- Special Architectural Features for Important Sites
- Lighting

Residential Buildings:

- Front Porches or Stoops
- Articulation of Main Entry
- Common Architectural Elements for Various Residential Uses

Open Space Character:

- Architectural/Development Standards
- Landscape Standards

Streetscape Character:

- Streetscape Character
- Landscape Standards
- Plant List

10.4 Street and Streetscape Design Character

1. TND Street Character

In a Traditional Neighborhood District, streets and streetscapes serve multiple purposes. These include movement of automotive traffic and transit vehicles, pedestrian and bicycle pathways, areas for public interaction, and areas for placement of street trees and landscaping.

Streets are designed to balance the needs of all users, and streetscape design is critical to this balance. The streetscape consists of sidewalks and amenities such as street trees and street furniture. Street widths are reduced to slow traffic and the network of interconnected streets disperses traffic and promotes efficient movement for all modes of transportation. Pedestrian activity is encouraged by providing wide sidewalks, on-street parking, and an appealing streetscape.

The street standards used within the different areas of a TND may vary depending on the proposed function of the roadway, the anticipated land use, the anticipated traffic load, and the desired character of the surrounding area. Special consideration should be given to street layout to minimize through traffic and the potential for inappropriate vehicle speeds. Recommended designs include limiting the length of through streets, introduction of a rotary or traffic circle, shifting of the street network through the use of T-intersections, or other similar techniques.

The following sections provide classifications, definitions, and illustrations of street and streetscape standards. Additional innovative street types may be permitted within a TND if approved by the Town Council.

2. TND Street Classifications and Streetscape Sections

Neighborhood Center Boulevard

A Neighborhood Center Boulevard is a thoroughfare providing long distance connections between the Neighborhood Center and the periphery of the TND. The boulevard is divided by a median planted with trees along its length. Adjacent land uses include retail, commercial, mixed-use, and multi-family residential.

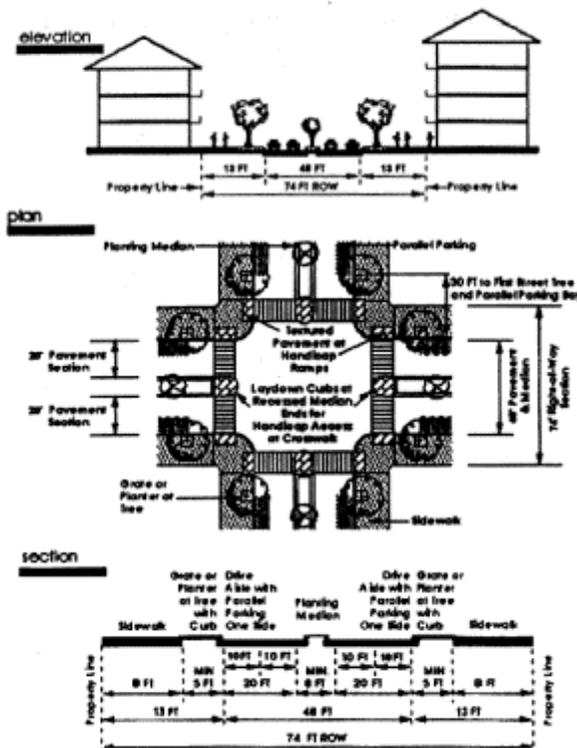
Transit Stop: If transit service is provided, no parking zones shall be designated for a minimum 50 feet adjacent to all transit stops to allow for loading and unloading passengers.

Typical ADT Range	greater than 3,000
Design Speed	30 mph
General Length	1 mile or less
Minimum Curb Basis	13 feet
Right-of-way width	74 feet
Paving	2 lanes @ 20 feet, 6-10' median
Parking	2 sides
Minimum Corner Radius	25 feet

3. (drawings below do not reflect dimensions above)

Neighborhood Center Boulevard

Figure 4.2.1-a

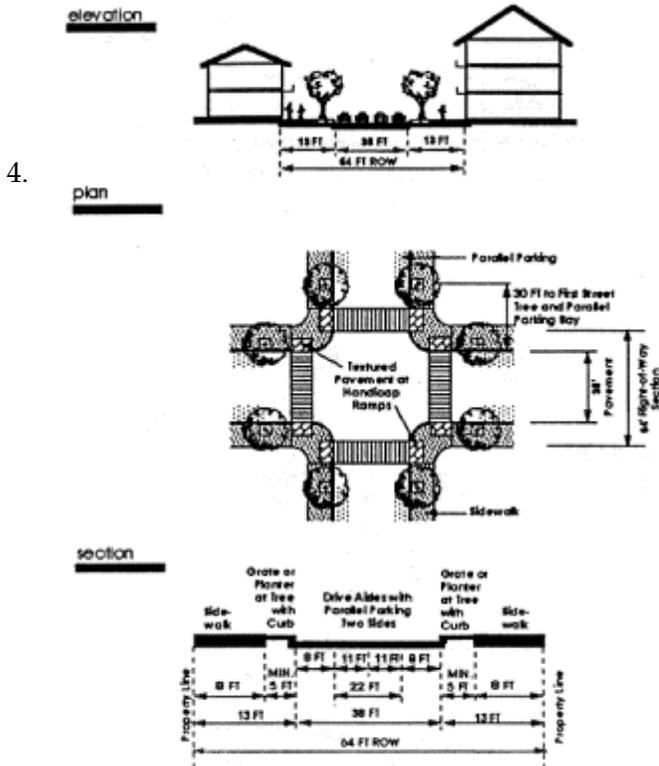


Neighborhood Center Street

A Neighborhood Center Street is a primary commercial/retail street within a Neighborhood Center. This street is the commercial spine for the TND and must be designed to encourage pedestrian activity. Adjacent land uses include retail, commercial, and mixed-use.

Transit Stop: If transit service is provided, no parking zones shall be designated for a minimum 50 feet adjacent to all transit stops to allow for loading and offloading passengers.

Typical ADT Range	greater than 2,000
Design Speed	30 mph
General Length	less than ½ mile
Minimum Curb Basis	13 feet
Right-of-way width	64 feet
Paving	38 feet
Parking	2 sides
Minimum Corner Radius	25 feet



Neighborhood Center Alley

A Neighborhood Center alley is a narrow route providing business and residential access in the Neighborhood Center. Loading areas, trash collection, utility location, and access to parking lots are accommodated by the alley.

Typical ADT Range	300-600
Design Speed	10 mph
General Length	less than 600 feet
Minimum Curb Basis	2.5 feet
Right-of-way width	25 feet
Paving	20 feet
Parking	not permitted
Minimum Corner Radius	25 feet

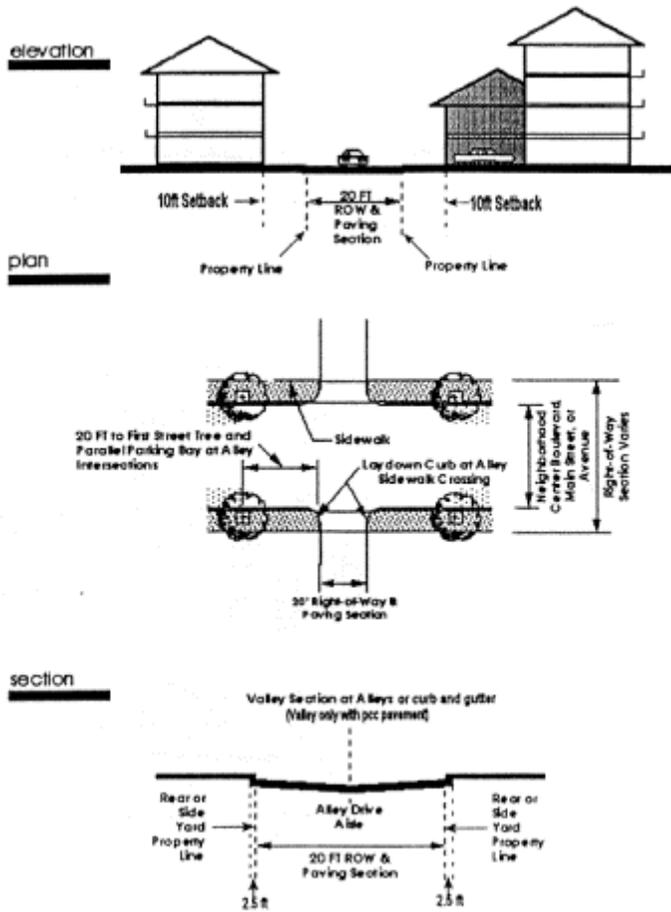
5. Mixed Residential Boulevard

A Mixed Residential Boulevard is a thoroughfare providing long distance connections between a Mixed Residential area and the periphery of a TND. A boulevard is divided by a median planted with trees along its length. Adjacent land uses include primarily multi-family residential, townhouse, condominium, and commercial at limited corner locations.

Transit Stop: If transit service is provided, no parking zones shall be designated for a minimum 50 feet adjacent to all transit stops to allow for loading and unloading passengers.

Typical ADT Range	greater than 2,500
Design Speed	30 mph
General Length	less than 1 mile
Minimum Curb Basis	10 feet
Right-of-way width	68 feet
Paving	2 lanes @ 20 feet, 8' median
Parking	2 sides
Minimum Corner Radius	20 feet

6. (drawings below do not reflect dimensions above)

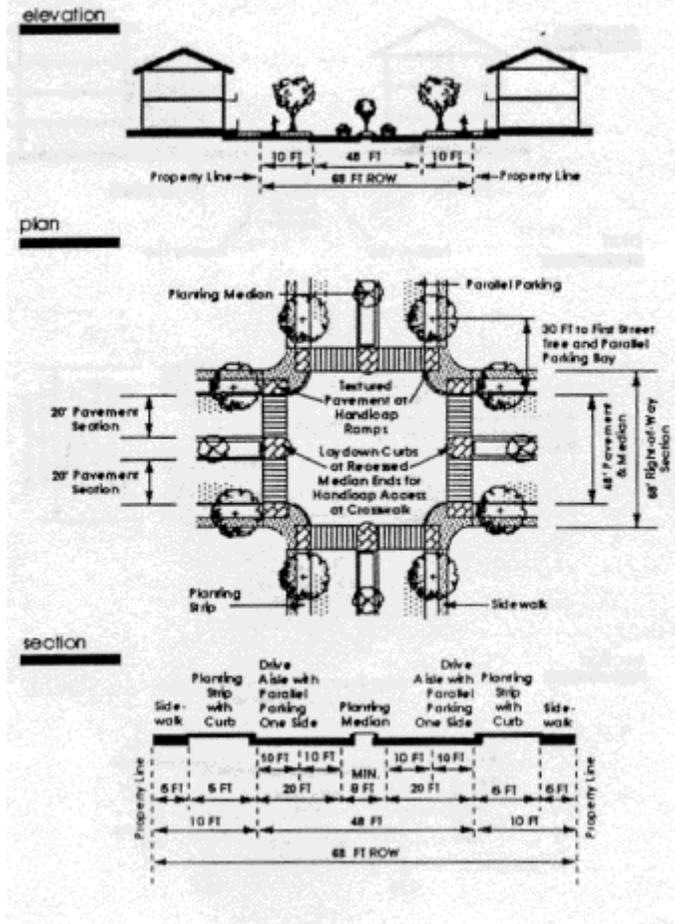


Mixed Residential Street

A Mixed Residential Street is a short thoroughfare that connects important locations within a Mixed Residential area. Adjacent land uses include multi-family residential, townhouse, condominium, commercial at limited corner locations, and single-family residential.

Typical ADT Range	1000-2000
Design Speed	30 mph
General Length	less than ½ mile
Minimum Curb Basis	11 feet
Right-of-way width	56 feet
Paving	36 feet
Parking	2 sides
Minimum Corner Radius	20 feet

7. (drawings below do not reflect dimensions above)



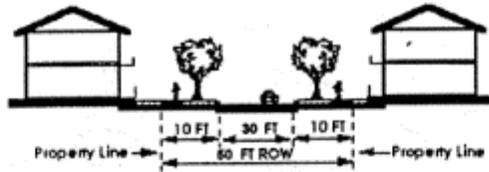
Mixed Residential Lane

A Mixed Residential Lane is a small scale, low speed roadway serving primarily single-family residential land uses.

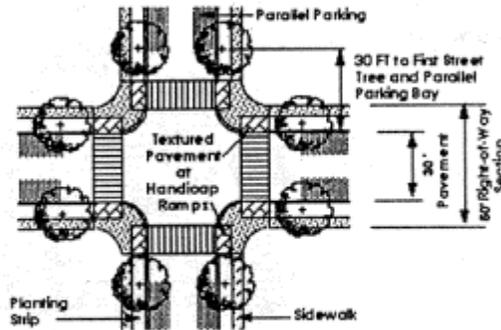
Typical ADT Range	less than 500
Design Speed	30 mph
General Length	less than ¼ mile
Minimum Curb Basis	10 feet
Right-of-way width	50 feet
Paving	30 feet
Parking	2 sides
Minimum Corner Radius	20 feet

8. (drawings below do not reflect dimensions above)

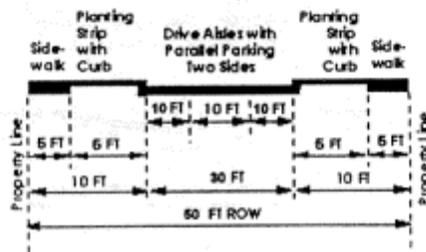
elevation



plan



section

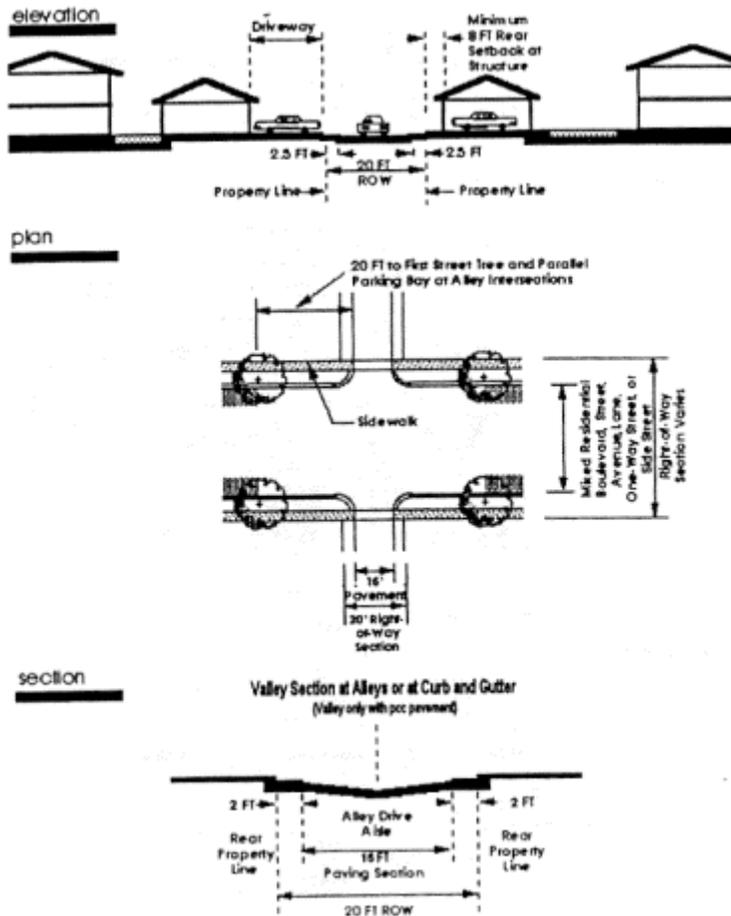


Residential Alley

A Residential alley is a narrow route providing rear access to single-family residential, multi-family, townhouse, condominium, and commercial uses within the Residential area. Trash collection, utility location, and access to parking are accommodated by the alley.

Typical ADT Range	300-600
Design Speed	10 mph
General Length	less than 600 feet
Minimum Curb Basis	2 feet
Right-of-way width	20 feet
Paving	14 feet
Parking	not permitted
Minimum Corner Radius	20 feet

9. Note: minimum rear setback at structure shall be 8 feet

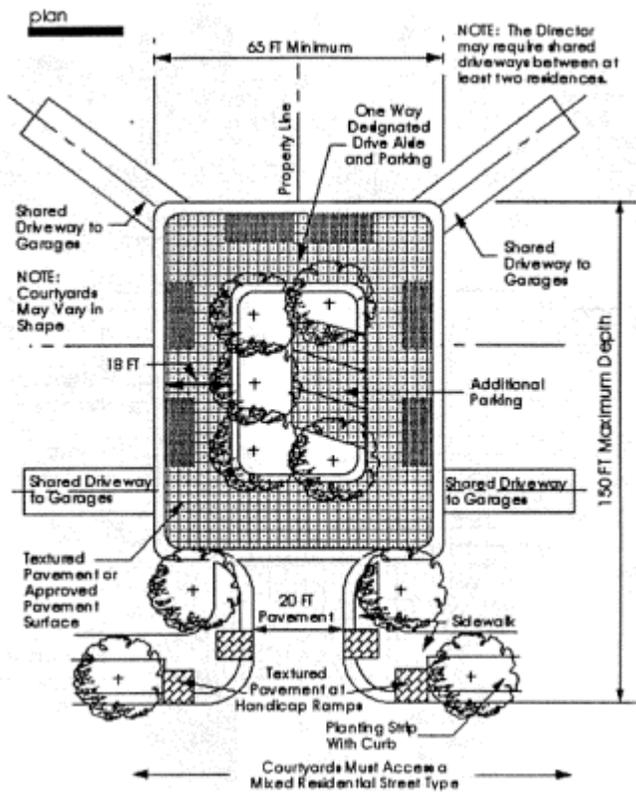


Mixed Residential Courtyard

A Mixed Residential Courtyard is intended for areas where alleys are not feasible or appropriate, shall not exceed a maximum length of 150 feet and be limited to one-way circulation. Use of the Mixed Residential Courtyard requires approval of the Town Council.

Typical ADT Range	less than 200
Design Speed	10 mph
General Length	150 feet maximum
Minimum Curb Basis	2 feet
Right-of-way width	65 feet
Paving	20 feet approach; 18 feet aisle
Parking	1 side at designated spaces only

10. Note: shared driveway approaches are not permitted, standard turning radii shall be used to accommodate safety and service vehicles and minimum rear setback at structure shall be 8 feet.



Rotary

A Rotary is intended as a traffic control device to minimize higher speed through traffic. A rotary may be used in a neighborhood center or a mixed residential area. The Rotary should not be used for streets with higher traffic volumes.

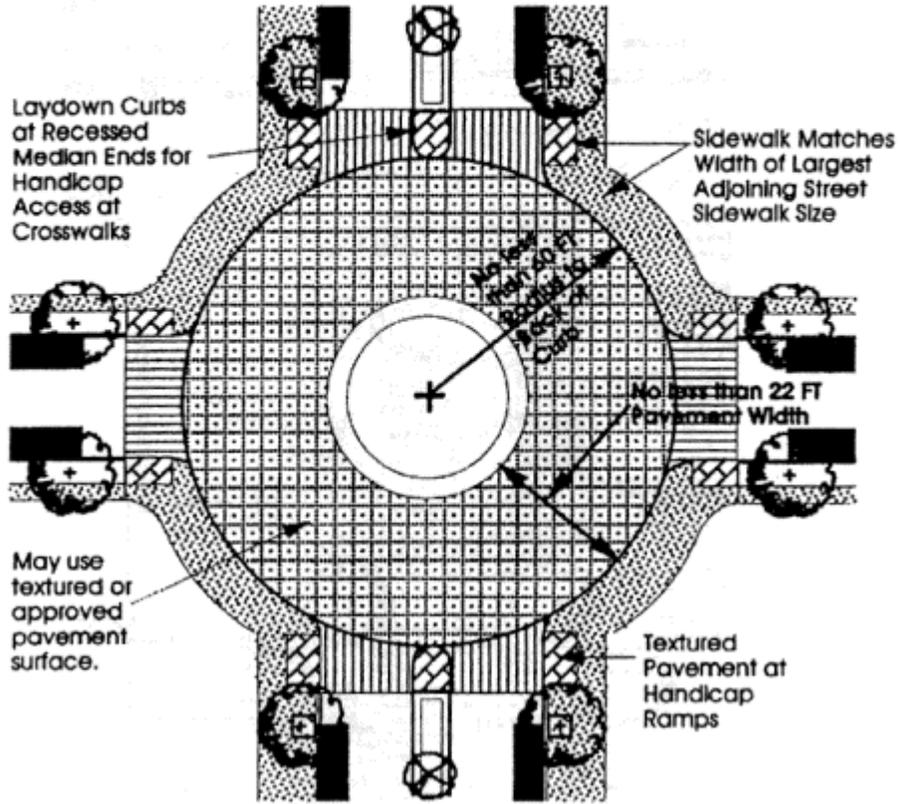
Typical ADT Range	less than 1000
General Length	N/A
Minimum Curb Basis	4-10 feet
Right-of-way width	varies
Paving	22 feet
Parking	not permitted
Outside Radius	60 feet minimum to curb face

11. (drawing below does not reflect dimensions above)

Rotary

Figure 4.2.13-a

plan



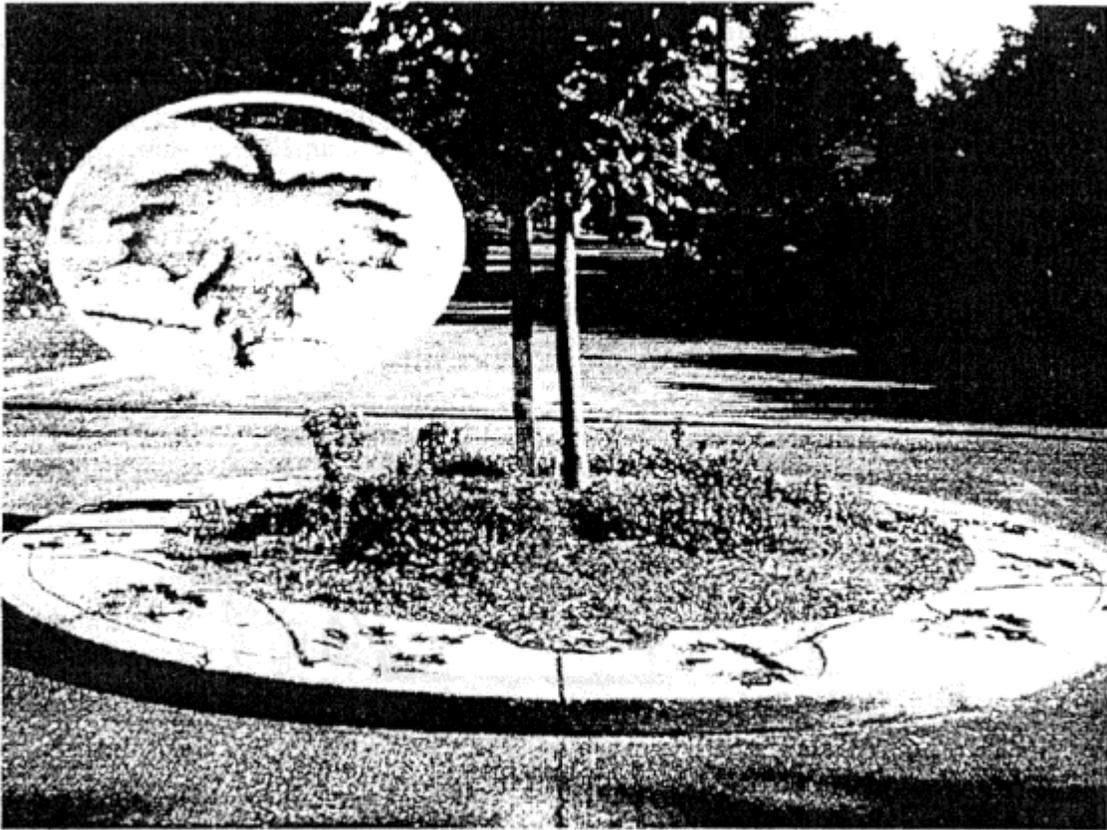


Figure 4.2.13-b

Pedestrian Path

A Pedestrian path is designed to provide safe, convenient routes for pedestrians. A pedestrian path is required for a block over 800 feet in length and is encouraged throughout the TND. A pedestrian path should provide efficient connections to other paths or walkways and should be designed to maximize visibility and security.

Path Right-of-Way Width	25 feet (not less than 20 feet)
Path Paving Width	10 feet minimum
General Length	N/A

12.

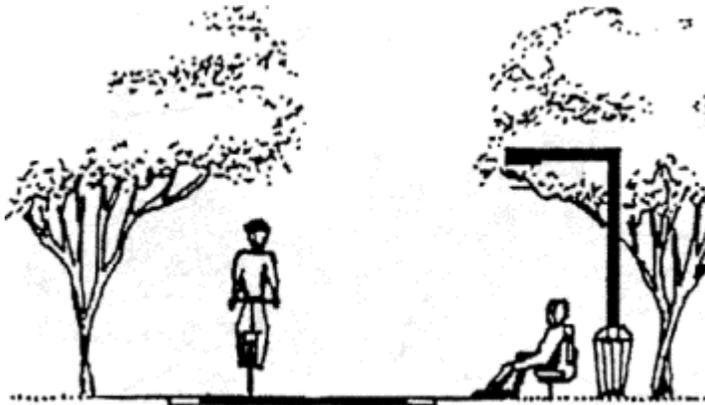


Figure 4.2.14-a



Figure 4.2.14-b

13. Employment Center and Workshop Streets

TND Street Types

The following may be used within the Employment Center and Workshop Optional Areas:

1. Neighborhood Center Boulevard
2. Neighborhood Center Main Street
3. Neighborhood Center Alley
4. Mixed Residential Boulevard
5. Mixed Residential Street
6. Rotary

10.5 Neighborhood Edge Streets

10.4.1 TND Street Types

The following may be used within the Neighborhood Edge Area:

- a. Mixed Residential Street
- b. Mixed Residential Alley
- c. Mixed Residential Courtyard
- d. Rotary

10.6 Location of Transit Facilities and Definitions

Major facilities such as Transit Centers, Park and Ride Centers, or Transportation Terminals should be located in or adjacent to activity centers such as the Neighborhood Center, Employment Center, Workshop Area, or along major roadways adjacent to the Traditional Neighborhood District. Major Transit Facilities should avoid locations which directly impact low density residential areas.

For the purposes of transit planning within a TND the following definitions shall apply:

10.6.1 Transit Stop

A location where passengers board and alight. Bus stops can serve one or more routes and include various levels of amenities depending on the level of actual or anticipated ridership. Amenities can include: bus stop sign pole, benches, trash receptacles, shelters and lighting. Bus stops can be placed within the public right-of-way or on private property depending on service needs and passenger comfort.

10.6.2 Transfer Center

A facility where two or more routes meet, located with on-street amenities (within R.O.W. such as shelters, turn-in area, etc.). This facility is essentially a bus stop but may include expanded amenities due to high ridership and transferring at a particular site. Ideal settings are located near smaller residential, business, or mixed-use neighborhood core areas where no layover activity is required.

10.6.3 Transit Center

An off-street facility serving four or more routes allowing for improved connections between routes, appropriate passenger amenities, and layover area. The center may accommodate a limited number of parking spaces to encourage ridership on local, express, or flyer services. Ideal setting is located adjacent to a mix of land uses and next to major arterial roadways. The design of the facility should seek to blend into the surrounding area and look for opportunities for joint uses.

10.7 Open Space Design Criteria

A. Open Space Character

Open space is one of the central organizing features within a Traditional Neighborhood District. Open space is distributed throughout the neighborhood and is accessible to all residents. The basic hierarchy of open space includes formal types such as squares, plazas, and greens, less formal parks, and least formal greenbelts and preserves.

In addition to meeting the recreational needs of residents, open space provides a structure that organizes and defines the neighborhood. It provides gathering places and opportunities for interaction within the community. Generally, open space is not fenced except for major private open space improvements. This section provides explanations of the various types of open space and illustrations of typical configurations.

B. TND Open Space Definitions and Requirements

1. Green

Green means an open space available for unstructured recreation, its landscaping consisting of grassy areas and trees. A Green should be designed for passive and unstructured active recreation. Improvements to the green may consist of paths, benches, landscaping, and other improvements.

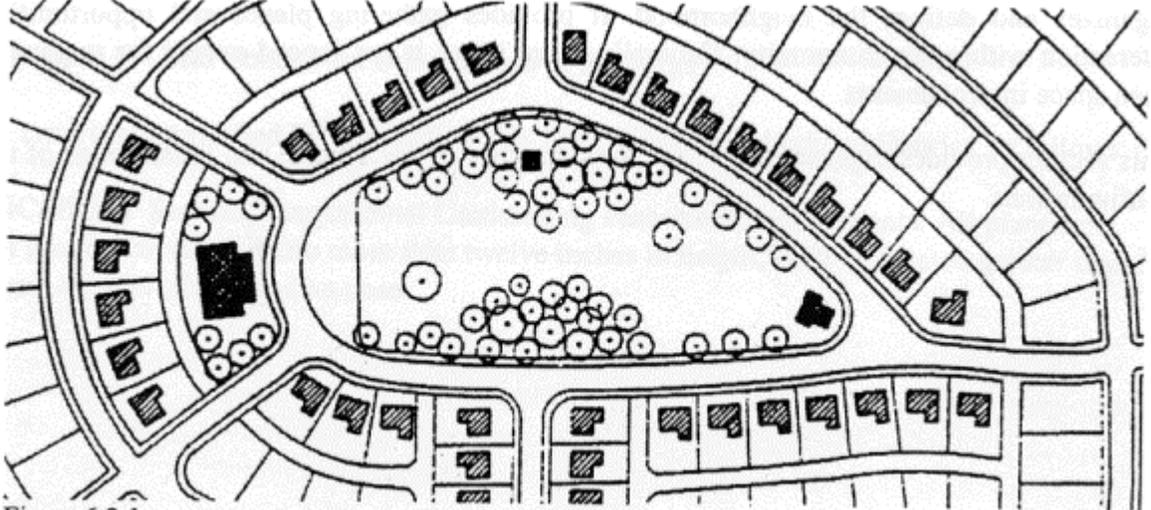


Figure 6.2.1-a

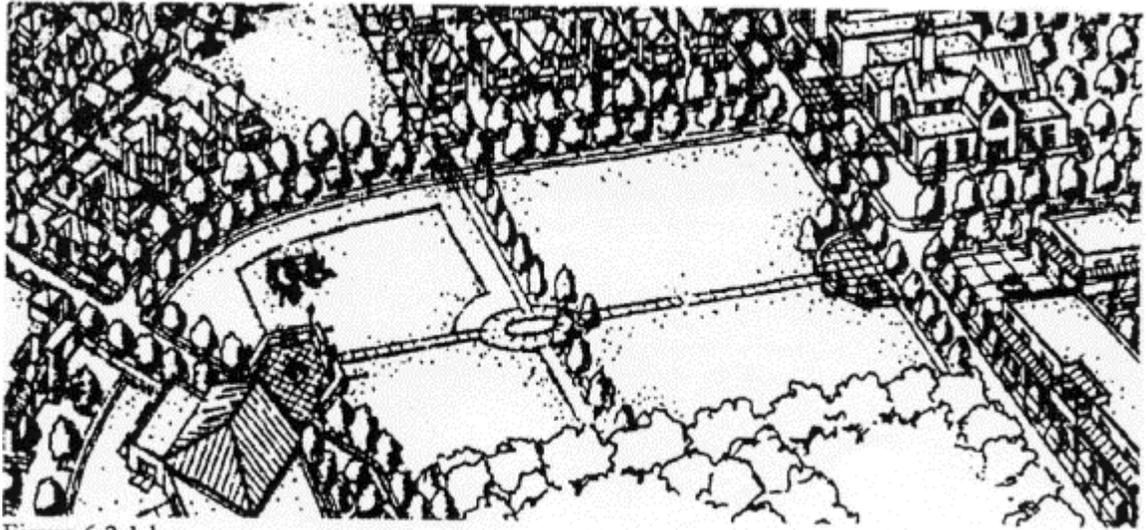
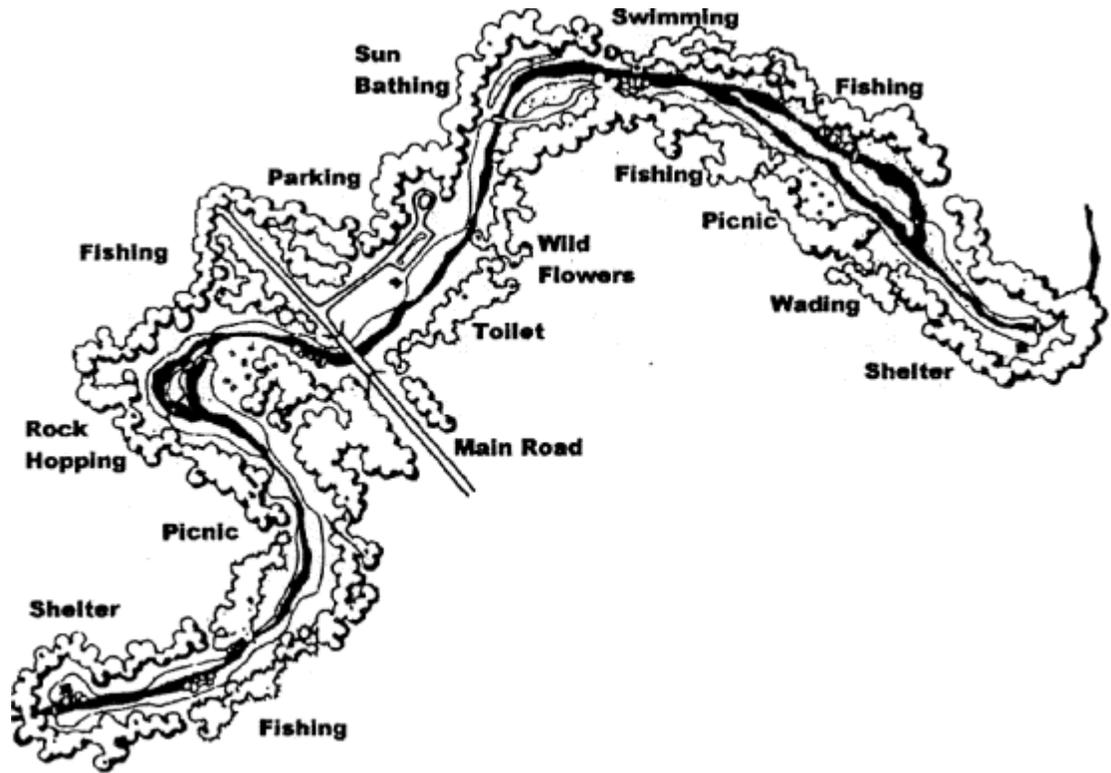


Figure 6.2.1-b

2. Greenbelt

Greenbelt means a series of connected open space that follow natural features such as ravines, creeks or streams. A Greenbelt is usually a combination of natural vegetation and landscaped or regularly maintained areas. Ideally, a greenbelt will provide pedestrian and bicycle connections to other open spaces in a larger open space system or to destinations such as schools, libraries, and neighborhood commercial areas. Perimeter roads along one or both sides of a greenbelt are encouraged for several reasons: 1) a roadway provides almost unlimited access as it parallels a greenbelt; 2) a roadway provides public observation of activities within a greenbelt, making it a safer place; 3) a greenbelt provides the motorist with an aesthetic contrast to the built environment. If access to a greenbelt is not continuous, then frequent access points should be provided as described in the following sections. Greenbelt width requirements are intended to promote a sense of openness and avoid a sense of enclosure.



3. Park

Park means an open space, available for recreation, its landscape consisting of paved paths and trails, open lawn, trees, open shelters, or recreational facilities. Facilities may range from simple picnic tables, benches, or a playground in a small park, to a recreation center, swimming pool, or sport field in a larger park. Other facilities may include playgrounds, shelters, sport courts, drinking fountains, parking lots, or restrooms. Park grounds are usually grassy and maintained on a regular basis for recreational activity, but may include some natural, or formally landscaped areas.

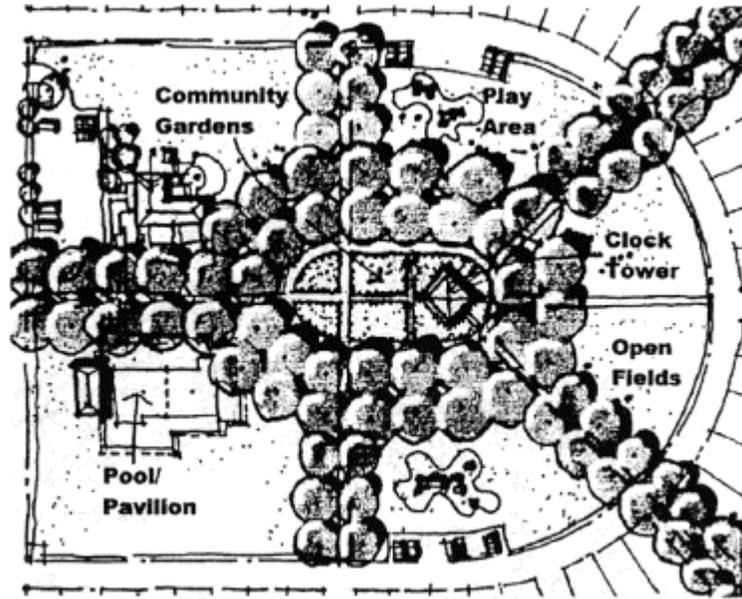


Figure 6.2.3-a

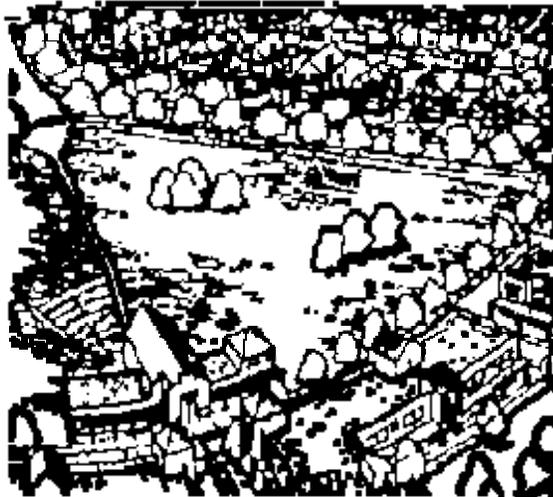


Figure 6.2.3-b

4. Plaza

Plaza means open space usually at the intersection of important streets, set aside for civic purposes and commercial activity, including parking, its landscape consisting of durable pavement and formal tree plantings. A Plaza is usually bordered by civic or private buildings. Plazas may range from very active places with adjacent complimentary uses such as restaurants and cafes, to quiet areas with only seating, formal landscape plantings, and amenities such as fountains or public art.

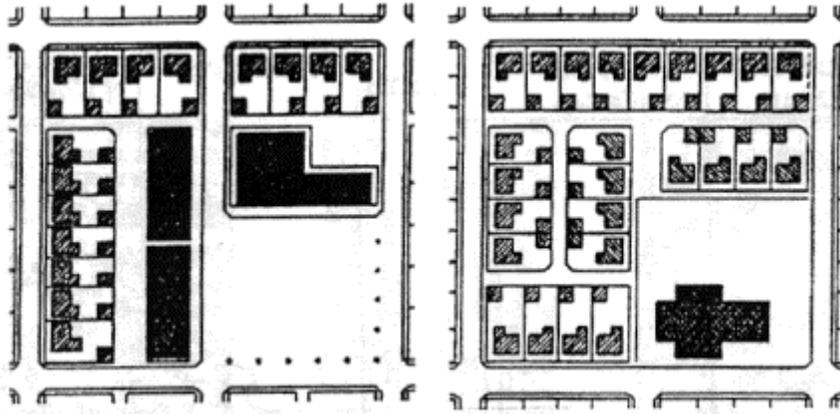


Figure 6.2.4-a

Figure 6.2.4-b

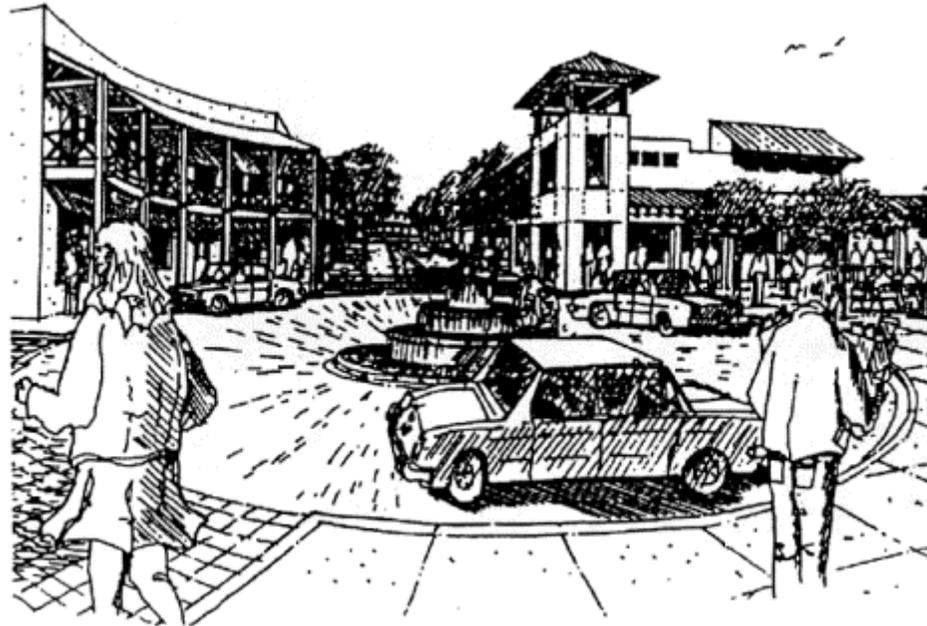


Figure 6.2.4-c

5. Preserve

Preserve means open space that preserves or protects endangered species, a critical environmental feature, or, other natural feature. Access to a Preserve may be controlled to limit impacts on the environment. Development of the Preserve is generally limited to trails, educational signs, and similar improvements.

Figure 6.2.5-a

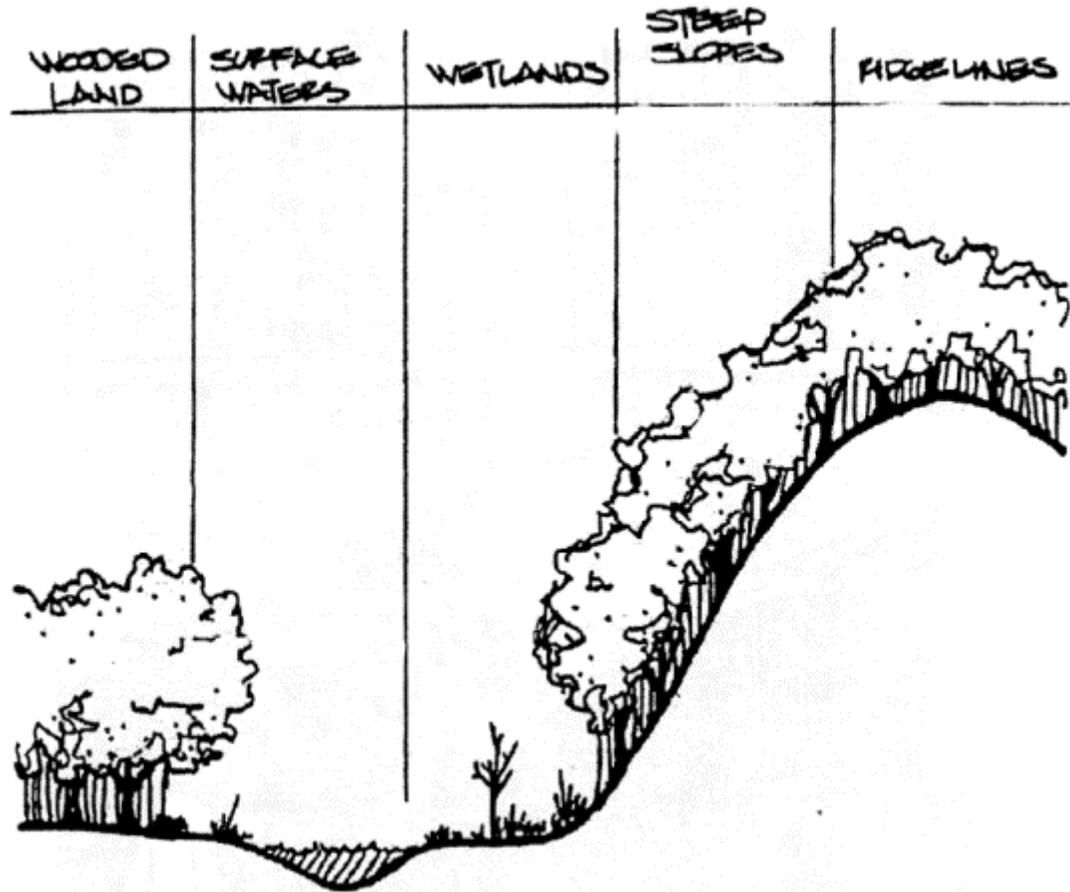


Figure 6.2.5-a

6. Square

Square means open space that may encompass an entire block, is located at the intersection of important streets, and is set aside for civic purposes, with landscape consisting of paved walks, lawns, trees, and civic buildings. A Square is bordered by streets and may have Major Civic uses located on or adjacent to the Square. The Neighborhood Square is intended as a central place for the community and should accommodate a wide variety of formal and informal gatherings.

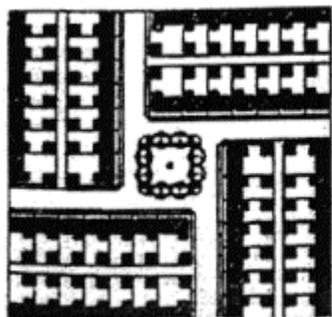


Figure 6.2.6-a

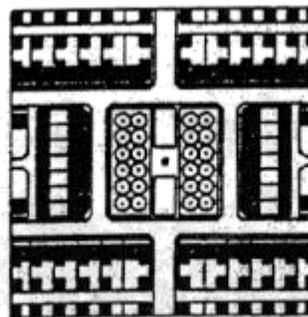


Figure 6.2.6-b

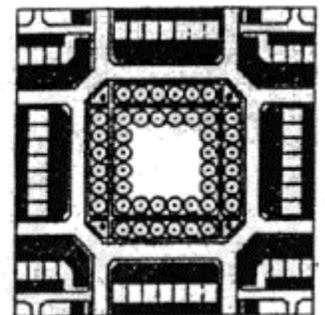


Figure 6.2.6-c

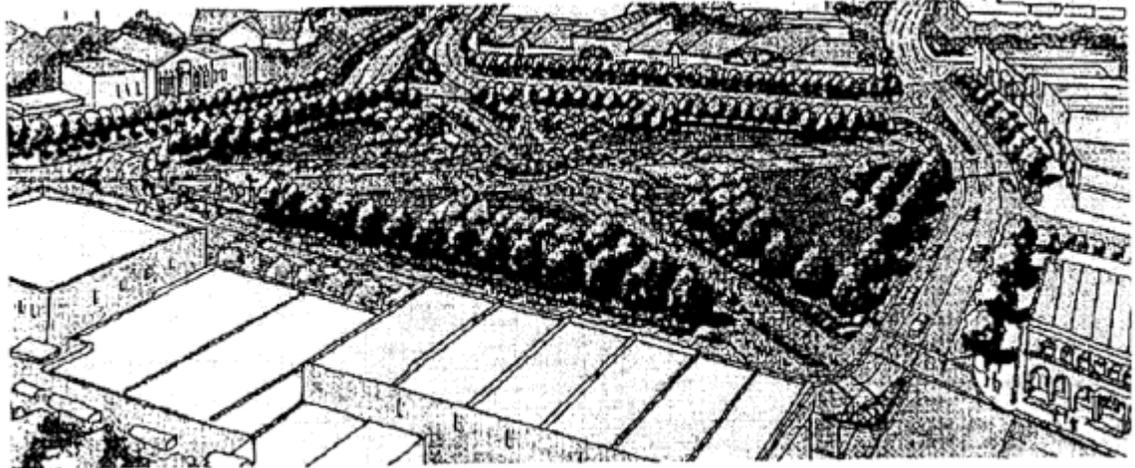


Figure 6.2.6-d

C. Access Standards for Greenbelts

For greenbelts located behind dwellings, the following access requirements shall apply. Access points to the greenbelt shall be located at intervals of not more than one-fourth mile, be a minimum width of 25 feet, and not exceed the depth of adjacent lots or 100 feet, whichever is greater.

When development is adjacent to a greenbelt and fencing is provided between the development and the greenbelt, fencing shall be of an open design to promote visibility and security.

10.8 Landscape Design Criteria

1. TND Landscape Character

This section provides criteria for the spacing and location of street and median trees.

Due to the more urban character of a TND, the area available for landscaping of individual lots is in many cases limited. For example, if a building is located at the front property line in the Neighborhood Center, there is no front street yard (one of the current criteria for defining landscape requirements). In a TND, landscaping is provided in the form of street trees, and landscaped open space such as squares, parks and plazas. Landscaping is required for large street yards and parking lots.



2. TND Landscape Criteria and Illustrations

1. Location and Spacing of Street Trees

In a Mixed Residential Area, trees shall be planted along all streets except mixed residential side streets. Street trees shall be located in the planting strip or planter within the street right-of-way, spaced a maximum 30 feet on center. Spacing may be varied to minimize conflicts with utility meters. Exact spacing is evaluated on a site-specific basis.

In a Neighborhood Center, street trees shall be planted on all streets in accordance with the Town of Sharpsburg Tree Protection & Landscape Ordinance for Landscape Planting Strip Requirements. In areas of concentrated retail activity, such as a Neighborhood Center Main Street, street trees may be grouped to minimize obstruction of views to retail uses.

No more than 40 percent of the street trees shall be of one specie. Care should be taken in selecting street trees to avoid specie which suffer from limb drop, heavy fruit or nut crops, invasive root systems, or allergen production. In locations where healthy and mature shade trees currently exist, the requirements for new trees may be waived or modified.

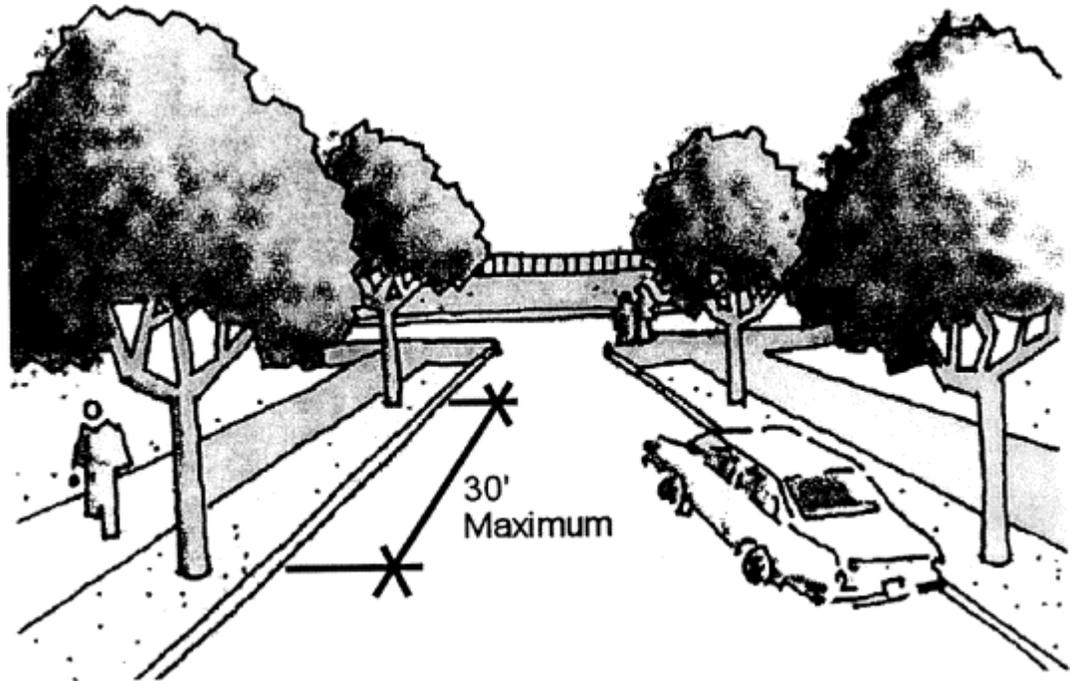


Figure 7.2.1-a

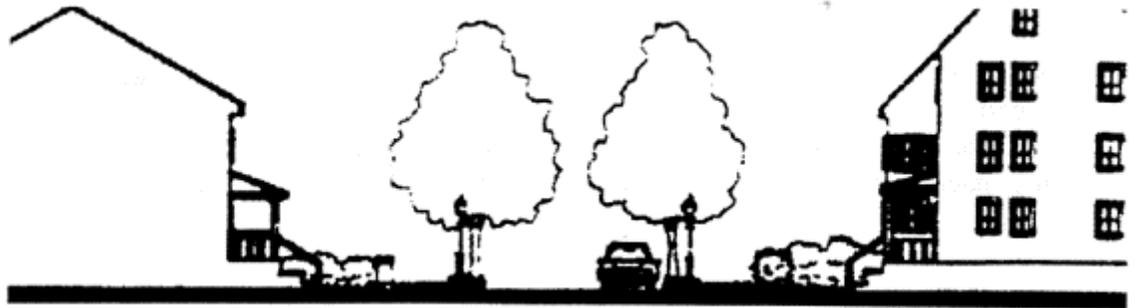


Figure 7.2.1-b

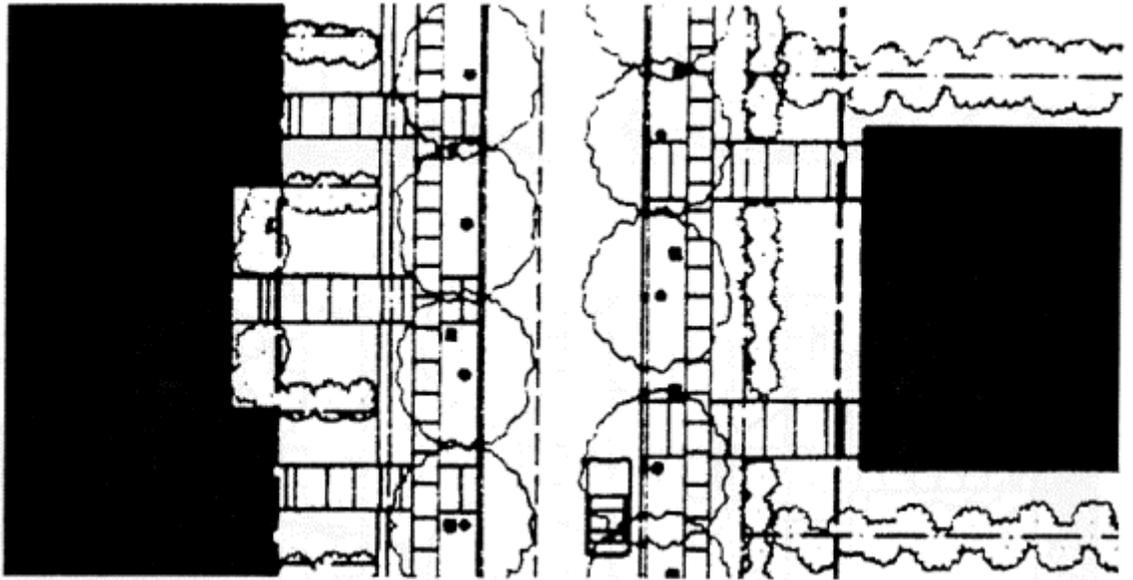


Figure 7.2.1-c

2. Median Trees and Landscaping

On a Mixed Residential or Neighborhood Center Boulevard, median trees and landscaping are required. Median trees should be a minimum 1 1/2 inch caliper, spaced 20 feet on center. Ornamental species are preferred. Medians may also contain shrubs and plant groundcover. The location and spacing of median trees may be modified with the approval of the Town's Landscape Architect.



Figure 7.2.2-a

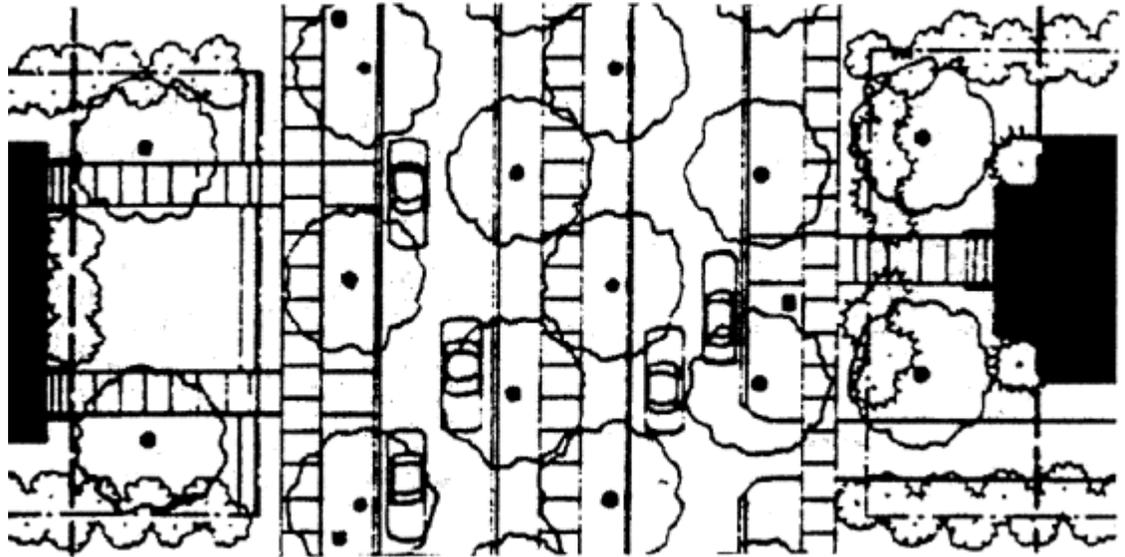


Figure 7.2.2-b

3. Installation of Streetscape Landscaping

Please see Town of Sharpsburg Tree Protection and Landscape Ordinance.

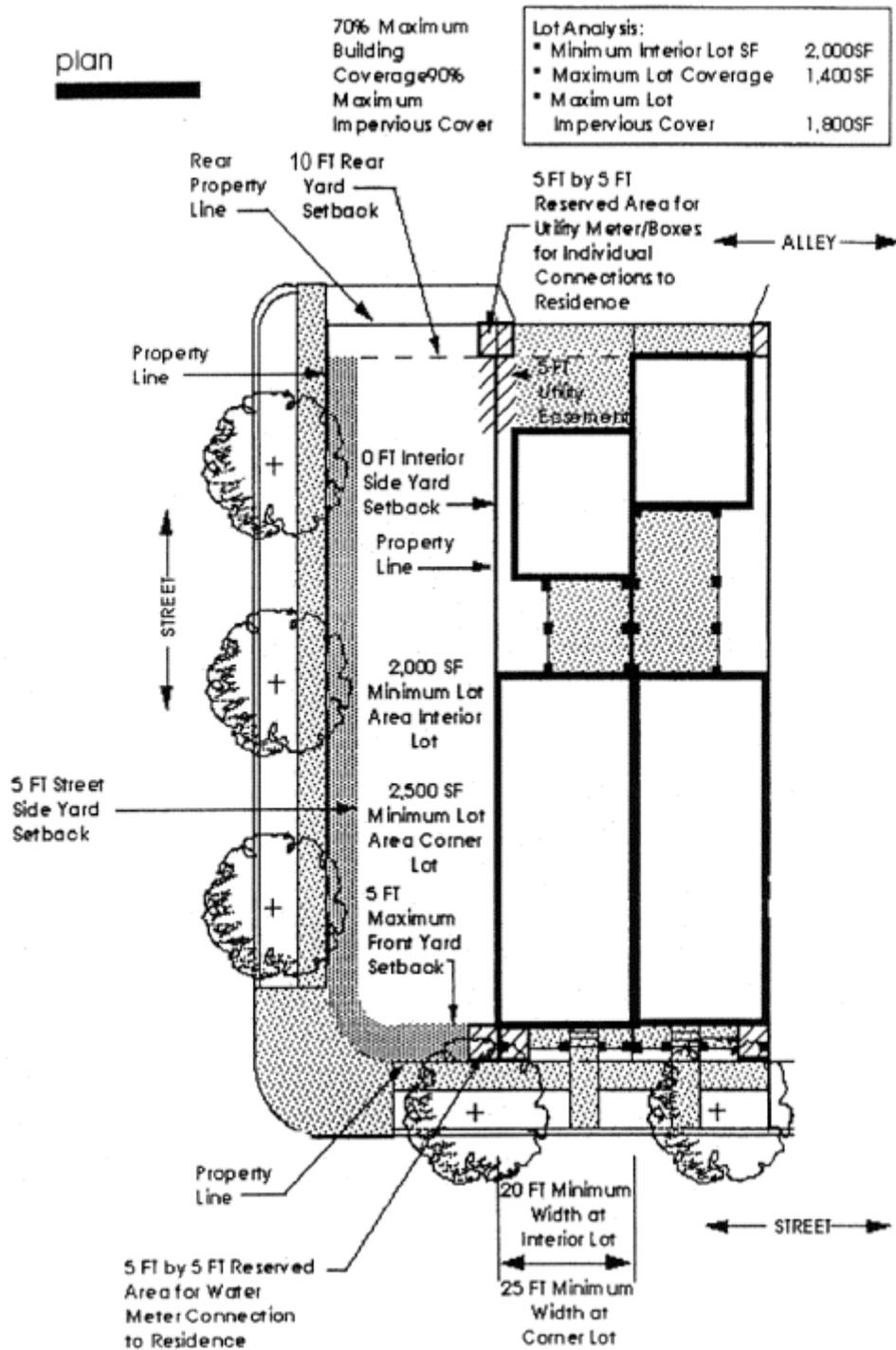
10.9 Site Development Design Criteria

TND Typical Lots

All of the drawings in this section are not consistent with the provisions in the Town of Sharpsburg Zoning Ordinance.

The following section contains typical lot illustrations showing minimum lot sizes, setbacks, maximum building cover, maximum impervious cover, easements, and possible building locations. The typical lots are intended to clarify and illustrate the site development standards found in the Traditional Neighborhood District Ordinance.

1. Neighborhood Center Type Lots
 Neighborhood Center Townhouse Lot

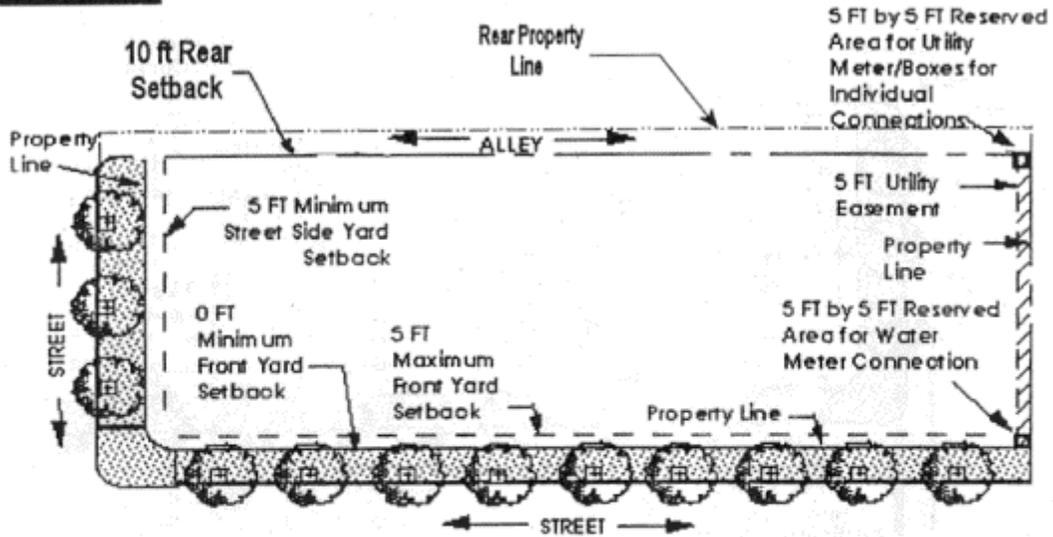


Neighborhood Center Commercial/Multi-family Lot

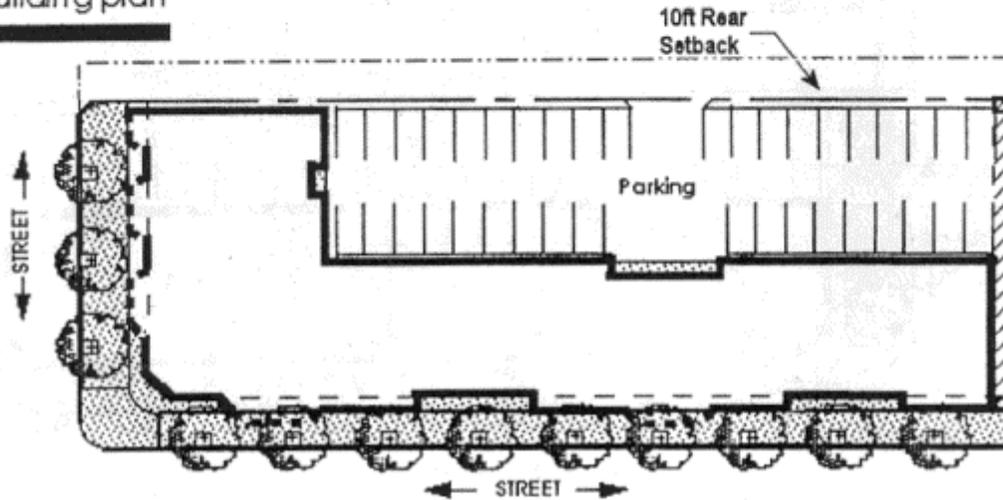
90% Maximum Impervious Cover
70% Maximum Building Coverage

Lot Analysis:	
▪ Maximum Lot SF	43,560SF
▪ Maximum Lot Coverage	30,492SF
▪ Maximum Lot Impervious Cover	39,204SF

lot plan



building plan

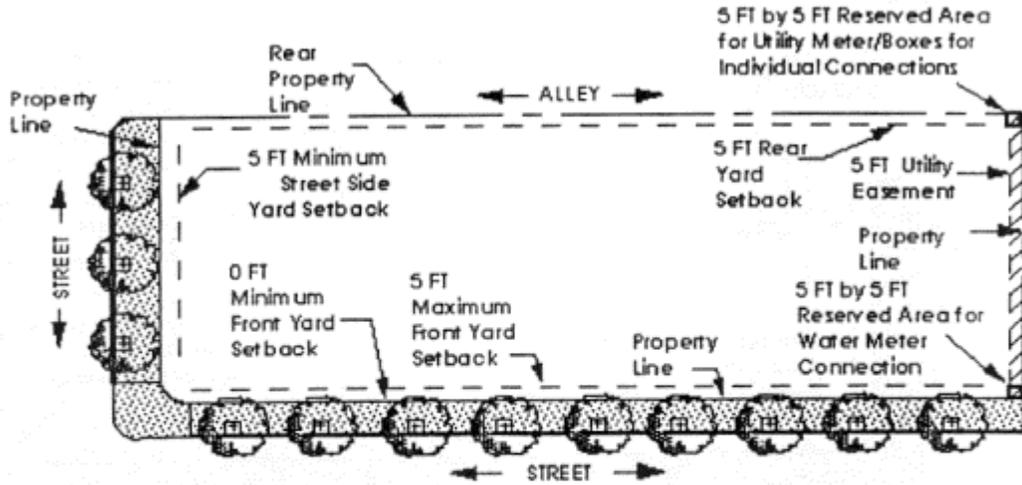


Neighborhood Center Civic Lot

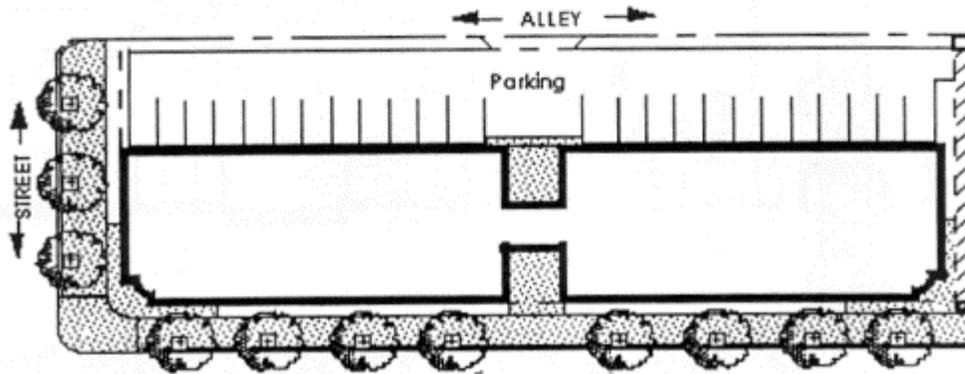
lot plan

90% Maximum
Impervious Cover
70% Maximum
Building Coverage

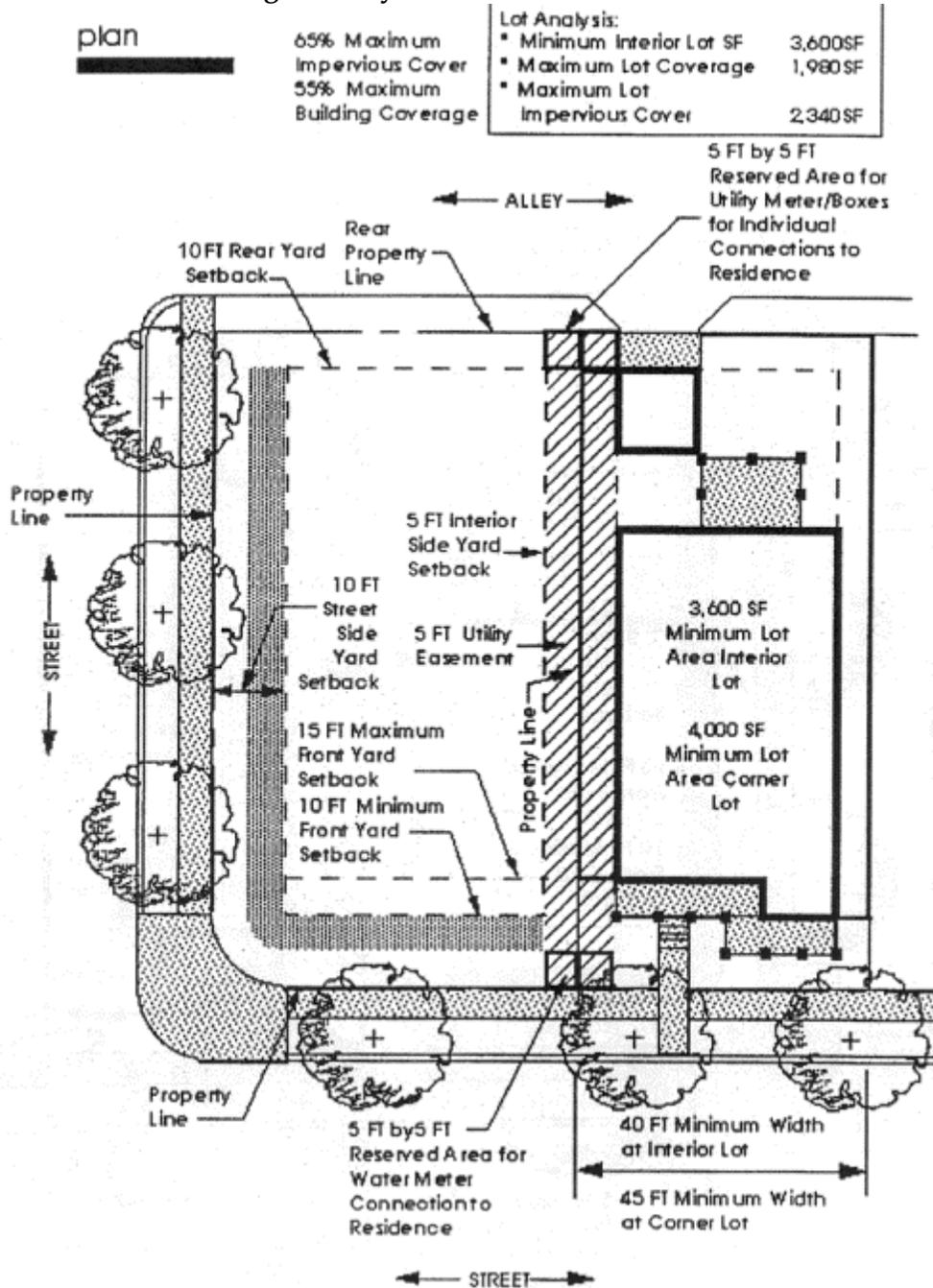
Lot Analysis:	
▪ Maximum Lot SF	43,560 SF
▪ Maximum Lot Coverage	30,492 SF
▪ Maximum Lot Impervious Cover	39,204 SF



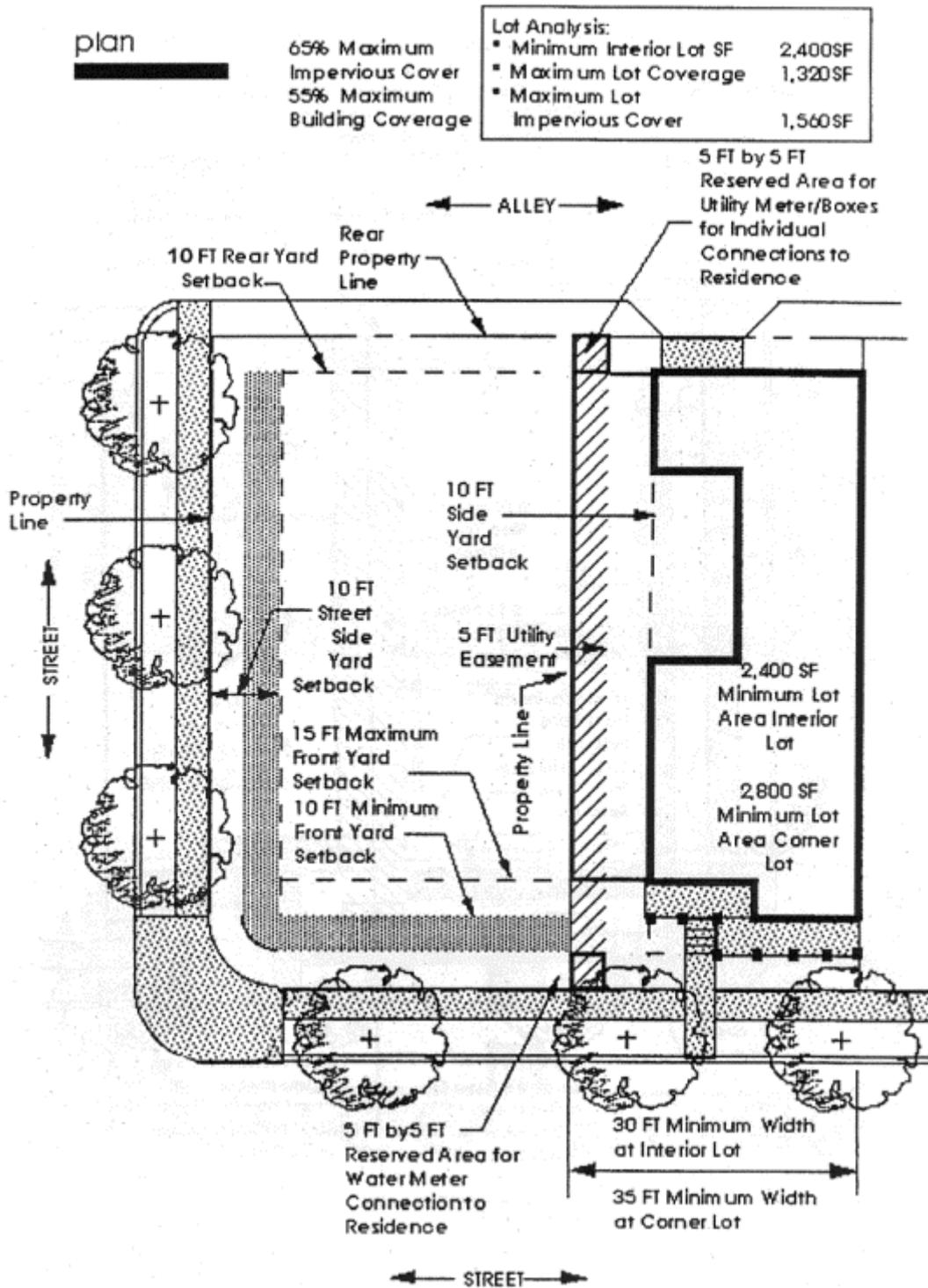
building plan



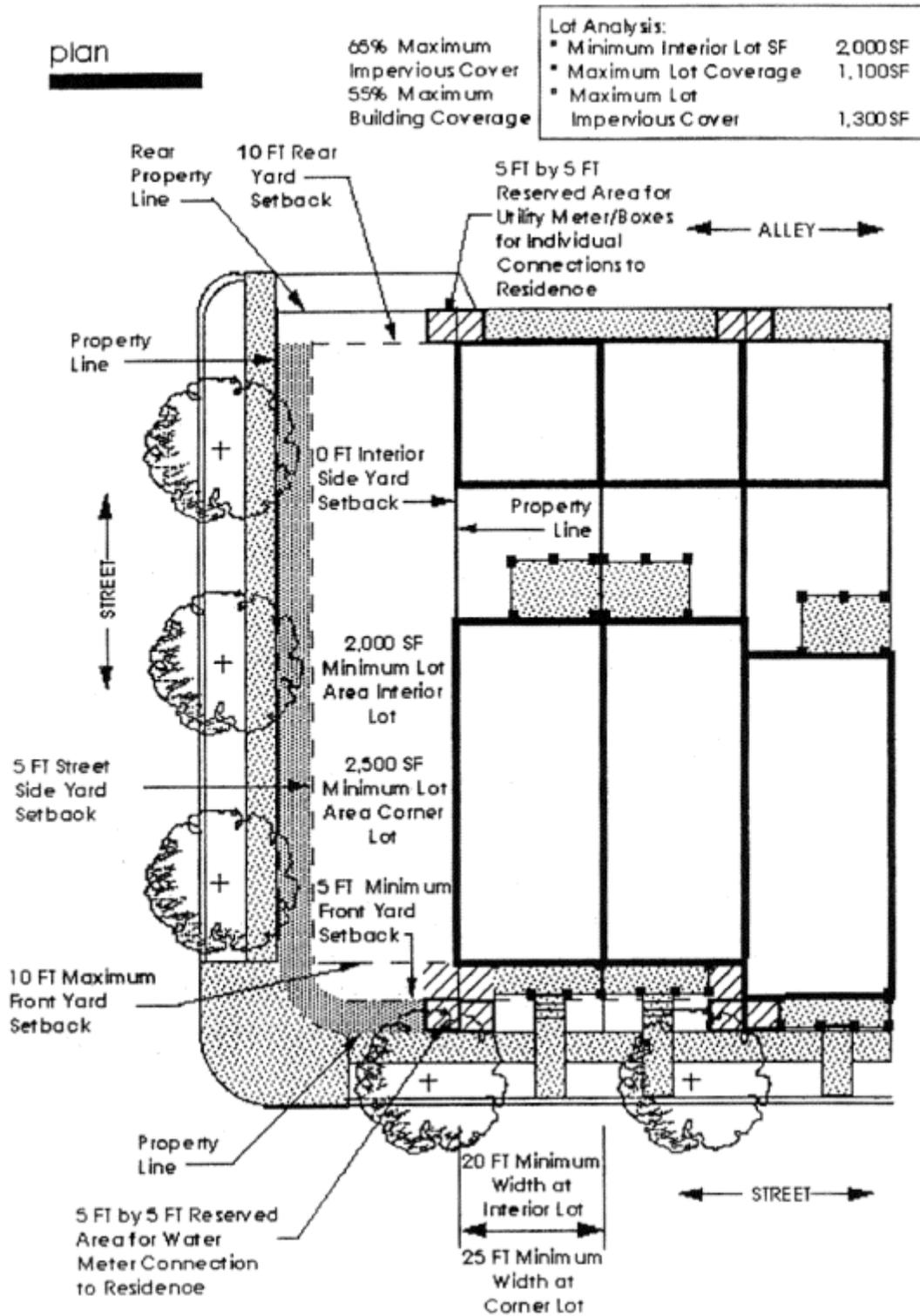
2. Mixed Residential Type Lots
Mixed Residential Single-family Lot



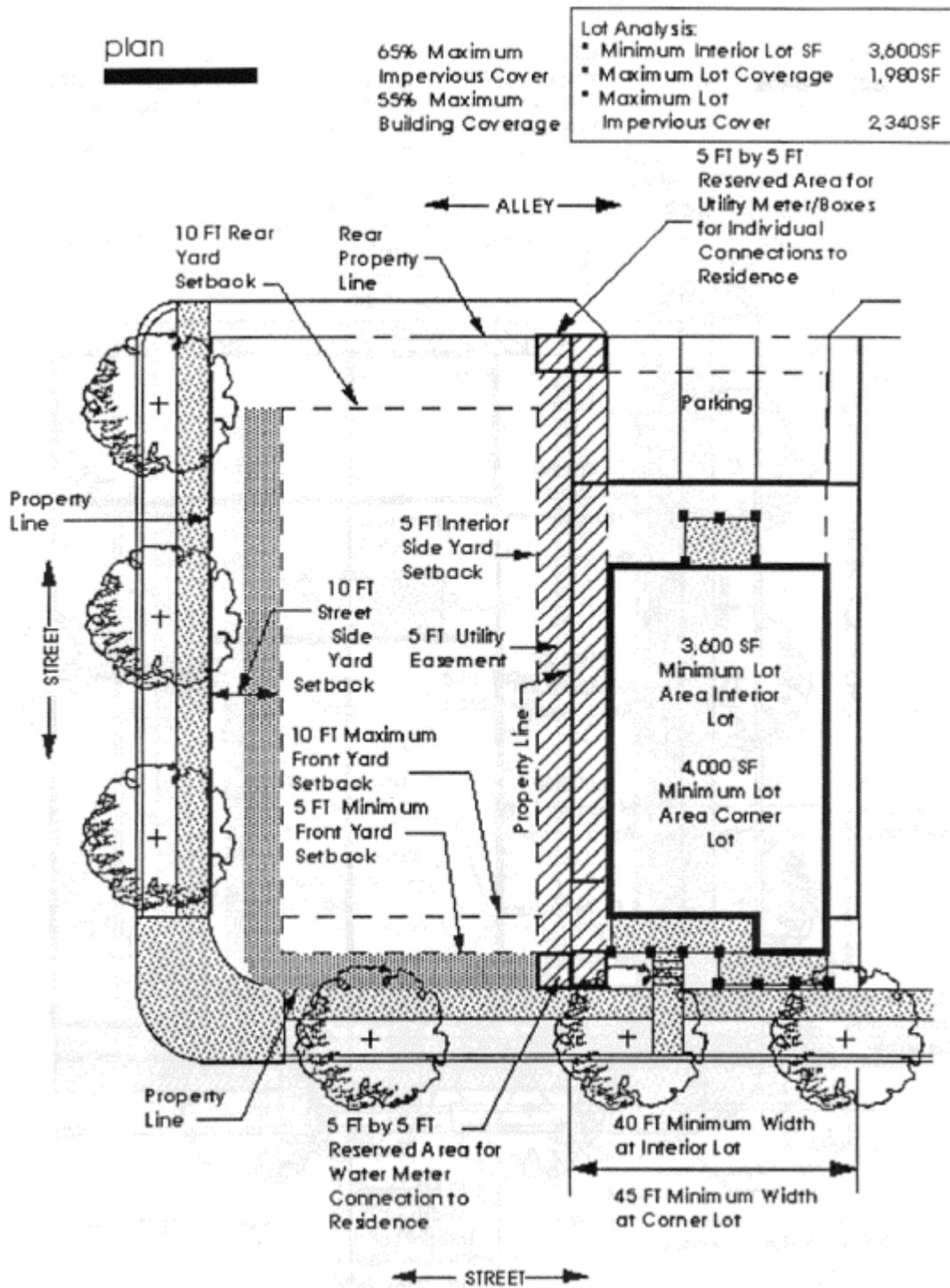
Mixed Residential Side Yard Lot



Mixed Residential Townhouse Lot



Mixed Residential Multi-family Lot

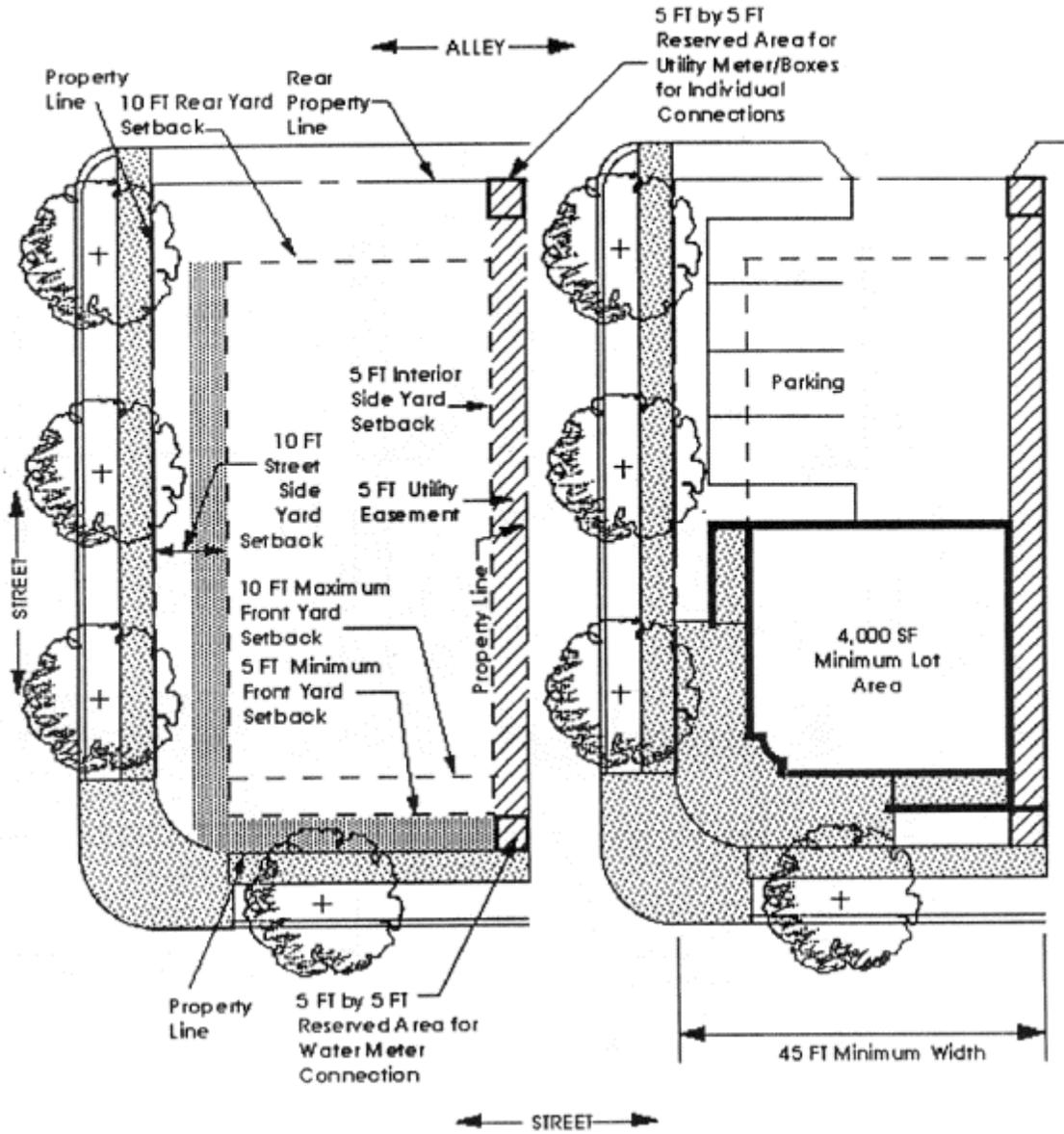


Mixed Residential Commercial Lot

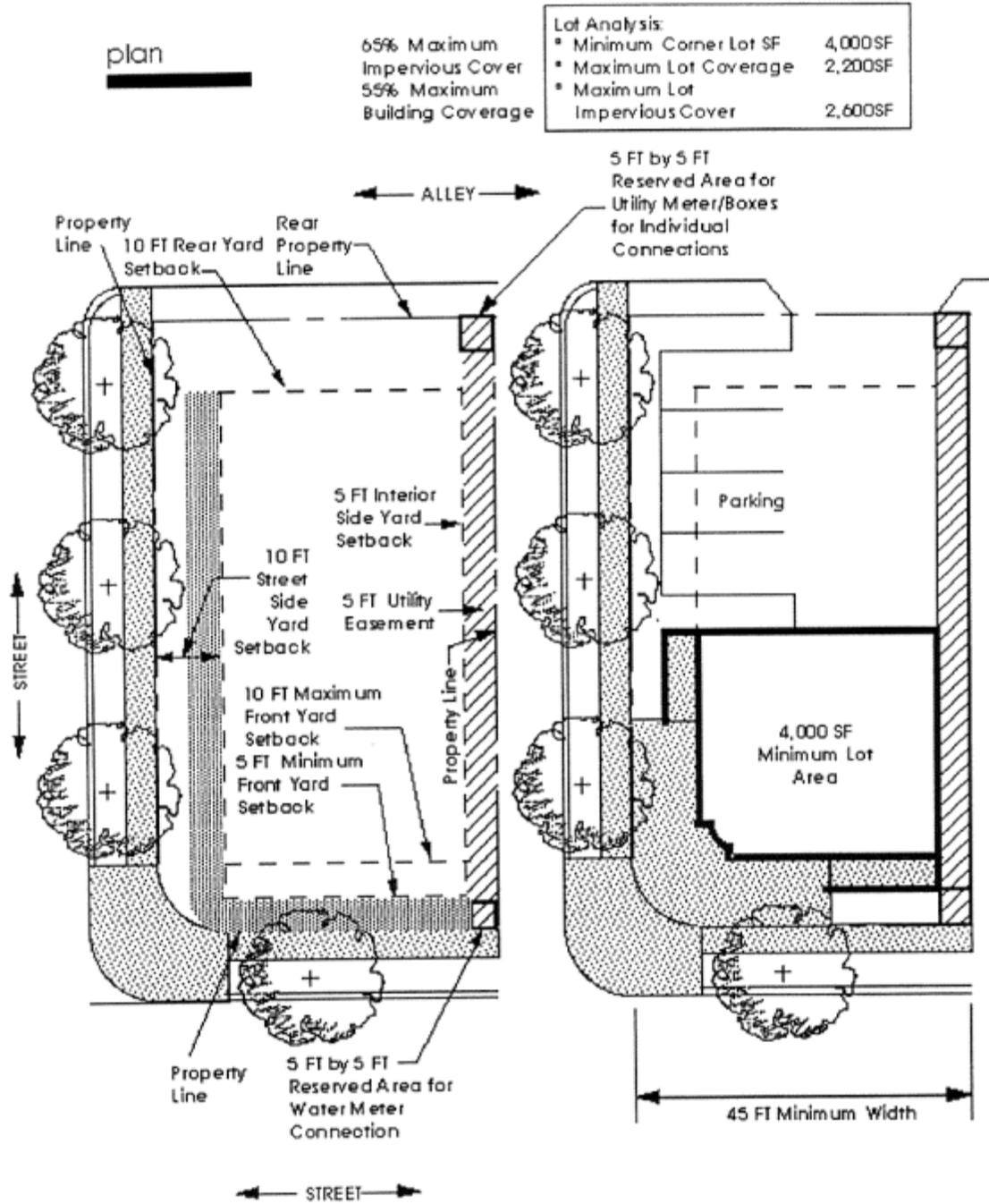
plan

90% Maximum Impervious Cover
55% Maximum Building Coverage

Lot Analysis:	
▪ Minimum Corner Lot SF	4,000SF
▪ Maximum Lot Coverage	2,200SF
▪ Maximum Lot Impervious Cover	3,600SF



Mixed Residential Civic Lot



**ARTICLE 11
PLAN AND PLAT SPECIFICATIONS**

11.1. CONCEPT PLAN SPECIFICATIONS.

The following paragraphs outline the required elements of both the required and optional plans and plats mentioned throughout these Regulations, and especially in Article 4 Permits Required for Development or Construction.

11.1.1. The Concept Plan for a subdivision or site development shall be clearly and legibly drawn at a scale of not less than 100 feet to one inch. Sheet size shall not exceed 48 inches by 36 inches, provided, however, a scale of 200 feet to one inch may be used to avoid sheets in excess of 48 inches by 36 inches. The Town of Sharpsburg may approve other scales and sheet sizes as deemed appropriate.

11.1.2. The Concept Plan may be prepared as a freehand drawing to approximate scale of the proposed improvements, right-of-way, lot lines, etc., shown on a boundary survey or other property outline map of the property.

11.1.3. The Concept Plans for subdivisions within the R-1 & R-2 Districts shall contain:

- a. Approximate total acreage.
- b. Proposed total number of lots and minimum lot size.
- c. Size and location of adjoining existing streets or access drives and proposed right-of-way, roadways, and access drives.
- d. For multi-family and nonresidential site developments (not subdivisions), the approximate location and arrangement of buildings, parking areas, and other improvements including storm water detention areas, and all required buffers.
- e. Topography with contour intervals no greater than 10 feet.
- f. Proposed method of sewage disposal (expressed as a note).
- g. Boundary lines of the overall property showing bearings and distances along all lines and the bearings and distance to an existing street intersection or other recognized permanent Town of Sharpsburg Development Regulations landmark. The source of said boundary information shall be indicated.
- h. All contiguous property under the ownership or control of the developer, except those lands of a dissimilar zoning category specifically approved to be excluded by the Town. Areas not planned at the time of the submittal shall be shown as "Future Development".

i. Authorization statement on Concept Plan to read as follows:

I hereby submit this Concept Plan as authorized agent/owner of all property shown thereon, and certify that all contiguous property under my ownership or control is included within the boundaries of this Concept Plan, as required by the Development Regulations.

Signature of Authorized Agent/Owner Date

j. Location sketch (vicinity map).

k. Location and size (in acres) of lakes, ponds, wetlands and floodplains and the source of the information.

l. Required recreation areas, and other public areas to be dedicated to the public or held in common ownership by a homeowner association or other similar entity.

m. Existing zoning of the property and adjoining properties.

n. Land lot and district.

o. Subdivider's name, local, and permanent (if different) address and phone number.

p. Name of company or person who prepared plan, local and permanent River Tributary Protection Areas, if applicable to the property.

q. General development data (in tabular form) for individual multi-family or nonresidential site developments, such as number of residential units, number of gross square feet of nonresidential floor area by building, number of parking spaces, number of stories, etc.

r. General development data (in tabular form) for single family developments, such as minimum lot size, floor area, and all relevant conditions of zoning.

s. Signature block to read as follows:

This Concept Plan has been reviewed and approved for general compliance with the Zoning Ordinance and Development Regulations of Town of Sharpsburg, Georgia.

Town of Sharpsburg,

Date

11.1.4. Concept Plans for Developments within TND, TC, TMF, THC, TNC, and LI Districts

Concept Plans for developments within TND, TC, TMF, THC, TNC, and LI Districts must be prepared by planners, engineers, landscape architects and/or architects. A Concept Plan without all required plan elements shall not be accepted for plan review processing. In addition to the items required for Concept Plans contained in this section, Concept Plans within TND, TC, TMF, THC, TNC, and LI Districts shall contain additional information and plan elements as follows:

- a. Location, foot print, number of residential units, non-residential floor space, and stories for no single family residential structures.
- b. Proposed street networks, including street cross sections indicating conformance within TND, TC, TMF, THC, TNC, and LI Districts design standards.
- c. Location and size (in acres and square feet) of uses and pods including number of units and/or amount of square feet of each use and pod.
- d. Location and size (in acres and square feet) of plaza, common areas, parks, recreation areas and similar amenity areas.
- e. Location of greenways, paths, bike routes, etc., both on-site and within 1,000 feet of the project Town of Sharpsburg Site Development Regulations boundary that will be used to promote connectivity.
- f. Location of storm water management facilities and BMP's. If these facilities are proposed for inclusion in required common area calculations, detailed design plans of these facilities shall be required.
- g. Location of proposed landscaped areas and features.
- h. Proposed phases or stages of development.
- i. Location of off-street and on-street parking areas and detail drawings of any required decorative fencing or screening.
- j. Location of transit stops and/or features to be used for public transit. The plan designer shall incorporate transit stops and options into the plan design subject to coordination with the Department of Transportation.
- k. A Pedestrian Access Plan (subject to the review & approval by the Town of Sharpsburg) that shall indicate the location of, and connectivity between and among the multi-use trail system, sidewalks, paths, trails and bike routes. The plan shall also include provisions and details for bike racks, street furniture and directional signage.

l. A Street and Pedestrian Lighting Plan (subject to the review and approval by the Town of Sharpsburg) that shall include the location and details of lighting fixtures.

m. An Architectural Design Plan (subject to the review and approval by the Town of Sharpsburg) that shall include building elevations for each use type and including decorative elements for such items as fountains, street furniture, outdoor restaurant seating, etc.

n. A Signage Plan (subject to the review and approval by the Town of Sharpsburg) in accordance with the adopted Town Signage Ordinance that shall include typical sign locations, elevations, and construction materials for all signage.

11.1.5 Concept Plan for Planned Community District (PCD) Developments

The Concept Plan submitted for PCD District projects shall consist of the Master Development Plan and Annual Phasing Plan, required by the Town's Zoning Ordinance and approved by the Mayor and Council at the time of the establishment of the District. These plans shall be reviewed against criteria required in these Regulations as well as conformance to the plans approved at the time of establishment of the District. The PCD District Concept Plan shall be approved by the Town prior to any development plans being approved or any permits issued. Subdivision Development Plans, prepared in accordance with Section 11.2, will be subsequently required for each phase of the approved PCD Development.

There will be administrative and review fees of the Concept Plan associated with the Town providing services and infrastructure to the PCD Development. Fees will be established by the Mayor and Council and assessed on a per acre basis. These fees may be amended by the Mayor and Council from time to time.

11.2. SUBDIVISION DEVELOPMENT PLANS.

11.2.1. An application for a development permit for a subdivision shall consist of the Preliminary Plat, a certified boundary survey, associated slope or construction easements (if any), and such other Development Plans as may be required by these Regulations.

11.2.2. The Development Plans shall generally conform to the Town of Sharpsburg Development Regulations Concept Plan, if any, and may constitute only that portion of the approved Concept Plan which the subdivider proposes to construct at one time as a single unit, provided that such portion conforms to the requirements of these rules and regulations. If no Concept Plan was approved on the property, the Development Plans shall include the entire property being developed within the same zoning category.

11.2.3. Scale.

The Development Plans shall be clearly and legibly drawn at a scale of not less than 100 feet to one inch. Sheet size shall not exceed 48 inches by 36 inches. Plan and Profile sheets shall have a horizontal scale of no less than 100 feet to one inch and a vertical scale of no less than 10 feet to one inch.

11.2.4. Certified Boundary Survey.

- a. The Preliminary Plat shall be based on a certified boundary survey delineating the entirety of the property contained within the Preliminary Plat, and tied to a point of reference (tie point) with the same degree of accuracy as the boundary survey itself. The survey shall have an accuracy of no less than 1 in 10,000, and shall meet all requirements of Georgia Law regarding the recording of maps and plats.
- b. Each Preliminary Plat shall be drawn on, accompanied by, or referenced to a boundary survey which shall at least meet the requirements of 11.2.4a, above.

11.2.5. The Preliminary Plat shall contain the following:

- a. Proposed name of subdivision.
- b. Name, address, and telephone number of the owner of record, and of the subdivider (if not the owner).
- c. Name, address, and telephone number of each professional firm associated with the Development Plans (engineer, surveyor, landscape architect, etc.).
- d. Date of survey, north point, and graphic scale, source of vertical datum, date of plat drawing, and space for revision dates. Town of Sharpsburg Development Regulations
- e. Proposed use of the site, such as single-family detached residences, duplexes, townhouses, office park, industrial subdivision, etc. For residential, indicate total number of dwelling units within plat.
- f. Location (Land District and Land Lot), acreage, and density (if applicable).
- g. Location sketch locating the subdivision in relation to the surrounding area with regard to well known landmarks such as major thoroughfares or railroads. Sketches may be drawn in freehand and at a scale sufficient to show clearly the information required, but not less than one inch equal to 2,000 feet. U.S. Geological Survey maps may be used as a reference guide for the location sketch.
- h. Name of former subdivision if any or all of the land in the Preliminary Plat has been previously subdivided, showing boundaries of same.
- i. Boundary lines of the perimeter of the tract indicated by a heavy line giving lengths in feet and hundredths of a foot, and bearings in degrees, minutes, and seconds. Bearing and distance to designate tie point.
- j. Directional flow arrows for street drainage and individual lot drainage when finished grading of lots is not shown.
- k. Contour lines based on sea level datum, or other datum acceptable to the Town of Sharpsburg. These shall be drawn at intervals of not more than two feet. Contour lines

shall be based on field surveys or photogrammetric methods from aerial photographs. The basis for the topographic contour shown shall be specified and dated.

l. Natural features within the proposed subdivision, including drainage channels, bodies of water, and other known significant features such as extensive exposed rock. On all water courses leaving the tract, the direction of flow shall be indicated. The 100-year floodplain shall be outlined and the source of the depicted floodplain information shall be indicated. For those lots containing floodplain, a Floodplain Lot Chart shall be provided showing the area (in square feet) of each lot lying inside and outside of the floodplain as though the land disturbance activity were completed.

m. Man-made and cultural features existing within and adjacent to the proposed subdivision including existing right-of-way measured from centerline, pavements widths, and names of existing and platted streets; all easements, city, and County jurisdiction lines; existing structures on the site and their disposition, Groundwater recharge areas, Keg Creek Watershed Protection District Boundaries, and other significant information. Location and dimensions of existing bridges; water, sewer, and other existing utility lines and structures; culverts and other existing features should be indicated.

n. Proposed layout including lot lines, lot numbers, and block letters; proposed street names, roadway and right-of-way lines; and, sites reserved through covenants, easement, dedication, or otherwise for public uses. Lots shall be numbered in numerical order and blocks lettered alphabetically. The minimum building setback line from all streets. Streets shall be dimensioned to show right-of-way and roadway widths, central angles, intersection radii, and cul-de-sac roadway and right-of-way radii. Centerline curve data shall be provided for all roadway curves [radius, length, amount of superelevation (if any), point of curvature (P.C.), point of tangency (P.T.), etc.] if not shown separately on construction drawings.

o. Identify unit number, division, or stage of development, if any, as proposed by the subdivider.

p. Existing zoning of the property. Rezoning and variance case numbers, dates of approval and conditions (as applicable). Note minimum lot size and minimum yard setback requirements, and other applicable zoning requirements. Show and dimension any required buffers, landscape strips, no-access easements, etc. Note any approved Waivers from these Regulations.

q. All adjoining property owners, subdivision names, Town of Sharpsburg Development Regulations lot numbers and lot lines, block letters, and zoning.

r. Location of all known existing or previously existing landfills.

s. Proposed recreation area, if any; area of the site; area and percent of site within the 100-year floodplain; proposed disposition of the site (public ownership, homeowners association, etc.).

t. Such additional information as may be reasonably required to permit an adequate evaluation of the subdivision.

11.2.6. Certificate of Development Plans Approval.

Each Preliminary Plat shall carry the following certificate printed or stamped thereon:

All requirements of the Town of Sharpsburg Development Regulations relative to the preparation and submission of a subdivision development permit application having been fulfilled, and said application and all supporting plans and data having been reviewed and approved by all affected Town Departments as required under their respective and applicable regulations, approval is hereby granted, on this Preliminary Plat and all other development plans associated with this subdivision, subject to all further provisions of said Development and other Town Regulations.

Mayor
Town of Sharpsburg

Date

THIS CERTIFICATE EXPIRES TWELVE MONTHS FROM THE DATE OF APPROVAL UNLESS A DEVELOPMENT PERMIT IS ISSUED.

NOTE: The boundaries of the lots shown on this Plat have not been surveyed. This Plat is not for recording.

11.2.7. The Preliminary Plat shall be accompanied by other Development Plans showing the following information when same is not shown on, or evident from the Preliminary Plat. The various plans may be combined where appropriate and clarity can be maintained.

a. Erosion Control Plan prepared in accordance with the requirements of the Soil Erosion and Sediment Control Ordinance. Erosion control measures may be shown on the Grading Plan, if desired.

b. Grading Plan prepared in accordance with the requirements of Article 8 of these Regulations if grading is proposed beyond the street right-of-way.

c. Storm water Drainage Construction Data:

(1) Location and size of all proposed drainage structures, including detention ponds, catch basins, grates, headwalls, pipes and any extensions thereof, energy dissipaters, improved channels, and all proposed drainage easements to be located outside street right-of-way lines.

(2) Profiles of all storm drainage pipes and slope of receiving channels. On storm drainage profiles a pipe chart will be shown which will include pipe numbers, pipe size, pipe material, pipe slope, pipe length, contributing drainage area, design flow, design storm frequency, runoff

coefficient and velocity. The hydraulic grade line will be shown on all pipes for the required design flow.

(3) Profiles of all open channels and ditches including Mannings' 25-year storm normal depth and velocity. On storm drainage profiles, an open channel chart will be shown which will include open channel numbers, conveyance size, lining material, length, channel slope, contributing drainage area, design storm frequency, runoff coefficient and velocity.

(4) Hydrological study used in determining size of structures, including map of all contributing drainage basins and acreage.

d. If sanitary sewers are required by the Town of Sharpsburg, Sanitary Sewer Plan, including the location and size of all proposed sewer lines, manholes, and any easements required therefore, together with sufficient dimensions to locate same on the ground shall be provided.

e. Construction Data for New Streets and Street Widening:

(1) Centerline profiles and typical roadway sections of all proposed streets, as well as plans and profiles for all proposed major thoroughfares. Typical roadway sections shall be provided for street widening.

(2) Where sanitary or storm sewers are to be installed within a street, the grade; size, location, and bedding class of pipe; location and invert elevation of manholes shall be indicated on the road profile.

(3) Profiles covering roadways that are extensions of existing roadways shall include: elevations at 50 foot intervals for such distance as may be adequate to provide continuity consistent with the standards required by the Regulations for street improvements, but no less than 200 feet.

(4) All elevations shall be coordinated and tied into U.S. Coast and Geodetic Survey or Department of Transportation bench marks where feasible, or into reference monuments established by the Federal Emergency Management Agency.

(5) Stub streets shall be profiled at least 200 feet onto adjoining property (no tree cutting).

f. The landscape Plan, prepared in accordance with the specifications under Article 11 Plan and Plat Specifications, the requirements of Article 5 of these Regulations, and the requirements of the Tree Protection and Landscaping Ordinance.

g. Tree Protection Plan as required by the Tree Protection and Landscaping Ordinance.

h. Floodplain Management Plans. If any floodplain areas are located on the property, such data as is required by the Floodplain Management Ordinance of these Regulations shall be submitted.

11.2.8. Encroachments.

Where construction is proposed on adjacent property, an encroachment agreement or easement shall be submitted to the Town.

11.3. FINAL PLAT SPECIFICATIONS.

11.3.1. The Final Plat shall be clearly and legibly drawn in black ink on tracing cloth or other permanent reproducible material. The scale of the Final Plat shall be 100 feet to one inch (1" equals 100') or larger. Sheet size shall not exceed 48 inches by 36 inches. (Any sheet that is larger than 17 inches by 22 inches must be photographically reduced to no more than 17 inches by 22 inches in order to be recorded with the Clerk of the Superior Court.)

11.3.2. The Final Plat shall be based on a certified boundary survey delineating the entirety of the property contained within the Final Plat, and tied to a point of reference (tie point) with the same degree of accuracy as the boundary survey itself. The survey shall have an accuracy of no less than 1 in 10,000, and shall meet all requirements of Georgia Law regarding the recording of maps and plats.

11.3.3. The Final Plat shall substantially conform to the Preliminary Plat and it may constitute only that portion of the approved Preliminary Plat which the subdivider proposes to record at any one time, provided that such portion conforms to the requirements of these Regulations, and said portion is not inconsistent with the public health, safety, or welfare. Any substantial deviation from the Preliminary Plat shall require revision and reapproval of the Preliminary Plat.

11.3.4. The Final Plat shall contain the following information:

- a. Name of the subdivision, unit number, Land District, and Land Lot number.
- b. Name, address, and telephone number of owner of record and the subdivider (if not the owner).
- c. Name, address, and telephone number of each professional firm associated with the portion of the subdivision within the Final Plat (engineer, surveyor, landscape architect, etc.).
- d. Date of plat drawing, graphic scale, north point; notation as to the reference of bearings to magnetic, true north or grid north, and indication whether bearings shown are calculated from angles turned.
- e. Location sketch of tract showing major surrounding features.
- f. Name of former subdivision, if any or all of the Final Plat has been previously recorded.

- g. Case number and date of approval for any applicable rezoning, Special Use Permit, Variance or Waiver affecting the property.
- h. Location and dimension of any buffer, landscape strip, special setback, no-access easement, etc., required by the Zoning Ordinance or these Regulations.
- i. Boundary lines of the tract, to be indicated by a heavy line, giving distances to the nearest onehundredth foot and bearings to the nearest second. Bearing and distance to designated tie point shall be shown. The Plat shall have a closure precision of 1 foot in no less than 10,000 feet.
- j. Municipal or County jurisdictional lines approximately tied to the lines of the subdivision by distance and angles when such lines traverse or adjoin the subdivision; land lot lines traversing or adjoining the subdivision shall also be indicated.
- k. Locations, widths, and names of all streets and alleys within and immediately adjoining the plat, the location and widths of all internal public crosswalks, and all other public rights-of-way.
- l. Street center lines showing angles of deflection and standard curve data including radii, length of arcs and tangents between curves, point of curvature (PC) and point of tangency (PT).
- m. Lot lines with dimensions to the nearest one-tenth of a foot and bearings to the nearest second, and radii of rounded corners, as necessary to delimit each lot.
- n. Building setback lines along streets with dimensions.
- o. When lots are located on a curve or when side lot lines are at angles other than 90 degrees, the lot width measured in accordance with the provisions of the Zoning Ordinance may be required to be shown, if deemed necessary by the Town of Sharpsburg for clarity.
- p. Lots numbered in numerical order and blocks lettered alphabetically.
- q. Location and size of all drainage pipe, location and extent of detention ponds, the location and size of all public water mains and fire hydrants, and the location, dimensions, and purpose of any easements, including construction or slope easements if required.
- r. Location of any areas to be reserved, donated, or dedicated to public use with notes stating their purpose and limitations. Location of any areas to be reserved by private deed covenant for common use of all property owners, or dedicated to a homeowner's association.

s. A statement of private covenants if any, and they are brief enough to be put directly on the plat; otherwise, if covenants are separately recorded, a statement as follows:

This plat is subject to the covenants set forth in the separate document(s) attached hereto dated _____, which hereby become a part of this plat, and which were recorded _____ and signed by the owner.

t. Accurate location, material, and description of monuments and markers (all monuments shall be in place prior to approval of the Final Plat.)

u. Certificates and statements specified in these Regulations, below.

v. Extent of the 100-year floodplain and a floodplain chart showing the area within and outside the floodplain for each lot containing any portion of the 100-year floodplain. Origin of the floodplain data shall be indicated.

w. Street address numbers and block number designations for street names signs on abutting streets, where appropriate.

x. Individual lots shall be designated HLP (House Location Plan), RDP (Residential Drainage Plan) and/or RDS (Residential Drainage Study) if such are required by the Town of Sharpsburg to be approved prior to issuance of a building permit.

y. All other notes or notations as may be required by the Town of Sharpsburg.

11.3.5. If any lands are shown as the Final Plat for dedication to Town of Sharpsburg other than street rights-of-way or easements, a Warranty Deed transferring title to said land in fee simple, in a form acceptable to the Town of Sharpsburg, shall be submitted with the Final Plat application.

11.3.6. If any lands are shown on the Final Plat for dedication to a Property Owners Association in order to meet minimum park or open space requirements of these Regulations, a copy of the deed of transfer for such dedication and a copy of the instrument of incorporation of the Property Owners Association shall be submitted with the Final Plat application.

11.3.7. Each Final Plat shall bear the following certificates or statements printed or stamped thereon as follows:

a. Final Surveyor's Certificate:

It is hereby certified that this plat is true and correct as to the property lines and all improvements shown thereon, and was prepared from an actual survey of the property made by me or under my supervision; that

MAYOR
TOWN OF SHARPSBURG

d. Public Notice - Drainage:

Every residential Final Plat shall contain the following statements:

- (1) NOTE: Town of Sharpsburg assumes no responsibility for overflow or erosion of natural or artificial drains beyond the extent of the street right-of-way, or for the extension of culverts beyond the point shown on the approved and recorded subdivision plat.
- (2) NOTE: Stream Buffer Easements are to remain in a natural and undisturbed condition.
- (3) NOTE: Structures are not allowed in drainage easements.

Every nonresidential Final Plat shall contain the following statement:

- (1) NOTE: Town of Sharpsburg assumes no responsibility for overflow or erosion of natural or artificial drains beyond the extent of the street right-of-way, or for the extension of culverts beyond the point shown on the approved and recorded subdivision plat. Town of Sharpsburg does not assume the responsibility for the maintenance of pipes in drainage easements beyond the Town right-of-way.
- (2) Stream Buffer Easements are to remain in a natural and undisturbed condition.
- (3) NOTE: Structures are not allowed in drainage easements.

e. Lot Layout Plan:

Every Final Plat for a subdivision zoned TC, TND, PCD and proposing single-family detached houses on fee-simple ownership lots shall contain the following statement:

NOTE: Lot layout required on each lot to be approved by the Town of Sharpsburg prior to a building permit being issued. This lot layout plan must be drawn by a Registered Land Surveyor, architect, or other professional, or may be drawn by the builder on a certified boundary survey of the lot. It must show all proposed improvements and easements on the lot, and must also show the same information on all adjoining lots. It will be the builder's responsibility to ensure that the house is staked out on the site to match the approved lot layout plan. Prior to a Certificate of Occupancy being issued, a record drawing

prepared by a Registered Land Surveyor and meeting the above requirements must be submitted for approval.

f. House Location Plans (HLP):

On any Final Plat containing a lot for which a House Location Plan approval will first be required prior to issuance of a building permit, the following statement shall be included:

HLP - HOUSE LOCATION PLAN

A House Location Plan shall be required to be approved by the Town of Sharpsburg prior to issuance of a Building Permit on those lots labeled "HLP". A House Location Plan is a scale drawing submitted by the builder at the time of permit. It is not required that this plan be prepared by a land surveyor or professional engineer. The purpose of this plan is to ensure that the house is properly located on the lot. Please refer to the Town of Sharpsburg Development Regulations or contact the Town of Sharpsburg for further information.

g. Residential Drainage Plan (RDP) or Study (RDS): On any Final Plat containing a lot for which a Residential Drainage Plan (RDP) or Residential Drainage Study (RDS) will first be required prior to issuance of a Building Permit, the following statement shall be included, as applicable:

RDP - RESIDENTIAL DRAINAGE PLAN
RDS - RESIDENTIAL DRAINAGE STUDY

A Residential Drainage Plan or Residential Drainage Study must be approved by the Town of Sharpsburg prior to issuance of a Building Permit on those lots labeled "RDP" or "RDS", respectively. Please refer to the Development Regulations and contact the Town of Sharpsburg for further information.

11.4. HOUSE LOCATION PLAN (HLP).

11.4.1. House Location Plans shall be drawn to scale and may be shown on a certified boundary survey of the lot or any other drawing showing the information required below. The Town of Sharpsburg may accept a House Location Plan drawn to the same scale as shown on the Final Plat where sufficient detail can be shown to support an adequate review and approval. The House Location Plan may be combined with a Residential Drainage Plan (RDP) if an RDP is required for the lot.

11.4.2. It is not the intent of the Town of Sharpsburg that the House Location Plan be prepared by a registered surveyor or engineer, but may be done by the individual proposing the improvements on the lot. It is the intent, however, to receive a drawing with sufficient readability and accuracy to ensure that the proposed

improvements will be constructed on the lot in conformance with the requirements of these Regulations, the Zoning Ordinance, or other regulations, as applicable.

11.4.3. House Location Plans shall show the following as applicable:

- a. Boundary lines of the lot, giving distances to the nearest one-tenth of a foot and bearings to the nearest minute.
- b. Location and names of all abutting streets or other rights-of-way.
- c. Minimum required front, side and rear building setback lines with dimensions, and notation of the existing zoning on the property.
- d. The approximate outline of all buildings, driveways, parking areas, swimming pools, recreational courts, patios, accessory structures and other improvements existing or proposed on the property, and dimensions of buildings and distances between all structures and the nearest property lines.
- e. All easements, public water, sewer or storm drainage facilities traversing or located on the property, septic tank, and septic tank drain field.
- f. Subdivision name, lot designation, land lot, and district.
- g. North arrow and scale.
- h. Limit of the 100-year floodplain and any applicable buffers or special building setback lines.
- i. All other applicable requirements of the Zoning Ordinance or conditions of zoning approval.
- j. Name, address, and telephone number of the owner and the person who prepared the HLP.

11.5 RESIDENTIAL DRAINAGE PLAN (RDP) OR STUDY (RDS)

11.5.1 Residential Drainage Plans shall be drawn to scale on a certified boundary survey of the lot prepared by a Registered Land Surveyor, having an error of closure not exceeding one in 5000. The Residential Drainage Plan may be combined with a House Location Plan (HLP) if an HLP is required for the lot.

11.5.2 Residential Drainage Plans shall show the following as applicable:

- a. Boundary lines of the lot, giving distances to the nearest one-tenth of a foot and bearings to the nearest minute.
- b. Location and names of all abutting streets or other rights-of-way.

- c. The outline of all buildings, driveways, parking areas, swimming pools, recreational courts, patios, accessory structures and other improvements existing or proposed on the property, and dimensions of buildings and distances between all structures and the nearest property lines as required to locate the major improvements on the lot.
- d. All easements, public water or sewer facilities traversing or located on the property, and septic tank drain field.
- e. Subdivision name, lot designation, land lot, and district.
- f. North arrow and scale.
- g. Contour lines based on sea level datum. These shall be drawn at intervals of not more than two feet, and shall be based on a field survey. Proposed grading of the lot shall be shown along with the finished floor elevation of the lowest habitable floor of the house.
- h. Storm water features, including swales, pipes, storm water detention and other structures, all drainage (DE) easements, and directions of flow.
- i. Floodplain features, including the limits of the flood hazard area, 100-year flood high water elevation, origin of the floodplain data, and any proposed modifications to the floodplain limits.
- j. Sedimentation and erosion control measures to be taken or placed on the lot during construction.
- k. Names, address, and telephone number of the owner and person who prepared the RDP.
- l. Seal, registration number, and signature of the Professional Engineer, Land Surveyor, or Landscape Architect who prepared the drainage improvements or modifications shown on the RDP with the date of signature.

11.5.3. A Residential Drainage Study (RDS) shall be conducted by the developer's or builder's design professional prior to issuance of a Certificate of Occupancy on those lots so noted on the Final Plat approval prior to issuance of a Building Permit. The grading and construction of the lot shall be field verified by the developer's or builder's design professional as being in conformance with grading plans and storm water management studies approved for the subdivision prior to the issuance of a Certificate of Occupancy.

11.5.4. A Certificate of Occupancy shall not be issued for the structure until a written certification has been received from the developer's or the builder's design professional stating that the provisions or improvements required by the Residential Drainage Plan or as a result of the Residential Drainage Study have been field verified.

11.5.5. If a RDP or RDS is required because a stream or floodplain is on or adjacent to the lot, the notation on the development plans and plat should be "RDP-E" or "RDS-E" as appropriate.

11.6. SITE DEVELOPMENT PLANS.

11.6.1. An application for a development permit for a multifamily or nonresidential site shall consist of the Site Town of Sharpsburg Development Regulations Plan, a certified boundary survey or Final Plat reference, associated slope or construction easements (if any), and such other Development Plans as may be required by these Regulations.

11.6.2. The Development Plans shall generally conform to the Concept Plan, if any, and may constitute only that portion of the approved Concept Plan which the developer proposed to construct at one time as a single unit, provided that such portion conforms to the requirements of these rules and regulations and all setbacks, maximum density, and other zoning restrictions. If no Concept Plan was approved on the property, the Development Plans shall include the entire property being developed having the same zoning category.

11.6.3. Scale.

The Development Plans shall be clearly and legibly drawn at an engineering scale convenient to illustrate the details of the project. Sheet size shall not exceed 48 inches by 36 inches. Plan and Profile sheets, if any, shall have a horizontal scale of no less than 100 feet to one inch and a vertical scale of no less than 10 feet to one inch.

11.6.4. Project Boundary Data.

a. The Site Plan shall be based on the boundaries of a lot as recorded on a Final Subdivision Plat or on a certified boundary survey delineating the entirety of the property contained within the project, and tied to a point of reference (tie point) with the same degree of accuracy as the boundary survey itself. The survey shall have an accuracy of no less than 1 in 10,000, and shall meet all requirements of Georgia Law regarding the recording of maps and plats.

b. Each Site Plan shall be drawn on, accompanied by, or referenced to a boundary survey which shall at least meet the requirements of 10.6.4.a. above.

11.6.5. The Site Plan shall contain the following (on one or more sheets):

a. Proposed name of development. If the project is located within a subdivision, the name of the subdivision, lot, and block number must also be shown.

b. Name, address, and telephone number of the owner of record, and of the developer (if not the owner).

- c. Name, address, and telephone number of each professional firm associated with the Development Plans (engineer, landscape architect, etc.).
- d. Date of survey, north point, and graphic scale, source of datum, date of plan drawing, and space for revision dates.
- e. Proposed use of the site, including gross square footage for each different use type or building.
- f. Location (Land District and Land Lot), acreage or area in square feet, and density (if applicable).
- g. Location sketch locating the development in relation to the surrounding area with regard to well known landmarks such as major thoroughfares or railroads. Sketches may be drawn in freehand and at a scale sufficient to show clearly the information required, but not less than one inch equal to 2,000 feet. U.S. Geological Survey maps may be used as a reference guide for the location sketch.
- h. Size and location of all buildings, building setback lines, minimum yard lines, and distances between buildings and from buildings to property lines; location of outdoor storage areas; parking and loading areas, driveways, curb cuts and designated fire lanes. Each building shall be identified with a number or letter.
- i. Boundary lines of the perimeter of the tract indicated by a heavy line giving lengths to the nearest one-hundredth of a foot and bearings to the nearest second. Bearing and distance to designate tie point.
- j. Directional flow arrows for street drainage.
- k. Contour lines based on sea level datum. These shall be drawn at intervals of not more than two feet and shall include the entire site and all abutting public streets. Contour lines shall be based on field surveys or photogrammetric methods from aerial photographs. The basis for the topographic contour shown shall be specified and Town of Sharpsburg Development Regulations dated.
- l. Natural features within the proposed development, including drainage channels, bodies of water, and other known significant features such as extensive exposed rock. On all water courses leaving the tract, the direction of flow shall be indicated. The 100-year floodplain shall be outlined and the source of the depicted floodplain information shall be indicated. The acreage or area in square feet within the floodplain shall be indicated.

m. Man-made and cultural features existing within and adjacent to the proposed development including existing right-of-way measured from centerline, pavement widths, and names of jurisdiction lines; existing structures on the site and their disposition, Groundwater Recharge areas of Keg Creek Watershed Protection District if applicable, and other significant information. Location and dimensions of existing bridges; water, sewer, and other existing utility lines and structures; culverts and other existing features should be indicated.

n. Proposed street names, roadway and right-of-way lines and widths and sites reserved through covenants, easement, dedication or otherwise for public uses.

o. Identify unit number, division or stage of development, if any, as proposed by the developer.

p. Show all adjoining property owners, subdivision names, lot numbers, lot lines and block letters, and zoning.

q. Show the location and number of parking spaces according to the size of the building on the plans. Show factors used in determining number of spaces as required in the Zoning Ordinance. Handicapped parking spaces must be shown as required by the Georgia Handicap law.

r. Zoning district rezoning case number, date of approval and conditions as applicable). Variances obtained on the property should be shown with the case number, date of approval and conditions (if applicable). Note any approved Waivers from these Regulations.

s. If buffers or other landscaping or screening treatments are required, show the location, size, and type (natural or planted) on the plans conforming to the Tree Preservation/Replacement Plan or Buffer and Landscape Plan, as applicable.

t. Location, height, and size of all freestanding signs to be erected on the site, and indication whether lighted or unlighted.

u. Location of all known existing landfills and proposed on-site bury pits (State EPD Permit and Town of Sharpsburg Special Use Permit or other approval may be required).

v. Such additional information as may be reasonably required to permit an adequate evaluation of the project.

11.6.6. Certificate of Development Plans Approval.

Each Site Plan shall carry the following certificate printed or stamped thereon:

All requirements of the Town of Sharpsburg Development Regulations relative to the preparation and submission of a development permit application having been fulfilled, and said application and all supporting plans and data having been reviewed and approved by all affected Town Departments as required under their respective and applicable regulations, approval is hereby granted of this Site Plan and all other development plans associated with this project subject to all further provisions of said Development and other Town Regulations.

Mayor
Town of Sharpsburg

Date

THIS CERTIFICATE EXPIRES TWELVE MONTHS FROM THE DATE OF APPROVAL UNLESS A DEVELOPMENT PERMIT IS ISSUED

11.6.7. The Site Plan shall be accompanied by other Development Plans showing the following information when same is not shown on, or evident from the Site Plan. The various plans may be combined where appropriate and clarity can be maintained.

a. Erosion Control Plan prepared in accordance with Town of Sharpsburg Development Regulations and the requirements of the Soil Erosion and Sediment Control Ordinance. Erosion control measures may be shown on the Grading Plan, if desired.

b. Grading plan, prepared in accordance with the requirements of Article 8 of these Regulations.

c. Storm Water Drainage Construction Data:

(1) Location and size of all proposed drainage improvements, and all proposed drainage easements to be located outside street right-of-way lines.

(2) Profiles of all storm drainage pipes and slope of receiving channels. Hydraulic grade line is to be shown on all pipes (except roof drains) for the required design flow. On storm drainage profiles a pipe chart will be shown which will include pipe numbers, pipe size, pipe material, pipe slope, pipe length, contributing drainage area, design flow, design storm frequency, runoff coefficient and velocity. On all pipes, the hydraulic grade line shall be shown. Profiles of all open channels and ditches including the design flow normal depth and velocity. On storm drainage profiles an open channel chart will be shown which will include open channel numbers, conveyance size, lining material, length, channel slope, contributing drainage area, design flow, design storm frequency, runoff coefficient and velocity for the required design flow.

(3) Acreage of drainage areas and Hydrological study used in determining size of structures, including map of all contributing drainage basins and acreages.

d. Sewage Disposal Plans, as follows:

(1) Sanitary Sewer Plans, including the profiles and other information as may be required by the Town of Sharpsburg.

(2) For projects proposed to be served by on-site sewage disposal systems, location and extent of septic tank, drain field and attendant structures, and other information required by the Health Department.

e. Street Widening and Construction Data:

(1) Centerline profiles and typical roadway sections of all proposed streets, as well as Town of Sharpsburg Development Regulations plans and profiles for all proposed major thoroughfares. Profiles (and plans, where required) shall be drawn on standard plan and profile sheet with plan section showing street layout, pavement and right-of-way width, curvature, and required drainage facilities. Typical roadway sections shall be provided for street widening.

(2) Where sanitary or storm sewers are to be installed within a street, the grade, size, location and bedding class of pipe; location and invert elevation of manholes shall be indicated on the road profile.

(3) Profiles covering roadways that are extensions of existing roadways shall include; elevations at 50 foot intervals for such distance as may be adequate to provide continuity consistent with the standards required by these Regulations for street improvements, but no less than 200 feet.

(4) All elevations shall be coordinated and sited into U.S. Coast and Geodetic Survey or Department of Transportation bench marks where feasible or into reference monuments established by the Federal Emergency Management Agency.

f. Buffer and Landscape Plan, if any such areas exist within the site, prepared in accordance with the specifications contained in this Article, and the requirements of Article 5 of these Regulations, and the requirements of the Tree Protection and Landscaping Ordinance.

g. Tree Preservation/Replacement Plan (if required by the Buffer Plan, Tree Landscape, and Tree Ordinance).

h. Floodplain Management Plans; if any floodplain areas are located on the property. Such data as is required by the Floodplain Management Ordinance shall be submitted.

i. Private Water System Plans, if any, indicating proposed water main size and location, with fire hydrants, on the site. The distance and direction to all other fire hydrants within 500 feet of the site or buildings along existing streets or other access drives shall also be indicated.

j. Street striping plan, showing striping in accordance with the Manual on Uniform Traffic Control devices, for any street newly constructed to 4 or more lanes, and all newly constructed or widened major thoroughfares.

11.6.8. Encroachments.

Where construction is proposed on adjacent property, an encroachment agreement or easement shall be submitted to the Town.

11.6.9. Public Notice – Drainage.

Every Site Plan shall contain the following statement:

a. Note: Town of Sharpsburg assumes no responsibility for overflow or erosion of natural or artificial drains beyond the extent of the street right-of-way, or for the extension of culverts beyond the point shown on the approved and recorded plan. Town of Sharpsburg does not assume the responsibility for the maintenance of pipes in drainage easements beyond the Town right-of-way.

b. NOTE: Stream Buffer Easements are to remain in a natural and undisturbed condition.

c. NOTE: Structures are not allowed in drainage easements.

11.7. TREE PROTECTION PLAN SPECIFICATIONS.

11.7.1. A Tree Preservation/Replacement Plan shall be required only under the circumstances described in the Tree Protection and Landscaping Ordinance.

11.7.2. Tree Preservation/Replacement Plans shall be prepared in accordance with the specifications contained in the Tree Protection and Landscaping Ordinance. At the developer's option, the plan may be combined with other plans such as a general landscaping plan for the project.

11.8. BUFFER AND LANDSCAPE PLAN SPECIFICATIONS.

11.8.1. A Buffer Plan and Landscape Plan shall be required as described in the Tree Protection and Landscaping Ordinance.

11.8.2. The Buffer and Landscape Plans shall be prepared in accordance with the specifications contained in the Tree Protection and Landscaping Ordinance. At the developer's option, the plan may be combined with other plans such as a general landscaping plan for the project.

ARTICLE 12 PROCEDURES

12.1 SUBDIVISION REVIEW PROCEDURES

12.1.1 Pre-Application Conference

Whenever any subdivision of a tract of land is proposed to be made, whether for residential or nonresidential development, the subdivider is encouraged to present to the Town preliminary documents and graphic exhibits to permit early evaluation of the subdivider's intentions and coordination with the Comprehensive Plan, Zoning Ordinance, Metropolitan North Georgia Water Planning District, etc., and to inform and provide the subdivider with the necessary regulations in order to properly accomplish the proposed project.

12.1.2 Concept Plan Approval

- a. Application for Concept Plan approval shall be submitted to the Town using an application form and in a number of copies to be determined by the Town of Sharpsburg. The Concept Plan shall include the entire property proposed for development, but need not include the applicant's entire contiguous ownership.
- b. In such case that the subdivider elects not to submit a Concept Plan, then the subdivider may proceed directly with the submittal of Development Plans if they show the entire property proposed for development. In so doing, however, the subdivider assumes the risk of premature design and engineering expenses in the event that the Town requires subsequent design and engineering changes.
- c. Following Concept Plan approval, a clearing and grubbing permit may be issued based on a Tree Protection Plan (see Tree Protection and Landscape Ordinance) and soil erosion and sedimentation control plan approved by the Town of Sharpsburg.
- d. Copies of the approved Concept Plan shall be provided to the Town for permanent record, in a number as determined by the Town of Sharpsburg.

12.1.3 Development Plans Approval for Subdivisions

- a. An application for Development Plans approval and issuance of a development permit shall be submitted to the Town using an application form and in a number of copies as determined by the Town of Sharpsburg. The Development Plans may encompass a portion of a property included within an approved Concept Plan. However, if no Concept Plan has been approved, the Development Plans must include the entire property being developed and having the same zoning. The application shall include the Preliminary Plat, and construction drawings. All construction drawings and other engineering data shall be prepared and sealed by a Professional Engineer or Landscape Architect currently registered in the State of Georgia, in accordance with provisions of Georgia Law.

b. Following submission to the Town of a Preliminary Plat and all drawings required for development permit review, a grading permit shall be issued at the developer's request based on a Tree Protection Plan, soil erosion and sedimentation control plan, hydrology study, and related construction drawings. The grading permit shall be limited to the area included within the Development Plans and may be further conditioned as deemed appropriate or necessary pending development permit approval.

c. The Town of Sharpsburg shall indicate on a review copy of the drawings or in a written memorandum all comments related to compliance of the Development Plans with these Regulations, principles of good design, the Zoning Ordinance, conditions of zoning approval, and the regulations of other Town departments and State agencies as appropriate. The Town of Sharpsburg shall have final staff authority to determine the applicability of any and all comments under this Development Regulations, the Zoning Ordinance or conditions of zoning approval.

d. The Town of Sharpsburg may not approve any Preliminary Plat whereon is shown a lot which would present particularly unusual difficulties for construction of a building, which would clearly require a variance to be reasonably usable, or which is otherwise "unbuildable" because of its unusability, whether due to the presence of floodplain, unusual configuration, lack of public utilities or for any other reason. A House Location Plan (HLP) may be required to be filed as a part of the Preliminary Plat approval to substantiate the buildability of any such difficult or unusual lot.

e. The subdivider shall be responsible for compliance with all codes, regulations, and zoning requirements and for the satisfaction of all of the noted and written comments of the Town of Sharpsburg.

f. Should an applicant disagree with the findings or final review comments of the Town of Sharpsburg or of any other Town department, concluding that factual or interpretive errors have been made, the following appeal procedure shall be followed to resolve the issues.

(1) Submit to the Town of Sharpsburg a written statement clearly defining the nature of the disagreement, the specific reference to the sections of the regulations (i.e., Sewer Regulations, Development Regulations, etc.) at issue, and the applicant's own opinion.

(2) Should the Town under appeal fail to respond within 10 working days from the date of transmittal of the appeal by the Town of Sharpsburg, the Applicant shall automatically forward a copy of the appeal to the Mayor and Town Council of Sharpsburg for final action in their normal course of business.

g. When the Town of Sharpsburg has determined that the plat and other Development Plans are in compliance with all applicable Town regulations and zoning requirements and approval has been received from all affected Town Departments, the Town Engineer shall sign and date a CERTIFICATE OF DEVELOPMENT PLANS APPROVAL stamped or printed on a reproducible copy of the plat. Approved copies of printed on a reproducible copy of the plat. Approved copies of the approved plat and Development

Plans shall be transmitted to the applicant and retained by the Town of Sharpsburg for its records.

h. Following the above approval by all affected Town Departments, a Development Permit shall be issued at the developer's request to begin construction activities based on the approved development plans.

12.1.4 Final Plat Approval

a. When the provisions of these Regulations have been complied with, the subdivider may submit to the Town an application for Final Plat approval, using an application form and in a number of copies as determined by the Town of Sharpsburg.

b. The Town of Sharpsburg shall indicate on a review copy of the plat or in a written memorandum all comments related to compliance of the Final Plat with these Regulations, the Zoning Ordinance, conditions of zoning approval, and the regulations of other Town departments and State agencies as appropriate. The Town of Sharpsburg shall have final staff authority to determine the applicability of any and all comments under these Site Development Regulations, the Zoning Ordinance or conditions of zoning approval.

c. The Town of Sharpsburg may not approve any Final Plat whereon is shown or by which is otherwise created a lot which would present particularly severe and unusual difficulties for construction of a building, which would clearly require a variance to be reasonably usable, or which is otherwise "unbuildable" due to the presence of floodplain, unusual configuration, lack of Health Department approval, or for any other justified reason.

d. Lots which would appear to be buildable under certain circumstances and would require further study or additional information before a building permit could be issued, but which present problems or unusual difficulties which can reasonably be addressed or overcome by the lot owner, may be included in the Plat with the appropriate notation of the steps necessary to allow issuance of a building permit.

e. The subdivider shall be responsible for compliance with all codes, regulations, and zoning requirements and for the satisfaction of all of the comments of the Town of Sharpsburg.

f. Final approval by the Town of Sharpsburg shall not be shown on the Final Plat until all requirements of these and other applicable regulations have been met, and the Town of Sharpsburg has received a completed request for Approval of Development Conformance and an executed Development Performance and Maintenance Agreement. The Agreement shall be accompanied by a bond, letter of credit or other acceptable surety providing for the maintenance of all installations and improvements required by these Regulations in the subdivision for a period not to exceed 36 months following the date of Approval of Development Conformance for subdivisions. The Maintenance Bond period of application may be extended by the Town of Sharpsburg at the request

of the Developer, provided it is in the best interest of the health, safety and welfare of the public.

g. The Town of Sharpsburg shall further determine that either:

(1) All improvements and installation to the subdivision required for approval of the Final Plat under the rules and regulations of Town of Sharpsburg have been completed in accordance with the appropriate specifications; or

(2) All of the storm water drainage and detention facilities, water and sewer utilities, street base and curbing construction required for approval of the Final Plat have been properly installed and completed and, for those required improvements not yet completed (grassing, pavement topping, required landscaping, sidewalks, etc.) a performance bond shall have been filed by the subdivider with the Development Performance and Maintenance Agreement, which performance bond shall:

(a) Be conditioned upon the faithful performance by the subdivider or developer of all work required to complete all improvements and installations for the subdivision, or approved portion thereof, in compliance with these rules and regulations within a specified time, not to exceed three months;

(b) Be payable to, and for the indemnification of, the Town;

(c) Be in an amount equal to the cost of construction of the required improvements not yet completed plus an additional ten (10) percent of said costs, as calculated by the Town of Sharpsburg on the basis of yearly contract prices or Town contracts, where available;

(d) Be with surety by a company entered and licensed to do business in the State of Georgia; and,

(e) Be in a form acceptable to the Town of Sharpsburg or the Town Attorney.

h. Payment for materials and installation of traffic control and street name signs shall be made to the Town of Sharpsburg or Coweta County Engineering Department in accordance with the traffic engineering regulations prior to approval of the Final Plat. Payment of the cost of striping major thoroughfares or required signalization if required and not completed by the developer shall also be received by the Town of Sharpsburg or other government agency prior to approval of the Final Plat.

i. Payment of the required plat recording fee shall be made to the Town of Sharpsburg prior to approval of the Final Plat.

j. As-built drawings and maps of each of the storm water drainage and detention facilities, water and sewer utilities, street base and curbing construction shall be required to be furnished in a electronic format in accordance with the Town's electronic mapping system and must be submitted prior to approval of the Final Plat.

k. Once the Town of Sharpsburg has approved the Final Plat and all other affected departments and agencies of government as required have certified compliance and signed the route sheet, the Final Plat shall be placed on the next available agenda of the Town Council for approval and acceptance of all improvements. The Final Plat shall not be deemed to be approved until it has been signed by the Mayor and Council.

l. Once the Final Plat has been so certified, the Town of Sharpsburg shall authorize it to be recorded with the Clerk of the Superior Court of Coweta County. The subdivider shall provide the Town of Sharpsburg with an appropriate number of copies of the recorded plat, as determined by the Town of Sharpsburg. Deeds to lands dedicated to the Town of Sharpsburg in fee simple, or to Property Owner Associations for park or recreational use, shall be recorded simultaneously with the Final Plat.

12.2 NON-SUBDIVISION REVIEW PROCEDURES

12.2.1 Pre-Application Conference

Whenever any development of a single parcel of land (other than a subdivision or a one or two-family dwelling) is proposed to be made, the developer is encouraged to present to the Town preliminary documents and graphic exhibits to permit early evaluation of the developer's intentions and coordination with the Comprehensive Plan, Zoning Ordinance, and to inform and provide the developer with the necessary regulations in order to properly accomplish the proposed project.

12.2.2 Concept Plan Approval

a. Application for Concept Plan approval shall be submitted to the Town of Sharpsburg using an application form and in a number of copies to be determined by the Town Engineer.

b. The Concept Plan shall include the entire property being developed. Properties which adjoin the subject property and which are under the same ownership or control as the subject property shall be so indicated. In such case that the developer elects not to submit a Concept Plan, then the developer may proceed directly with the submittal of Development Plans, if they show the entire parcel being developed. In so doing, however, the developer assumes the risk of premature design and engineering expenses in the event that the Town of Sharpsburg requires subsequent design and engineering changes.

c. Following Concept Plan approval, a clearing and grubbing permit shall be issued at the developer's request based on a Tree Protection Plan and Soil Erosion and Sediment Control Plan approved by the Town.

d. Following Concept Plan approval, a grading permit may be issued at the developer's request based on the requirements above for a clearing and grubbing permit and in addition a stormwater management report (hydrology study) shall be submitted and approved.

e. Copies of the approved Concept Plan shall be provided to the Town of Sharpsburg for permanent record, in a number as determined by the Town.

12.2.3 Site Development Plans Approval

a. An application for Development Plan approval and issuance of a development permit shall be submitted to the Town using an application form and in a number of copies as determined by the Town of Sharpsburg. The Development Plans may encompass a portion of a property included within an approved Concept Plan. However, if no Concept Plan has been approved, the Development Plans must include the entire property being developed and having similar zoning. As required under Section 10.6 Site Development Plans, of these Regulations, the application shall include the Site Plan and construction drawings, as appropriate to the project. All construction drawings and other engineering data shall be prepared and sealed by a Professional Engineer or Landscape Architect currently registered in the State of Georgia, in accordance with the provisions of Georgia Law.

b. The Town of Sharpsburg shall indicate on a review copy of the drawings or in a written memorandum all comments related to compliance of the Development Plans with these Regulations, principles of good design, the Zoning Ordinance, conditions of zoning approval, and the regulations of other Town departments and State agencies as appropriate. The Town of Sharpsburg shall have final staff authority to determine the applicability of any and all comments under these Development Regulations, the Zoning Ordinance or conditions of zoning approval.

c. The developer shall be responsible for compliance with all codes, regulations, and zoning requirements and for the satisfaction of all of the noted and written comments of the Town of Sharpsburg.

d. Deeds to lands dedicated to Town of Sharpsburg in fee simple, shall be submitted to the Town of Sharpsburg for recording.

e. Should an applicant disagree with the findings or final review comments of the Town of Sharpsburg or of any other Town department, concluding that factual or interpretive errors have been made, the following appeal procedure shall be followed to resolve the issues:

- (1) Submit to the Town Council a written statement clearly defining the nature of the disagreement, the specific reference to the sections of the

regulations (i.e., Sewer Regulations, Development Regulations, etc.) at issue, and the applicant's own opinion.

f. When the Town of Sharpsburg has determined that the Site Plan and other Development Plans are in compliance with all applicable Town regulations and zoning requirements, and approval has been received from all affected Town Departments, the Town Engineer shall sign and date a CERTIFICATE OF DEVELOPMENT PLANS APPROVAL on a reproducible copy of the plan. Approved copies of the approved Development Plans shall be transmitted to the applicant and retained by the Town of Sharpsburg for its record.

g. Following the above approval by all affected Town Departments a development permit shall be issued at the developer's request to begin construction activities based on the approved Development Plans. Said permit may include clearing, grubbing, and grading as appropriate and approved as part of the project. A building permit may also be issued on the basis of the approved development permit under the provisions contained in Article 4 Permits Required for Development or Construction. A Certificate of Occupancy may not be issued, however, until a Certificate of Development Conformance for the project has been executed by the Owner and an executed Development Performance and Maintenance Agreement has been received in accordance with these Regulations.

12.2.4 Certificate of Development Conformance Approval Process

a. Final approval by the Town of Sharpsburg shall not be shown on the Certificate of Development Conformance until all requirements of these and other applicable regulations have been met, and the Town of Sharpsburg has received a completed request for Approval of Development Conformance and an executed Development Performance and Maintenance Agreement. The Agreement shall be accompanied by a bond, letter of credit or other acceptable surety providing for the maintenance of all installation and Public improvements required by these Regulations in the development for a period not to exceed 36 months following the date of Approval of Development Conformance for developments for which the final topping of a "two-pass" street has not been applied or for a period not to exceed 42 months. The Maintenance Bond period of application may be extended by the Town of Sharpsburg provided it is in the best interest of the health, safety and welfare of the public.

b. The Town of Sharpsburg shall further determine that either:

(1) All Public improvements and installations to the development required to be dedicated and for approval of the Certificate of Development Conformance under the rules and regulations of Town of Sharpsburg have been completed in accordance with the appropriate specifications; or;

(2) All of the storm water drainage and detention facilities, water and sewer utilities, street base and curbing construction required for approval of the Certificate of Development Conformance have been properly

installed and completed and, for those required Public improvements not yet completed, within areas to be dedicated, (grassing, pavement topping, required landscaping, sidewalks, etc.) a performance bond shall have been filed by the developer with the Development Performance and Maintenance Agreement, which performance bond shall:

(a) Be conditioned upon the faithful performance by the developer of all work required to complete all Public improvements and installation required to be dedicated for the development, or approved portion thereof, in compliance with these rules and regulations within a specified time, not to exceed three months;

(b) Be payable to, and for the indemnification of, the Town;

(c) Be in an amount equal to the cost of construction of the required Public improvements required to be dedicated not yet completed plus an additional ten (10) percent of said costs, as calculated by the Town of Sharpsburg on the basis of yearly contract prices or Town contracts, where available;

(d) Be with surety by a company entered and licensed to do business in the State of Georgia; and,

(e) Be in a form acceptable to the Town of Sharpsburg or the Town Attorney.

c. Payment for materials and installation of all traffic control measures shall be made to the appropriate entities in accordance with the traffic engineering regulations prior to approval of the Certificate of Development Conformance. Payment of the cost of striping major thoroughfares or required signalization if required and not completed by the developer shall also be received by the Town of Sharpsburg prior to approval of the Certificate of Development Conformance.

d. Payment of the required plat recording fee shall be made to the Town prior to approval of the Final Plat.

e. Once the Town of Sharpsburg has approved the Certificate of Development Conformance and all other affected departments and agencies of government as required have certified compliance and signed the route sheet, the Mayor shall certify by his signature on the original of the Certificate of Development Conformance that all of the requirements of these Regulations, the Zoning Ordinance, and the conditions of zoning approval have been met, and that all other affected departments have approved the plat. The Certificate of Development Conformance shall not be deemed approved until it has been signed by the Town and where use of septic tanks is proposed, by a duly authorized representative of the Health Department.

12.3 ASSIGNMENT OF NAMES AND ADDRESS

12.3.1 Subdivision or Development Names

- a. Proposed subdivision or development names must be reviewed and approved prior to the issuance of a development permit. Names will be reviewed by the Town of Sharpsburg upon submittal of the Preliminary Plat or Site Plan
- b. Proposed names shall not duplicate or too closely approximate, phonetically, the name of any other subdivision or development in Coweta County or its municipalities except for extensions of existing subdivisions or developments.
- c. Subdivision and development names may be reserved if submitted and approved along with the Concept Plan for the project.

12.3.2 Street Names

- a. Proposed street names must be reviewed and approved prior to approval of a Final Plat for recording. Street names may be reserved through approval as shown on an approved Concept Plan or Preliminary Plat for the subdivision. Proposed names for private streets shall follow the same rules as for public streets.
- b. Street names shall consist of a root name of the developer's choosing and a suffix designation (such as "Street", "Avenue", "Drive", etc.), and shall be followed by a quadrant suffix. Directional prefixes (i.e., "North", "South") and the prefixes "old" or "new" shall not be used.
- c. A proposed street that is obviously in alignment with another already existing and named street shall bear the name of such existing street, unless this requirement is waived by Coweta County Engineering or Public Safety.
- d. Except within the same development, no proposed street name shall duplicate (be spelled the same or be phonetically the same) as an existing street name within Coweta County regardless of the use of such suffix designations as "Street", "Avenue", "Boulevard", "Drive", "Place", "Way", "Court", or however otherwise designated. In the same subdivision, a root name may not occur more than twice.
- e. All street root names and suffix designations are subject to the approval of the Town. Obscene or otherwise unacceptable language, abbreviations, contractions, or initials may not be used.
- f. Root names shall consist of no more than 13 characters including space, hyphens, etc. Letters not occurring in the English alphabet, and numerals, shall not be used.

12.3.3 Street Address Assignments

- a. A street address number must be assigned prior to issuance of a building permit. For any new structure proposed on a property which has not been assigned an address, a street number will be assigned upon confirmation or

establishment of the property as a buildable lot of record under the requirements of these Regulations.

b. Subdivisions

House numbers will be assigned after an Exemption Plat or Preliminary Plat is approved for the property. Submit two copies of the approved plat to the Town of Sharpsburg. Block number assignments shall also be designated for abutting major street name signs at this time.

c. Commercial/Industrial Projects or Buildings Projects will be numbered after the developer submits the Site Plan for development review.

d. Apartment Projects

Projects will be numbered after the developer submits copies of the Site Plan for development review. The overall development will be issued a single street address. The developer will be responsible for numbering/lettering individual buildings and units.

e. Condominium Projects

Projects will be numbered after the developer submits the Site Plan for development review. Individual units shall be numbered consecutively if located along public or private streets. Units in the "stacked-flat" configuration shall use the same numbering approach as applies to an apartment project.

f. The following numbering systems shall be followed per postal regulations:

(1) Individual mailbox for each dwelling units: Each street in the project must be named.

(2) Cluster box system - Centralized mailbox for entire project: One street name will serve to assign all house numbers for main delivery.

12.4. Initiation of Developmental Activities

12.4.1 Initial Activities Required

Following the issuance of any permit authorizing clearing and grading of a site:

a. Required erosion control measures must be installed where practical by the developer and inspected and approved by the Town of Sharpsburg prior to actual grading or removal of vegetation. All control measures shall be in place as soon after the commencement of activities as possible and in coordination with the progress of the project.

b. Soil sedimentation facilities must be installed and operational prior to major grading operations.

c. Areas required to be undisturbed by the Zoning Ordinance, conditions of zoning approval or other ordinance or regulation shall be designated by survey stakes, flags, or other appropriate markings and shall be inspected and approved by the Town of Sharpsburg prior to the commencement of any clearing or grading activities.

12.4.2 Tree Protection Areas

Prior to the initiation of land disturbance activities and throughout the clearing and grading process the following must be accomplished for an designated tree protection area in accordance with any approved Buffer and Landscape Plan or Tree Preservation/Replacement Plan for the property:

- a. For those trees which are not to be removed, all protective fencing, staking, and any tree protection area signs shall be in place. These barriers must be maintained throughout the land disturbance process and should not be removed until landscaping is begun.
- b. The tree protection areas shall not be utilized for storage of earth and other materials resulting from or used during the development process.
- c. Construction site activities such as parking, materials storage, concrete washout, burning, etc. shall be arranged to prevent disturbances within the tree protection areas.

12.4.3 Development Inspections

Oral notification shall be made by the developer or contractor to the Town of Sharpsburg at least 24 hours prior to commencement of activity for each of the following phases as authorized by any permit for site work or development. Inspections shall be made by the Town and passed prior to continuation of further activity or proceeding into new phases.

- a. Clearing or clearing and grubbing of the site or any portion included under the permit.
- b. Grading. Installation of slope stakes shall be required. Upon completion of roadway grading, the Water Certificate shall be submitted to the Town certifying that the centerline of the road and the offset centerline of the water line is within 6" of that shown on the approved plans or re-lined plan submittal. Inspection and approval shall be required prior to trenching or continuation with sub-base preparation.
- c. Installation of storm drainage pipe, detention, or other storm water facilities.
- d. Installation of sanitary sewer and appurtenances. This notification shall be made simultaneously with official notification by the developer or contractor to the Sharpsburg Public Utilities, and if for informational purposes only to the Town of Sharpsburg.
- e. Curbing of roadways. Inspection should be requested before the forms have been set (if used). Roadway width will be spot checked by string line between curb stakes.

f. Sub-base or subgrade of streets. After compaction, the subgrade will be string-lined for depth and crown. The subgrade shall be roll tested and shall pass with no movement, to the satisfaction of the Town.

g. Street base. The base will be string-lined for depth and crown, and shall pass a roll test with no movement to the satisfaction of the Town of Sharpsburg.

h. Paving. A Town inspector shall be on site during the paving process to check consistency, depth, and workmanship, as applicable. For asphalt paving, the temperature of the material will be spot-checked, and the roadways will be cored after completion to check thickness.

12.4.4 Responsibility for Quality and Design

The completion of inspections by Town of Sharpsburg officials or employees and authorization for work continuation shall not transfer responsibility for the quality of the work performed or materials used from the contractor or developer, nor imply or transfer acceptance of responsibility for project design or engineering from the professional corporation or individual under whose hand or supervision the plans were prepared.

12.4.5 Stop Work Orders

Work which is not authorized by an approved permit, or which is not in conformance to the approved plans for the project, or which is not in compliance with the provisions of these Regulations or any other adopted code, regulation or ordinance of Town of Sharpsburg, shall be subject to immediate Stop Work Order by the Town of Sharpsburg. Work which proceeds without having received the necessary inspections of the Town of Sharpsburg shall be halted until all inspections of intervening work is completed.

12.4.6 Stabilization for Erosion Control

If for any reason a clearing and grubbing, grading, or development permit expires after land disturbance activities have commenced, the developer shall be responsible for stabilizing the site for erosion control, under the direction of the Town of Sharpsburg.

12.5 APPROVAL OF DEVELOPMENT CONFORMANCE

12.5.1 Prerequisite to Final Plat or Certificate of Occupancy

This approval shall be a prerequisite to the approval of a Final Plat or issuance of a Certificate of Occupancy for any part of a project or issuance of a Certificate of Occupancy for any part of a project included in a development permit, except for single-family and two-family residential structures. The approval shall reflect the owner's certification that all site work and construction has been accomplished according to the terms of approved plans and permits, and that all facilities intended for maintenance, supervision and/or dedication to the public are in compliance with appropriate standards, regulations, codes and ordinances. Such approval shall be revoked in cases of fraud or whenever unauthorized changes are made to the site without the benefit of required permits.

12.5.2 Submission Requirements

Upon completion of the project as authorized for construction by the development permit, the owner shall file a Certificate of Development Conformance with the Town of Sharpsburg along with record drawings of all storm water detention facilities and modifications to the limits of the 100-year floodplain (if any). An "as-built" hydrology study for the project with the actual parameters from the record drawing of the detention facilities. A record drawing of the sanitary sewer facilities shall also be prepared, separately or included with the above, and submitted to the Sharpsburg Utilities Department in accordance with their regulations. The Certificate of Development Conformance shall be in a form as required by the Town of Sharpsburg (see Appendix B) and shall be accompanied by a Development Performance and Maintenance Agreement completed in draft form. If the owner is a corporation, the documents shall be signed by the President or Vice President, be affixed by the corporate seal, and either the corporate secretary shall attest to the signature and affix the corporate seal, or a Certificate of Corporate Resolution shall also be submitted.

12.5.3 Approval

Following final inspection and approval of all record drawings, the Town of Sharpsburg shall approve the Certificate of Development Conformance.

12.6 PROJECT CLOSEOUT AND CONTINUING MAINTENANCE

12.6.1 Development Performance and Maintenance Agreement

Based on the approved Certificate of Development Conformance, the owner shall file a final Development Performance and Maintenance Agreement with the Town of Sharpsburg, along with any required Certificate of Corporate Resolution and performance or maintenance surety, as a prerequisite to the approval of a Final Plat or issuance of a Certificate of Occupancy for any part of a project included in the development permit, except for single-family and two-family residential structures. The Development Performance and Maintenance Agreement shall be in a form as required by the Town of Sharpsburg, and shall include the following:

- a. Final required improvements yet to be completed (e.g., grassing, topping, sidewalks, required landscaping) and performance bonding. Final landscaping shall be provided in accordance with a schedule acceptable to the Town of Sharpsburg. The developer may be allowed up to three months in which to finish the other designated improvements, after the date of approval of the Certificate of Development Conformance.
- b. Maintenance of the public streets and drainage facilities within public streets or easements for the bonding period after the date of approval of the Certificate of Development Conformance. Repairs shall be made for any deficiencies identified within the bonding period or the bonds shall be called to complete same.
- c. Indemnification of the Town of Sharpsburg against all liability for damages arising as a result of errors or omissions in the design or construction of the development for a period of ten years. If liability is subsequently assigned or transferred to a successor in

title or other person, a copy of such legal instrument shall be filed with the Clerk to Superior Court.

12.6.2 Maintenance and Performance Surety

a. The maintenance surety and the performance surety, required from the owner/developer or the contractor employed by the owner/developer, may be in the form of cash deposited with the Town, or a bond, letter of escrow or letter of credit from a bank or other financial institution in a form acceptable to the Town of Sharpsburg or Town Attorney.

b. The Maintenance bond period of application shall not be less than 36 months from installation of the wearing course or final topping for a one-pass street and not less than 42 months from the installation of the binder for a two-pass street and which time shall be extended equal to any extension of time for the Performance Bond granted by the Town of Sharpsburg but not to exceed 24 months. The Performance Bond period of application shall not exceed 3 months unless an extension of an additional 3 calendar months has been granted by the Town of Sharpsburg. All cost estimates shall be as prepared by or acceptable to the Town of Sharpsburg.

c. A Maintenance Bond for the sanitary sewer facilities is required separately by the Water Pollution Control Division in accordance with their regulations. For the water system improvements, the contractor employed by the developer shall be responsible for maintenance of all water mains and appurtenances for one year from the date of approval of the Certificate of Development Conformance by correcting all defects or deficiencies in materials or workmanship.

ARTICLE 13

FEES

13.1 Application filing and permit fees shall be established from time-to-time by the Mayor and Council.

13.2 Permit fees, if any, shall be submitted as a prerequisite to issuance of the permit. Non-payment as a result of submission of a check having insufficient funds on account, or for any other reason, shall cause the permit to be voided and reissuance subject to penalty as may be established by the Town of Sharpsburg.

13.3 Application fees, if any, shall be submitted with the application and upon acceptance of said submission for review and consideration shall not be refundable. Failure to pay a required application fee shall cause the application to be returned to the applicant without acceptance for review or consideration by the Town.

13.4 Following the approval of development plans, and prior to authorization to begin construction, the developer shall pay into the Town of Sharpsburg such required inspection, sanitary sewer permit charges, curb cut, or other fees as may be established from time-to-time by the Mayor and Council. Such fees shall not be refundable following issuance of a Development Permit, except upon approval of the Mayor and Council.

13.5 Prior to approval of a Final Plat or Certificate of Occupancy, the developer shall provide to the Town of Development such recording fees and performance and/or maintenance bonds as shall be required by these Regulations or established from time-to-time by the Mayor and Council.

ARTICLE 14

ADMINISTRATION, APPEAL, AND VIOLATIONS

14.1. ADMINISTRATION.

14.1.1. These Site Development Regulations shall be administered, interpreted, and enforced by the Town Administrator or their designee. All other ordinances or regulations referenced herein, such as the fire prevention and life safety codes, building and other technical codes, health, water, and sewer regulations, shall be administered by the Town of Sharpsburg.

14.1.2. In any case in which activities are undertaken in violation of these Regulations, not in compliance with the provisions of a permit issued under the authorization of these Regulations, or without authorization of a permit which would otherwise be required, the Town of Sharpsburg is hereby authorized to suspend or invalidate such permits, order that all unauthorized or improper work be stopped, direct correction of deficiencies, issue summonses to any court of competent jurisdiction, or take any other legal or administrative action appropriate to the severity of the violation and degree of threat to the public health, safety, and welfare.

14.2. REGULATIONS TO BE PUBLISHED.

It shall be the duty and responsibility of the Town Administrator or their designee to maintain an accurate and up-to-date compilation of these Development Regulations and all amendments and pertinent attachments thereto and to publish said compilation and make it available to the public at a cost as established by the Mayor and Council.

14.3. MODIFICATIONS.

Modification of the design standards set forth in these Development Regulations may be authorized by the Town of Sharpsburg in specific cases when, in its opinion, undue hardship may result from strict compliance; provided any such determination shall be based fundamentally on the fact that unusual topographical or other exceptional conditions require such modification, or that the granting of the modification will not adversely affect the general public welfare or nullify the intent of these Regulations. Any such modification granted by the Town of Sharpsburg shall be made in writing to the developer and also made a part of the Town's records. Application for any modifications shall be filed in writing to the Town with necessary supporting documents and shall explain in detail the reasons and facts supporting the application.

14.4. APPEAL AND WAIVER OF THE REGULATIONS.

14.4.1. Appeals.

Appeals of the interpretation by the Town Administrator or their designee of the requirements of these Regulations shall first be submitted in writing to the Town of Sharpsburg who shall review the request in a timely manner and receive comments from other affected departments.

The appeal thereupon shall be forwarded to the Mayor and Council for final action in their normal course of business.

14.4.2. Waivers.

Waiver requests of the requirements of these Regulations shall be submitted to the Town of Sharpsburg, along with such fees as shall be established by the Town. The Town Administrator or their designee shall coordinate the review of each waiver request with all other affected Town departments and shall summarize such comments or recommendations as may be received to the Mayor and Council for action in their normal course of business.

14.5 Violations, Enforcement and Penalties.

Any action or inaction that violates the provisions of this ordinance or the requirements of an approved plan or permit shall be subject to the enforcement actions or penalties outlined herein. Any such action or inaction that is continuous with respect to time is deemed to be a public nuisance and also may be abated by injunctive or other equitable relief. The imposition of any of the enforcement actions or penalties described herein shall not prevent such equitable relief.

14.6 Notice of Violation.

If the Town Administrator or his designee determines that an applicant or other responsible person has failed to comply with the terms and conditions or the provisions of this ordinance, they shall issue a written notice of violation to such applicant or other responsible person. Where a person is engaged in activity covered by this ordinance without having first secured the appropriate permit therefor, the notice of violation shall be served on the owner or the responsible person in charge of the activity being conducted on the site.

The notice of violation shall contain:

1. The name and address of the owner or the applicant or the responsible person;
2. The address or other description of the site upon which the violation is occurring;
3. A statement specifying the nature of the violation;
4. A description of the remedial actions or measures necessary to bring the action or inaction into compliance with a permit, approved plan or this ordinance and the date for the completion of such remedial action;
5. A statement of the penalty or penalties that may be assessed against the person to whom the notice of violation is directed; and

14.7 Penalties.

In the event the remedial measures described in the notice of violation have not been completed by the date set forth for such completion in the notice of violation, any one or more of the following actions or penalties may be taken or assessed against the person to whom the notice of violation was directed. Before taking any of the following actions or imposing any of the following penalties, the Town Administrator or his designee shall provide a reasonable opportunity, of not less than ten days (except that in the event the violation constitutes an immediate danger to public health or public safety, 24 hours notice shall be sufficient) to cure such violation. In the event the applicant or other responsible person fails to cure such violation after such notice and cure period, the Town Administrator or his designee may take any one or more of the following actions or impose any one or more of the following penalties.

1. **Stop Work Order** - The Town Administrator or his designee may issue a Stop Work Order which shall be served on the owner, applicant or other responsible person. The Stop Work Order is effective immediately and shall remain in effect until the applicant or other responsible person has taken the remedial actions or measures set forth in the Notice of Violation or has otherwise cured the violation or violations described therein, provided the Stop Work Order may be withdrawn or modified to enable the applicant or other responsible person to take necessary remedial measures to correct and cure such violation or violations.
2. **Withhold Certificate of Occupancy** - The Town Administrator or his designee is authorized to refuse to issue a Certificate of Occupancy or Completion for the building or other improvements constructed or being constructed on the site until the applicant or other responsible person has taken the remedial actions and measures set forth in the Notice of Violation or has otherwise corrected and cured the violations described therein.
3. **Suspension, Revocation or Modification of Permit** - The Town Administrator or his designee is authorized to suspend, revoke or modify the permit authorizing the land disturbing activities or development. A suspended, revoked or modified permit may be reinstated after the applicant or other responsible person has taken the remedial actions and measures set forth in the Notice of Violation or has otherwise corrected and cured the violations described therein, provided such permit may be reinstated (upon such conditions as the Town Administrator or his designee may deem necessary) to enable the applicant or other responsible person to take the necessary remedial measures to cure such violations.
4. **Civil Penalties** - In the event the applicant or other responsible person fails to take the remedial actions and measures set forth in the notice of violation or otherwise fails to cure the violations described therein within ten days (or such greater period as the Town Administrator or his designee shall deem appropriate) (except that in the event the violation constitutes an immediate danger to public health or public safety, 24 hours notice shall be sufficient) after the Town Administrator or his designee has taken one or more of the actions described above, the Town Administrator or his designee may issue a citation and impose a penalty not to exceed the maximum amount allowed by the Town Charter as is from time to time amended (depending on the severity of the violation) for each day the violation remains unremedied after receipt of the Notice of Violation.

5. **Other Legal Remedies**

- a. In any case in which a violation of this ordinance has occurred, the town, in addition to other remedies provided by law, may petition for a restraining order, injunction, abatement, or take any other appropriate legal action or proceeding through a court of competent jurisdiction to prevent, restrain, or abate such unlawful use or activity.
- b. In any case in which any land is, or is proposed to be, used or activities are undertaken in violation of these Regulations or any amendment thereto adopted by the Mayor and Council, the Town, in addition to other remedies provided by law, may petition for a restraining order, injunction, abatement, or take any other appropriate legal action or proceeding through a court of competent jurisdiction to prevent, restrain, or abate such unlawful use or activity.

ARTICLE 15
ADOPTION AND AMENDMENT

15.1 EFFECTIVE DATE

15.1.1 These regulations shall be in full force and effect on October 2, 2006 following the adoption by the Mayor and Council of the Town of Sharpsburg, Georgia, and shall apply to any land disturbance Permit for which an application is received after the effective date of these Regulations.

15.1.2 Any subdivision or other project for which a valid and complete application for a Development Permit shall have been received prior to the effective date of these Regulations shall be considered "grandfathered" and, at the developer's option, may proceed to completion and building permits may be issued under the Subdivision Regulations of Town of Sharpsburg in place prior to the effective date of these Regulations, provided that the Development Permit is or can be issued within 90 calendar days of said effective date and all time frames associated with said permit are observed.

15.1.3 Any subdivision or other project for which a Development Permit has been issued prior to the effective date of these Regulations shall be considered "grandfathered".

15.1.4 Any subdivision or other project for which only a Clearing, Clearing and Grubbing, or Grading Permit shall have been issued prior to effective date of these Regulations shall be brought into conformance with these Regulations prior to issuance of a Development Permit. Administrative modifications in accordance with Article 14 shall be granted as necessary and appropriate where full compliance is not feasible or cannot reasonably be achieved because of the stage of development, limitations imposed by the site, or design parameters.

15.1.5 Nothing in these Regulations shall be construed to affect the validity of any building permit lawfully issued prior to the effective date of these Regulations.

15.2 AMENDMENTS

15.2.1 These Regulations may be amended from time-to-time by ordinance of the Mayor and Council of Town of Sharpsburg. Such amendments shall be effective as of their date of adoption unless otherwise stated in the amending ordinance.

15.2.2 Any subdivision or other project for which a valid and complete application for a Development Permit shall have been received prior to the adoption of an amendment to these Regulations may, at the developer's option, proceed to completion and building permits may be issued as though no amendment had been approved, provided that the Development Permit is or can be issued within 90 calendar days of said amendment and all time frames associated with said permit are observed.

15.2.3 Any subdivision or other project for which a Development Permit has been issued prior to the adoption of an amendment to these regulations may, at the developer's option, proceed to completion and building permits may be issued as though no amendment had been approved.

15.2.4 Any subdivision or other project for which only a Clearing, Clearing and Grubbing, or Grading Permit shall have been issued prior to adoption of an amendment to these Regulations shall be brought into conformance with the amendment (if applicable) prior to issuance of a Development Permit. Administrative modifications in accordance with Article 14 shall be granted as necessary and appropriate where full compliance is not feasible or cannot reasonably be achieved because of the stage of development, limitations imposed by the site, or design parameters.

15.2.5 No amendment to these Regulations shall be construed to affect the validity of any building permit lawfully issued prior to the adoption of said amendment.

15.3 SEVERABILITY

If any section, subsection, sentence, clause, or phrase of these Regulations is for any reason held to be unconstitutional or void, the validity of the remaining portions of these Regulations shall not be affected thereby, it being the intent of the Mayor and Council of Town of Sharpsburg in adopting these Regulations that no portion thereof or provision of the Regulations contained herein shall become inoperative or fail by reason of the unconstitutionality or invalidity of any section, subsection, sentence, clause, phrase, or provisions of these Regulations.

15.4 CONFLICTING REGULATIONS

All regulations or parts of regulations of the Code of Ordinances of the Town of Sharpsburg in conflict with these Regulations shall be and the same are hereby repealed in their portions so in conflict. Provided, however, that it is not the intent of these Regulations to repeal or affect any Law of the State of Georgia, or any Code or Ordinance of Town of Sharpsburg adopted as a requirement of a State Law, in which case the most restrictive requirement shall control.

ARTICLE 16

The Ordinance shall be codified at Chapter 23 of The Town of Sharpsburg's Code of Ordinances.

ARTICLE 17

This Ordinance shall become immediately effective upon its second reading and adoption by the Town Council.

ARTICLE 18

The Preamble of this Ordinance shall be construed to be, and is hereby incorporated by reference as is fully set out herein.

ARTICLE 19

The sections, paragraphs, sentences, clauses, and phrases of this Ordinance are severable, and if any phrase, sentence, paragraph, or section of this Ordinance shall be declared illegal by the valid judgment or decree of any court of competent jurisdiction, such an illegality shall not affect any of the remaining phrases, clauses, sentences, paragraphs, and sections of this Ordinance.

ARTICLE 20

The repeal of any stricken, deleted or repealed language of this ordinance of the now former language of the Town of Sharpsburg (“ Former Language”) shall not be construed or held to repeal the Former Language as to any offense committed against such Former Language or as to any act done, any penalty, forfeiture or punishment so incurred, or any right accrued or claim arising under the Former Language, or in any way whatever to affect any such offense or act so committed or so done, or any penalty, forfeiture or punishment so incurred or any right accrued or claim arising before the herein newly enacted language (“New Language”) takes effect, save only that proceedings thereafter shall conform to the New Language, so far as practicable. If any penalty, forfeiture or punishment be mitigated by any provision of the New Language, such provision may be, by the consent of the party affected, applied to any judgment announced after the New Language takes effect.

ARTICLE 21

All ordinances and parts of ordinances in conflict herewith are hereby expressly repealed.

[signatures on the next page]

APPROVED BY THE MAYOR AND COUNCIL OF THE TOWN OF SHARPSBURG
at a regular meeting of the Mayor and Council on the ____ day of October, 2006, by the
following voting for adoption:

Wendell L. Staley, Mayor

J. Clay Cole, Council Member

Larry W. Hyde, Council Member

Derrick G. McElwaney, Council Member

Standly D. Parten, Council Member

Attest:

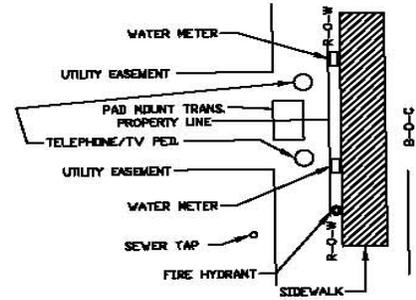
Donna M. Camp, Town Clerk

Robin L. Spradlin, Town Administrator

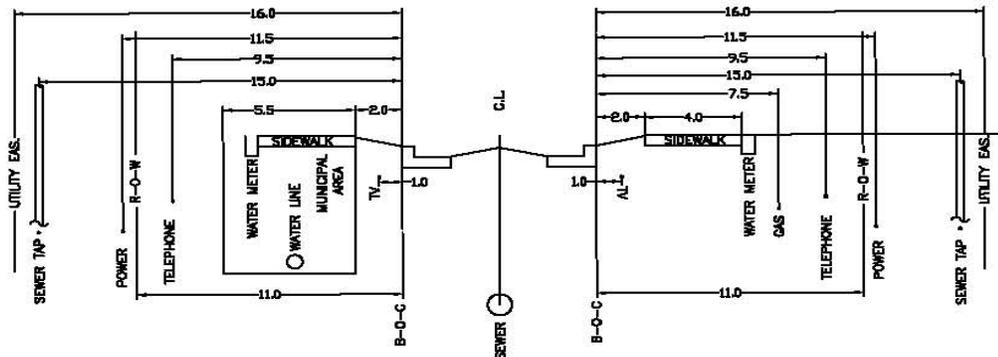
APPENDIX A

GENERAL NOTES:

- 1) GAS AND WATER WILL BE ON OPPOSITE SIDES OF THE ROAD.
- 2) UTILITY LOCATIONS ARE MEASURED FROM THE BACK OF CURB (B-O-C).
- 3) POWER, CABLE TV, AND TELEPHONE WILL USE JOINT TRENCHES WHERE PRACTICAL. THE LOCATION SHALL BE THE UTILITY TRENCH FURTHEST FROM THE B-O-C.
- 4) BURIAL DEPTH MEASURED FROM THE TOP OF CURB TO THE TOP OF THE UTILITY.
- 5) ALL RESIDENTIAL ROADS REQUIRE AN ADDITIONAL 5 FOOT UTILITY EASEMENT AT THE FRONT OF THE LOT.
- 6) BEFORE ANY UTILITY IS INSTALLED, THE REQUIRED WIDTH OF THE ROADWAY SHALL BE ROUGH GRADED AND ALL CONCRETE CURBING SHALL BE SET AT FINAL GRADES.
- 7) IN GENERAL, THE WATER MAINS SHOULD BE INSTALLED FIRST. FOLLOWING WATER MAIN INSTALLATION, UTILITIES ARE TO BE INSTALLED IN THIS ORDER: 1) ELECTRIC POWER 2) GAS 3) TELEPHONE 4) CABLE T.V. ALL UTILITIES SHALL BE INSTALLED PRIOR TO PAVING.
- 8) EACH UTILITY SHALL BE RESPONSIBLE FOR REPAIRS OF ANY DAMAGE THEY CREATE TO OTHER UTILITIES AND TO THE STREET IMPROVEMENTS WITHIN THE RIGHT-OF-WAY.



RESIDENTIAL STREET ABOVE GRADE PLAN



STREET WIDTH



UTILITY PLACEMENT
