

**UPPER MIFFLIN
TOWNSHIP**

CUMBERLAND COUNTY

**SUBDIVISION
AND
LAND DEVELOPMENT
ORDINANCE**

UPPER MIFFLIN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

SUBDIVISION & LAND DEVELOPMENT ORDINANCE

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UPPER MIFFLIN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

SUBDIVISION AND LAND DEVELOPMENT ORDINANCE

AN ORDINANCE REGULATING THE SUBDIVISION AND DEVELOPMENT OF LAND WITHIN UPPER MIFFLIN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA: REQUIRING THE SUBMITTAL OF SUBDIVISION AND LAND DEVELOPMENT PLANS FOR TOWNSHIP REVIEW: PRESCRIBING STANDARDS OF DESIGN, PLANS REQUIREMENTS, AND CONDITIONS OF ACCEPTANCE OF THE PUBLIC IMPROVEMENTS.

The Board of Supervisors of Upper Mifflin Township, Cumberland County, Pennsylvania, does herein and hereby ordain that an ordinance regulating the subdivision and development of land within Upper Mifflin Township requiring the submittal of subdivision and land development plans for Township review; prescribing standards of design plan requirements, plan processing procedures, improvement and construction requirements, and condition of acceptance of public improvements, is promulgated pursuant to the Pennsylvania Municipalities Planning Code, Act 247 effective January 1, 1968, P.L. 805 July 31, 1968, reenacted and amended December 21, 1988 by Act of 1988 P.L. 1329, No. 170, as further amended.

ARTICLE I

PURPOSES AND INTERPRETATION

SECTION 100. Purposes

This ordinance is enacted for the purpose of assuring sites suitable for building purposes and human habitation and to provide for the harmonious development of Upper Mifflin Township, for the coordination of existing streets with proposed streets; for adequate open space, for traffic, recreation, light and air, sedimentation and water management control facilities, and for distribution of population, thereby creating conditions favorable to the health, safety, morals, and general welfare of the citizens of Upper Mifflin Township.

SECTION 101. Interpretation

The provisions of this Ordinance shall be deemed to be minimum requirements necessary to meet the foregoing purposes. Where, owing to special conditions, the life, health, safety or property of persons may be menaced or jeopardized by the application of any of the requirements of this Ordinance, more stringent or restrictive requirements necessary to eliminate or alleviate such menace or jeopardy may be applied or imposed by the Township. Where the provisions of this Ordinance impose greater restrictions than those of any statute, other ordinance or regulation, the provision of this Ordinance shall prevail. Where the provisions of any statute, other Ordinance or regulation impose greater restrictions than those of this Ordinance, the provisions of such statute, ordinance, or regulation shall prevail.

SECTION 102. Severability

The provisions of this ordinance shall be severable, and if any of its provisions shall be held to be unconstitutional, illegal or invalid, such decision shall not affect the validity of any of the remaining provisions of this ordinance. It is hereby declared as a legislative intent that this ordinance would have been adopted had such unconstitutional, illegal, or invalid provision not been included herein.

ARTICLE II

SHORT TITLE

SECTION 200. Short Title

This Ordinance may be cited as "The Upper Mifflin Township Subdivision and Land Development Ordinance of 2007."

ARTICLE III

DEFINITIONS

SECTION 300. Definitions

As used in this Ordinance words in the singular include the plural, and those in the plural include the singular. The word “person” includes corporation, unincorporated association and partnership, as well as an individual. The word “building” includes the meaning of “structure” and shall be construed as if followed by the phrase “or part thereof.” The following words as used in this Ordinance shall have the meanings indicated below:

1. **Accelerated Erosion:** The removal of the surface of the land through the combined action of man’s activity and the natural processes of a rate greater than would occur because of the natural process alone.

2. **Agricultural Operation:** An enterprise that is actively and continuously engaged in the commercial production and preparation for market of crops, livestock and livestock products and in the production, harvesting and preparation for market or use of agricultural, agronomic, horticultural, silvicultural and aquacultural crops and commodities. The term includes an enterprise that implements changes in production practices and procedures or types of crops, livestock, livestock products or commodities produced consistent with practices and procedures that are normally engaged by farmers or are consistent with technological development within the agricultural industry excluding the construction of buildings, structures and impervious surfaces.

3. **Alley (or Service Drive):** A minor right-of-way, publicly or privately owned, primarily for service access to the back or side of properties and not intended for general traffic circulation.

4. **Alteration:** As applied to land, a change in topography as a result of the moving of soil and rock from one location or position to another; also the changing of surface conditions by causing the surface to be more or less impervious; land disturbance.

5. **Applicant (see Developer and Subdivider):** A landowner or developer, as hereinafter defined, who has filed an application for development including his heirs, successors, and assigns.

6. **Application for Development:** Every application, whether preliminary, tentative or final, required to be filed and approved prior to start of construction or development including, but not limited to, an application for a building permit, for the approval of a subdivision plat or plan, or for the approval of a development plan.

7. **Best Management Practices (BMP):** Stormwater structures, facilities and techniques to control, maintain or improve the quantity and quality of surface runoff.
8. **Block:** An area bounded by streets or proposed streets.
9. **Board:** The Board of Supervisors of Upper Mifflin Township, Cumberland County, Pennsylvania.
10. **Building Setback Line:** The line within a property defining the required minimum distance between a building and the adjacent right-of-way said distance referred to as front yard, and the line defining side and rear yards.
11. **Cartway:** The portion of a street including shoulders intended for vehicular use.
12. **Channel Erosion:** The widening, deepening, and headward cutting of small channels and waterways, due to erosion caused by moderate to large floods.
13. **Cistern:** A reservoir or tank for storing rainwater.
14. **Clear-Sight Distance:** A line of unobstructed vision from a point four and one-half feet (4-1/2' 0") above the center line of a street to the nearest point of the top of an object four inches (4") high on the same center line.
15. **Clear-Sight Triangle:** An area of unobstructed vision at street intersections defined by lines of sight between points at a given distance from the intersection of the street center lines.
16. **Condominium:** Ownership in common with others of a parcel of land and certain parts of a building thereon which would normally be used by all the occupants, together with individual ownership in fee of a particular unit or apartment in such building or on such parcel of land and may include dwellings, offices and other types of space in commercial buildings or on property.
17. **Conservation District:** The Cumberland County Conservation District.
18. **County:** Cumberland County, Pennsylvania.
19. **Cul-de-sac:** A street with access closed at one end and with a vehicular turn-around at the closed end.

20. **Culvert:** A structure with appurtenant works, which carries a stream, or stormwater runoff under or through an embankment or fill.
21. **Dam:** A artificial barrier, together with its appurtenant works, constructed for the purpose of impounding or storing water or another fluid or semi-fluid, or a refuse bank, fill or structure for highway, railroad or other purposes which does or may impound water or another fluid or semi-fluid.
22. **Decision:** A final adjudication of any board or other body granted jurisdiction under this Chapter or the Pennsylvania Municipalities Planning Code, as amended, to do so, either by reason of the grant of exclusive jurisdiction or by reason of appeals from determinations; all decisions shall be appealable to the Court of Common Pleas of the County and Judicial District wherein the Township lies.
23. **Design Storm:** The magnitude and temporal distribution of precipitation from a storm event measured in probability of occurrence (e.g., a 5-year storm) and duration (e.g., 24-hours), used in the design and evaluation of stormwater management systems.
24. **Designee:** The agent of the Upper Mifflin Township Planning Commission and/or agent of the Upper Mifflin Township Board of Supervisors involved with the administration, review or enforcement of any provisions of this ordinance by contract or memorandum of understanding.
25. **Detention Basin:** A structure designed to temporarily detain surface runoff for a period of time sufficient to reduce the velocity and rate of surface flows leaving a site. Detention basins drain fully after rainfall has ceased.
26. **Determination:** The final action by an office, body or agency charged with the administration of the present ordinance or applications thereunder, except the Upper Mifflin Township Board of Supervisors and the Planning Commission, only if and to the extent the Planning Commission is charged with final decision on preliminary or final plans under the Subdivision and Land Development Ordinance; all determinations shall be appealable only to the Boards designated as having jurisdiction for such appeal.
27. **Developer:** Any landowner, agent of such landowner or tenant with the permission of such landowner, who makes or causes to be made a subdivision of land or land development.

28. **Development of Regional Significance and Impact:** Any land development that, because of its character, magnitude, or location will have substantial effect upon the health, safety, or welfare of citizens in more than one municipality.
29. **Development Plan:** The provisions for development, including a planned residential development, a plat of subdivision, all covenants relating to use, location and bulk of buildings and other structures, intensity of use or density of development, streets, ways and parking facilities, common open space and public facilities. The phrase “provision of the development plan” when used in this act shall mean the written and graphic materials referred to in this definition.
30. **Development Site:** The specific tract of land for which a Regulated Activity is proposed.
31. **Diffused Drainage Discharge:** Drainage discharge not confined to a single point location or channel, such as sheet flow or shallow concentrated flow.
32. **Downslope Property Line:** That portion of the property line of the lot, tract, or parcels of land being developed located such that all or most of the overland or pipe flow from the site would be directed towards it.
33. **Drainage:** The flow of water or liquid waste and the methods of directing such flow.
34. **Drainage Conveyance Facility:** A Stormwater Management Facility designed to transmit stormwater runoff and shall include streams, channels, swales, pipes, conduits, culverts, storm sewers, stormwater detention/retention facilities, etc.
34. **Dwelling:** A building designed for residential purposes and used as living quarters for one or more persons:
- a. **Dwelling Unit:** One or more rooms used for living and sleeping purposes and having a kitchen with fixed cooking facilities arranged for occupancy by one (1) family or a single person.
 - b. **Dwelling, Single Family, Detached:** A building used by one (1) family, having one (1) dwelling unit and having two (2) side yards.
 - c. **Dwelling, Single Family, Semi-Detached:** A building used by one (1) family, having one (1) side yard, and one (1) party wall in common with another building.

- d. **Dwelling, Single Family, Attached (rowhouse or townhouse):** A building used by one (1) family, and having two (2) party walls in common with the other buildings.
 - e. **Dwelling, Two Family Detached:** A building used by two (2) families, with one (1) dwelling unit arranged over the other, having two (2) side yards.
 - f. **Dwelling, Two Family, Semi-Detached:** A building used by two (2) families, with one (1) dwelling unit arranged over the other, having one (1) side yard, and having one (1) party wall in common with another building.
35. **Earth Disturbance:** Any activity which alters, disturbs, and exposes the existing land surface.
 36. **Easement:** A right granted for the use of private land for certain public or quasi-public purposes; also the land to which such right pertains.
 37. **Engineer, Township:** The Township Engineer or any consultant designated by the Board of Supervisors to review a subdivision plan and perform the duties of engineer on behalf of the Township.
 38. **Engineer, Registered:** A person duly registered as a professional engineer by the Commonwealth of Pennsylvania.
 39. **Erosion:** The movement of soil particles by the action of water, wind, ice, or other natural forces.
 40. **Erosion and Sediment Pollution Control Plan:** A plan that is designed to minimize accelerated erosion and sedimentation.
 41. **Exceptional Value Waters:** Surface waters of high quality which satisfy Pennsylvania Code Title 25 Environmental Protections, Chapter 93 Water Quality Standards, Section 93.4b(b) (relating to anti-degradation).
 42. **Existing Conditions:** The site conditions as they exist prior to development.
 43. **Flood:** A general, but temporary condition of partial or complete inundation of normally dry land areas from the overflow of streams, rivers, and other waters of this Commonwealth.
 44. **Floodplain:** Any land area susceptible to inundation by water from any natural source or delineated by applicable Department of Housing and Urban Development, Federal Insurance Administration Flood Hazard

Boundary – Mapped as being a special flood hazard area. Also included are areas that comprise Group 13 Soils, as listed in Appendix A of the Pennsylvania Department of Environmental Protection (PaDEP) Technical Manual for Sewage Enforcement Officers (as amended or replaced from time to time by PaDEP).

45. **Floodway:** The channel of the watercourse and those portions of the adjoining floodplains, which are reasonably required to carry and discharge the 100-year frequency flood. Unless otherwise specified, the boundary of the floodway is as indicated on maps and flood insurance studies provided by FEMA. In an area where no FEMA maps or studies have defined the boundary of the 100-year frequency floodway, it is assumed – absent evidence to the contrary – that the floodway extends from the stream to 50 feet from the top of the bank of the stream.
46. **Flood Prone Area:** A flood prone area lies beyond the floodway. Flood prone areas are designated by their probability of being flooded; a one hundred year floodplain includes the floodway, and a flood prone land adjacent to it, which has a one percent probability of being flooded each year, and a one hundred percent probability of being flooded within one hundred years. (Of course, these are only probabilities; one hundred year floods could occur in successive years).
47. **Freeboard:** The difference between the design flow elevation in the emergency spillway of a basin and the top of the basin embankment; and the difference between the design flow elevation of a swale and the top of the swale embankment.
48. **Governing Body:** The council in cities, boroughs and incorporated towns; the board of commissioners in townships of the first class; the board of supervisors in townships of the second class; the board of commissioners in counties of the second class through eighth class or as may be designated in the law providing for the form of government. In this instance, the Upper Mifflin Township Board of Supervisors.
49. **Grade:** A slope, usually of a road, channel or natural ground specified in percent and shown on plans as specified herein. (To) Grade – to finish the surface of a roadbed, top of embankment or bottom of excavation.
50. **Grassed Waterway (Swale):** A natural or man-made drainageway of parabolic, trapezoidal, rectangular, or triangular cross-section shaped to required dimensions and vegetated with erosion-resistant grasses for conveyance of runoff.
51. **Groundwater Recharge:** Replenishment of existing natural underground water supplies.

52. **High Quality Waters:** Surface waters having quality which exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water by satisfying Pennsylvania Code Title 25 Environmental Protection, Chapter 93 Water Quality Standards, § 93.4b(a).
53. **Impervious Surface:** A surface that prevents or impedes the percolation of water into the ground. Gravel surfaces shall be considered impervious.
54. **Infiltration Facility:** A structure or other man-made feature designed to collect runoff and direct it into the ground.
55. **Inlet:** A surface connection to a closed drain. A structure at the diversion end of a conduit. The upstream end of any structure through which water may flow.
56. **Landowner:** The legal or beneficial owner or owners of land including the holder of an option or contract to purchase (whether or not such option or contract is subject to any condition), a lessee if he is authorized under the lease to exercise the rights of the landowner, or other person having a proprietary interest in land.
57. **Land Development:** Any of the following activities:
- (i.) the improvement of one lot or two or more contiguous lots, tracts or parcels of land for any purpose involving;
 - (a.) a group of two or more residential or nonresidential buildings, whether proposed initially or cumulatively, or a single nonresidential building on a lot or lots regardless of the number of occupants or tenure; or
 - (b.) the division or allocation of land or space, whether initially or cumulatively, between or among two or more existing or prospective occupants by means of, or for the purpose of streets, common areas, leaseholds, condominiums, building groups or other features;
 - (ii.) a subdivision of land;
 - (iii.) excluding;
 - (a.) the conversion of an existing single-family detached dwelling or single-family semi-detached dwelling into not

more than three residential units, unless such units are intended to be a condominium;

- (b.) the addition of an accessory building, including farm buildings, on a lot or lots subordinate to an existing principal building; or
- (c.) the addition or conversion of buildings or rides within the confines of an enterprise which would be considered an amusement park. For purposes of this subclause, an amusement park is defined as a tract or area used principally as a location for permanent amusement structures or rides. This exclusion shall not apply to newly acquired acreage by an amusement park until initial plans for the expanded area have been approved by proper authorities.

- 58. **Lot:** A designated parcel, tract or area of land established by a plat or otherwise as permitted by law and to be used, developed or built upon as a unit.
- 59. **Lot Width:** The width of a lot measured at the required building setback line.
- 60. **Manning's Equation (In Manning's Formula):** A method for calculation of velocity of flow (e.g., feet per second) and flow rate (e.g., cubic feet per second) in open channels based upon channel shape, roughness, depth of flow and slope. "Open channels" may include closed conduits so long as the flow is not under pressure.
- 61. **Mobilehome:** A transportable, single family dwelling intended for permanent occupancy, contained in one unit, or in two or more units designed to be joined into one integral unit capable of again being separated for repeated towing, which arrives at a site complete and ready for occupancy except for minor and incidental unpacking and assembly operations, and constructed so that it may be used without a permanent foundation.
- 62. **Mobilehome Lot:** A parcel of land in a Mobilehome Park, improved with the necessary utility connections and other appurtenances necessary for the erections thereon of a single Mobilehome.
- 63. **Mobilehome Park:** A parcel or contiguous parcels of land which has been so designated and improved that it contains two or more mobilehome lots for the placement thereon of mobilehomes.

64. **Municipality:** Upper Mifflin Township, Cumberland County, Pennsylvania.
65. **Non-Point Source Pollution:** Pollution that enters a watery body from diffuse origins in the watershed and does not result from discernable, confined, or discrete conveyances.
66. **NRCS:** Natural Resource Conservation Service (previously SCS).
67. **Open Channel:** A drainage element in which stormwater flows with an open surface. Open channels include, but shall not be limited to, natural and man-made drainageways, swales, streams, ditches, and canals.
68. **Outfall:** Point where water flows from a conduit, stream, or drain.
69. **Outlet:** Points of water disposal from a stream, river, lake, tidewater or artificial drain.
70. **Panhandle Lot:** A lot that is connected to a public street by a fifty foot (50') wide strip of land that is a part of the lot but that is not used in determining the applicable minimum lot area requirement. The lot area of a Panhandle Lot shall be calculated by using only that portion of the lot that satisfied the minimum lot dimensions.
71. **Peak Discharge:** The maximum rate of stormwater runoff from a specific storm event and location.
72. **Percolation Test:** A procedure to determine the absorption rate of the soil in an area proposed as the installation site for an on-lot septic system or stormwater infiltration facility, to be carried out according to the requirements of the Pennsylvania Department of Environmental Protection.
73. **Pipe:** A culvert, closed conduit, or similar structure (including appurtenances) that conveys stormwater.
74. **Planning Commission:** The Planning Commission of Upper Mifflin Township. If no Planning Commission is presently active, all reference to the Planning Commission shall be construed to mean the Cumberland County Planning Commission.
75. **Plat:** The map or plan of a subdivision or land development, whether preliminary or final.
76. **Preliminary Soil Analysis:** A procedure to permit visual inspection of soils conditions and water table level in an area proposed as the

installation site for an on-lot septic system in accordance with Pennsylvania Department of Environmental Protection rules and regulations. Such tests may be referred to as “Deep Probe” or inspection trench and shall be open for inspection by the Township Sewage Enforcement Officer and the Department of Environmental Protection.

77. **Prime Agricultural Land:** Land used for agricultural purposes that contains soils of the first, second or third class as defined by the United States Department of Agriculture natural resource and conservation services county soil survey.
78. **Public Hearing:** A formal meeting held pursuant to public notice by the governing body or planning agency, intended to inform and obtain public comment, prior to taking action in accordance with this Chapter or the Pennsylvania Municipalities Planning Code, as amended.
79. **Public Meeting:** A forum held pursuant to notice under the Act of July 3, 1986 (P.L. 388, No. 84), known as the “Sunshine Act.”
80. **Public Notice:** A notice published once each week for two (2) successive weeks in a newspaper of general circulation in the Township; such notice shall state the time and place of the hearing and the particular nature of the matter to be considered at the hearing; the first publication shall not be more than thirty (30) days and the second publication shall not be less than seven (7) days from the date of the hearing.
81. **Public Right-of-Way:** A strip of land intended to be dedicated for the use of the means of vehicular and pedestrian circulation by the public at large.
82. **Qualified Design Professional:** A Pennsylvania Registered Professional Engineer.
83. **Rational Formula:** A rainfall-runoff relation used to estimate peak flow
84. **Regulated Activities:** Actions or proposed actions that have an impact on stormwater runoff and that are specified Section 1005.C. of this Ordinance.
85. **Release Rate:** The rate at which runoff is released from a site or sub-area measured in cubic feet per second.
86. **Report:** Any letter, review, memorandum, compilation or similar writing made by any body, board, officer or consultant other than a solicitor to any other body, board, officer or consultant for the purpose of assisting the recipient of such report in the rendering of any decision or determination. All reports shall be deemed recommendatory and advisory only and shall

not be binding upon the recipient, board, officer, body or agency, nor shall any appeal lie therefrom. Any report used, received or considered by the body, board, officer or agency rendering a determination or decision shall be made available for inspection to the applicant and all other parties to any proceeding upon request, and copies thereof shall be provided at cost of reproduction.

87. **Retention Basin:** A reservoir, formed from soil or other material, which is designed to retain permanently a certain amount of stormwater which also may be designed to temporarily detain surface runoff for a period of time sufficient to reduce the velocity and rate of surface flows leaving a site. Retention basins also may receive fresh water from year-round streams. Retention basins always contain water, and thus may be considered man-made lakes or ponds.
88. **Return Period:** The average interval, in years, within which a storm event of a given magnitude can be expected to recur. For example, the 25-year return period rainfall would be expected to recur on the average of once every twenty-five years.
89. **Reserve Strip:** A parcel of ground in separate ownership separating a street or road from adjacent properties or from another street.
90. **Riser:** A vertical pipe or inlet structure extending from the bottom of a pond that is used to control the discharge rate from the pond for a specified design storm.
91. **Runoff:** Any part of precipitation that flows over the land surface.
92. **Secretary:** The Township Secretary of Upper Mifflin Township.
93. **Seepage Pit/Seepage Trench:** An area of excavated earth filled with loose stone or similar coarse material, into which surface water is directed for infiltration in the ground.
94. **Sheet Flow:** Runoff that flows over the ground surface as a thin, even layer, not concentrated in a channel.
95. **Soil Cover Complex Method:** A method of runoff computation developed by the NRCS that is based on relating soil type and land use/cover to a runoff parameter called Curve Number (CN).
96. **Soil Group, Hydrologic:** A classification of soils by the Natural Resources Conservation Service, formerly the Soil Conservation Service, into four runoff potential groups. The groups range from "A" soils, which

are very permeable and produce little runoff, to "D" soils, which are not very permeable and produce much more runoff.

97. **Slope:** Slopes are to be expressed in a percentage based upon vertical difference in feet per one hundred feet (100' 0") of horizontal distance.
98. **Spillway:** A depression in the embankment of a pond or basin which is used to pass peak discharge greater than the maximum design storm controlled by the pond.
99. **Storm Frequency:** The number of times that a given storm "event" occurs or is exceeded on the average in a stated period of years. See "Return Period".
100. **Stormwater:** The total amount of precipitation reaching the ground surface.
101. **Stormwater Facility:** Any structure, natural or man-made, that, due to its condition, design, or construction, conveys, stores, or otherwise affects stormwater runoff. Typical stormwater management facilities include, but are not limited to, detention and retention basins, open channels, storm sewers, pipes, and infiltration facilities.
102. **Stormwater Management Plan:** The plan prepared by the Developer or his representative indicating how stormwater runoff will be managed at the particular site of interest according to this Ordinance.
103. **Street:** A strip of land, including the entire right-of-way, intended to be dedicated for use as a means of vehicular and pedestrian circulation by the public at large. Includes street, avenue, boulevard, road, highway, freeway, parkway, lane, alley, viaduct and any other ways used or intended to be used by vehicular traffic or pedestrians.
104. **Structure:** Any man-made object having an ascertainable stationary location on or in land or water, whether or not affixed to the land.
105. **Subarea:** The smallest drainage unit of a watershed for which stormwater management criteria have been established in the Stormwater Management Plan.
106. **Subdivider:** The owner, developer or the authorized agent of the owner of a subdivision of land development.
107. **Subdivision:** The division or redivision of a lot, tract or parcel of land by any means into two (2) or more lots, tracts, parcels or other divisions of land including changes in existing lot lines for the purposes, whether

immediate or future, of lease, partition by the court for distribution to heirs or devisees, transfer of ownership or building or lot development. Provided, however, that the subdivision by lease of land for agricultural purposes into parcels of more than ten (10) acres, not involving any new street or easement of access or residential dwelling, shall be exempted.

108. **Substantially Completed:** Where, in the judgment of the Township Engineer, at least ninety percent (based on the cost of the required improvements for which financial security was posted) of those improvements required as a condition for final approval have been completed in accordance with the approved plan, so that the project will be able to be used, occupied or operated for its intended use.
109. **Supervisors:** The Upper Mifflin Township Board of Supervisors.
110. **Surveyor, Registered:** A person duly registered as a professional surveyor by the Commonwealth of Pennsylvania.
111. **Swale:** A low lying stretch of land which gathers or carries surface water runoff.
112. **Time-of-Concentration (T_c):** The time for surface runoff to travel from the hydraulically most distant point of the watershed to a point of interest within the watershed. This time is the combined total of overland flow time and flow time in pipes or channels, if any.
113. **Township:** Upper Mifflin Township, Cumberland County, Pennsylvania.
114. **Usable Open Space:** A parcel or parcels of land or an area of water, or a combination of land and water within a development site designed and intended for the use or enjoyment of residents of the subdivision or Mobilehome Park or other development, not including streets, off street parking areas, and areas set aside for public facilities.
115. **Watercourse:** A permanent stream; intermittent stream; river; brook; creek; channel or ditch for water, whether natural or man-made.
116. **Wetland:** Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs, fens, and similar areas.

ARTICLE IV

**CONTROL OF SUBDIVISION AND LAND DEVELOPMENT,
RECORDING OF PLANS,
DEDICATION OF PROPERTY AND IMPROVEMENTS**

SECTION 400. Control of Subdivision and Land Development

From and after the effective date of this Ordinance no subdivision or development of any lot, tract, or parcel of land within the Township shall be made, and no street, sanitary sewer, storm sewer, water main or other facility in connection therewith shall be laid out, constructed, opened or dedicated for public use of travel or for the common use of occupants of buildings abutting thereon, except in strict accordance with the provisions of this Ordinance. No lot in a subdivision or land development may be sold, no building may be erected and no changes may be made in the contour of the land; no grading, excavating, removal or destruction of the topsoil, trees or other vegetative cover of the land may be commenced in a subdivision or a land development unless and until a plan for the subdivision or land development has been approved by the Board of Supervisors and recorded, and until the improvements required by the Board of Supervisors in connection therewith have either been constructed in strict accordance with the standards and specifications, particularly as presented in Article X of this Ordinance, are declared to be a minimum guarantee that all streets shown on any proposed plan are of sufficient width and proper grade and so located as to accommodate the probable volume of traffic thereon, afford adequate light and air, facilitate fire protection, provide access for fire fighting equipment to buildings and provide a coordinated system of streets conforming to the Township's Official Plan of streets; and further, that the land whereon buildings are to be constructed is of such character that it can be used for building purposes without danger to health or peril from fire, flood or other hazard, that all necessary or required erosion and sedimentation facilities be installed prior to or during the initial phase of construction of the subdivision or land development. (Where owing to special conditions, a literal enforcement of the provisions of this Ordinance would result in unnecessary hardship, the Board of Supervisors may on the basis of an approved preliminary plan, make such reasonable exception thereto as will not be contrary to the public interest and may permit the sale of a lot, issuance of a permit, or erection of a building, subject to conditions necessary to assure adequate streets and other public improvements.)

SECTION 401. The Effect of Land Development

If a tract or parcel of land is planned and designed for separate developments or uses, although said tract or parcel remains under single ownership, each such development or use shall contain the minimum lot area, setback, and yard requirements as stipulated in Article X. In the event the ownership of a particular development or use is to be subdivided for transfer or sale, such subdivision shall contain the minimum area, setback and yard requirements.

**SECTION 402. Recording of Final Plans and
Dedication of Property and Improvements**

Upon approval of a final plan, the developer shall within ninety (90) days of such final approval record such plan in the office of the Recorder of Deeds of the County, and the streets, parks, erosion and sedimentation and water management control facilities and other public improvements shown thereon shall then be considered to be a part of the Official Plan of the Township. Offers of dedication of such public improvements to the Township shall be submitted on a written, recordable document setting forth by metes and bounds the offer; or the owner may note on the plan that such improvements have not been offered for dedication to the Township. Every street, park, erosion and sediment facility or other public improvement shown on a recorded subdivision or land development plan shall be deemed to be a private street, park, or improvement until such time as the same has been accepted by ordinance or resolution.

SECTION 403. Control of Common Areas and Facilities

Whenever a developer or owner proposes to provide land or structures for the common benefit of the particular residents of a project such as usable open space and active play areas, a Home Owner's Association shall be established to maintain such facilities. The Township Supervisors shall retain the right to review and approve the Articles of Incorporation and all Declarations of Covenants, Conditions, and Restrictions of the Home Owner's Association.

ARTICLE V

GENERAL PROCEDURE AND JURISDICTION

SECTION 500. Plan Approving Authority

All subdivision and land development plans shall be subject to approval, modification, or rejection by the Board of Supervisors; in the event such a plan is disapproved, the reasons therefore shall be set forth in writing. All plans shall be referred to the Planning Commission for its review and recommendations.

SECTION 501. Submittal of Plans

The subdivider or land developer shall submit preliminary copies of subdivision plans to the Township Secretary and the Township Secretary shall distribute the required number of copies to the Township agencies concerned as provided for in Article VII. All plans when first submitted shall be considered preliminary plans, except as per Section 504. If the subdivider or land developer makes substantial revisions in his plans after they have been approved in preliminary form, such revised plans shall be treated as preliminary plans when resubmitted. Upon approval of the preliminary plans, the subdivider shall submit final plans to the Township Secretary and the Township Secretary shall distribute the required number of copies to the township agencies concerned as provided for in Article VIII. Mobilehome Park plans shall be reviewed in the same manner as subdivision and land development plans.

Applications shall not be considered complete and plats shall not be reviewed until such time as all modifications of requirements have been obtained from the Township.

SECTION 502. Review of Plans

Subdivision and land development plans shall be reviewed by the Planning Commission at its first regular meeting following the date of submittal, providing that such plans are submitted at least twenty-one (21) days prior to the meeting.

SECTION 503. Status of Approved Plans, Hearings

From the time an application for approval of a plan, whether preliminary or final, is duly filed as provided in the subdivision and land development ordinance, and while such application is pending approval or disapproval, no change or amendment of the zoning, subdivision or other governing ordinance or plan shall affect the decision on such application adversely to the applicant and the applicant shall be entitled to a decision in accordance with the provisions of the governing ordinances or plans as they stood at the time the application was duly filed.

In addition, when a preliminary application has been duly approved, the applicant shall be entitled to final approval in accordance with the terms of the approved preliminary

application as hereinafter provided. However, if an application is properly and finally denied, any subsequent application shall be subject to the intervening change in governing regulations. When an application for approval of a plat, whether preliminary or final, has been approved or approved subject to conditions acceptable to the applicant, no subsequent change or amendment in the zoning shall be applied to affect adversely the right of the applicant to commence and to complete any aspect of the approved development in accordance with the terms of such approval within five (5) years from such approval. Where final approval is preceded by preliminary approval, the five year period shall be counted from the date of the preliminary approval. In the case of any doubt as to the terms of a preliminary approval, the terms shall be construed in the light of the provisions of the governing ordinances or plans as they stood at the time when the application for such approval was duly filed. Where the landowner has substantially completed the required improvements as depicted upon the Final Plat within the aforesaid five year limit, or any extension thereof as may be granted by the governing body, no change of municipal ordinance or plan enacted subsequent to the date of filing of the Preliminary Plat shall modify or revoke any aspect of the approved Final Plan pertaining to zoning classification or density, lot, building street or utility location. In the case of a Preliminary Plat calling for the installation of improvements beyond the five year period, a schedule shall be filed by the landowner with the Preliminary Plat delineating applications for Final Plat approval of each section are intended to be filed. Such schedule shall be updated annually by the applicant on or before the anniversary of the Preliminary Plat approval, until Final Plat approval of the final section has been granted and any modification in the aforesaid schedule shall be subject to approval of the governing body in its discretion. Each section in any residential subdivision or land development, except for the last section, shall contain a minimum of twenty-five percent of the total number of dwelling units as depicted on the Preliminary Plan, unless a lesser percentage is approved by the governing body in its discretion.

Provided the landowner has not defaulted with regard to or violated any of the conditions of the Preliminary Plat approval, including compliance with landowner's aforesaid schedule of submission of Final Plats for the various sections, then the aforesaid protections afforded by substantially completing the improvements depicted upon the Final Plat within five years shall apply and for any section or sections, beyond the initial section, in which the required improvements have not been substantially completed within said five year period the aforesaid protections shall apply for an additional term or terms of three years from the date of Final Plan approval for each section. Failure of landowner to adhere to the aforesaid schedule of submission of Final Plats for the various sections shall subject any such section to any and all changes in zoning, subdivision and other governing ordinance enacted by the municipality subsequent to the date of the initial Preliminary Plan Submission. Before acting on an application, the Board of Supervisors may hold a public hearing thereon after public notice.

SECTION 504. Preliminary/Final Plat

When an entire tract of land is divided into not more than three lots (including the residue) with the required frontage on a public street of sufficient width and no public improvements proposed or when a subdivision involves divisions of land for adjoining lot addition purposes only, the Planning Commission may recommend and the Supervisors may approve, upon written application of the applicant, that approval be granted on the basis of the plat submitted and identified as Preliminary/Final. Land development plans shall be reviewed for such consideration on an individual basis and shall only be considered in instances where no public improvements are required and when the proposed development is deemed negligible by the Township Board of Supervisors upon recommendation by the Township Planning Commission. Said plats shall be prepared and reviewed in accordance with all of the Preliminary and Final Plat requirements of Articles VI and VII of this Ordinance.

SECTION 505. Fees

- A. Filing fees shall be paid by the applicant to the Township Secretary at the time of filing of any application. Such fees shall be as established most recently by the Board of Supervisors by resolution.

- B. Subject to the provisions of this Section concerning the applicant's payment of review and report fees, no final approval of any application will be granted by the Township unless and until the applicant reimburses the Township for the cost and expense of the following professional services incurred by the Township, or any agency, Commission or Board thereof, in connection with the review and approval of any plat or application, or the inspection of public improvements:
 - (1.) Engineering Services
 - (2.) Legal Services
 - (3.) Stenographer's Fees
 - (4.) Sewage Enforcement Officer Fees

All of the above fees for which the Township seeks reimbursement shall be certified by the Township Secretary to the applicant at the time when the Township is in a position to finally approve any application or plat.

ARTICLE VI

VOLUNTARY PRE-APPLICATION CONSULTATION

SECTION 600. Consultation with Planning Commission

Conferences and any other communications with the Planning Commission shall be kept as confidential as possible. Before going ahead with the Preliminary Plan procedure or with steps to acquire land or subdivide, the subdivider or developer should be familiar with these regulations and should consult with the Planning Commission about the following factors:

- A. The suitability of the site for development.
- B. The demand for a development of the type proposed in the particular location proposed.
- C. The accessibility of the site.
- D. The availability of public facilities (schools, parks, water, sanitary and storm sewage, etc.) and public services (police, fire, refuse disposal, etc.)
- E. The effect on the project of any existing or contemplated comprehensive plan, any public improvement identified on the Township's Official Map, and these regulations.
- F. Sewage facilities requirements of the Department of Environmental Protection and the Township.
- G. Erosion and Sedimentation plans and permits as required by the Department of Environmental Protection and as reviewed by the Cumberland County Conservation District.
- H. Precautionary measures to preserve or protect historic and natural features.
- I. Approvals by all appropriate State and Federal agencies.

SECTION 601. Sketch Plan Submission

It is suggested that prior to the consultation with the Planning Commission the subdivider prepare a Sketch Plan of his proposed development. It is suggested that the subdivider or developer submit sufficient data to the Planning Commission for purposes of generally illustrating and discussing the proposed project.

ARTICLE VII

PRELIMINARY PLANS

SECTION 700. Plan Requirements

The following materials shall be submitted with an application for review and approval of preliminary plans:

- A. Seven (7) copies of the subdivision or land development plan in the form of a map or series of maps on sheet sizes either eighteen inches by twenty-four inches (18" x 24") or twenty-four inches by thirty-six inches (24" x 36") drawn to a scale not smaller than one hundred feet (100' 0") to the inch and showing the following:
- (1.) The limits and dimensions of the tract to be subdivided or developed and the proposed name or identifying title of the project. The date, scale and north point.
 - (2.) Existing and proposed streets, including the names, State or Township route numbers, widths of the right-of-way and cartway.
 - (3.) The location and dimensions, where applicable, of existing buildings, railroads, easements, rights-of-way, public lands, tree masses, streams and other features, and monuments.
 - (4.) The location and dimensions of proposed easements, existing property lines, rights-of-way, and land reserved for public purposes; and the location, course, and dimensions of existing and proposed sanitary and storm sewer and water facilities and surface water on adjacent land and the proposed development.
 - (5.) Existing topographic contours at not more than ten foot (10' 0") intervals or at such intervals that the contours shall have a maximum spacing of one hundred feet (100' 0"). The Planning Commission may also require supplemental plans showing proposed final contours.
 - (6.) The name, address and telephone number of the subdivider or developer and the current owner. The name, address, telephone numbers, seal, and signature of the registered engineer or registered surveyor who shall have prepared the plan. The name and address of the owner of the tract and the names of the owners of adjoining tracts. Deed references for the tract and all adjoining tracts.

- (7.) A location map drawn to a scale of 1" = 2,000' and taken directly from the applicable USGS 7.5' quadrangle showing the proposed project in relation to adjacent properties and existing streets in that vicinity of the Township.
- (8.) Number to identify each lot or parcel in unit, cooperative or condominium subdivision and/or site. Approximate dimensions, lot numbers, and the approximate area and proposed use of each lot. Areas shall be indicated as both gross and net area and shall be expressed in both square feet and acres.
- (9.) Purpose for which sites other than residential lots or parcels in unit, cooperative or condominium subdivisions are dedicated or reserved.
- (10.) Location and description of survey monuments. All permanent reference monuments shown by a symbol and labeled as monument on the plat.
- (11.) Reference to recorded subdivision plats of adjoining plotted land by record name, date and number.
- (12.) Statement by the owner dedicating streets, right-of-way and any sites for public uses which are to be dedicated.
- (13.) Proposed Protective Covenants running with the land, if any.
- (14.) Adjacent lots must be plotted.
- (15.) Existing sewage disposal facilities on adjacent lots (location of collection lines, pump stations, on-lot systems, etc.). It is acceptable to identify those areas through the use of a legend.
- (16.) All plats shall contain a note regarding the status of wetlands on-site based upon a minimum of three factors: (1) the presence or absence of hydric soils or soils with inclusions of hydric components as classified by the USDA Natural Resource Conservation Service, (2) National Wetlands Inventory mapping, and (3) an inspection of the property by the responsible surveyor or engineer. If wetlands are present or suspected on-site, the plan shall clearly state whether or not any disturbance of these areas is proposed. Where deemed necessary by the Township Board of Supervisors upon recommendation by the Township Planning Commission, an analysis of wetland conditions on the subject property shall be performed. Such analysis shall be prepared by a

recognized professional wetlands consultant and shall clearly state the existence or nonexistence of any wetlands and shall delineate the field determined boundaries of those areas should they exist. A note shall also be added which states that Upper Mifflin Township assumes no responsibility with regard to wetlands analyses and delineations. Plats shall also include the location and boundaries of any 100-year floodplain and/or floodway within the subject property as identified on the latest edition of FEMA's Flood Insurance Rate Maps for the Township.

- (17.) Prime Agricultural Land - Any land that is indicated by the Natural Resource Conservation Service as "Pennsylvania prime farmland soils" and Capability Class I, II, or III must be plotted on the plan.
- (18.) The Necessary Approval Blocks
- (19.) The following note shall be included on all subdivision and/or land development plans:

AGRICULTURAL NUISANCE DISCLAIMER

The lands depicted on this plan may be located adjacent to or be involved in a normal agricultural operation as defined by Pennsylvania Act 133 of 1982, as amended, "The Right To Farm Law." If you purchase land that is depicted on this plan and said lands are located or involved as described above, you may be prohibited from filing a nuisance action against the operators of a normal agricultural operation. In addition you may be subjected to inconvenience, discomfort and the possibility of injury to property and health arising from normal and accepted agricultural practices and operations, including, but not limited to, noise, dust, odor, the operation of machinery of any kind including aircraft, the storage and disposal of manure, and the application of fertilizers, soil amendments, herbicides and pesticides.

- (20.) Details, conditions and applicable approval dates of any granted modifications of requirements or other specific Township approvals.
- B. Cross-section drawings for all proposed streets showing rights-of-way, cartway widths, location of sidewalks, and planting strips. Three (3) copies of profile drawings of all proposed streets showing existing and proposed grades.
 - C. Plans and profiles of existing and/or proposed sanitary and storm sewer systems, water distribution systems, and any other pertinent utilities. Such

plans shall include grades, pipe sizes and the location of valves and fire hydrants.

- D. Results of preliminary soil analyses which shall be conducted in accordance with the Rules and Regulations of the Department of Environmental Protection and performed and inspected by a Sewage Enforcement Officer approved by the Township.
- E. Each subdivision or land development application shall be accompanied by five (5) copies of the appropriate sewage facilities planning documentation on forms provided by the Department of Environmental Protection (PaDEP).
- F. Whenever a single tract or other parcel of land, or part thereof, is subdivided or developed such that the subdivision or development is subject to the Rules and Regulations of the Department of Environmental Protection pursuant to the control of erosion and sedimentation, the subdivider or developer shall prepare, for the use and review of the Township, two (2) copies of an Erosion and Sedimentation Control Plan. The design standards and specifications for said Plan. Shall be in accordance with the Rules and Regulations of the Pennsylvania Department of Environmental Protection relative to Erosion Control (Chapter 102). The design standards and specifications for said Plan are contained in said Chapter 102.
- G. No plat which will require access to a highway under jurisdiction of the Pennsylvania Department of Transportation shall be finally approved unless the plat contains a notice that a Highway Occupancy Permit is required pursuant to Section 420 of the Act of June 1, 1945 (P.L. 1242, No. 4228), known as the "State Highway Law," before driveway access to a State highway is permitted. The plat shall be marked to indicate that access to the State highway shall be only as authorized by a Highway Occupancy Permit. In all other respects, full and complete compliance must take place with respect to the provisions of Act No. 12986-42 and any supplementary rules and regulations enacted pursuant thereto by the Pennsylvania Department of Transportation.
- H. Traffic Impact Study – Each subdivision or land development application shall include therewith a Traffic Impact Study in accordance with Section 1006 of this Ordinance.
- I. Water Impact Study – Each subdivision or land development application shall include therewith a water impact study in accordance with Section 1007 of this Ordinance.

SECTION 701. Review Procedure

- A. At least twenty-one (21) days prior to the meeting of the Planning Commission at which initial consideration is desired, the subdivider or developer shall submit seven (7) copies of the Preliminary Plan and accompanying documentation to the Secretary.

- B. Copies of the Preliminary Plan may be distributed by the Secretary as follows:
 - (1.) Three (3) copies of the Plan and supporting data to the Planning Commission for review and comment.

 - (2.) One (1) copy of the plan and supporting data to the Township Engineer for his review and comment.

 - (3.) Remaining copies to the Township.

- C. The Planning Commission shall take official action on a Preliminary Plan within sixty (60) days of Township receipt of the plans and data. The Commission shall note its action on three (3) copies of the plans. The three (3) noted copies of the plan shall then be forwarded to the Board of Supervisors along with a recommendation concerning preliminary approval. Upon recommendation of preliminary plan approval, the Commission shall also recommend to the Board of Supervisors that the appropriate sewage facilities planning documentation be formally adopted and submitted to the Pennsylvania Department of Environmental Protection for its review, if applicable.

- D. The Board of Supervisors shall take official action within ninety (90) days following the date of the first regular meeting of the Planning Commission at which the plan is considered. The Board shall note its action on three (3) copies of the plans. One (1) shall be retained for Township use. The action of the Township with regard to the plan shall be communicated to the subdivider or developer not later than fifteen (15) days following the decision.

- E. Before acting on any Subdivision Plan, the Township Supervisors may hold a public hearing thereon after public notice.

- F. When the application is not approved in terms as filed, the decision shall specify the defects found in the application and describe the requirements which have not been met and shall, in each case, cite the provisions of the ordinance.

- G. Failure of the Township Supervisors to render a decision and communicate it to the applicant within the time and in the manner required herein shall be deemed an approval of the application in terms as presented unless the applicant has agreed in writing to an extension of time or change in the prescribed manner of presentation of communication of the decision, in which case, failure to meet the extended time or change in manner of presentation of communication shall have like effect.

- H. Approval of the Preliminary Plan shall not constitute approval of the Final Subdivision Plan by the Township Supervisors.

ARTICLE VIII

FINAL RECORD PLANS

SECTION 800. Plan Requirements

The following materials shall, where applicable, be submitted with an application for approval of a final plan. Final plans shall conform in all important details with preliminary plans as previously approved, and any conditions specified in the approval of preliminary plans shall be incorporated in the final plans.

- A. Seven (7) copies of the plan in the form of a map or series of maps, drawn to a scale of not smaller than one hundred feet (100' 0") to the inch on sheets size eighteen inches by twenty-four inches (18" x 24"). Where more than one (1) sheet is required, an index map of the entire project at a smaller scale shall be shown on a sheet of the same size. The Planning Commission may require final plans at a scale of fifty feet (50' 0") to the inch as a condition of approval to assure legibility in cases warranted by the complexity of the proposal. The error of closure shall not be more than one part in 10,000. Such final plans shall show.
 - (1.) The items required to be shown in preliminary plans as specified in Section 700,a.
 - (2.) Final topographic contours at not more than ten foot (10' 0") intervals so that the contours shall have a maximum spacing of one hundred feet (100' 0").
 - (3.) The location of all proposed monuments, street lights, and street signs.
 - (4.) The location of minimum building setback lines.
 - (5.) An Erosion and Sedimentation Control Plan and/or earthmoving permit when required under Section 102 of the Clean Streams Law. Said Plan should also be submitted to the County Conservation District when one (1) acre or more of earth is to be disturbed.
- B. A utility map or maps showing tract boundaries, existing and proposed streets, lot lines, sanitary and storm water sewer facilities, water pipes, curbs, sidewalks, fire hydrants and manholes.
- C. Profile and cross-section maps of diagrams of streets showing proposed grades of curbs, sanitary and storm water sewers, water pipes, underground utilities and water management facilities.

- D. A statement of the types of structures to be erected, and a summary table of the number of structures and dwelling units proposed.
- E. Evidence that the plans are in conformity with building, sanitation and other applicable Township Ordinances and Regulations and with the regulations governing the extension of utility services into the Township. In any instance where such plans do not conform, evidence shall be presented that an exception has been officially authorized.

SECTION 801. Review Procedure

- A. At least twenty-one (21) days prior to the meeting of the Planning Commission at which initial consideration is desired, the subdivider or developer shall submit seven (7) copies of the Final Plan and accompanying documentation to the Township Secretary.
- B. A Final Plan may be prepared for only a portion of the approved Preliminary Plan where a subdivider or developer wishes to undertake the development of a project in sections of stages.
- C. Upon receipt of the Final Plan the Township Secretary shall submit one (1) copy of the plan and utility maps and streets profiles to the Township Engineer; three (3) copies to the Planning Commission; and the remaining copies are kept by the Township.
- D. Within sixty (60) days following the date of the first meeting at which the plan is formally considered, the Planning Commission shall recommend either approval or disapproval of the Final Plan.
- E. The Township Supervisors shall take official action on each subdivision or land development plan within ninety (90) days following the date of the first regular meeting of the Planning Commission at which the plan is formally considered and the Township Supervisors shall note or stamp this action on all copies of the plan. Distribution of the copies of the plan as finally approved shall be as follows: One (1) copy to be retained by the Township Secretary's files; one (1) copy to the Planning Commission; and the original and one (1) copy to the subdivider or developer. If the plan is disapproved, the subdivider or developer shall be notified, in writing, of the requirements which have not been met with reference to the applicable provisions of this Ordinance. The action of the Township with regard to the plan shall be communicated to the subdivider or developer not later than fifteen (15) days following the decision.
- F. Within ninety (90) days following approval by the Board of Supervisors the Final Plan shall be recorded by the subdivider or developer at the

County Recorder of Deeds' office. The Recorder of Deeds shall not accept any plan for recording unless the plan has been officially approved and signed by the Board of Supervisors. Recording shall be the responsibility of the applicant and not the Township.

- G. The Township Board of Supervisors shall not approve a Final Plan without a favorable report from the Department of Environmental Protection regarding any applicable Official Plan Revision or Exemption. However, failure of the Department of Environmental Protection to report to the Township within the regulated period shall constitute approval.
- H. The Township Supervisors shall not approve a final plan until proof of issuance is received for any necessary permits from the Department of Environmental Protection, Bureau of Dams and Waterways.
- I. Before acting on any subdivision plan, the Township Supervisors may hold a public hearing thereon after public notice.
- J. The Township Supervisors shall not approve a plan where an existing building is located on a lot that has an on-lot sanitary sewer system that is being further subdivided unless and until certification is provided by the Township Sewage Enforcement Officer that the system is functioning properly.
- K. In any case where public improvements are required as detailed in Section 1101, two copies of as-built drawings of all streets, stormwater management facilities, and any other required improvements shall be provided to the Township. Said as-built drawings shall be prepared, signed and sealed by a licensed engineer or surveyor. Prior to the release of any security guaranteeing said improvements, the Township shall approve the construction of the improvements following a review of the as-built drawings relative to the approved subdivision or land development plan and the findings of a site inspection. In the case of construction following Preliminary Plan approval and without guarantee for the completion of improvements, the Township shall withhold Final Plan approval until such as-built drawings are provided and the Township has approved the construction of the subject improvements based upon the approved Preliminary Plan design.

ARTICLE IX

MOBILEHOME PARK REGULATIONS

SECTION 900. Procedure

No person, firm or corporation shall construct, maintain or operate a Mobilehome Park within the Township without obtaining a Mobilehome Park Permit from Upper Mifflin Township. The procedures for reviewing Mobilehome Park plans shall be the same as for subdivision and land development projects in accordance with the Provisions of this Ordinance.

SECTION 901. Plan Requirements

Prior to the issuance of a Mobilehome Park Permit, plans shall be submitted to and approved by the Township in accordance with the requirements and procedures of this Ordinance regarding Preapplication Consultation, Preliminary Plans and Final Record Plans, including review and filing fees. In addition to the site plan information required elsewhere in this Ordinance, the following information shall be provided on the plans:

- A. The location and use of proposed buildings or structure improvements.
- B. The location and design of all uses not requiring structures such as recreation areas and landscaping.

SECTION 902. Renewable Mobilehome Park Permits and Registers

- A. The Board of Supervisors may grant a Mobilehome Park Permit for a period not to exceed twelve (12) months from the date of approval of such permit which shall be renewable every twelve (12) months. The Board of Supervisors or its duly authorized representative shall inspect each Mobilehome Park prior to granting or renewing an annual permit for conformance with the Provisions of This Ordinance, the approved land development plan, and any other applicable regulations.

Each application for an original permit or renewal permit shall be accompanied by an inspection fee in the amount set by Resolution of the Board of Supervisors. Such fee amount may be changed by subsequent Resolutions of the Board. In the event the actual cost of inspection services exceeds the fee amount, the additional cost shall be borne by the applicant. Such charges shall be levied whether or not the permit is approved.

- B. Any person holding a permit shall give notice in writing to the Township within ten (10) days after having sold, transferred or otherwise disposed of interest in or control of any Mobilehome Park. Such notice shall include the name, address and telephone number of the person succeeding to the

interest in or control of such Mobilehome Park, and shall be accompanied by a permit transfer fee as set by Township resolution and payable to the Township.

- C. It shall be incumbent upon the proprietor of a Mobilehome Park to keep a register and to report therein the name of person or head of family occupying each Mobilehome, showing date of entry on said land, make and size of the Mobilehome, and the names of all persons living in said Mobilehome. Said register shall be submitted to the Township annually with the application for renewal of a Mobilehome Park Permit. Said register shall also be available for inspection by the Board of Supervisors upon request.

SECTION 903. Inspection of Mobilehome Parks

- A. The Township or its authorized agent is hereby authorized to make such inspections as are necessary to determine satisfactory compliance with regulations contained herein and regulations issued hereunder, in order that the duty of safeguarding the health and safety of the occupants of such Mobilehome Parks, and of the general public, may be performed.
- B. Whenever, upon inspection of any Mobilehome Park, the Township or its authorized agents find that conditions or practices exist which are in violation of any provision contained herein or regulations issued hereunder, the Township shall give notice in writing in accordance with Subsection C., below, to the person to whom the permit was issued, that unless such conditions or practices are corrected within a reasonable period of time, the permit shall be suspended. At the end of such period, the Township shall re-inspect the Mobilehome Park and, if such conditions or practices have not been corrected, the permit shall be suspended and notice given in writing of such suspension to the person to whom the permit is issued. Upon receipt of notice of such suspension, such person shall cease operation of such Mobilehome Park.
- C. Whenever the Township determines that there are reasonable grounds to believe that there has been a violation of any provision contained herein or regulations issued hereunder, notice shall be given of such alleged violations to the person to whom the permit was issued as hereafter provided. Such notice shall be as follows:
 - (1.) Be in writing;
 - (2.) Include a statement of the reasons for the issuance;
 - (3.) Allow a reasonable time for the performance of any act it requires;

- (4.) Be served upon the owner or his agent as the case may require, provided that such notice or orders shall be deemed to have been properly served upon such owner or agent when a copy thereof has been sent by Certified Mail to his last known address, or when he has been served by such notice by any method authorized or required by the laws of this Commonwealth;
 - (5.) Contain an outline of remedial action which, if taken, will effect compliance with the provisions contained herein and regulations issued hereunder.
- D. Any person affected by any notice which has been issued in connection with the enforcement of the provisions contained herein, or regulation issued hereunder, may request a hearing on the matter before the Board of Supervisors; provided that such person files in the office of the Township Secretary a written petition requesting such hearing and setting forth a brief statement of the grounds thereof within ten (10) days after the notice was served. The filing of the request for a hearing shall operate as a stay of the notice and of the suspension except in the case of an order issued upon finding that an emergency exists which requires immediate action to protect the public.

SECTION 904. Lot Requirements and Mobilehome Standards

- A. Individual Mobilehome lots located in a Mobilehome Park shall contain at least ten thousand (10,000) square feet of lot area and shall not be less than sixty (60) feet wide at the building set-back line exclusive of easements or rights-of-way.
- B. All Mobilehome lots shall be given street numbers and all park streets shall be given names.
- C. Every Mobilehome shall be provided with a Mobilehome stand, which provides an adequate foundation for the placement of such Mobilehome, securing the structure from settling, vibration, uplift and sliding.
 - (1.) The Mobilehome stand shall have a minimum area equal in length and width to the Mobilehome to be placed on it. Such stand shall be cement concrete with a minimum thickness of four (4) inches, shall have a frost wall around its perimeter, and shall have an adequate sub-base.
 - (2.) All Mobilehomes shall be securely fastened to the concrete stand (tied-down) in a manner recommended by the manufacturer of the Mobilehome, or the Mobilehome owner's insurance company, for

the purpose of protecting and securing the Mobilehome from the forces of wind.

- (3.) Alternatively, the Township may approve a Mobilehome stand design in accordance with the manufacturer's recommendations or the recommendations of the Mobilehome owner's insurance company. Either alternative should be presented in written form to the Township for approval at the time of subdivision, land development and/or building permit application.

SECTION 905. Yard and Set-Back Requirements

- A. All Mobilehomes shall be located at least thirty-five (35) feet from any public street right-of-way which abuts a Mobilehome Park boundary and at least fifty (50) feet from any other boundary of the park.
- B. There shall be a minimum distance of twenty-five (25) feet between an individual Mobilehome and adjoining pavement of a park street or common parking area or other common areas.
- C. All Mobilehomes and patios on a Mobilehome lot shall not be located closer than ten (10) feet to a side lot line, and shall not be located closer than twenty-five (25) feet to a rear lot line that is not a park boundary.

SECTION 906. Mobilehome Park Street System

- A. Park Access – Each Mobilehome Park shall be provided with at least two (2) suitable points of ingress and egress and a distance of at least one hundred and fifty (150) feet shall be maintained between center lines of access streets.
- B. Lot Access – All Mobilehome Parks shall be provided with safe and convenient paved access streets to and from each and every Mobilehome lot. Alignment and gradient shall be properly adapted to topography.
- C. Streets – All streets within any Mobilehome Park shall be designed and improved as local streets in accordance with Township Specifications. Mobilehome park streets shall not be considered a means of vehicular and pedestrian circulation by the public at large and shall not be offered for Township dedication.
- D. Intersections – Not more than two (2) streets shall intersect at any point and a distance of at least one hundred and fifty feet (150' 0") shall be maintained between center lines of offset intersection streets.

SECTION 907. Required Off Street Parking

- A. Off street parking areas shall be provided in all Mobilehome Parks for the use of park occupants and guests. Such areas shall be furnished at the rate of at least two (2) vehicular parking spaces for each Mobilehome lot.

- B. Each off street parking space shall contain at least two hundred square feet (200 sq. ft.) being a minimum of ten (10) feet by twenty (20) feet and shall not exceed a distance of three hundred feet (300' 0") from the Mobilehome lot that it is intended to serve.

- C. Auxillary Parking Lots.
 - (1.) There shall be a minimum of one (1) auxiliary parking space for every two (2) Mobilehome stands, located within five hundred (500) feet of the Mobilehomes it is intended to serve.
 - (2.) Construction and paving of auxiliary parking lots shall be in accordance with the standards set forth herein for park streets.
 - (3.) All parking spaces within the auxiliary parking lot shall be clearly defined.
 - (4.) Separate parking lots for the storage of small trailers, boats, RV's, campers, etc. may be provided. However, storage of such vehicles shall not occur in auxiliary parking lots.

SECTION 908. Utility Improvements

- A. Water Supply
 - (1.) All Mobilehome Parks shall be served by a public water supply. However, where a public supply of water is not available, a private centralized system may be developed and used as approved by the Pennsylvania Department of Environmental Protection.
 - (2.) The water supply shall supply a minimum of one hundred fifty (150) gallons per day per Mobilehome.
 - (3.) Water supply treatment, where applicable, shall be in accordance with the requirements of the Pennsylvania Department of Environmental Protection.

impervious material. Overflows and vents of such reservoirs shall be effectively screened.

- (5.) The water system of the Mobilehome Park shall be connected by pipes to all Mobilehomes, buildings and other facilities requiring water, and shall be so designed and maintained as to provide a pressure of not less than forty (40) pounds per square inch, under normal operating conditions.
- (6.) All water piping, fixtures and other equipment shall be constructed and maintained in accordance with State and local regulations and requirements, and shall be of a type and in a location approved by the Pennsylvania Department of Environmental Protection.
- (7.) Individual water-riser pipes and connections shall be provided, and shall be located within the confined area of each Mobilehome stand at a point where the water connection will approximate a vertical position, and shall extend at least four (4) inches above ground elevation. The pipe shall be at least three-fourths (3/4) inches in diameter, and the water outlet shall be capped when a Mobilehome does not occupy the stand; surface drainage shall be diverted from the location of the riser pipe.

B. Sanitary Sewage Facilities

- (1.) An adequate and safe public or private centralized sanitary sewage system shall be provided in all parks for conveying and disposing of sanitary sewage from Mobilehomes, service buildings and other accessory facilities.
- (2.) All proposed treatment and disposal facilities shall be approved by the Pennsylvania Department of Environmental Protection prior to construction.
- (3.) Sanitary sewer collection lines shall be completely separate from the water supply system and from any storm drainage system.
- (4.) Each Mobilehome shall be provided with a sanitary sewer riser pipe located within the confined area of the Mobilehome stand, so that the sewer connection to the Mobilehome drain outlet will approximate a vertical position.
- (5.) The sanitary sewer riser pipe shall be capped when a Mobilehome does not occupy a stand. The rims of the riser pipe shall extend a minimum of four (4) inches above ground elevation, and surface drainage shall be diverted away from the riser pipe.

C. Electrical Distribution

All Mobilehome Parks shall have underground electrical distribution systems which shall be installed and maintained in accordance with the local electric power company's specifications regulating such systems.

D. Natural Gas Systems

Any natural gas system shall be installed and maintained in accordance with the regulations and specifications of the Company supplying the natural gas.

E. Liquefied Petroleum Gas System

Liquefied petroleum gas systems provided for Mobilehomes, service buildings or other structures shall include the following:

- (1.) Systems shall be provided with safety devices to relieve excessive pressures and shall be arranged so that the discharge terminates at a safe location.
- (2.) Systems shall have at least one (1) accessible means for shutting off gas. Such means shall be located outside the Mobilehome and shall be maintained in effective operating condition.
- (3.) All LPG piping outside of the Mobilehomes shall be well supported and protected against mechanical injury. Undiluted liquefied petroleum gas liquid form shall not be conveyed through piping equipment and systems in Mobilehomes.
- (4.) Any vessel containing liquefied petroleum gas shall be securely but not permanently fastened to prevent accidental overturning. Vessels with a capacity greater than one hundred (100) gallons must be placed ten feet or more from any building. Vessels with a capacity greater than five hundred (500) gallons are prohibited, and no Mobilehome shall have a total capacity greater than 500 gallons.
- (5.) No LPG vessel shall be stored or located inside or beneath any storage cabinet, carport, Mobilehome or any other structure unless such installations are specifically approved by the Township.

F. Fuel Oil Supply Systems

- (1.) All fuel oil supply systems provided for Mobilehomes, service buildings and other structures shall be installed and maintained in conformity with accepted engineering practices and standards of the supplying or installing company.
- (2.) Fuel storage tanks may be located below the ground surface, as long as they are installed in accordance with the Department of Environmental Protection and other applicable regulations.
- (3.) Fuel storage tanks may be located above the ground surface, provided they are placed on a concrete pad and affixed in such a way as to prevent tipping.
- (4.) All piping from outside fuel storage tanks shall be located below the surface of the ground and a riser pipe shall be provided, located within the confined area of the Mobilehome stand.
- (5.) All fuel oil supply systems shall have shut-off valves located within five (5) inches from the Mobilehome stand surface.
- (5.) All fuel storage tanks shall be located a minimum distance of ten (10) feet from all electrical service lines.
- (7.) Fuel storage tanks shall not be located under Mobilehomes.

SECTION 909. Usable Open Space

- A. All Mobilehome Parks shall provide not less than ten percent (10%) of the total land area for usable open space purposes. Usable open space shall be so located as to be free of traffic hazards, should be centrally located and easily accessible to all park residents and shall not include areas reserved for purposes of stormwater management. Mobilehome Parks containing more than thirty (30) lots or dwelling units shall provide playgrounds, with facilities which are appropriate to the scale and character of the Mobilehome park, considering its natural features, size, land use intensity, and potential population.
- B. Exposed ground surfaces in all parts of every park shall be paved, or covered with stone screenings, and other solid material, or protected with a vegetation that is capable of preventing accelerated soil erosion and the emanation of dust during dry weather.

- C. Park grounds shall be maintained free of vegetation which is poisonous or which may harbor rodents, insects, or other pests harmful to man.

SECTION 910. Buffer Strips

A visual screen or landscaped buffer strip a minimum of five (5) feet in height shall be provided separating the park from adjacent uses. The required buffer strip shall be composed of evergreen trees supplemented with forsythia. Such trees shall be planted offset in two parallel rows, with a six-foot minimum distance between the trunks of each of the plants, measured in a continuous direction. All required planted materials shall be well maintained and any that die or fail to survive shall be replaced within twelve (12) months by the then owner of the development with trees of original planting size.

SECTION 911. Walkways

A. General Requirements

All parks shall be provided with safe, convenient, all season pedestrian walks, accessible to the handicapped, of adequate width for intended use, durable and convenient to maintain, between individual Mobilehome lots, the park streets and all community facilities provided for park residents. Sudden change in alignment and gradient shall be avoided.

B. Common Walk System

A common walk system shall be provided and maintained between locations where pedestrian traffic is concentrated. Such common walks shall have a width of four feet (4' 0") and shall be constructed of cement concrete in accordance with Penn DOT Form 408 Specifications.

C. Individual Walks

All Mobilehome lots shall be connected to common walks, to paved streets, or to paved driveways or parking spaces connecting to a paved street. Such individual walks shall have a minimum width of two feet (2' 0"), and may be constructed of concrete, brick, flagstone or other suitable material.

SECTION 912. Other Site Improvements

- A. An emergency alarm communication system acceptable to the local fire company shall be provided.
- B. Each Mobilehome lot may be provided with a concrete slab for use as a patio or for a foundation for any expansion of the Mobilehome. If provided, the concrete slab shall be constructed on a stable surface and be

located so as to adjoin and be parallel to the Mobilehome. It shall not be larger than three hundred (300) square feet in area.

- C. The primary entrance to each Mobilehome shall be provided with an entrance landing, the height of which shall not be less than six (6) inches below the threshold of the door opening. Such landing shall extend at least four (4) feet outward from the Mobilehome. Any such landing over twelve (12) inches in height above the ground shall be provided with steps. Any such landing over eighteen (18) inches in height shall also be provided with a railing on all open sides not containing steps as well as a step handrail. Landings must be of permanent construction, and may be made of wood, masonry or metal.
- D. Individual tenants at the Mobilehome Park may construct attached enclosures or covered patios to individual Mobilehomes, provided that such enclosure does not exceed the slab area noted in Section 912 (b.) and is confined to same.
- E. An enclosure of compatible design and material shall be erected around the entire base of each Mobilehome. Such enclosure shall provide sufficient ventilation to inhibit decay and deterioration of the structure.
- F. All means of ingress, egress, walkways, streets and parking lots shall be adequately lighted to ensure the visibility and safety of residents.
- G. A fence, wall, hedge or vegetative material at least five feet in height and of a density to conceal the park from adjacent properties shall be provided and maintained along all lot lines of the park.

SECTION 913. General Regulations

- A. Grounds, buildings and structures shall be maintained free of noxious weeds, insects and rodent harborage and infestation. Extermination methods and other measures to control insects and rodents shall conform with the requirements of the Pennsylvania Department of Environmental Protection.
- B. The person to whom a license for a Mobilehome park is issued shall operate the park in compliance with the regulations contained herein and shall provide supervision to maintain the park, its facilities and equipment in good repair and in a clean sanitary condition. Maintenance of the streets and snow removal shall be the responsibility of the owner/operator of the Mobilehome park.

- C. The responsible operator of the Mobilehome park shall supervise the placement of each Mobilehome on the Mobilehome stand which includes securing its stability and installing all utility connections.
- D. No part of any Mobilehome park shall be used for a non-residential purpose except such uses that are required for the direct servicing and well being of park residents and for the management and maintenance of the park.
- E. Fire-resistant skirting shall be provided along the entire perimeter of the Mobilehome, for the purpose of concealing the wheel assembly and piping, and it shall be installed by the individual Mobilehome owner within sixty (60) days after placement of the Mobilehome.
- F. Storage, collection and disposal of waste shall be so conducted as to create no health hazards, rodent harborage, insect breeding areas, accident or fire hazards or air pollution. Provisions shall be made by the park operator to have garbage and waste collected at least once every week.
- G. No provision contained herein shall be deemed as prohibiting the sale or rental, for residential use, of a Mobilehome, provided such Mobilehome is located on a Mobilehome stand and is connected to the pertinent utilities.

SECTION 914. Mobilehomes Not Located in a Mobilehome Park

- A. Any Mobilehome not located in a Mobilehome park shall comply, in all respects, with the requirements of the Township for obtaining building permits as a single-family detached dwelling unit, and also shall comply with all applicable requirements of the Upper Mifflin Township Subdivision and Land Development Ordinance, including the following:
 - (1.) Each Mobilehome shall be anchored so as to secure the structure from settling, vibrations, uplift, sliding, and frost.
 - (2.) The anchoring method to be used shall be presented in written form to the Township at the time of subdivision, land development and/or building permit application.
 - (3.) The primary entrance to each Mobilehome shall be provided with an entrance landing, the height of which shall not be less than six (6) inches below the threshold of the door opening. Such landing shall extend at least four (4) feet outward from the Mobilehome. Any such landing over twelve (12) inches in height shall be provided with steps. Any such landing over eighteen (18) inches in height shall also be provided with a railing on all open sides not containing steps as well as a step handrail. Landings must be of

permanent construction, and may be made of wood, masonry or metal.

- (4.) Riser Pipes - Sanitary sewer and water riser pipes shall be provided and shall be located within the confine area of the Mobilehome stand at a point where the water and sewer connections will approximate a vertical position, and shall extend a minimum of four (4) inches above the stand surface. Both riser pipes shall be capped when a Mobilehome does not occupy the stand. Surface drainage shall be diverted from the location of the riser pipes.
- (5.) Fuel Storage Tanks - Fuel storage tanks and piping may be located below the surface of the ground providing installation is in accordance with the Department of Environmental Protection Regulations. Fuel tanks located above ground shall be placed on a concrete pad and affixed so as to prevent tipping. A riser pipe shall be provided, located within the confined area of the Mobilehome stand. All supply systems shall have shut-off valves located within five (5) inches from the Mobilehome stand surface.
- (6.) Skirting - A fire-resistant skirting shall be provided along the entire perimeter of the base of the Mobilehome, for the purpose of concealing the wheel assembly and piping, which skirting shall provide sufficient ventilation to inhibit decay and deterioration of the structure. Such skirting shall be installed by the Mobilehome owner within sixty (60) days after placement of the Mobilehome.

ARTICLE X

DESIGN STANDARDS

SECTION 1000. Application

The standards of design in This Article shall be used to judge the adequacy of development proposals. Where, in the opinion of the Township, the literal application of these standards in certain cases would result in undue hardship or would be plainly unreasonable, the Planning Commission may recommend such modifications as it deems reasonable and necessary and not contrary to the public interest.

SECTION 1001. General Standards

- A. Land – No land shall be subdivided or developed for any purposes unless all hazards to life, health, or property from flood, fire and disease, shall have been eliminated or unless the plans for the project shall provide adequate safeguard against such hazards.

- B. Development – Proposed projects shall be coordinated with existing nearby neighborhoods so that the community as a whole may develop harmoniously.

SECTION 1002. Blocks and Lots

- A. Block Length – Blocks shall be not less than five hundred feet (500' 0") long nor more than sixteen hundred feet (1600' 0") long.

- B. Block Width – Blocks shall be wide enough for two (2) lots unless through lots are permitted by the Board of Supervisors upon recommendation by the Planning Commission.

- C. Through Lots – Double frontage lots are to be avoided and will not be permitted unless lots are a minimum of two hundred feet (200') deep.

- D. The following shall constitute minimum lot dimensions and no existing or dedicated public or private right-of-way shall be included as part of the lot area.

- (1.) Lot Area - 2 acres
- (2.) Lot Width - 200 ft.
- (3.) Lot Depth - 200 ft.
- (4.) Building Setbacks
 - Front Yard - 35 ft.
 - Side Yards - 25 ft.
 - Rear Yard - 25 ft.

- E. Exceptions – The general principles of design and the minimum requirements for the laying out of subdivisions and land developments stipulated in This Ordinance may be varied by the Board of Supervisors upon recommendation of the subdivider or developer and the Planning Commission in the case of a project large enough to constitute a more or less self-contained neighborhood, industrial park or commercial center. Such a project shall be developed in accordance with a comprehensive plan safeguarded by appropriate restrictions, which in the judgment of the Board has made adequate provisions for all essential requirements. Provided, however, that no modification shall be granted by the Board which would conflict with features of any adopted long-range plan of the Township or with the intent and purpose of the general principles of design and minimum requirements of This Ordinance.
- F. Lot Line – Lot lines shall be approximately at right angles or radial to street lines so long as reasonably shaped lots result.

SECTION 1003. Streets

- A. Street Pattern – The proposed street pattern shall be integrated with existing and/or officially planned streets and it shall be so related to topography as to produce usable lots and reasonable street grades.
- B. Design and Purpose – Streets shall be designed according to their function and laid out to preserve the integrity of their design in accordance with the following functional classification:
- (1.) Local Street or Road – A street providing access to farms and residences. Standards assume light traffic flow with the possibility of upgrading the classification sometime in the future. Generally, Township roads shall be considered Local Roads, unless otherwise determined by the Township.
 - (2.) Collector Street or Road – A street which connects local streets or roads to arterial roads or to population centers. Standards assume medium traffic flow with the possibility of upgrading the classification sometime in the future. Generally, State Routes shall be considered collector roads, unless otherwise determined by the Township.
 - (3.) Arterial Road – A road which connects collector streets or roads to major highways or to towns and cities. Standards assume heavy traffic flow at high speeds and limited access. Generally, interstate traffic routes shall be considered Arterial Roads, unless otherwise determined by the Township.

(4.) Alley and Service Drive – Shall be prohibited except where proven to be necessary.

C. Street Widths – Streets shall be laid out according to the following minimum schedule; however, additional street width may be required as determined by the Township.

Class of Street	Right-of-Way Width	Minimum Pavement Width	Minimum Shoulder Width
Local Street	50 feet	20 feet	4'
Collector Street	60 feet	24 feet	8'
Arterial Road	Pennsylvania Department of Transportation Standards		

D. Street Pavement – The roadway shall be improved in accordance with Township Specifications set forth in Article 1100 of This Ordinance.

E. Continuations – Where reasonable and practicable, new streets shall be laid out to continue existing streets at no reduction in width. Greater widths may be required.

F. Street Names – Continuations of existing streets shall be known by the same name; but names for other streets shall not be duplicated or closely resemble names for existing streets in the Township.

G. Access

(1.) Streets shall be laid out to provide for access to all lots and to adjacent undeveloped areas, and the subdivider or developer shall improve access streets to the limits of the subdivision of the land development.

(2.) Each subdivision and land development plan shall be designed to provide for access to each lot or development by a street and with frontage upon a street constructed to Township specifications or an existing Township or State Route.

(3.) Panhandle lots may be utilized to provide access provided that the topography of the land to be developed shall safely accommodate the number of proposed access areas. Access by a panhandle lot shall be limited to one dwelling unit per each property as it existed on the date of adoption of this Ordinance. No panhandle lot shall be located within 600 feet of any other panhandle lot with said distance to be measured from the lot boundary line of a panhandle

lot which would be closest to the lot boundary line of any other panhandle lot. It shall be the responsibility of the Applicant to substantiate adequately the need for such relief in accordance with Article XII.

- H. Reserve Strips – Reserve strips controlling access to a lot or adjacent areas are prohibited unless in accordance with This Ordinance.
- I. Dead-end Streets – Dead-end streets are prohibited unless constructed as cul-de-sacs. Permanent cul-de-sac streets shall be utilized only where use of a cul-de-sac is the only manner to access the land that does not create unreasonable hardship. Topography, parcel shape, parcel size, natural features, wetlands and existing adjacent land use and development shall be considered in determining whether a cul-de-sac is appropriate.
1. The length of cul-de-sac streets shall not exceed six hundred (600) feet nor shall the length be less than two hundred fifty (250) feet. The length of the cul-de-sac shall be measured from the centerline intersection of the nearest through street to the center of the cul-de-sac turnaround.
 2. Cul-de-sac streets shall include a paved, circular turnaround having a minimum radius to the outer pavement edge or curb line of fifty (50) feet, and a minimum radius to the right-of-way line of sixty (60) feet.
 3. No cul-de-sac turnaround shall have a centerline grade exceeding four percent (4%).
 4. Cul-de-sac streets shall provide access to no more than six (6) dwelling units.
 5. There shall be no more than two (2) driveways off the circular turnaround. Any lots designed with frontage on both the circular turnaround and the street leading to it shall only be allowed driveway access to the street portion of the frontage and not to the circular turnaround.
 6. No panhandle lots shall be accessed from the circular turnaround.
- J. Clear Sight Distance – Clear sight distance along the center lines of local streets shall be maintained at not less than one hundred fifty feet (150'); along collector streets at not less than two hundred and fifty feet (250'); and along major and arterial streets at not less than four hundred and fifty feet (450').

- K. Directional Changes – Changes in street direction shall be made by horizontal curves with a minimum radius of five hundred feet (500') for major and arterial streets, three hundred feet (300') for collector streets, and one hundred and fifty (150) feet for local streets. These radii are to be measured at the center line. Shorter radii may be permitted on recommendation of the Township Engineer.
- L. Grades – There shall be a minimum centerline grade of three-quarters (0.75%) of one percent on all streets. Grades shall not exceed six percent on all major and arterial streets and twelve percent on local and collector streets. Steeper grades may be permitted on local streets for short distances upon recommendation of the Township Engineer if no gentler slope is possible.
- M. Vertical Curves – Changes in grade shall be joined by vertical curves, and the maximum rate of change of grade shall be five percent per hundred feet of road, provided that the clear sight distances specified above are maintained at all points.
- N. Crown – The slope of the crown on all streets shall be no less than one-eighth inch (1/8") per foot and no more than one-third (1/3") per foot as directed by the Engineer.
- O. Side Slopes – Street cuts and fills shall be provided with side slopes no steeper than one vertical to three horizontal. Such slopes shall be suitably planted with perennial grasses or other vegetation to prevent gulying and erosion.
- P. Intersections – Street intersections shall be designed according to the following standards:
- (1.) No more than two (2) streets shall cross at the same point. Street intersections shall be at right angles wherever possible, and intersections of less than sixty (60) degrees (measured at the center line of the streets) will not be permitted.
 - (2.) Intersecting streets shall not enter into the same side of collector, arterial or major streets at intervals of less than eight hundred feet (800' 0"). Local streets entering another street from opposite sides should be directly opposite each other; or if necessary, they may be separated by at least one hundred fifty feet (150' 0") between center lines measured along the center line of the cross street. Greater offset may be required by the Board of Supervisors upon recommendation of the Planning Commission depending on the importance of the cross street.

- (3.) Maximum grade within any intersection shall not exceed five percent in any direction, and approaches to any intersection shall follow a straight course within one hundred feet (100' 0") of the intersection. Grades within one hundred feet (100' 0") of an intersection shall not exceed seven percent.
- (4.) Curb radii at intersections shall be according to the following schedule of minimum lengths: Fifteen (15) feet for intersections of alleys and all streets; twenty (20) feet for local streets; and thirty-five (35) feet for major and collector streets. Where streets of different categories intersect, requirements for the one with the larger radius shall control. The minimum radius of intersecting rights-of-way lines shall be forty feet (40' 0").
- (5.) At street intersections a seventy-five foot (75' 0") clear sight triangle shall be provided, in which no building or structure, wall, fence, hedge, tree, shrub or other growth shall be placed except for utility poles, light standards, street signs and fire hydrants. The clear sight triangle shall be depicted on the approved plan.

SECTION 1004. Easements

Where utility lines or drainage facilities are installed in or over undedicated land, a public easement granted in favor of the Township or the controlling utility shall be required. Easements located in front yards shall abut the street right-of-way and shall be at least ten feet (10' 0") wide. Easements located in side or rear yards shall extend at least ten feet (10' 0") on each side of the line or facility. Suitable easements no less than twenty-five (25) feet in width may also be required along the course of streams for the future installation of sewers or to preserve the unimpeded flow of natural drainage. Where feasible, telephone and electric lines shall be installed below ground.

SECTION 1005. Stormwater Management

A. FINDINGS

The Upper Mifflin Township Board of Supervisors finds that:

- (1.) Inadequate management of accelerated stormwater runoff resulting from development throughout a watershed increases flood flows and velocities, contributes to erosion and sedimentation, overtaxes the carrying capacity of existing streams and storm sewers, greatly increases the cost of public facilities to convey and manage stormwater, undermines floodplain management and flood reduction efforts in upstream and downstream communities, reduces groundwater recharge, and threatens public health and safety.

- (2.) A comprehensive program of stormwater management, including reasonable regulation of development and activities causing accelerated erosion, is fundamental to the public health, safety, welfare, and the protection of the people of the Municipality and all the people of the Commonwealth, their resources, and the environment.

B. PURPOSE

The purpose of this section is to promote the public health, safety and welfare by minimizing damages described in the previous section of this chapter through provisions designed to:

- (1.) Manage accelerated runoff and erosion and sedimentation problems at their source by regulating activities that cause such problems.
- (2.) Utilize and preserve the existing natural drainage systems.
- (3.) Encourage recharge of groundwater where appropriate and prevent degradation of groundwater quality.
- (4.) Maintain existing flows and quality of streams and watercourses in Upper Mifflin Township.
- (5.) Preserve the flood-carrying capacity of streams.
- (6.) Provide proper maintenance of all permanent stormwater management facilities that are constructed in Upper Mifflin Township.
- (7.) Provide performance standards and design criteria for stormwater management and planning within Upper Mifflin Township.

C. APPLICABILITY

The following activities are defined as “Regulated Activities” and shall be regulated by this Ordinance:

- (2.) Land Development
- (3.) Subdivision
- (4.) Construction of new or additional impervious or semi-pervious surfaces (driveways, parking lots, etc.)
- (5.) Construction of new buildings or additions to existing buildings
- (6.) Diversion or piping of any natural or man-made stream channel
- (7.) Installation of stormwater management facilities or appurtenances thereto

D. **EXEMPTIONS**

- (1.) Regulated activities that meet the exemption criteria in the following table may be eligible for an exemption from the requirements of Section 1005 of this Ordinance subject to a review by the Township Engineer, and at the sole discretion of the Township Supervisors. Requests for exemptions shall be submitted in writing for review by the Township and shall clearly identify the justification and basis for the request. The exemption criteria shall apply to all regulated activities proposing construction of impervious surfaces after the effective date of this Ordinance. Regulated activities related to commercial and/or industrial development shall not be eligible for exemptions. The total impervious surface area at a site shall be calculated for the area inclusive of both existing and proposed impervious surfaces. Gravel and stone areas shall be included in the impervious area calculation, but can be reduced according to the area reduction factors and sample calculation provided in Exhibit 1, Figure B-1. When subdivision is proposed, the impervious area calculation shall be applied to the entire parent tract (not individual parcels) even if the development is proposed in phases. The date of adoption of this Ordinance shall be the starting point from which to consider tracts as "parent tracts" for which impervious areas shall be inclusively considered.

Stormwater Management Exemption Criteria

<u>Total Parcel Size</u>	<u>Maximum Impervious Area Exemption (sq.ft.)</u>
≤ 1/4 acre	2,500 sq. ft
>1/4 to 1 acre	5,000 sq. ft.
>1 to 2 acres	10,000 sq. ft
> 2 to 5 acres	15,000 sq. ft.
>5 acres	20,000 sq. ft.

Requests for exemption shall be reviewed by the Board of Supervisors on an individual site basis using the criteria outlined in this Section. An exemption shall not relieve the applicant from implementing any measures that would be necessary to protect the public health, safety, welfare, property, the resources of the people and/or the environment. Protective measures shall be required for proposed conditions including, but not limited to, direct discharge of concentrated stormwater flows onto adjoining and/or adjacent properties.

E. STATUTORY AUTHORITY

The Township of Upper Mifflin is empowered to regulate land use activities by the authority of the Act of October 4, 1978, P.L. 864 (Act 167), the Stormwater Management Act and the Second Class Township Code, the Act of May 1, 1933 (P.L. 103, No. 69), Re-enacted and Amended November 9, 1995 (P.L. 350, No. 60), as amended.

F. GENERAL REQUIREMENTS

- (1.) All regulated activities in Upper Mifflin Township not granted an exemption in accordance with Section 1005.D. shall submit a Stormwater Management Plan to the Township for review.
- (2.) Design Standards. The design of all storm water management facilities shall incorporate sound engineering principles and practices. The Township shall reserve the right to disapprove any design that would result in the occupancy or continuation of an adverse hydrologic or hydraulic condition within the watershed. Computations for determining storm water runoff and for the design of storm water management facilities shall be based upon the NRCS Soil-Cover-Complex Methods (Technical Release 55 or Technical Release 20), the Modified Rational Method, or the Standard Rational Method. Use of the Standard Rational Method shall be acceptable for analysis of watersheds up to 20 acres in size. The Modified Rational Method shall be acceptable for watersheds up to 200 acres in size. NRCS Methods shall be acceptable for watershed analyses of all sizes. For each area or subarea analyzed, use the same analytical method for pre-development and post-development conditions. The Township may require that computed existing runoff rates be reconciled with field observations and conditions. If the designer can substantiate through actual physical calibration that more appropriate runoff and time of concentration values should be utilized at a particular site, then appropriate variations may be made upon review and recommendation of the Township Engineer.

The following general requirements apply to all regulated activities in Upper Mifflin Township.

- (3.) The stormwater management plan shall consider and provide provisions for management of all stormwater runoff affecting the development site, including safe conveyance of the 100-year design storm runoff from offsite watersheds, if any.

- (4.) All pre-development calculations shall be based upon existing land uses except existing agricultural uses, which shall be based on Cultivated Land with Conservation Treatment, Pasture in Good Condition, Meadow in Good Condition, and Farmstead, unless the actual ground cover generates a lower Curve Number or Rational "C" value.
- (5.) All calculations using the Rational Method shall use rainfall intensities consistent with appropriate times-of-concentration for overland flow and return periods from the Design Storm Curves from PA Department of Transportation Design Rainfall Curves (1986) (Figure B-3) in Exhibit 1 of this Ordinance.
- (6.) Runoff Curve Numbers (CN) for both existing and proposed conditions to be used in the soil cover complex method shall be obtained from Table B-2 in Exhibit 1 of this Ordinance.
- (8.) Runoff coefficients (c) for both existing and proposed conditions for use in the Rational method shall be obtained from Table B-3 in Exhibit 1 of this Ordinance.
- (9.) Storm sewers, swales and other stormwater conveyance structures shall be designed to convey post-development runoff from a 25-year design storm without surcharging inlets, and with adequate freeboard in open drainageways. Six inches of freeboard shall be provided in swales carrying 14 cfs or less. One foot of freeboard shall be provided for in drainageways designed to carry flows of 15 cfs or greater.
- (10.) The minimum pipe diameter permitted for use in storm sewer systems and/or stormwater carrying culverts shall be 15-inches.
- (11.) Stormwater drainage systems shall be provided in order to permit unimpeded flow along natural watercourses, except as modified by stormwater management facilities or open channels consistent with this Ordinance.
- (12.) The existing points of diffused or concentrated drainage that discharge onto adjacent property shall not be altered without written permission of the affected property owner(s) and shall be subject to any applicable discharge criteria specified in this Ordinance.
- (13.) If existing diffused drainage discharge will be concentrated in the post development condition and discharged onto an adjacent property, the Developer must document that adequate downstream

conveyance facilities exist to safely transport the concentrated discharge, or otherwise prove that no erosion, sedimentation, flooding or other harm will result from the concentrated discharge.

- (14.) Where a development site is traversed by watercourses, drainage easements shall be provided conforming to the line of such watercourses. Easements shall be centered on the watercourse and have a minimum width of 20.0 feet. The terms of the easement shall prohibit excavation, the placing of fill or structures, and any alterations that may adversely affect the flow of stormwater within any portion of the easement.
- (15.) When it can be shown that, due to topographic conditions, natural drainageways on the site cannot adequately provide for drainage, open channels may be constructed conforming substantially to the line and grade of such natural drainageways. Work within natural drainageways shall be subject to approval by PADEP.
- (16.) Any stormwater management facilities regulated by this Ordinance that would be located in or adjacent to waters of the Commonwealth or wetlands shall be subject to approval by PADEP and, if applicable, the U.S.Army Corps of Engineers. When there is a question whether wetlands may be involved, it is the responsibility of the Developer or his agent to demonstrate the applicable regulatory agencies that the land in question cannot be classified as wetlands.
- (17.) Any stormwater management facilities regulated by this Ordinance that would be located on State highway rights-of-way shall be subject to approval by the Pennsylvania Department of Transportation.
- (18.) Where soil conditions permit, minimization of impervious surfaces and infiltration of runoff through seepage beds, infiltration trenches, etc. are encouraged strongly to reduce the size or eliminate the need for detention facilities.
- (18.) Cleanout structures for storm sewers shall be installed at the following maximum spacing:

<u>Size of Pipe (inches)</u>	<u>Maximum Allowable Spacing (Feet)</u>
15	200
18-36	300
42-60	500
66 or Larger	Unlimited

- (16.) The Stormwater Management Plan shall include calculations indicating velocities of flow, grades, sizes, and capacities of water carrying structures, and retention and detention structures as well as sufficient design information to construct such facilities.
- (17.) Proposed lots or buildings adjacent to basins and significant channels shall have a finished first floor elevation of two (2) feet above the one hundred (100) year storm event level calculated for these facilities. The plans shall specify the minimum allowable finished first floor elevation for these lots or buildings.
- (18.) Stormwater runoff channels shall be designed and installed to avoid trapping excess sediment.
- (19.) Erosion and sediment pollution control measures shall be required for all plans submitted and shall be in accordance with the applicable standards and specifications set forth in the latest edition of the DEP Erosion and Sediment Pollution Control Program Manual and all other aspects of DEP Chapter 102 regulations.
- (20.) Special provisions may be required for watersheds draining to high quality (HQ) and exceptional value (EV) waters in accordance with PADEP regulations.
- (21.) Plans approved by Upper Mifflin Township shall be on site throughout the duration of the regulated activity.
- (22.) Adequate erosion protection shall be provided along all open channels at all points of discharge.

G. STORMWATER MANAGEMENT DISTRICTS

Upper Mifflin Township is contained within a single stormwater management district.

In addition to the requirements specified below, the Ground Water Recharge (Section 1005.I.), Water Quality (Section 1005.J.), and Stream Bank Erosion (Section 1005.K.), requirements shall be implemented.

Standards for managing runoff in the Township are shown below. Development sites in Upper Mifflin Township must control post-development runoff rates to pre-development runoff rates for the each specified design storm as follows:

**Design Storm
Post-Development**

**Design Storm
Pre-Development**

2- year	1- year
5- year	5- year
10- year	10- year
25- year	25- year
100-year	100-year

**H. DESIGN CRITERIA FOR STORMWATER
MANAGEMENT STORAGE FACILITIES**

- (1.) Release rates from storage structures shall be based on the runoff from the 1-year, 2-year, 5-year and 10-year, 25-year and 50-year and 100-year pre-development storm events.
- (2.) All stormwater storage facilities (i.e. detention and retention basins) shall be designed in accordance with the following minimum standards.
 - (a.) Embankment material used for basin construction shall be comprised of either on-site or imported fill which meets the following criteria:
 - Free of organic material, ash, cinders and demolition debris.
 - Particle size distribution that is well graded.
 - Plasticity index less than 10, liquid limit less than 30.
 - Less than 15% by weight rock fragments larger than 3 inches, less than 30% by weight larger than ¾ inch and less than 30% smaller than No. 200 sieve.
 - (b.) Embankment slopes shall not be steeper than one (1) foot vertical in three (3) feet horizontal.
 - (c.) The top width of basin embankments shall not be less than six (6) feet.
 - (d.) Emergency spillways in berms or earthen embankments shall be designed to convey the peak discharge from a 100-year design storm event while maintaining a minimum 1.0 foot of freeboard, assuming that the principal outlet structure is completely blocked. Proper erosion control measures shall be provided to protect the spillway and

embankment against the erosive effects of accelerated discharge. Calculations for erosion protection shall be provided.

- (e.) All embankments shall incorporate a compacted clay core and cutoff key trench meeting the criteria for embankment material as well as the following additional criteria:
 - Soil shall be relatively impermeable and meet the following USCS classification groups as determined by ASTM D2487/D2488: CL and/or CL-ML.
- (f.) Top width of compacted clay core shall be a minimum of 2 feet with a top elevation equal to the 25-year storm peak water storage elevation or higher. The bottom width of clay key trench shall be a minimum of 4 feet and the key shall extend a minimum of 2 feet into virgin, undisturbed soil below the topsoil layer.
- (g.) Anti-seep collars shall be installed on all basin outlet pipes. The required size and spacing of the collars shall be confirmed through calculations.
- (h.) Basins shall be kept in a maintainable condition with a minimum bottom slope of 1% sloped toward the principal outlet structure. If paved low flow channels are used, then the basin bottom slope can be reduced to 0.5%. Paved low flow channels shall have a minimum width of 4 feet and be constructed of four-inch-thick concrete over four-inches of compacted PennDOT No. 2A stone.

**I. GROUND WATER RECHARGE
(INFILTRATION/RECHARGE/RETENTION)**

- (1.) The ability to retain and maximize the ground water recharge capacity of the area being developed is encouraged. Design of the infiltration/recharge stormwater management facilities shall give consideration to providing ground water recharge to compensate for the reduction in the percolation that occurs when the ground surface is paved and roofed over. These measures are encouraged, particularly in hydrologic soil groups A and B and should be utilized wherever feasible. Soils used for the construction of basins shall have low-erodibility factors ("K" factors).

The Township reserves the right to waive the requirements of this section if the Township receives documentation from a qualified

design professional which demonstrates the implementation of infiltration practices would pose a threat to public health, safety, welfare and the protection of the people of the Municipality, their resources and the environment, or if site-specific soils testing demonstrates that suitable infiltration rates cannot be achieved. At a minimum, a site's suitability for infiltration practices shall be determined using the criteria in Sections 1005.I.3. and 4.

(2.) Infiltration Best Management Practices (BMPs) shall meet the following minimum requirements:

(a.) The size of the recharge facility shall be based upon the following equation:

$$Re_v = [(S) (R_v) (A)] / 12$$

Where:

- Re_v = Recharge Volume (acre-feet)
- S = Soil specific recharge factor (inches)
- R_v = Volumetric runoff coefficient
- A = Site area contributing to the recharge facility (acres)

And:

$$R_v = 0.05 + 0.009 (I)$$

Where:

I = percent impervious area

And:

S may be obtained based upon hydrologic soil group based upon the table below recommended as general values by DEP. More site specific data may be utilized to determine recharge if justified by the design engineer and approved by the municipal engineer.

<u>Hydrologic Soil Group</u>	<u>Soil Specific Recharge Factor (S)</u>
A	0.38 inches
B	0.25 inches
C	0.13 inches
D	0.06 inches

If more than one hydrologic soil group (HSG) is present at a site, a composite recharge volume shall be computed based upon the proportion of total site area within each HSG.

- (b.) The recharge volume provided at the site shall be directed to the most permeable HSG available, if feasible.
- (3.) A detailed soils evaluation of the project site shall be required to determine the suitability of recharge facilities. The evaluation shall be performed by a qualified design professional, and at a minimum, address soil permeability, depth to bedrock and normal or seasonal high water table, susceptibility to sinkhole formation, and subgrade stability. The general process for designing the infiltration BMP shall be:
- (a.) Analyze hydrologic soil groups as well as natural and man-made features within watershed to determine general areas of suitability for infiltration practices.
 - (b.) Provide field tests to determine the presence of appropriate soil percolation rates between 0.55 and 8.25 in/hr. Testing shall be performed at the location of each proposed Infiltration BMP at the bottom elevation of the proposed facility. A plan including the frequency and locations of soil tests shall be submitted to the Township for review and approval.
 - (c.) Infiltration BMPs shall be capable of completely infiltrating the collected runoff volume within 2 days (48 hours).
 - (d.) Infiltration BMP bottoms shall be separated by a minimum 36" vertically from the seasonal high water table and/or bedrock layer, as documented by on site soil testing. For Infiltration BMPs receiving only roof runoff from a single-family residential dwelling, a 24" vertical separation distance may be permitted at the discretion of the Township.
 - (e.) Infiltration BMPs shall not be located within 50 feet of carbonate bedrock formations.
 - (f.) Design Infiltration BMPs for the required storm volume based on field-determined capacity at the level of the proposed infiltration surface.

- (g.) Infiltration BMPs shall be constructed in virgin soil, not fill, after all site work is completed and the contributing drainage area has received final stabilization. Recharge/infiltration facilities shall not be used as sediment basins at any time. This requirement shall be provided in note form on the plan.
- (h.) Specific requirements shall be included on the plans to protect infiltration BMPs from compaction by equipment and to prevent sediment from entering infiltration BMPs during construction. This requirement shall be provided in note form on the plan.
- (i.) Infiltration BMPs shall be at least 20 feet down-gradient, or 100 feet upgradient from on-site and/or offsite building foundations.
- (j.) Infiltration BMPs shall be lined with a geotextile filter fabric, having a replaceable top liner surface.
- (k.) Infiltration BMPs shall be a minimum of 100 feet from any water supply well where the runoff is from commercial or industrial pervious parking areas. For all other applications a minimum distance of 50 feet shall be used.
- (l.) Infiltration BMPs shall not be located within 50 feet of septic systems and/or septic system drain fields.
- (m.) All infiltration BMP's shall incorporate a conveyance and control for overflow runoff.

Waiver of any or all of these requirements will be evaluated on an individual basis and may be granted at the discretion of the Township only upon written request and explanation of the reason(s) that these requirements should not apply provided by a Qualified Design Professional.

- (4.) Extreme caution shall be exercised where infiltration is proposed in geologically susceptible areas such as strip mine or limestone areas. Extreme caution shall also be exercised where salt or chloride would be a pollutant since soils do little to filter this pollutant and it may contaminate the groundwater. It is also extremely important that the qualified design professional evaluate the possibility of groundwater contamination from the proposed infiltration/recharge facility and recommend a hydrogeologic justification study be performed if necessary. Whenever a basin

will be located in an area underlain by limestone, a geological evaluation of the proposed location shall be conducted to determine susceptibility to sinkhole formations. The design of all facilities over limestone formations shall include measures to prevent ground water contamination and, where necessary, sinkhole formation. The infiltration requirement in the High Quality/Exceptional Waters shall be subject to the PADEP's Chapter 93 and Antidegradation Regulations. The municipality may require the installation of an impermeable liner in detention basins. A detailed hydrogeologic investigation may be required by the Township. All prevention provisions shall be stated and shown on the plan with details provided for each.

- (a.) In carbonate areas, BMPs shall be designed to disperse stormwater over the largest feasible area (e.g., subtle berms and level spreaders) so as not to significantly modify the natural hydrologic regime. Use of infiltration BMPs which result in significant increases (more than a 100% increase) in the predevelopment rate of infiltration per unit area should be avoided in carbonate areas, unless a detailed geologic evaluation (see below) demonstrates that the potential for sinkhole formation is minimal.
- (b.) Stormwater runoff from significant pollutant producing sources (so-called "hot spots" such as industrial uses, gas stations, fast-food and other commercial uses generating large numbers of vehicle trips, and other uses at the determination of the Township) shall be filtered and/or pretreated using a water quality BMP before being discharged in carbonate areas.
- (c.) In these cases, the Township may require that a detailed geologic evaluation of the project site be performed to determine the suitability for recharge, including both the potential for groundwater contamination and potential for sinkhole formation. The evaluation shall be performed by a registered professional geologist licensed in the Commonwealth of Pennsylvania and/or any other Township-approved professional, and at a minimum, address soil permeability, depth to bedrock, susceptibility to sinkhole formation, and subgrade stability.

It shall be the developer's responsibility to verify if the site is underlain by limestone. The following note shall be attached to all drainage plans and signed and sealed by the developer's engineer or geologist:

I, _____, hereby certify that the proposed detention basin / infiltration BMP (circle one) is / is not underlain by limestone.

- (5.) The municipality may require the developer to provide safeguards against groundwater contamination for uses which may cause groundwater contamination should there be a mishap or spill.
- (6.) Where pervious pavement is permitted for parking lots, recreational facilities, non-dedicated streets, or other areas, pavement construction specifications and maintenance schedules shall be noted on the plan.
- (7.) Recharge/infiltration facilities may be used in conjunction with other innovative or traditional BMPs, stormwater control facilities, and nonstructural stormwater management alternatives.

J. WATER QUALITY REQUIREMENTS

- (1.) In addition to the performance standards and design criteria requirements of Section 1005 of this Ordinance, the land developer shall comply with the following water quality requirements of Section 1005 unless otherwise exempted by provisions of this Ordinance.

The Township reserves the right to waive the requirements of this section if the Township believes that the implementation of infiltration practices would pose a threat to public health, safety, welfare, property and the protection of the people of the Municipality, their resources and the environment.

Developed areas will provide adequate storage and treatment facilities necessary to capture and treat stormwater runoff. The Recharge Volume computed under Section 1005.I.2. may be a component of the Water Quality Volume. If the Recharge Volume is less than the Water Quality Volume, the remaining Water Quality Volume may be captured and treated by methods other than recharge/infiltration BMPs.

The Water Quality Volume (WQv) is the storage capacity needed to treat stormwater runoff produced by "P" inch of rainfall (90% Rule) from the developed areas of the site (For "P" Values, see Exhibit 1, Table B-5). The following calculation formula is used to determine the storage volume, WQv, in acre-feet of storage:

$$WQv = [(P)(Rv)(A)]/12$$

WQv = Water Quality Volume

P = Rainfall Amount (90% of events producing this rainfall
(Exhibit 1, Table B-5)

A = Area in acres

Rv = $0.05 + 0.009(I)$ where I is the impervious surface
percentage

- (2.) WQv shall be designed as part of a stormwater management facility which incorporates water quality BMPs as a primary benefit of using that facility, in accordance with design specifications contained in "Pennsylvania Handbook of Best Management Practices for Developing Areas".

Design of infiltration BMPs proposed to comply with the water quality requirements of this section shall be in accordance with the design requirements outlined in the previous Sections 1005.I.3.-5.

K. STREAM BANK EROSION REQUIREMENTS

- (1.) Storage facilities shall be designed to release the 1-year post development storm runoff volume over a minimum duration of 24-hours.

L. PROHIBITED DISCHARGES

- (1.) Stormwater discharges into the Municipality's separate storm sewer system which are not composed entirely of stormwater shall not be permitted, except; (1) as provided in Subsection 2 below, and (2) discharges allowed under a state or federal permit.
- (2.) Discharges which may be allowed, based on a finding by the Municipality that the discharge(s) do not significantly contribute to pollution to surface waters of the Commonwealth, are:
 - Discharges from fire fighting activities,
 - Potable water sources including dechlorinated water line and fire hydrant flushes,
 - Irrigation drainage,
 - Routine external building washdown (which does not use detergents or other compounds),
 - Air conditioning condensation,
 - Water from individual residential car washing,
 - Springs,
 - Water from crawl space pumps,
 - Uncontaminated water from foundation or from footing drains,

- Flows from riparian habitats and wetlands,
 - Lawn watering,
 - Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spill material has been removed) and where detergents are not used,
 - Dechlorinated swimming pool discharges,
 - Uncontaminated groundwater.
- (3.) In the event that the Municipality determines that any of the discharges identified in Subsection 2 significantly contribute to pollution of waters of the Commonwealth, or is so notified by DEP, the Municipality will notify the responsible person to cease the discharge.
- (4.) Upon notice provided by the Municipality under Subsection 3, the discharger will have a reasonable time, as determined by the Municipality, to cease the discharge consistent with the degree of pollution caused by the discharge.
- (5.) Nothing in this Section shall affect a discharger's responsibilities under state or federal law.

M. PROHIBITED CONNECTIONS

- (1.) The following connections are prohibited, except as provided in Section 1005.L.2 above:
- (a.) Any drain or conveyance, whether on the surface or subsurface, which allows any non-storm water discharge including sewage, process wastewater, and wash water, to enter the separate storm sewer system, and any connections to the storm drain system from indoor drains and sinks; and
 - (b.) Any drain or conveyance connected from a non-residential land use to the separate storm system which has not been documented in plans, maps, or equivalent records, and approved by the Municipality.

N. ROOF DRAINS

- (1.) Roof drains shall not be connected to streets, sanitary or storm sewers or roadside ditches, except as provided in Section 1005.N.2.
- (2.) When it is more advantageous to connect directly to streets or storm sewers, connections of roof drains to streets or roadside ditches may be permitted by the Municipality.

- (3.) Roof drains shall discharge to infiltration areas or vegetative BMPs to the maximum extent practicable.

O. PLAN REQUIREMENTS & CONTENT

The stormwater management plan shall contain the following, and shall be signed and sealed by a qualified design professional.

- (1.) A general description of the project and a detailed narrative of the stormwater management proposal and conclusions describing the management techniques, types of storage and conveyance facilities, and a comparison between the pre-development and post-development peak runoff levels.
- (2.) Complete hydrologic and hydraulic structural computations for all stormwater management facilities. Structural computations can be requested at the discretion of the Municipality and their Engineer.
- (3.) Runoff calculations and related design computations of the total drainage area necessary to substantiate the proposed temporary and permanent stormwater management facilities.
- (4.) Map(s) of the project area shall be submitted on 24-inch x 36-inch sheets and shall be prepared in a form that meets the requirements for recording at the offices of the Recorder of Deeds of Cumberland County. The contents of the maps(s) shall include, but not be limited to:
 - (a.) The location of the project relative to highways, municipalities or other identifiable landmarks.
 - (b.) The 100-year flood plain as determined by the Federal Emergency Management Agency (FEMA).
 - (c.) Existing contours at intervals of two feet. In areas of steep slopes (greater than 15 percent), five-foot contour intervals may be used.
 - (d.) Existing streams, lakes, ponds, or other bodies of water and wetlands within the project area.
 - (e.) A map showing the extent of the entire watershed contributing runoff to the site including offsite watersheds, if any.
 - (f.) The downstream area affected by stormwater runoff from the proposed development.

- (g.) Other physical features including sinkholes, streams, existing drainage courses, and areas of natural vegetation to be preserved.
- (h.) The locations of all existing and proposed utilities, sanitary sewers, and water lines on the property being developed and within 50 feet of the subject property lines.
- (i.) An overlay showing soil names and boundaries.
- (j.) Proposed changes to the land surface and vegetative cover, including the type and amount of impervious area that would be added.
- (k.) Existing and proposed structures, roads, paved areas, and buildings. These features shall be shown within 50 feet of the property lines when access is permitted.
- (l.) Final contours at intervals of two feet. In areas of steep slopes (greater than 15 percent), five-foot contour intervals may be used.
- (m.) Construction details, sections and specifications for stormwater facilities with sufficient information and dimensions for construction interpretation that will provide the developer and constructor with sufficient information to meet the requirements of this Ordinance.
- (n.) The name of the development, the name and address of the owner of the property, and the name of the individual or firm preparing the plan.
- (o.) The date of submission and all subsequent revisions.
- (p.) A graphic and written scale of one (1) inch equals no more than fifty (50) feet; for tracts of twenty (20) acres or more, the scale shall be one (1) inch equals no more than one hundred (100) feet.
- (q.) North arrow.
- (r.) The total tract boundary and size with distances marked to the nearest hundredth of a foot and bearings to the nearest second.
- (s.) Existing and proposed land use(s).
- (t.) A key map showing all existing man-made features beyond the property boundary that would be affected by the project.
- (u.) Access easements around all stormwater management facilities that would provide ingress to and egress from a public right-of-way and prohibit structures and other obstructions from being placed in areas intended and required for stormwater management. Access easements shall have a minimum width of 20.0 feet and be

centered on the facility (i.e. pipe, swale) to which access is being provided. For storage, retention and infiltration facilities the easement shall conform substantially to the size, shape and configuration of such facility. For regulated activities proposing individual on lot controls. A note shall be provided to grant the Township access to inspect facilities in the event of a malfunction.

- (v.) A note on the plan indicating the location and responsibility for maintenance of stormwater management facilities that would be located off-site. All off-site facilities shall meet the performance standards and design criteria specified in this Ordinance.
- (w.) Staging and implementation schedule for constructing the proposed stormwater management facilities.
- (x.) A statement, signed by the landowner, acknowledging the stormwater management system to be a permanent fixture that can be altered or removed only after approval of a revised plan by the municipality.
- (y.) A note which states that no person shall modify, remove, fill, landscape or alter any existing stormwater BMP, unless it is part of an approved maintenance program, without the written approval of the Municipality.
- (z.) A note which states that no person shall place any structure, fill, landscaping or vegetation into a stormwater BMP or within a drainage easement, which would limit or alter the functioning of the BMP, without the written approval of the Municipality.
- (aa.) Maintenance and ownership provisions in accordance with Sections 1005.P. and Q.
- (bb.) The location of all erosion and sedimentation control facilities.
- (cc.) Vertical profiles of all proposed open channels and storm sewers including hydraulic capacity.
- (dd.) Overland drainage paths of proposed swales or channels to convey water. The plans shall show all points of discharge from the site (swale, pipe, watercourse, sheet flow, etc.).
- (ee.) The following signature block for the design engineer who is licensed in the Commonwealth of Pennsylvania:

_____, on this date _____, has
(Design Engineer) (date of signature)

reviewed and hereby certifies that, to the best of his/her knowledge and ability, the stormwater management plan meets all design standards and criteria of Upper Mifflin Township Subdivision and Land Development Ordinance.

- (ff.) A list of the waivers of this Ordinance that are requested.
- (gg.) The locations of all exiting and proposed septic tank infiltration areas and wells.

P. PERFORMANCE GUARANTEE

The applicant shall provide a financial guarantee to the Township for the proper installation and construction of all stormwater management controls as required by the approved stormwater plan and this ordinance in the amount of 110% of the total estimated construction cost of all elements of the approved plan. Performance guarantees will be released only upon submittal of Record Drawings, which shall consist of an As-Built Survey of all stormwater management facilities included in the approved Stormwater Management Plan. Record Drawings shall be submitted to the Municipal Engineer for final approval, and shall include an explanation of any discrepancies, alterations and or modifications with the approved stormwater management plans. Record drawings shall be certified by a qualified design professional.

Q. PROGRAM PROVISIONS

- (1.) Each stormwater management plan shall contain provisions, which clearly set forth the ownership and maintenance responsibility of all permanent stormwater management facilities. The provisions shall include:
 - (a.) Description of maintenance requirements and outline of routine maintenance actions and schedules necessary to ensure proper operation of the facility(ies).
 - (b.) Establishment of suitable easements for access to all facilities from public right-of-ways. Easement locations, dimensions and prohibitions shall be as required by Section 1005.O.4.u. The Township, its agents and employees shall have the right to enter easement areas where stormwater management and erosion and sediment control facilities are located for the purpose of inspecting said facilities.
 - (c.) Identification of the responsible party or entity for ownership and maintenance of both temporary and permanent stormwater management and erosion and sediment control facilities. In

meeting these requirements, the following priority for ownership is herein established:

- (1st) As a first priority, the facilities should be incorporated within individual lots so that respective lot owners will own and be responsible for maintenance in accordance with this section and the recorded deed restrictions.
- (2nd) As a second priority, in the event that the first priority cannot be achieved, ownership and maintenance shall be the responsibility of a Homeowners' Association. The Township shall have complete discretion in determining whether or not the first priority can be achieved. The stated responsibilities of the Homeowners' Association in terms of owning and maintaining the stormwater management facilities shall be submitted with final plans for determination of their adequacy and, upon their approval, shall be recorded with the approved subdivision and / or land development plan with the recorder of deeds of Cumberland County, Pennsylvania. In addition, the approved subdivision and / or land development plan and any deed written from said plan for a lot or lots shown therein shall contain a condition that it shall be mandatory for the owner or owners of said lot to be members of said Homeowners' Association.
- (3rd) Municipal ownership shall not be permitted.
- (d.) No Stormwater Management Plan shall be finally approved until the applicant/owner/developer signs the Stormwater Facilities Maintenance and Monitoring Agreement labeled Exhibit 2.
- (e.) When ownership will ultimately be the responsibility of a Homeowner's Association an agreement shall be provided to the Township by the Applicant/Owner/Developer defining the terms and conditions under which ownership and maintenance responsibilities will be transferred to the Homeowner's Association. Other items may be required in the agreement where determined necessary to guarantee satisfactory installation and maintenance of all facilities. The agreement shall be subject to the review and approval of the Municipality.

R. SCHEDULE OF INSPECTIONS

- (1.) The Municipal Engineer or his Municipal assignee shall observe any phases of the installation of the permanent stormwater management facilities that are deemed appropriate by the Municipal Engineer and the Municipality.
- (2.) During any stage of the work, if the Municipal Engineer determines that the permanent stormwater management facilities are not being installed in accordance with the approved Stormwater Management Plan, the Municipality shall revoke any existing building permits until a revised Drainage Plan is submitted and approved, as specified in this Ordinance.

S. RIGHT-OF-ENTRY

Upon presentation of proper credentials, duly authorized representatives of the municipality may enter at reasonable times upon any property within the municipality to inspect the condition of the stormwater structures and facilities in regard to any aspect regulated by this Ordinance.

T. NOTIFICATION

In the event that a person fails to comply with the requirements of this Ordinance, or fails to conform to the requirements of any permit issued hereunder, the municipality shall provide written notification of the violation. Such notification shall set forth the nature of the violation(s) and establish a time limit for correction of these violation(s). Failure to comply within the time specified shall subject such person to the penalty provisions of this Ordinance. All such penalties shall be deemed cumulative and resort by the municipality from pursuing any and all remedies. It shall be the responsibility of the Owner of the real property on which and Regulated Activity is proposed to occur, is occurring, or has occurred, to comply with the terms and conditions of this Ordinance.

U. ENFORCEMENT

The municipal governing body is hereby authorized and directed to enforce all of the provisions of this Ordinance. All inspections regarding compliance with the drainage plan shall be the responsibility of the municipal engineer or other qualified persons designated by the municipality.

- (1.) A set of design plans approved by the municipality shall be on file at the site throughout the duration of the construction activity. Periodic inspections may be made by the municipality or designee during construction.

(2.) Adherence to Approved Plan

It shall be unlawful for any person, firm or corporation to undertake any regulated activity under Section 1005.C. on any property except as provided for in the approved drainage plan and pursuant to the requirements of this Ordinance. It shall be unlawful to alter or remove any control structure required by the drainage plan pursuant to this Ordinance or to allow the property to remain in a condition which does not conform to the approved drainage plan.

(3.) At the completion of the project, and as a prerequisite for the release of the performance guarantee, the owner or his representative shall:

(a.) Provide a certification of completion from an engineer, surveyor or other qualified person verifying that all permanent facilities have been constructed according to the plans and specifications and approved revisions thereto.

(b.) Provide a set of as-built (record) drawings.

(4.) After receipt of the certification by the municipality, a final inspection shall be conducted by the municipal engineer or designated representative to certify compliance with this Ordinance.

(5.) Prior to revocation or suspension of a permit, the governing body will schedule a hearing to discuss the non-compliance if there is no immediate danger to life, public health or property.

(6.) Suspension and revocation of Permits

(a.) Any building permit issued by the Municipality may be suspended or revoked by the governing body for:

(1.) Non-compliance with or failure to implement any provision of the permit.

(2.) A violation of any provision of this Ordinance or any other applicable law, ordinance, rule or regulation relating to the project.

(3.) The creation of any condition or the commission of any act during construction or development which constitutes or creates a hazard or nuisance, pollution or which endangers the life or property of others.

(b.) A suspended building permit shall be reinstated by the governing body when:

- (1.) The municipal engineer or his designee has inspected and approved the corrections to the stormwater management and erosion and sediment pollution control measures(s), or the elimination of the hazard or nuisance, and/or;
- (2.) The governing body is satisfied that the violation of the ordinance, law, or rule and regulation has been corrected.
- (3.) A permit that has been revoked by the governing body cannot be reinstated. The applicant may apply for a new permit under the procedures outlined in this Ordinance.

(7.) Occupancy Permit

An occupancy permit shall not be issued unless the certification of compliance has been secured. The occupancy permit shall be required for each lot owner and/or developer for all subdivisions and land development in the municipality.

V. PUBLIC NUISANCE

- (1.) The violation of any provision of this Section is hereby deemed a Public Nuisance.
- (2.) Each day that a violation continues shall constitute a separate violation.

SECTION 1006. Traffic Impact Studies

- (1.) Uses Requiring a Traffic Study – At the time of any required preliminary plan submittal under the Township Subdivision and Land Development Ordinance, for any of the following uses, the applicant shall submit a traffic study and a written report, when the following are proposed:
 - (a.) Twenty-five (25) or more dwelling units.
 - (b.) More than 10,000 square feet of total floor area of commercial space.
 - (c.) More than 30,000 square feet of total floor area of office space.
 - (d.) Any truck terminal, warehouse, distribution facility or industrial use of more than 60,000 square feet of total floor area of industrial space.
 - (e.) More than 15,000 square feet of total floor area of institutional space.

- (f.) Any use or combination of uses that would generate traffic volumes greater than 500 trips per day.
 - (g.) Whenever the Board of Supervisors shall find that there are reasonable grounds to believe that the existing transportation network, including bridges, may be inadequate to handle the volume or character of traffic likely to result from the proposed subdivision or land development.
- (2.) Scope of Study – Such a traffic study shall meet the requirements set forth below:
- (a.) Costs: The full costs of completing the study and of a review by the Township engineer or other Township representative shall be borne by the applicant.
 - (b.) Selection of Engineer: The Board of Supervisors shall provide a list of four or more persons or firms that are qualified traffic engineers or traffic planners. The applicant shall select one of the persons or firms from this list. Alternate firms may be approved upon a review of qualifications.
 - (c.) Study Area: Prior to initiation of the traffic study, the traffic engineer or planner shall meet with the Board of Supervisors or its designee to establish the area to be studied. This area shall be limited to streets and intersections within a maximum of one mile of the proposed project boundaries.
 - (d.) Joint Studies: Joint traffic studies between different applicants are strongly encouraged. If a recent and relevant study is available, that information may be used if applicable, that information may be used if applicable as a basis for this required study.
 - (e.) Project Description: Any study shall include a description of the proposed development, the proposed access, and the surrounding street system. If a development is proposed to occur in stages, each stage shall be described and taken into account in the study. If the applicant owns other lands within the study area, reasonable assumptions shall be made about how that land can be expected to be developed, and shall be taken into account.
 - (f.) Existing Traffic Conditions: The traffic volumes and service levels during the a.m. and p.m. peak hours shall be presented for all streets and intersections in the study area that can be expected to be significantly impacted. The study shall determine actual

peak hours following a review of a 24-hour traffic count. Traffic volumes shall be based upon actual counts that occurred within the prior two years and not upon State estimates. The locations of all accidents reportable to the State Police within the study area during the most recent five-year period shall be noted.

- (g.) Expected Traffic Generation: The study shall include an estimate of the number of trips expected to be generated by the use and any future stages during the determined a.m. and p.m. peak hours. Such estimates shall be based upon the latest published estimates of the Institute of Transportation Engineers, or its successor entity.
- (h.) Projected Effects: The study shall take into account not only the use proposed by the applicant, but also other uses and developments that have received building permits or preliminary subdivision or land development approval from the Township. The study shall project a.m. and p.m. peak hour traffic volumes and levels of service on impacted intersections and streets. If the traffic generation by the development would be more than 30 percent greater during any hour other than the a.m. or p.m. peak hours on adjacent streets, the study shall analyze both the peak hours for the development and for adjacent streets. The study shall project what directions the traffic generated will head towards.
- (i.) Levels of Service: The study shall use the description of the levels of service (A, B, C, D, E and F) for streets and highways established by the U.S. Department of Transportation.
- (j.) Signal Warrants: Heavily traveled intersections at entrances to the development and other major unsignalized intersections in the study area shall be studied to determine whether a traffic signal is warranted by PennDOT criteria.
- (k.) Needed Improvements: The study may take into account traffic improvements which are clearly funded and will occur within the next two years. The study shall also consider any Township improvements identified in any regional land use and transportation plans. The study shall include suggestions for how each congested or hazardous intersection or bridge in the study area should be improved to reduce the hazard or congestion, along with a rough estimate of the cost of that improvement.
- (l.) Applicant's Response: The applicant shall respond in writing to the traffic study with proposals on what traffic improvements, bridge improvements, right-of-way dedications, or commitments of financing for specific projects the applicant proposes to commit to

resolve the negative traffic impacts of the proposed development. Such improvements or financing may be staged relative to the stages of the development. The applicant may also agree to commit towards the long-term support of a program to reduce peak hour traffic by private vehicles, through programs such as van pooling, support of mass transit or staggered work hours, in place of certain structural improvements.

SECTION 1007 Water Impact Studies

(1.) Requirement for a Water Impact Study

A groundwater availability study will be required at the time of any required Preliminary Plan submittal for all subdivision(s) and/or land development(s) of any land tract(s) in Upper Mifflin Township that proposes to utilize groundwater obtained from the said tract(s), any adjoining tract(s) or from any other tract(s) within the Township. The study will be required irrespective of whether that water is being distributed as part of a public water supply or as individual well(s) on lot within the said tract(s).

(2.) Exclusion and Modification to a Water Impact Study

(a.) Exclusion

In the case of subdivision(s) or land development(s) involving less than ten (10) existing proposed or possible residential dwelling unit(s) or non-residential development(s) estimated to use less than 3,500 GPD (gallons per day) of water, the ground water availability study is not required. Studies shall also not be required when the applicant is a municipal water supplier and the proposal is for a new or expanded regional water source.

(b.) Modification

When there are fifteen (15) or more dwelling unit connections proposed as possible additions in the future to the said well/water system or when there are or is a possibility, in the future, of twenty-five (25) or more human consumers of the water from the said source, the study, regulation(s) and approval(s) shall also be within the jurisdiction of PADEP for conduct of the water impact study.

(3.) Conduct of a Water Impact Study

The water impact study shall be prepared, signed and sealed by a hydrologist, professional geologist or professional engineer qualified to conduct groundwater investigations in the Commonwealth of

Pennsylvania. The purpose of the study will be to determine whether there is an adequate supply of groundwater for the proposed use and to estimate the impact of the additional water withdrawal(s) on existing nearby wells, underlying aquifers and streams and examine the possible connection(s) to an existing public water supply system and the capacity of that existing system to accommodate the proposed development(s).

(4.) Water Impact Study Requirements

The Upper Mifflin Township Board of Supervisors shall only review and/or approve the groundwater impact study after the person(s) preparing the study signs the report, certifies the data and has included the following information:

(A.) Calculations of the projected water needs using the criteria set forth in the following:

- (1.) For residential usage, the PADEP calculation of 3.5 persons per dwelling unit and an average daily usage of 100 gallons per person per day shall be utilized.
- (2.) For any non-residential usage, PADEP accepted estimated water usage figures shall be utilized in all computations.
- (3.) For any and all proposed public water system usage as described in Subsection 1007.2.b, PADEP jurisdictions shall prevail.
- (4.) Where applicable, calculations of the projected water needs using the criteria set forth in the following references shall be used:
 - (a.) PUBLIC WATER SUPPLY MANUAL Bureau of Water Quality Management Publication No. 15 by the PADEP, Harrisburg, Pennsylvania, as amended.
 - (b.) GUIDE FOR DETERMINATION OF REQUIRED FIRE FLOW by the Insurance Services Office (ISO) as amended.
 - (c.) AMERICAN WATER WORKS ASSOCIATION Standards and Manuals for the American Water Works Association, Denver, Colorado, as amended.

(B.) A geologic map of the area within a 1 mile radius of the site, at a scale of not less than one (1) inch to one thousand (1,000) feet (1"=1,000').

(C.) The location of all faults, lineaments and fracture traces within ¼ mile of the site.

- (D.) The locations of all existing and proposed wells within ¼ mile of the site, and all large withdrawal wells (over 10,000 gpd) within 1 mile of the site.
- (E.) The location of all existing and proposed on-lot septic systems and sewer lines within ¼ mile of the site.
- (F.) The location of all streams, perennial and intermittent, floodplains and wetlands, within the project's boundaries.
- (G.) The locations of all existing sources of pollution/ contamination within ¼ mile of the well site.
- (H.) A discussion of the aquifers underlying the site and their long-term drought recharge capability based on accepted published data or detailed site specific investigations.
- (I.) Based on the drought recharge capability of the underlying aquifer and the calculated daily groundwater withdrawals of the project, a hydrologic budget shall be calculated for the site property itself, and for the area within ¼ mile of the site.
- (J.) Based on the results of the hydrologic budget, a determination shall be made on whether or not the potential exists for adverse affects on the hydrologic environment caused by the project.
- (K.) The study shall include a brief statement of the qualifications of the person(s) preparing the study.
- (L.) For each well that is constructed:
 - (1.) An accurate geologic log should be constructed during the drilling of the well giving a detailed description of the type and thickness of rocks encountered.
 - (2.) The log should contain information on the depth and thickness of all water bearing zones encountered and the yield for each zone. Yield from the well must be measured using a quantitative method.
- (M.) A pumping test shall be conducted at a rate approved by the Township or its designee. A test of greater duration than that initially undertaken may be required if a water-table or unconfined-type response (delayed drainage) is encountered during the testing period. The test shall be conducted at a constant pumping rate that should not deviate greater than +/-5% during the

test. Notice of all pumping tests shall be given to the Township at least 72 hours before commencing the pumping test.

- (N.) In order to determine the impact of the project on existing wells, a representative sample of existing wells, evenly spaced around the pumping well, shall be monitored for changes in water level. The number and location of monitoring wells shall be subject to approval by the Township or its designee before conducting a step test. Sufficient well monitoring shall be performed to allow for the construction of hydrographs showing a continuous record of well levels before, during and after the pumping test.
- (O.) A means of accurately measuring the well discharge shall be provided subject to approval by the Township or its designee.
- (P.) Well discharge shall be directed away from the site by a method suitable to the Cumberland County Conservation District and to a point suitable to the Township.
- (Q.) Records shall be compiled in typewritten form to include the following information:
 - (1.) Name of driller and personnel conducting test.
 - (2.) Description of test well to include horizontal and vertical dimensions, casing installed and grouting detail.
 - (3.) List of formation samples.
 - (4.) Static water level immediately prior to yield testing.
 - (5.) Hydrograph of depth to water surface during test pumping and recovery period at the test well showing corresponding pump and discharge rate in gallons per minute and time readings were taken.
 - (6.) Log of depth to water surface at existing and monitoring wells during test pumping period showing time readings were taken.
- (R.) A report shall accompany the test well data, which analyzes and interprets all data regarding impacts on the groundwater supply and existing wells. The credentials of the individual(s) preparing the report shall be included. Conclusions shall be drawn from the analysis with respect to:
 - (1.) Availability of sufficient water for the land development proposed;
 - (2.) Probable effects of long-term pumping on well levels within one (1) mile of the test well.

- (S.) No land development/subdivision plan, requiring a “water impact study”, shall be approved by the Township if the study indicates that the proposed well/water system does not provide an adequate supply of water for the proposed development/use, considering both quality and quantity, or that the proposed well/water supply adversely affects nearby wells and streams or does not provide for adequate groundwater recharge in respects to calculated withdrawals.
- (T.) The submission to the Township shall include all applications, reports, or supplemental information submitted to and received from the PADEP and/or the Cumberland County Conservation District.

ARTICLE XI

IMPROVEMENT STANDARDS

SECTION 1100. Construction of Improvements

The subdivider or developer shall grade and pave the streets and install all other necessary improvements at no expense to the Township including where required, curbs, sidewalks, screening and landscaping, water mains, erosion, sedimentation and water management control facilities, sanitary and storm sewers, street lights, fire hydrants, pavement markings, street name and traffic control signs, and other facilities and utilities required by the Board, in strict accordance with the requirements of this Article and the standards and specifications of the Township.

Construction and inspection of all such facilities and utilities shall be subject to inspection by appropriate Township officials during the progress of the work. The subdivider or developer shall not begin work on structures in any part of the subdivision or land development until the subbase has been completed. At such time as ten (10%) of the structures within the subject phase of a subdivision or land development have been completed or are under construction, the subdivider or developer shall be required to install the base course prior to beginning work on any other structure within the subdivision or land development. The wearing course shall not be applied to any proposed Township street in a subdivision or land development until a minimum of 90% of the structures have been completed within that phase of the subdivision or land development.

SECTION 1101. Completion of Improvements or Guarantee Thereof Prerequisite to Final Plat Approval

No plat shall be finally approved unless the streets, walkways, curbs, gutters, street lights, traffic control signage and markings, fire hydrants, shade trees, water mains, sanitary sewer facilities, storm drains, storm water detention and/or retention basins and other related drainage facilities, recreational facilities, open space improvements, buffer or screen plantings, and other on-site improvements as are required by this ordinance have been installed and paid for in full by the applicant in accordance with the requirements of this ordinance. In lieu of the completion of any such improvements required as a condition for the final approval of a plat, the applicant shall deposit with the Township financial security acceptable to the Township in an amount sufficient to cover the costs of any and all such required improvements for common amenities. All matters and procedures concerning such financial security shall comport in all respects with the provisions of Sections 509, 510, and all of the "Pennsylvania Municipalities Planning Code", as amended (53 P-S. Sections 10509, 10510 and 10511), the contents of which are hereby incorporated herein by reference as fully as those set forth at length herein. All documentation concerning such financial security shall be subject to the review and approval of the Township Solicitor. The applicant shall reimburse the Township for the

reasonable and necessary expense incurred for the inspection of required on-site improvements. Such reimbursement shall be based upon the same schedule, and shall be subject to the same procedures, as are set forth in Section 505 of this Ordinance.

Failure to complete any construction or development of the proposed subdivision or land development within five (5) years following the approval of a final plat by the Township shall automatically render the approval of the plat null and void, unless an extension of time has been requested in writing by the applicant and a written approval granted by the Township Board of Supervisors. Further, failure of the applicant to comply with the requirements of Section 508 (4) of the "Pennsylvania Municipalities Planning Code", as amended [53 P.S. Section 10508 (4)], the contents of which are also hereby incorporated herein by reference, shall subject the subdivision or land development to any and all changes in zoning, subdivision and other governing ordinances enacted by the Township subsequent to the date of the initial preliminary plan submission.

SECTION 1102. Street Construction

A. General

All street construction shall be subject to supervision by the Township Supervisors, or their representatives, and shall be consistent with the grades and dimensions drawn on the plans, profiles, and cross-sections submitted by the applicant and approved by the Township Supervisors. Figure 1 that follows illustrates an acceptable typical cross-section for streets and roads within the Township. The applicant shall reimburse the Township for the actual cost of the required final inspection of the subgrade and subbase construction by the Township Supervisors, or their representatives.

B. Subgrade

Prior to laying the subbase, the applicant shall (1) remove all top soil from the designated cartway, (2) remove all pockets of soft yielding, or otherwise unsatisfactory material prior to laying subbase the applicant shall use eight (8") inches of approved shale, or acceptable coarse-grained material, (3) bring the cartway to grade level with approved shale, or acceptable, coarse-grained material, compacted at six (6") inch depth intervals, (4) make provisions for adequate surface and subsurface drainage, and (5) install required utilities.

C. Subbase

The applicant shall notify the Township Supervisors in writing of impending construction of the subbase, and thereby, request final inspection of the subgrade.

The subbase shall consist of six (6") inches of 2A stone rolled and compacted, or four (4") inches of compacted approved shale four (4") inches of 2A stone, rolled and compacted.

D. Pavement

The applicant shall notify the Township Supervisors in writing of the impending construction of the pavement, and thereby, request final inspection of the subbase.

The pavement, including shoulders, shall be:

- (1.) Base course consisting of three (3") inches of compacted ID-2 with a wearing coat of one and one half (1-1/2") inches of ID-2 sealed at curbs, if applicable; or
- (2.) Motor/Pave with a four (4") inch FB-I compacted base, and two (2") inches of compacted and sealed (FB-I) wearing course.
- (3.) The applicant shall permanently mark the centerline of all proposed collector roads with a four (4) inch wide yellow line.

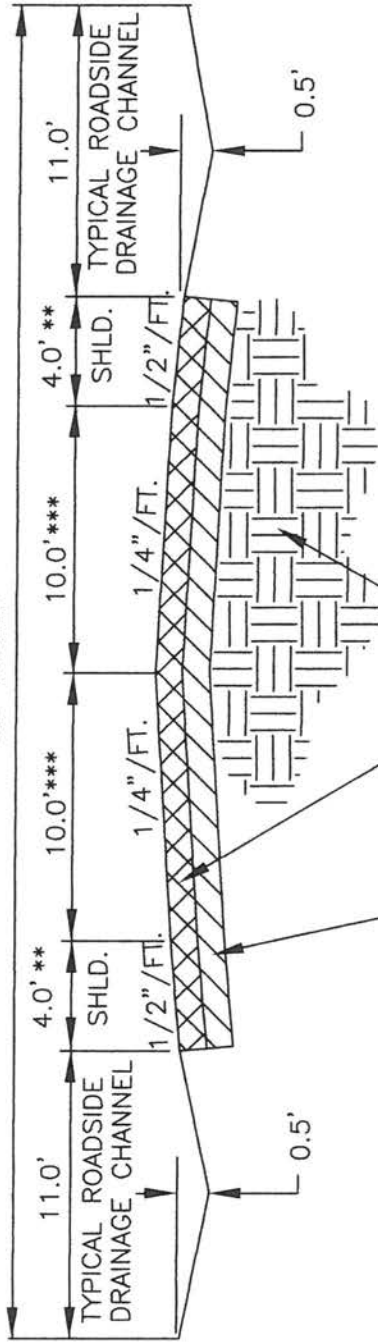
E. Arterial Streets

For the construction of arterial roads or highways, the subdivider shall consult the Township Supervisors and be governed by the Pennsylvania Department of Transportation for the method of construction to be used.

The Township Supervisors upon the recommendation of the Planning Commission shall decide if a collector or arterial street is required as a direct result of the construction of a subdivision.

- * 60' FOR COLLECTOR ROADS
- ** 8' FOR COLLECTOR ROADS
- *** 12' FOR COLLECTOR ROADS

50' R.O.W. *



COMPACTED SUBGRADE FREE OF ALL TOPSOIL AND HUMUS MATERIAL; GRADED TO A UNIFORM LEVEL WITH APPROVED SHALE OR ACCEPTABLE, COARSE-GRAINED MATERIAL, FREE OF ALL DEPRESSIONS AND SOFT SPOTS IN ACCORDANCE WITH TOWNSHIP SPECIFICATIONS.

BITUMINOUS PAVING TO CONSIST OF:
 3" ROLLED AND COMPACTED ID2 BINDER COURSE,
 1-1/2" ROLLED AND COMPACTED ID2 WEARING COURSE OR
 4" ROLLED AND COMPACTED MOTORPAVED FB-1 COMPACTED BASE, 2" ROLLED, COMPACTED AND SEALED MOTORPAVED FB-1 WEARING COURSE IN ACCORDANCE WITH TOWNSHIP SPECIFICATIONS.

BASE COURSE TO CONSIST OF EITHER:
 6" OF ROLLED AND COMPACTED 2A STONE AGGREGATE OR 4" ROLLED AND COMPACTED 2A STONE AND 4" OF COMPACTED APPROVED SHALE IN ACCORDANCE WITH TOWNSHIP SPECIFICATIONS.

RESIDENTIAL DRIVEWAY CROSSING OF THE TYPICAL STREET DRAINAGE OR MAIN DRAINAGE CHANNEL SHALL MAINTAIN THE MINIMUM CROSS-SECTION AND GRADIENT OF THE CHANNEL. NO PIPES ARE TO BE UTILIZED UNDER DRIVEWAYS UNLESS REVIEWED AND APPROVED BY THE TOWNSHIP SUPERVISORS IN ADVANCE OF INSTALLATION.

FIGURE 1

UPPER MIFFLIN TOWNSHIP CUMBERLAND COUNTY

TYPICAL STREET / ROAD CROSS-SECTION FOR MINOR STREETS, LOCAL ROADS AND COLLECTOR ROADS.

SECTION 1103. Sewers and Water

- A. Where a public sanitary sewer system is within one thousand (1,000') feet, or where plans approved by the municipality provide for the installation of such public sanitary sewer facilities to within one thousand (1,000') feet of a proposed subdivision, the subdivider shall provide the subdivision with a complete sanitary sewer system, if, in the Supervisor's opinion, on the recommendation of the Planning Commission, if it is feasible.
- B. Where the installation of a sanitary sewer system is not required, the subdivider or owner of the lot shall provide for each lot, at the time improvements are erected thereon, a private sewage disposal system consisting of a septic tank and tile absorption field or other approved sewage disposal system. All such individual sewage disposal systems shall be constructed in accordance with the Rules and Regulations of the Pennsylvania Department of Environmental Protection.
- C. Where a private, community sewerage system is proposed, such system shall be subject to approval of the Pennsylvania Department of Environmental Protection before approval by the Township. As a condition of Township approval, the Board upon recommendation of the Planning Commission may establish terms for future acceptance of such system on behalf of the Township which may include a deferral of acceptance or a permanent refusal to accept. All private, community sewerage systems shall be owned and maintained by a perpetual entity and such ownership and maintenance responsibility shall be clearly established as a condition of Final Plan approval.
- D. Where a water main supply system is within one thousand (1,000') feet of, or where plans approved by the Township provide for the installation of such public water facilities, the subdivider shall provide the subdivision with a complete water main supply system to be connected to the existing or proposed water main supply system if, in the Supervisor's opinion on the recommendation of the Planning Commission, it is feasible. The design and installation shall be subject to the approval of the agency or entity having jurisdiction as a condition of Township approval.
- E. Where a private, community water system is proposed, such system shall be subject to the applicable approval of the Pennsylvania Department of Environmental Protection before approval by the Township. As a condition of Township approval, the Board upon recommendation of the Planning Commission may establish terms for future acceptance of such system which may include a deferral of acceptance or a permanent refusal to accept. All private community water systems shall be owned and maintained by a perpetual entity and such ownership and maintenance

responsibility shall be clearly established as a condition of Final Plan approval.

- F. Where water is to be provided by means other than by private wells owned and maintained by the individual owners of the lots within the subdivision or development, applicants shall present evidence to the Board of Supervisors that the subdivision or development is to be supplied by a certified public utility, a bona fide cooperative association of lot owners, or by a municipal corporation, authority, or utility. A copy of Certificate of Public Convenience from the Pennsylvania Public Utility Commission or an application for such certification, a cooperative agreement or a commitment or agreement to serve the area in question, whichever is appropriate, shall be acceptable evidence.

SECTION 1104. Storm Water Management Construction Standards

Basin Construction Criteria – Construction standards of storm water management and erosion control facilities shall be in accordance with the approved Plans and accompanying Specifications, if any. The construction details and standards of PennDOT Form 408 Specifications and PennDOT, RC Series, Roadway Construction Standards shall be used when applicable.

ARTICLE XII

MODIFICATION OF REQUIREMENTS

SECTION 1200. Peculiar Conditions

The Board of Supervisors may grant a modification of the requirements of one or more provisions if the literal enforcement will exact undue hardship because of peculiar conditions pertaining to the land in question, provided that such modification will not be contrary to the public interest and that the purpose and intent of the ordinance is observed.

SECTION 1201. Requests for Modification

- A. All requests for a modification shall be in writing and shall accompany and be a part of the application for development. The request shall state in full the grounds and facts of unreasonableness or hardship on which the request is based, the provision or provisions of the ordinance involved and the minimum modification necessary.
- B. The request for modification may be referred to the Planning Commission and the Township Engineer for advisory comments. The Board of Supervisors or the Planning Commission, as the case may be, shall keep a written record of all action on all requests for modifications.

ARTICLE XIII

REMEDIES

SECTION 1300. Enforcement Remedies

- A. Any person, partnership, or corporation who or which has violated the provision of the Upper Mifflin Township Subdivision Ordinance shall, upon being found liable therefore in a civil enforcement proceeding commenced by Upper Mifflin Township, pay a judgment of not more than \$500.00 plus all court costs, including reasonable attorney fees incurred by the municipality as a result thereof. No judgment shall commence or be imposed, levied or payable until the date of the determination of a violation by the district justice. If the defendant neither pays nor timely appeals the judgment, the municipality may enforce the judgment pursuant to the applicable rules of civil procedure. Each day that violation continues shall constitute a separate violation, unless the district justice determining that there has been a violation further determines that there was a good faith basis for the person, partnership or corporation violating the ordinance to have believed that there was no such violation, in which event there shall be deemed to have been only one such violation until the fifth day following the date of the determination of a violation by the district justice and thereafter each day that a violation continues shall constitute a separate violation.

- B. The court of common pleas, upon petition, may grant an order of stay, upon cause shown, tolling the per diem judgment pending a final adjudication of the violation and judgment.

- C. Nothing contained in this section shall be construed or interpreted to grant any person or entity other than the municipality the right to commence any action for enforcement pursuant to this section.

SECTION 1301. Preventive Remedies

- A. In addition to other remedies, the Township may institute and maintain appropriate actions by law or in equity to restrain, correct or abate violations, to prevent unlawful construction, to recover damages and to prevent illegal occupancy of a building, structure or premises. The description by metes and bounds in the instrument of transfer or other documents used in the process of selling or transferring shall not exempt the seller or transferor from such penalties or from the remedies herein provided.

- B. Upper Mifflin Township may refuse to issue any permit or grant any approval necessary to further improve or develop any real property which

has been developed or which has resulted from a subdivision of real property in violation of the Upper Mifflin Township Subdivision Ordinance. This authority to deny such a permit or approval shall apply to any of the following applicants:

- (1.) The owner of record at the time of such violation.
- (2.) The vendee or lessee of the owner of record at the time of such violation without regard as to whether such vendee or lessee had actual or constructive knowledge of the violation.
- (3.) The current owner of record who acquired the property subsequent to the time of violation without regard as to whether such current owner had actual or constructive knowledge of the violation.
- (4.) The vendee or lessee of the current owner of record who acquired the property subsequent to the time of violation without regard as to whether such vendee or lessee had actual or constructive knowledge of the violation.

As an additional condition for issuance of a permit or the granting of an approval to any such owner, current owner, vendee or lessee for the development of any such real property, the Township may require compliance with the conditions that would have been applicable to the property at the time the applicant acquired interest in such real property.

ARTICLE XIV

EFFECTIVE DATE: ENACTMENT

SECTION 1400. Effective Date

This Ordinance shall take effect upon its enactment as provided by law.

SECTION 1401. Enactment

Enacted and ordained this 21st day of Aug., 20 07.

ATTEST:

Letha Ann Myers
Secretary

SEAL

**BOARD OF SUPERVISORS OF
UPPER MIFFLIN TOWNSHIP**

Michael J. Biele
Robert J. ...

Walter S. Beaton

EXHIBIT 1

- FIGURE B-1:** Gravel / Stone Impervious Area Reduction Factor Table and Sample Impervious Area Calculation
- FIGURE B-2:** PennDOT Delineated Regions
- FIGURE B-3:** Storm Intensity-Duration-Frequency Curve (PennDOT Region 3)
- TABLE B-2:** Runoff Curve Numbers (NRCS (SCS) TR-55)
- TABLE B-3:** Rational Runoff Coefficients
- TABLE B-4:** Roughness Coefficients (Manning's "N") For Overland Flow (U.S. Army Corps Of Engineers, Hec-1 Users Manual)
- TABLE B-5:** 24-Hour Storm Values Representing 90% Of Annual Rainfall (Pa Handbook Of Best Management Practices For Developing Areas)
- TABLE B-6:** Stormwater Credits for Computing Post Development Hydrograph

FIGURE B-1

Gravel / Stone Impervious Area Reduction Factor				
Hydrologic Soil Group	A	B	C	D
Reduction Factor	0.58	0.77	0.85	0.89

Sample Impervious Area Calculation

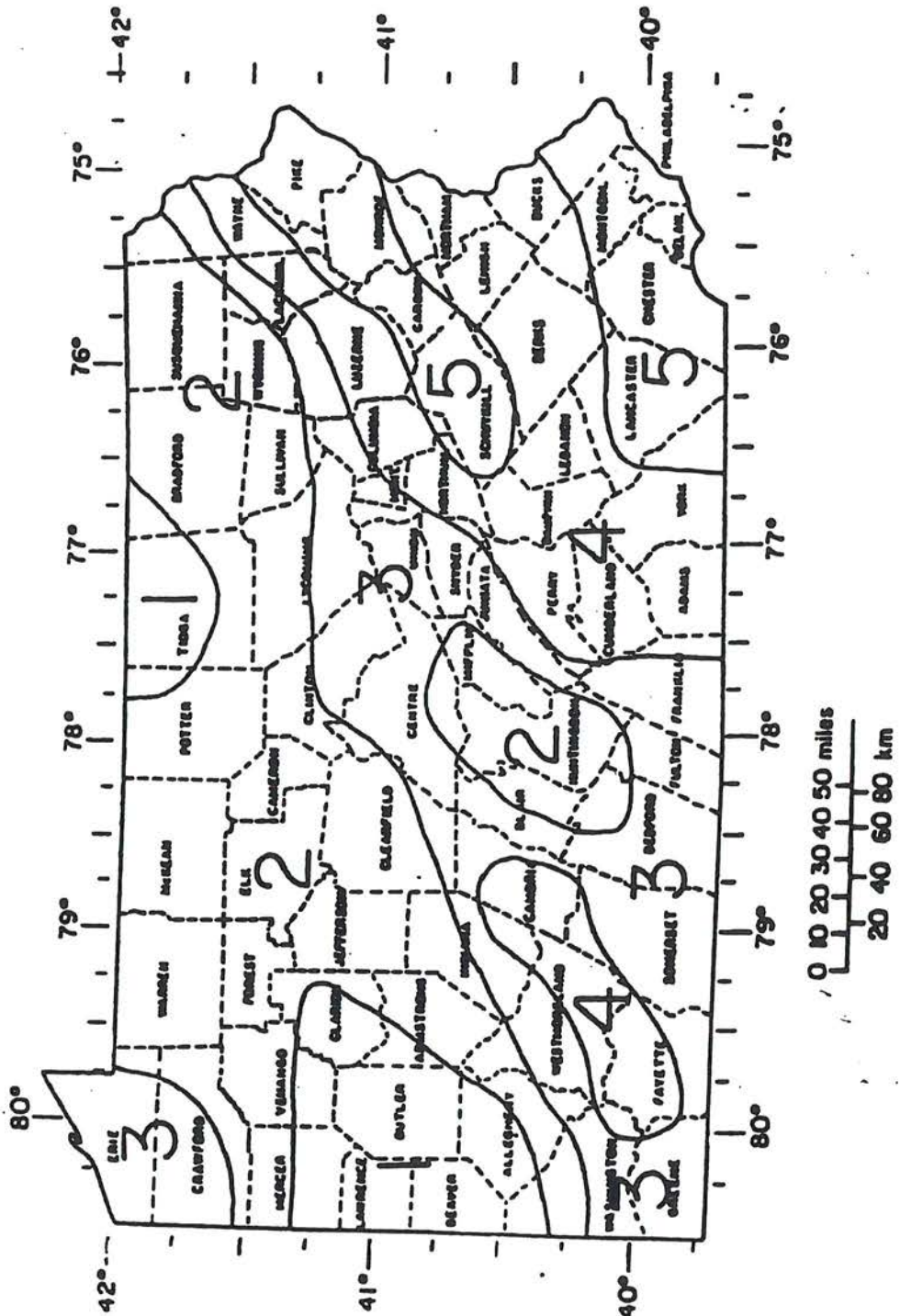
GIVEN: Property Size (parent tract) = 5+ acres
Hydrologic Soil Group = C
Existing Impervious Areas (paving, rooftops, etc.) = 2,500 SF
Proposed Impervious Areas = 8,000 SF
Existing Gravel / Stone Areas = 4,000 SF
Proposed Gravel / Stone Areas = 6,000 SF

FIND: Total impervious area to determine if the project is eligible for an exemption review by the Township based on the criteria in Section 1005.D.

SOLUTION:

1. For hydrologic soil group C, the gravel / stone area impervious reduction factor is 0.85.
2. Total Impervious Area = (2,500 SF + 8,000 SF) + [(4,000 SF + 6,000 SF) x 0.85]
= 10,500 SF + 8,500 SF
= 19,000 SF
3. 19,000 SF < 20,000 SF therefore, in accordance with Section 1005.D., this site may be exempt from the requirements of Section 1005, subject to the review of the Township Engineer and at the sole discretion of the Township Supervisors.

**FIGURE B-2
PENNDOT DELINEATED REGIONS**



**FIGURE B-3
PENNDOT STORM INTENSITY-DURATION-FREQUENCY CURVE**

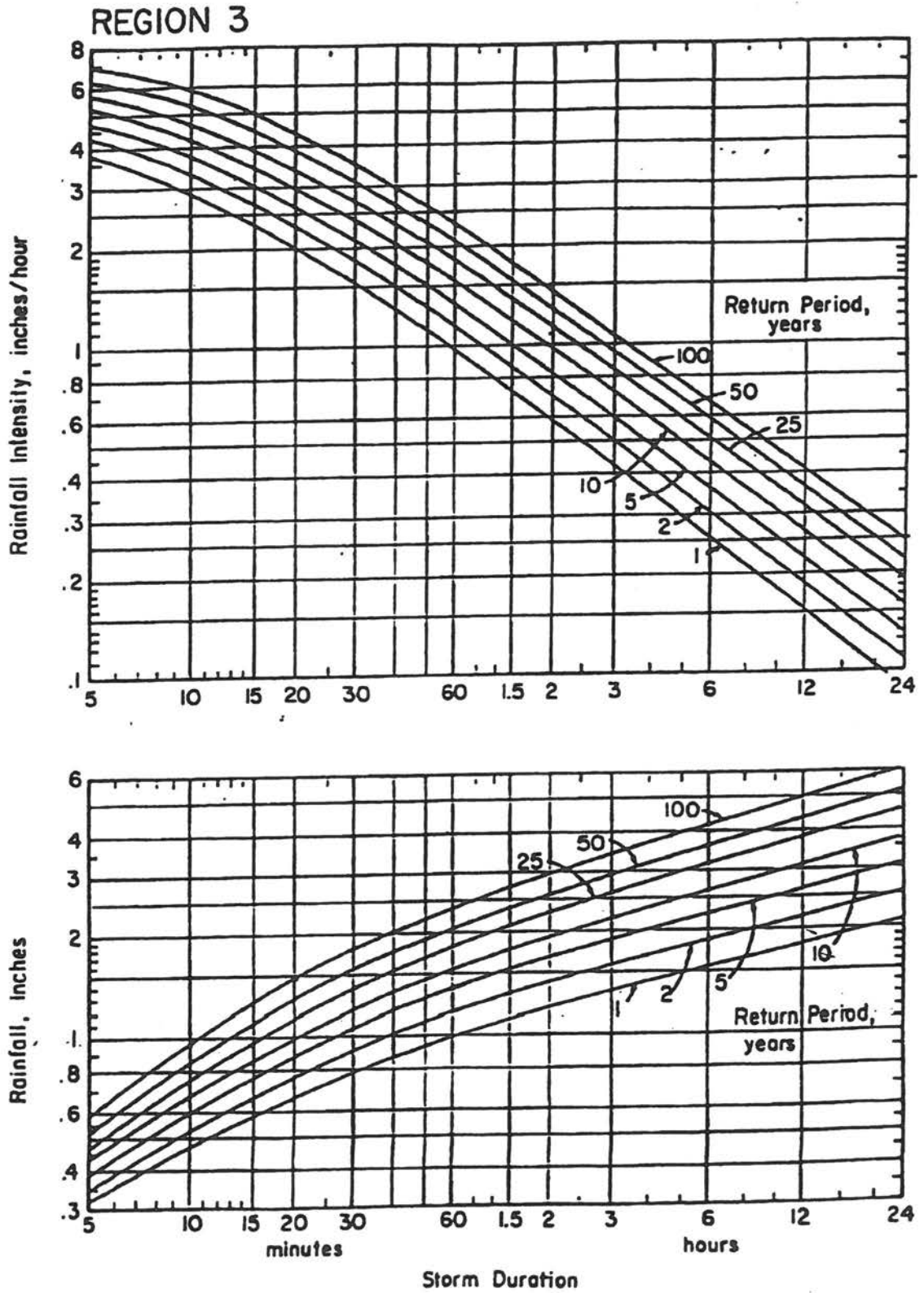


TABLE B-2
Runoff Curve Numbers
(From NRCS (SCS) TR-55)

LAND USE DESCRIPTION		HYDROLOGIC SOIL GROUP			
		A	B	C	D
Open Space		44	65	77	82
Orchard		44	65	77	82
Meadow		30**	58	71	78
Agricultural		59	71	79	83
Forest		36**	60	73	79
Commercial	(85% Impervious)	89	92	94	95
Industrial	(72% Impervious)	81	88	91	93
Institutional	(50% Impervious)	71	82	88	90
Residential					
Average Lot Size	% impervious				
1/8 acre or less	65	77	85	90	92
1/8 - 1/3 acre	34	59	74	82	87
1/3 - 1 acre	23	53	69	80	85
1 - 4 acres	12	46	66	78	82
Farmstead		59	74	82	86
Smooth Surfaces (Concrete, Asphalt, Gravel or Bare Compacted Soil)		98	98	98	98
Water		98	98	98	98
Mining/Newly Graded Areas (Pervious Areas Only)		77	86	91	94

* Includes Multi-Family Housing unless justified lower density can be provided.

** Caution - CN values under 40 may produce erroneous modeling results.

Note: Existing site conditions of bare earth or fallow shall be considered as meadow when choosing a CN value.

TABLE B-4

Roughness Coefficients (Manning's "n") for Overland Flow

Surface Description	n		
-----		-	
Dense Growth	0.4	-	0.5
Pasture	0.3	-	0.4
Lawns	0.2	-	0.3
Bluegrass Sod	0.2	-	0.5
Short Grass Prairie	0.1	-	0.2
Sparse Vegetation	0.05	-	0.1
Bare Clay-Loam Soil (eroded)	0.01	-	0.0
Concrete/Asphalt - very shallow depths (less than ¼ inch)	0.10	-	0.1
- small depths (1/4 inch to several inches)	0.05	-	0.1

Roughness Coefficients (Manning's "n") For Channel and Pipe Flow

Reach Description	n
-----	-
Natural stream, clean, straight, no rifts or pools	0.03
Natural stream, clean, winding, some pools or shoals	0.04
Natural stream, winding, pools, shoals, stony with some weeds	0.05
Natural stream, sluggish deep pools and weeds	0.07
Natural stream or swale, very weedy or with timber underbrush	0.10
Concrete pipe, culvert or channel	0.013
Corrugated metal pipe	0.024
Spiral rib metal pipe	0.012
Corrugated polyethylene pipe	0.020
Smooth-lined corrugated polyethylene pipe	0.012

TABLE B-5

24-Hour Storm Values Representing 90 % of Annual Rainfall
(Source: PA Handbook of Best Management Practices for Developing Areas,

PennDOT Rainfall Region	P Inches
1	1.13
2	1.48
3	1.60
4	1.95
5	2.04

TABLE B-6

Stormwater Credits for Computing Post-Development Hydrograph

The developer may, subject to approval of the municipal engineer, use the stormwater credits, described in the following table, in computing post-development hydrograph:

Stormwater Credit	Description
Natural Area Conservation	Conservation of natural areas such as forest, wetlands, or other sensitive areas in a protected easement thereby retaining their pre-development hydrologic and water quality characteristics. Using this credit, a designer may subtract conservation areas from total site area when computing the required water quality volume. Additionally, the post-development curve number (CN) for these areas may be assumed to be forest in good condition.
Disconnection of Rooftop Runoff	Credit is given when rooftop runoff is disconnected and then directed over a pervious area where it may either infiltrate into the soil or filter over it. Credit is typically obtained by grading the site to promote overland flow or by providing bioretention on single-family residential lots. If a rooftop area is adequately disconnected, the impervious area may be deducted from the total impervious cover. Additionally, the post-development CNs for disconnected rooftop areas may be assumed to be forest in good condition.
Disconnection of Non-Rooftop Runoff	Credit is given for practices that disconnect surface impervious cover by directing it to pervious areas where it is either infiltrated or filtered through the soil. As with rooftop runoff, the impervious area may be deducted from the total impervious cover thereby reducing the required water quality volume.
Stream Buffer Credit	Credit is given when a stream buffer effectively treats stormwater runoff. Effective treatment constitutes capturing runoff from pervious and impervious areas adjacent to the buffer and treating the runoff through overland flow across a grass or forested area. Areas treated in this manner may be deducted from total site area in calculating and may contribute to meeting requirements for groundwater recharge.
Grass Channel (Open Section Roads)	Credit may be given when open grass channels are used to reduce the volume of runoff and pollutants during smaller storms. Use of grass channels will automatically meet the minimum groundwater recharge requirement. If designed according to appropriate criteria, these channels may meet water quality criteria for certain types of residential development.
Environmentally Sensitive Rural Development	Credit is given when a group of environmental site design techniques are applied to low density or rural residential development. This credit eliminates the need for structural practices to treat both the required recharge volume R_c , and water quality volume. The designer must still address the channel protection volume, the overbank protection and overbank /extreme flood event requirements for all roadway and connected impervious surfaces.

EXHIBIT 2

**STANDARD STORMWATER
FACILITIES MAINTENANCE
AND
MONITORING AGREEMENT**

EXHIBIT 2

STANDARD STORMWATER FACILITIES MAINTENANCE AND MONITORING

AGREEMENT

THIS AGREEMENT, made and entered into this _____ day of _____, 20__, by and between _____, (hereinafter the "Landowner"), and Upper Mifflin Township, Cumberland County; Pennsylvania, (hereinafter "Municipality");

WITNESSETH

WHEREAS, the Landowner is the owner of certain real property as recorded by deed in the land records of Cumberland County, Pennsylvania, Deed Book _____ at Page _____, (hereinafter "Property").

WHEREAS, the Landowner is proceeding to build and develop the Property; and

WHEREAS, the Subdivision/Land Management Plan (hereinafter "Plan") for the _____ Subdivision which is expressly made a part hereof, as approved or to be approved by the Municipality, provides for detention or retention of stormwater within the confines of the Property; and

WHEREAS, the Municipality and the Landowner, his successors and assigns agree that the health, safety, and welfare of the residents of the Municipality require that on-site stormwater management facilities be constructed and maintained on the Property; and

WHEREAS, the Municipality requires that stormwater management facilities as shown on the Plan be constructed and adequately maintained by the Landowner, his successors and assigns.

NOW, THEREFORE, in consideration of the foregoing premises, the mutual covenants contained herein, and the following terms and conditions, the parties hereto agree as follows:

1. The on-site stormwater management facilities shall be constructed by the Landowner, his successors and assigns, in accordance with the terms, conditions and specifications identified in the Plan.
2. The Landowner, his successors and assigns, shall maintain the stormwater management facilities in good working condition, acceptable to the Municipality so that they are performing their design functions
3. The Landowner, his successors and assigns, hereby grants permission to the Municipality, his authorized agents and employees, upon presentation of proper identification, to enter upon the

Property at reasonable times, and to inspect the stormwater management facilities whenever the Municipality deems necessary. The purpose of the inspection is to assure safe and proper functioning of the facilities. The inspection shall cover the entire facilities, berms, outlet structures, pond areas, access roads, etc. When inspections are conducted, the Municipality shall give the Landowner, his successors and assigns, copies of the inspection report with findings and evaluations. At a minimum, maintenance inspections shall be performed in accordance with the following schedule:

- Annually for the first 5 years after the construction of the stormwater facilities,
 - Once every 2 years thereafter, or
 - During or immediately upon the cessation of a 100 year or greater precipitation event.
4. All reasonable costs for said inspections shall be born by the Landowner and payable to the Municipality.
 5. The owner shall convey to the municipality easements and/or rights-of-way to assure access for periodic inspections by the municipality and maintenance, if required.
 6. In the event the Landowner, his successors and assigns, fails to maintain the stormwater management facilities in good working condition acceptable to the Municipality, the Municipality may enter upon the Property and take such necessary and prudent action to maintain said stormwater management facilities and to charge the costs of the maintenance and/or repairs to the Landowner, his successors and assigns. This provision shall not be construed as to allow the Municipality to erect any structure of a permanent nature on the land of the Landowner, outside of any easement belonging to the Municipality. It is expressly understood and agreed that the Municipality is under no obligation to maintain or repair said facilities, and in no event shall this Agreement be construed to impose any such obligation on the Municipality.
 7. The Landowner, his successors and assigns, will perform maintenance in accordance with the maintenance schedule for the stormwater management facilities including sediment removal as outlined on the approved schedule and/or Subdivision/Land Management Plan.
 8. In the event the Municipality, pursuant to this Agreement, performs work of any nature, or expends any funds in performance of said work for labor, use of equipment, supplies, materials, and the like on account of the Landowner's or his successors' and assigns' failure to perform such work, the Landowner, his successors and assigns, shall reimburse the Municipality upon demand, within 30 days of receipt of invoice thereof, for all costs incurred by the Municipality hereunder. If not paid within said 30-day period, the Municipality may enter a lien against the property in the amount of such costs, or may proceed to recover his costs through proceedings in equity or at law as authorized under the provisions of the Pennsylvania Municipalities Planning Code.
 9. The Landowner, his successors and assigns, shall indemnify the Municipality and his agents and employees against any and all damages, accidents, casualties, occurrences or claims which might arise or be asserted against the Municipality for the construction, presence,

existence or maintenance of the stormwater management facilities by the Landowner, his successors and assigns.

10. In the event a claim is asserted against the Municipality, his agents or employees, the Municipality shall promptly notify the Landowner, his successors and assigns, and they shall defend, at their own expense, any suit based on such claim. If any judgment or claims against the Municipality, his agents or employees shall be allowed, the Landowner, his successors and assigns shall pay all costs and expenses in connection therewith.
11. In the advent of an emergency or the occurrence of special or unusual circumstances or situations, the Municipality may enter the Property, if the Landowner is not immediately available, without notification or identification, to inspect and perform necessary maintenance and repairs, if needed, when the health, safety or welfare of the citizens is at jeopardy. However, the Municipality shall notify the landowner of any inspection, maintenance, or repair undertaken within 5 days of the activity. The Landowner shall reimburse the Municipality for his costs.

This Agreement shall be recorded among the land records of Cumberland County, Pennsylvania and shall constitute a covenant running with the Property and/or equitable servitude, and shall be binding on the Landowner, his administrators, executors, assigns, heirs and any other successors in interests, in perpetuity.

ATTEST:

WITNESS the following signatures and seals:

(SEAL)

For the Municipality:

(SEAL)

For the Landowner:

ATTEST:

_____ Upper Mifflin Township
County of Cumberland, Pennsylvania

I, _____, a Notary Public in and for the County and State

aforesaid, whose commission expires on the _____ day of _____, 20__, do hereby

certify that _____ whose name(s) is/are signed to the foregoing Agreement bearing date of the _____ day of _____, 20__, has acknowledged the same before me in my said County and State.

GIVEN UNDER MY HAND THIS _____ day of _____, 20__.

NOTARY PUBLIC

(SEAL)

