BUTLER COUNTY, OHIO

Subdivision and Land Development Regulations



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Butler County Planning Commission 130 High Street, Hamilton OH 45011 (513) 887-3411

http://development.butlercountyohio.org/

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Title, Purpose, and Jurisdiction

1.01 Title

The following regulations for the control of plats and subdivisions are adopted by the Board of County Commissioners and the County Planning Commission of Butler County, Ohio, under authority granted by Chapter 711 of the *Ohio Revised Code*, and shall be known and may be cited and referred to as the "Butler County Subdivision Rules and Regulations" and shall hereinafter be referred to as "these regulations".

1.02 Purpose

These regulations are adopted to secure and provide for:

- A. The proper arrangement of streets or highways in relation to existing or planned streets or highways, or to the official *Butler County Land Use Plan* and *Butler County Thoroughfare Plan*.
- B. The orderly and efficient layout and the appropriate use of the land.
- C. A common ground of understanding and a sound working relationship between the County and the developer and to safeguard the interests of the homeowner, the subdivider, and the county and its citizens.
- D. The accurate surveying of land, preparing and recording of plats, and the equitable handling of all subdivision plats by approving authority and subdividers.
- E. Technically feasible and economically reasonable standards to achieve a level of subdivision design and construction to minimize damage to property, degradation of natural resources, and to promote and maintain the health, safety, and general well-being of all life and inhabitants of Butler County.
- F. The preparation of subdivision plans and to inform interested persons of the procedures and standards for design and construction of subdivision improvements in the unincorporated areas of Butler County.

1.03 Authority

The Ohio Revised Code, Chapter 711.01 enables the Butler County Board of Commissioners and the Butler County Planning Commission to adopt regulations governing plats and subdivisions of land within their jurisdiction. The Ohio Revised Code, Section 307.79 enables the Board of County Commissioners to adopt rules to abate soil erosion and water pollution by soil sediment. The Butler County Planning Commission has adopted the *Butler County Thoroughfare Plan*, a statutory requirement for reviewing plats or subdivisions.

1.04 Administration

These regulations shall be administered by the Butler County Planning Commission and other county staff, hereinafter referred to as the Planning Commission.

1.05 Jurisdiction

The rules and regulations governing plats and subdivisions of land contained herein shall apply to the unincorporated area of Butler County.

1.06 Severability

If any clause, section, or provision of these regulations is declared invalid or unconstitutional by a court of competent jurisdiction, validity of the remainder shall not be affected thereby.

1.07 Relations to Other Laws

The provisions of these regulations shall supplement any and all laws of the State of Ohio, resolutions of the Butler County Board of Commissioners or the Butler County Planning Commission, or any and all rules and regulations promulgated by authority of such law or resolution, relating to the purpose and scope of these regulations. Whenever the requirements of these regulations are at variance with the requirements of any other lawfully adopted rules, regulations, ordinances, or resolutions, the most restrictive or that imposing the higher standards shall govern. Whenever a township has adopted a county or township zoning plan, under the provisions of Section 303 or 519, *Ohio Revised Code*, all proposed subdivisions shall meet the requirements of said zoning plan, as well as the provisions of these regulations.

1.08 Amendments

These regulations may be amended, after public hearing and other requirements as specified in the *Ohio Revised Code*.

1.09 Disclaimer of Liability

The County shall not be responsible for maintaining any subdivision improvements until such time as such improvements have been accepted by the County. Prior to such date, the County shall not be responsible for any suits, actions or claims of any character brought on account of any injuries or damage sustained by any person or property in connection with such subdivision improvements.

Definitions

2.010 Interpretation of Terms or Words

For the purpose of these regulations, certain terms or words used herein shall be interpreted as follows:

- A. The word **"person"** includes a firm, association, organization, partnership, trust, company, or corporation, as well as an individual.
- B. The present tense includes the future tense, the singular number includes the plural, and the plural number includes the singular.
- C. The word **"shall"** is a mandatory requirement, the word **"may"** is a permissive requirement, and the word **"should"** is a preferred requirement.
- D. The words **"used"** or **"occupied"** include the words **"intended, designed,** or **arranged to be used** or **occupied"**.
- E. The word "lot" includes the words "plot" or "parcel".
- **2.020** Access Management Manual: Refers to the current Butler County Access Management Regulations.
- **2.025** Alley: See definition of *Thoroughfare, street, or road,* below.
- **2.030** Archaeological Significance: A structure or area that shows evidence of a past culture or life, especially ancient peoples or civilizations. Such evidence would include, but not be limited to, relics, artifacts, skeletons, etc.
- **2.035** As-built plans: A drawing which represents a true location of what is being measured or has already been built in the field.
- **2.040** Assurance of Completion: A contract secured by a performance bond or other guarantee or security satisfactory to the Butler County Board of Commissioners guaranteeing completion of public improvements which are required by these regulations.
- **2.045 Base Flood Elevation:** As used in floodway computations, the base flood elevation is the highest elevation of water expected from a 100-year frequency flood.
- **2.050 Best Management Practices (BMP):** Schedule of activities, prohibitions of practices, maintenance procedures and other management practices (both

structural and non-structural) to prevent or reduce the pollution of surface waters of the state. BMP's also include treatment requirements, operating procedures and practices to control plant and/or construction site runoff, spillage or leaks, sludge or waste disposal or drainage from raw material storage.

- **2.055 Bikeway or Bicycle Path:** An area specifically for bicycling which is physically separated from motorized vehicular traffic by an open space or barrier and either within the highway right of way or within an independent right of way.
- **2.060** Building Limits: An area designated on the plat which defines the limits within which a building may be placed.
- **2.065 Building Pad:** A building site prepared by artificial means, including, but not limited to, grading, excavation, or filling, or any combination thereof.
- 2.070 Building Setback Line: See definition of Setback Line, below.
- **2.075 Channel:** A natural stream or drainage way that conveys water; a ditch excavated for the flow of water.
- 2.080 Concentrated Stormwater Runoff: Surface runoff which converges and flows primarily through water conveyance features such as swales, gullies, waterways, channels, culverts, or storm sewers.
- 2.085 Conservation: The wise use and management of natural resources.
- **2.090 Construction General Permit (CGP):** The NPDES permit authorizing storm water discharges associated with construction activities. Sites one acre and larger must apply for coverage under this NPDES general permit.
- 2.095 Corner Lot: See definition of *Lot Types*, below.
- **2.100 County Commissioners:** The Board of County Commissioners of Butler County, Ohio.
- **2.105 County Engineer:** An elected official under Chapter 315 of the *Ohio Revised Code*. For the purpose of these regulations it shall also mean any designee appointed by the County Engineer or under the authority of his office.
- **2.110 Covenant:** A written promise or pledge.
- **2.115 Cul-de-sac:** See definition of *Thoroughfare, street, or road,* below.
- **2.120** Cut and fill slope: A portion of land surface or area from which soil material is excavated and/or filled forming a slope or embankment.

- **2.125 Crosswalk:** Any portion of a roadway (at an intersection or elsewhere) distinctly indicated for pedestrian crossing by lines or other markings on the surface.
- **2.130 Culvert:** A closed conduit for the passage of surface drainage under a street, driveway, or other embankment.
- **2.135 Dead End/Stubbed Street:** See definition of *Thoroughfare, street, or road,* below.
- **2.140 Denuded Area:** A portion of land surface on which the vegetation or other soil stabilization features have been removed, destroyed or covered and which may result in or contribute to erosion and sediment pollution.
- **2.145 Design Exception:** An alternative to previously set design criteria which provides a logical and cost effective engineering approach in extreme or unusual situations.
- **2.150 Detention Structure:** A permanent or temporary structure for the temporary storage of runoff which is designed so as not to create a permanent pool of water.
- **2.155 Developer:** Any individual, subdivider, firm, association, syndicate, partnership, corporation, trust, or any other legal entity commencing proceedings under these regulations to engage in the subdivision of land hereunder for themselves or for another.
- **2.160 Development Area:** Any tract, lot, or parcel of land where earth-disturbing activity is to be performed.
- **2.165 Dimensions:** Geometric measurements in length and/or width which denotes a physical area. (i.e.: a lot or right-of-way).
- **2.170 Ditch:** An open channel, either excavated or natural, for the purpose of drainage or irrigation.
- **2.175 Ditch Petition:** A method outlined in the *Ohio Revised Code* Chapter 6131 by which a perpetual maintenance agreement for a Stormwater Management System located outside of the public street right-of-way is established. This agreement process is started by a petition submitted to the Butler County Commissioners and is funded through tax assessments on the affected properties. A standard petition form and a list of other requirements can be obtained from the Butler County Engineer's Office.
- **2.180 Driveway:** A path for cars leading from the improved street or road to a garage or house (ingress/egress).
- **2.185 Dumping:** Grading, pushing, piling, throwing, unloading, or placing of material.

- **2.190 Earth Disturbing Activity:** Any dumping, excavating, filling, or other alteration of the earth's surface where natural or man-made ground cover is destroyed and which may result in or contribute to erosion and sediment pollution.
- **2.195 Earth Material:** Soil, sediment, rock, sand, gravel, and organic material or residue associated with or attached to the soil.
- **2.200 Easement:** Authorization by a property owner for the use by another, for a specified purpose, of any designated part of their property.
- **2.205** Engineer: Any person registered to practice professional civil engineering by the state board of registration as specified in Section 4733.14 of the *Ohio Revised Code*.
- **2.210 Erosion:** The process by which the land surface is worn away by the action of water, wind, ice or gravity.
 - A. Accelerated Erosion: A process which is much more rapid than natural or geologic erosion and is primarily a result of human activities.
 - B. Channel Erosion: The erosion process whereby the volume and velocity of a concentrated flow wears away the bed and banks of a well-defined channel.
 - C. Floodplain Erosion: Abrading and wearing away of the nearly level land situated on either side of a channel due to overflow and flooding.
 - D. Gully Erosion: The erosion process whereby water accumulates in narrow channels during and immediately after rainfall or snow or ice melt and actively removes the soil from this narrow area to considerable depths, such that the channel would not be obliterated by normal smoothing or tillage operations.
 - E. Natural Erosion or Geologic Erosion: The wearing away of the earth's surface by water, wind, or ice under natural environmental conditions that are undisturbed by humans.
 - F. Rill Erosion: An erosion process in which numerous small channels only several inches deep are formed, which, if not corrected, can become gullies. Normal tillage operations can remove the rills.
 - G. Sheet Erosion: The removal of a fairly uniform layer of soil from the land surface as a result of raindrop splash and runoff.
- **2.215 Erosion and Sediment Control:** A system of structural and vegetative measures that minimize soil erosion and offsite sedimentation.
- **2.220 Erosion and Sediment Control Plan:** An erosion and sediment control strategy or plan, to minimize erosion and prevent off-site sedimentation by containing

sediment on-site or by passing sediment laden runoff through a sediment control measure, prepared and approved in accordance with the specific requirements of these regulations, and designed in accordance with the handbook "Rainwater and Land Development" in Section 302. The erosion and sediment control plan may be referred to as a sediment control plan.

- **2.225** Final Plat: A plat of a subdivision containing all necessary information as required in Article VIII of these regulations, signed by the appropriate authorities and recorded in the office of the Butler County Recorder.
- **2.230** Floodplain, 100 year: The lands within Butler County subject to a one- percent or greater chance of flooding in any given year.
- **2.235** Floodway: The channel of a river or other watercourse and the adjacent land areas that must be reserved, as defined by the Federal Emergency Management Agency (FEMA), in order to discharge the base flood.
- **2.240** Frequency Year Storm: A rainfall event of a magnitude with a specified average occurrence interval and is calculated with soil conservation service type II twenty-four-hour curves or depth-duration frequency curves.
- **2.245 Grading:** Earth-disturbing activity such as excavation, stripping, cutting, filling, stockpiling, or any combination thereof.
- **2.250 Grubbing:** Removing, clearing, or scalping material such as roots, stumps or sod.
- **2.255 Highly erodible soil:** A portion of land surface which is very susceptible to erosive forces and is characterized by steep slopes or long slopes.
- **2.260 Historical Significance:** Any structure or area that provides evidence for a fact of history or the source of history.
- **2.265 Home Owners' Association:** An organization established for the care and maintenance of storm water and detention facilities and other common areas as determined by the Planning Commission.
- 2.270 Illicit Discharge: Defined at 40 CFR 122.26(b)(2). Refers to any discharge to a municipal separate storm sewer that is not entirely composed of storm water, except discharges authorized under an NPDES permit (other than the NPDES permit for discharges from the MS4) and discharges resulting from fire-fighting activities. Also refers to definition held within the County's Illicit Discharge Regulations.
- **2.275 Improvements:** Street pavement, curbs, gutters, sidewalks, waterlines, sewer lines, storm drains, street lights, flood control and drainage facilities, utility

lines, landscaping, and other related matters, whether public or private, normally associated with the development of raw land into building sites.

- **2.280** Landslide: The rapid mass movement of soil and rock material downhill under the influence of gravity in which the movement of the soil mass occurs along an interior surface of sliding.
- **2.285** Land Use Plan: The long-range plan for the desirable use of land in Butler County as officially adopted, and amended from time to time, by the Planning Commission; the purpose of such plan being, among other purposes, to serve as a guide in the zoning and progressive changes of the land to meet changing community needs, in the appropriate subdividing and development of undeveloped land, and in the acquisition of rights-ofway or sites for such public facilities as streets, parks, schools and other public buildings.
- **2.290** Location Map: see Vicinity Map, below.
- **2.295** Lot: For purposes of these regulations, a lot is a parcel of land of sufficient size to meet minimum zoning requirements for use, coverage, and area, and to provide such yards and other open spaces as may be required. Such lot shall have frontage on an improved public street, or on an approved private street, and may consist of:
 - (1) A single lot of record;
 - (2) A portion of a lot of record;
 - (3) A combination of complete lots of record, or portions of lots of record.
- **2.300** Lot Area: The total computed area contained within the lot lines exclusive of any portion of a public right-of-way or a private access easement.
- **2.305** Lot Frontage: That portion of a lot running along the right-of-way line of any adjoining unlimited access public thoroughfare. Where the lot is located on a curve in the road, the lot frontage may be measured along the curved building line provided that the side property lines run radial to the curve. (Please see Appendix A, drawing A-1 for a sample drawing.)
- **2.310** Lot Measurements: A lot shall be measured as follows (Please see Appendix A, drawing A-1 for sample drawing):
 - A. Depth of a lot shall be considered to be the mean horizontal distance between the front and rear lot lines.
 - B. Width of a lot shall be considered to be the mean width of the lot measured at right angles to its depth.

- **2.315** Lot of Record: A lot which is part of a subdivision recorded in the Office of the County Recorder, or a lot or parcel described by metes and bounds, the description of which has been so recorded.
- 2.317 Lot Split: See Minor Subdivision, below.
- **2.320** Lot Types: Terminology used in these regulations with reference to corner lots, interior lots and through lots is as follows (Please see Appendix A, Drawing A-5 for an example):
 - A. A **corner lot** is defined as a lot abutting upon two (2) or more streets at their intersection or upon two (2) parts of the same street, such streets or parts of the same street forming an interior angle of less than one hundred thirty-five (135) degrees.
 - B. An **interior lot** is a lot other than a corner lot with frontage on only one street.
 - C. A **double frontage lot** is a lot other than a corner lot with frontage on more than one street.
- **2.325 Maintenance Bond:** An agreement by a developer with Butler County, for a percentage of the established construction cost, used as a guarantee against any deficiencies which might develop over a predetermined period of time in the physical improvements which have been constructed within a subdivision.
- **2.330 Minimum Opening Elevation (M.O.E.):** The lowest elevation of any opening in the foundation or first floor of a structure. A minimum opening elevation is established to prevent entry of floodwater into a structure.
- **2.335 Minor Subdivision (Lot Split):** A division of a parcel of land that does not require a record plat to be approved by the Planning Commission as specified in Section 711.131 of the *Ohio Revised Code*.
- **2.340 Monuments:** Permanent concrete or iron markers used to establish boundary lines of the subdivision plat and points of change in street alignment.
- 2.345 MS4: Municipal Separate Storm Sewer System, which means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) that are:
 - Owned or operated by the federal government, state, municipality, township, county, district(s) or other public body (created by or pursuant to state or federal law) including special districts under state law (such as a sewer district, flood control district, drainage district, or similar entity), or a designated and approved management agency under Section 208

of the Clean Water Act (CWA) that discharges into surface waters of the state; and

- 2. Designated or used for collecting or conveying solely storm water,
- 3. Which is not a combined sewer and
- 4. Which is not part of a publicly owned treatment works.
- 2.350 National Pollutant Discharge Elimination System (NPDES): means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits and enforcing pretreatment requirements, under Sections 307, 402, 318 and 405 of the CWA. The term includes an "approved program."
- **2.355 NOI:** Notice of intent
- **2.360 NOT:** Notice of termination
- 2.365 **OEPA:** Ohio Environmental Protection Agency, oversees the NPDES program
- **2.370 Open Space:** An open area which may be on the same lot with a building. The area may include, along with the natural environment features, swimming pools, tennis courts, and/or any other recreational facilities that the Planning Commission deems permissive. Streets, structures for habitation, and the like shall not be considered open space.
- 2.375 **Original Tract:** A parcel of land prior to any subdivision or split.
- **2.380 Outfall:** An area where water flows from a structure such as a conduit, storm sewer, improved channel or drain, and the area immediately beyond the structure which is impacted by the velocity of flow in the structure.
- **2.385 Owner:** Someone who holds a right of possession and title to a parcel or tract of land.
- **2.390 Park:** An area of land containing pasture, woods, lakes, etc. which are used for public recreational purposes.
- **2.395 Parking Area, Public:** An open area, other than a street or other public way, used for the parking of automobiles and available to the public whether for a fee, free, or as an accommodation for clients or customers.
- **2.400 Parking Space:** A permanently surfaced area of not less than one hundred sixty (160) square feet, either within a structure or in the open, exclusive of driveways or access drives, required for the parking of one (1) motor vehicle.

- **2.405 Performance Bond:** An agreement by a developer with Butler County a percentage of the estimated construction cost, intended to guarantee the completion of physical improvements according to plans and specifications.
- **2.410 Person:** Any individual, corporation, partnership, joint venture, agency, unincorporated association, municipal corporation, township, county, state agency, the federal government, or any combination thereof.
- 2.415 Planned Unit Development: A development that is planned to integrate a variety of uses with collateral uses, in which lot size, setback lines, yard areas, and building types may be varied and modified to achieve particular design objectives and make provision for open spaces, common areas, utilities, public improvements, and collateral uses.
- 2.420 Planning Commission: (a) County Planning Commission of Butler County, Ohio.
 (b) A board, as defined by ORC Chapter 713.22, which makes decisions concerning subdivisions and zoning related issues.
- **2.425 Plat:** The drawing on which the developer's plan for a subdivision (preliminary or final) is presented to the Butler County Planning Commission for approval.
- **2.430 Plat of Survey:** A land survey performed by a professional surveyor which identifies a minor subdivision or lot split.
- 2.435 Post Construction Operation & Maintenance Plan: A document that outlines the responsible party for the operation and maintenance of storm water facilities in a development. Minimum requirements can be found in Article V of these regulations.
- **2.440 Preliminary Plat:** The drawing depicting a proposed subdivision which is intended to provide the Butler County Planning Commission with pertinent information regarding the development of a subdivision.
- 2.445 **Private Street:** A roadway which has not been dedicated to the county and is completely maintained by the adjoining property owners. This roadway is not maintained by the county nor is it required to meet county standards. It is owned entirely by the property owners who use it.
- **2.450 Property Owners Association:** An organization established for the care and maintenance of storm water and detention facilities and other common areas as determined by the Planning Commission.
- 2.455 Public Way: An alley, avenue, boulevard, bridge, channel, ditch, easement, expressway, freeway, highway, land, parkway, right-of-way, road, sidewalk, street, subway, tunnel, viaduct, walk, or other way in which the general public or public entity have a right of travel, or which are dedicated for travel purposes, whether improved or not.

- **2.460 Replat:** A new recording of a previously recorded subdivision in which the purpose is to modify some portion of the originally recorded plat.
- **2.465 Retention Structure:** A permanent structure that provides for the storage of runoff by means of a permanent pool of water.
- 2.470 **Right-of-Way:** A strip of land taken or dedicated for use as a public way. In addition to the roadway, it normally incorporates the curbs, lawn strips, sidewalks, lighting, utilities and drainage facilities, and may include special features (required by the topography or treatment) such as grade separation, landscaped areas, viaducts, and bridges.
- 2.473 Road: See Thoroughfare, below.
- **2.475 Runoff:** The portion of rainfall, melted snow, or irrigation water that flows across the ground surface and is eventually returned to streams.
- **2.480** Sanitary Sewers: An approved sewage disposal system which provides a collection network and disposal system and central sewage treatment facility for a single development, community, or region.
- **2.485** Sanitary Waste Treatment, On-Site: A septic tank or similar installation on an individual lot which utilizes a bacteriological process or equally satisfactory process for the elimination of sewage and provides for the proper and safe disposal of the effluent, subject to the approval of health and sanitation officials having jurisdiction.
- **2.490** Sediment: Solid material, both mineral and organic, that is in suspension, is being transported, or has been moved from its site of origin by wind, water, gravity, or ice, and has come to rest on the earth's surface.
- **2.495** Sediment Basin: A settling pond meeting or exceeding the design specifications of a temporary sediment basin as defined in water management and sediment control for urbanizing areas.
- **2.500** Sediment Control: The limiting of sediment transport by controlling erosion, filtering sediment from water, or detaining sediment-laden water allowing sediment to settle out.
- **2.505** Sediment Pollution: The resulting failure to use management or conservation practices to control wind or water erosion of the soil and to minimize the degradation of water resources by soil sediment in conjunction with land grading, excavating, filling, or other soil-disturbing activities on land used or being developed for non-farm commercial, industrial, residential, or other non-farm purposes.

- 2.510 Sensitive Area: An area or water resource as delineated by the Butler County Soil and Water Conservation District prior to plan approval that requires special management because of its susceptibility to sediment pollution or because of its importance to the well-being of the surrounding communities, region, or the state and includes:
 - A. Ponds, wetlands or small lakes with less than five acres of surface area; and
 - B. Small streams with gradients less than ten feet per mile with average annual flows of less than 3.5 feet per second containing sand or gravel bottoms.
- **2.515** Settling Pond: A runoff detention structure such as a sediment basin or sediment trap, which detain sediment-laden runoff allowing sediment to settle out.
- **2.520** Setback Line: Denotes the minimum distance from property boundaries to any structures. See also the definition for *Yard*, below.
- **2.525** Sheet Flow: Overland water runoff in a thin uniform layer.
- **2.530** Sidewalk: That portion of the road right-of-way outside the roadway, which is improved for the use of pedestrian traffic. See the definition for "Walkway" in these regulations.
- **2.535 Sloughing:** A downward movement of an extended layer of soil resulting from the undermining action of water or the earth-disturbing activity of humans.
- **2.540** Soil: Unconsolidated erodible earth material consisting of minerals and/or organics.
- **2.545 Soil Conservation:** Using the soil within the limits of its physical characteristics and protecting it from unalterable limitations of climate and topography.
- 2.550 Soil and Water Conservation District: As organized under Chapter 1515 of the Ohio Revised Code; referring either to the Soil and Water Conservation District Board, or its designated employee(s), hereinafter referred to as the Butler County Soil and Water Conservation District.
- **2.555 Soil Stabilization:** Vegetative or structural soil covers controlling erosion, and includes permanent and temporary seed, mulch, sod, pavement, etc.
- **2.560** Storm Water Management: Runoff water safely conveyed or temporarily stored and released at an allowable rate to minimize erosion and flooding.

- **2.565 Storm Water Facilities:** Means any storm sewer pipe, catch basin, pipe, storm sewer, headwall, ponds, detention basin, BMP's, or post-construction BMP that relates to the management of storm water runoff or the treatment of storm water.
- 2.570 Stormwater Runoff: See Runoff, above.
- **2.575 Stream:** A body of water running or flowing on the earth's surface or channel in which such flow occurs. Flow may be seasonally intermittent.
- 2.577 Street: See Thoroughfare, below.
- **2.580 Structure:** Anything constructed, the use of which requires permanent location on the ground, or attachment to something having a permanent location on the ground.
- **2.585 Subdivider:** See the definition for *Developer* in these regulations.
- **2.590 Surveyor:** Any person registered to practice as a professional surveyor in the State of Ohio as specified in Chapter 4733, *Ohio Revised Code*.
- **2.595 Terrain Classification:** Terrain within the entire area of the preliminary plat is classified as level, rolling, hilly, or hillside for street design purposes. The classifications are as follows:
 - (1) Level is that land which has a cross slope range of four (4) percent or less.
 - (2) **Rolling** is that land which has a cross slope range of more than four (4) percent but not more than eight (8) percent;
 - (3) **Hilly** is that land which has a cross slope range of more than eight (8) percent but not more than fifteen (15) percent;
 - (4) **Hillside/Steep** is that land which has a cross slope range of more than fifteen (15) percent.
- **2.600 Thoroughfare Plan:** The official Thoroughfare Plan as adopted, and as amended from time to time, by the Planning Commission of Butler County, Ohio, establishing the general location and official right-of-way width of roads in Butler County, on file in the Butler County Engineer's Office and in the Butler County Planning Commission Office.
- **2.605** Thoroughfare, street, or road: The full width between property lines bounding every public way of whatever nature, with a part thereof to be used for vehicular traffic and designated as follows (Please see Appendix A, drawing A-2 for a sample drawing):
 - A. **Interstates and Freeways**: A divided highway intended to serve the uninterrupted flow of traffic for both interstate and intrastate traffic

through an area. Such highways are generally limited or controlled access in nature. These cross sections are distinguished by 200 foot rightof-way widths and multiple 12-foot lanes.

- B. **Principal Arterials**: Principal Arterials are generally State and U.S. highways and heavily traveled County and City roads which carry both local and cross-county traffic. They link various urban and rural communities, and are intended to move traffic to and from interstates and major traffic generators. Right-of-way widths of 120 feet are provided for multiple lane use in order to accommodate design speeds of over 45 mph.
- C. **Minor Arterials**: Similar in function to Principal Arterials, though usually carrying less traffic. These thoroughfares consist of State and U.S. Highways, County, and City roads which distribute traffic from Principal Arterials to a lower system. Right-of-way widths of 100-120 feet are provided with additional 15-foot slopes and utility easements as required.
- D. **Major Collectors**: Major Collectors consist of Township and County roads which are intended to carry local traffic and distribute traffic to Principal and Minor Arterials and/or to local streets. Right-of-way widths of 100-120 feet and 15-foot slope and utility easements are standard in this section.
- E. **Minor Collectors**: Minor Collectors are lesser County and Township roads which are intended to serve commercial and industrial properties that abut them. Additionally, they provide links for short distance trips. Rural sections are distinguished by 80-foot right-of-way widths, 8-foot earth berms and open ditches. Turn lanes are provided at intersections, as required by traffic analysis.
- F. **Minor Collectors Second Class**: Minor Collectors Second Class are Township roads which are intended to serve the residential properties that abut them. These streets collect traffic from local streets and distribute to roads of a higher classification. Urban sections are distinguished by 60-foot right-of-way widths with 10-foot utility easements. Turn lanes are to be provided at intersections as required by traffic analysis.
- G. **Neighborhood Collectors**: Neighborhood Collector streets are intended to be utilized in residential neighborhoods and acts as a collector for local streets. They are to provide links to short destinations within and adjacent to the subdivision. This section is distinguished by a 60-foot right-of-way width. A turn lane may be required at intersections within the development and at intersections; driveway access is restricted around intersection points.
- H. **Local Streets**: These streets provide access to individual properties which abut them. In addition, they provide access to the Collector and Arterial Systems on a local level. Local streets serve residential, commercial and

industrial land uses. These urban facilities require 60-foot right-of-way widths and 10-foot utility easements.

- I. **Alley**: A public or private way not more than thirty (30) feet wide affording only secondary means of access to abutting property.
- J. **Cul-de-sac**: A local street of relatively short length (See Section 5.02) with one (1) end open to traffic and the other end terminating in a vehicular turnaround.
- K. **Dead-end/Stubbed Street**: A street temporarily having only one (1) outlet for vehicular traffic and intended to be extended or continued in the future.
- L. **Permanent Dead-end Street**: A street (without a cul-de-sac turnaround) having only one outlet for vehicular traffic and not intended to be extended or continue in the future.
- M. **Private Street**: A street which has not been duly accepted by the County or State for public use.
- N. **Public Street**: A street which has been dedicated and accepted by the County or State for public use.
- **2.610 Time Limits:** Time limits designated within these regulations shall begin when application for review are officially accepted or as otherwise stipulated in these regulations.
- **2.615 Unstable Soil:** A portion of land surface or area which is prone to slipping, sloughing or landslides.
- **2.620** Utility Easement: The easement used for the maintenance of vehicle sight distances, the placement of stormwater drainage, sewer, water, natural gas, electric, telephone, cable television or other facilities or utilities, and for street maintenance.
- **2.625 Variance:** A variance is a modification of the strict terms of the relevant regulations where such modification will not be contrary to the public interest and where owing to conditions peculiar to the property and not the result of the action of the applicant, a literal enforcement of the regulations would result in unnecessary and undue hardship.
- **2.630** Vicinity Map: A drawing located on the plat which sets forth by dimension or other means, the relationship of the proposed subdivision to nearby developments or landmarks and community facilities and services within Butler County in order to better locate and orient the area in question.
- **2.635** Walkway: A public way for pedestrian use only, whether along the side of a road or not.

- **2.640** Watercourse: A definite channel with bed and banks within which concentrated water flows, either continuously or intermittently.
- **2.645** Watershed: The total drainage area contributing runoff to a single point.
- **2.650** Water Quality Volume (WQv): The volume of storm water runoff which must be captured and treated prior to discharge from a developed site after construction is complete. Also see requirements under the Construction General Permit.
- **2.655** Wetlands: Surface areas that are inundated or saturated by surface or groundwater 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. Wetlands generally include swamps, marshes, bogs and similar areas.
- **2.660** Yard: An open space (other than an interior court or courtyard) unoccupied and unobstructed from the ground upward except as specified in applicable zoning resolutions.
 - A. **Front Yard**: An open space extending the full width of the lot between a building and the front lot line.
 - B. **Rear Yard**: An open space extending the full width of the lot between a building and the rear lot line.
 - C. **Side Yard**: An open space extending from the required front yard to the required rear yard between a building and nearest side lot line.

Procedures for Subdivision Approval

3.01 General Statement

No person, firm or corporation, proposing to create a subdivision within the territorial limits of these Regulations shall enter into any contract for the sale of, or shall offer to sell said subdivision or any part thereof, or shall proceed with any construction work on the proposed subdivision until said person, firm or corporation has obtained from the Planning Commission approval of the preliminary plat of the proposed subdivision. Any work performed prior to final plat approval will be at the risk of the developer.

3.02 Subdivision Definition and Classification

Section 711.001 of the Ohio Revised Code specifically defines a subdivision as:

(1) "The division of any parcel of land shown as a unit or as contiguous units on the last preceding tax roll, into two or more parcels, sites, or lots, any one of which is less than five acres for the purpose, whether immediate or future, of transfer of ownership, provided, however, the division or partition of land into parcels of more than five acres not involving any new streets or easement of access, and the sale or exchange of parcels between adjoining lot owners, where such sale or exchange does not create additional building sites, shall be exempted; or

(2) The improvement of one or more parcels of land for residential, commercial, or industrial structures or groups of structures involving the division or allocation of land for the opening, widening or extension of any street or streets, except private streets serving industrial structures; the division or allocation of land as open spaces for common use by owners, occupants or lease holders or as easements for the extension and maintenance of public sewer, water, storm drainage or other public facilities".

Part (1) of the above definition refers to two types of land subdivision, in which no improvements are required: "*minor subdivisions*" (also known as lot splits or cut-ups) and "*platted subdivisions*" (also known as final plat subdivisions). It is noteworthy that all subdivisions of land in Ohio are deemed platted subdivisions except:

(a) the division of land into parcels five (5) acres or more in size that does not involve the creation of new dedicated streets or public easements of access; or

(b) the transfer of parcels of land between adjoining property owners where additional building sites are not created; or

(c) the division of parcels that meet current zoning and which involves the creation of fewer than five lots. Procedures for creating these divisions can be found in Section 3.03, following.

Part (2) of the above definition refers to "*platted subdivisions*" in which improvements are required. Note that actual division of land is not a prerequisite for qualification as a subdivision. Any improvement of land for residential, commercial, or industrial purposes which involves the allocation of land for new public streets is legally a subdivision in the State of Ohio.

The Ohio General Assembly has recognized the need for simple conveyance of property divisions in a limited number of instances. Section 711.131 of the Ohio Revised Code permits the division of a parcel of land along an existing public street, not involving the opening, widening or extension of any street or road, and involving no more than five (5) lots after the original tract has been completely subdivided to be submitted to the Butler County Planning Department exercising subdivision approval authority for approval without a plat. If such planning authority acting through a properly designated representative thereof is satisfied that such proposed division is not contrary to applicable platting, subdividing, or zoning regulations, it shall approve such proposed division and on the presentation of a conveyance of said parcel, shall stamp the same "approved by Butler County Planning Department; no plat required" and have it signed by its clerk, secretary, or other official as may be designated by it. Such planning authority may require the submission of a "plat of survey" and such other information as its determination thereunder. This method of subdivision of land is known as lot splitting and is often called a "minor subdivision" or a "lot split."

3.03 Procedures for Minor Subdivisions

In order to create a minor subdivision (split a piece of property) from the original tract, the subdivider shall follow these procedures:

- A. The subdivider shall have a registered surveyor to survey the land that is to be subdivided and prepare a "Plat of Survey." Subdivider is to comply with the Butler County Access Management Regulations, incorporate any access conditions on the Plat of Survey and deed(s). Once access has been reviewed and approved, by the County Engineer's Office, the surveyor shall file a "Plat of Survey" with the Butler County Plat Department. The plat must comply with section 3.04 of these regulations.
- B. If the proposed property or the remaining piece contains less than five (5) acres, then the split shall require Health Department approval. This approval is required by the Planning Department and must be submitted at the time of split approval. If this proposed split is currently

served by public water and sanitary sewer, then a statement must be obtained from the Butler County Water & Sewer Department stating such.

- C. A deed shall be drawn which contains the legal description of the property to be subdivided. This deed as well as the "Plat of Survey" shall be taken to the Plat Office for approval.
- D. After the split has been given approval from the Health Department or the Butler County Water & Sewer Department and the Butler County Plat Department, the deed, a copy of the health approval and a copy of the Plat of Survey are then checked by the Planning Department for conformity to the County or Township Zoning Resolutions. The Planning Department shall stamp and sign the deed approved if the lot in question meets all codes as stipulated above.
- E. If the proposed split is zoned Planned Unit Development (PUD), then a copy of the final site plan that was approved by the township or county shall be submitted with the proposed split.
- F. The deed shall then be taken to the Butler County Auditor (Conveyance) for the transfer of property and then to the Butler County Recorder where it will become a legal lot of record.

3.04 Items to be Contained on the Plat of Survey for Minor Subdivisions

- A. The Plat of Survey for Minor Subdivisions shall be clearly and legibly drawn (Please refer to Appendix A, drawing A-3 for an example survey). The size of the plat shall be eighteen (18) by twenty-four (24) inches and drawn to an applicable scale. The material used shall be mylar with black permanent ink.
- B. The Plat of Survey shall contain the following information:
 - 1. A north arrow, graphical scale and date;
 - 2. Township, section, town and range;
 - 3. Tract surveyed shall be shown in solid heavy lines;
 - 4. All lines of survey with bearings and distances in hundredths of a foot and bearings to 1 second for 1:10,000 accuracy;
 - 5. Type of monument set or found at all points;
 - 6. Monuments on right-of-way or offset lines showing a distance or dimension to the monument;
 - 7. Name and right-of-way width of all roads;
 - 8. Denote all section lines and/or half-section lines;
 - 9. Ties shall be made to the corners of recorded subdivisions and the

section corners or established ½ section corners. Bearings must be shown on section lines. University Lands may be tied to University Land lot corners showing bearings and distances on lot lines;

- 10. List all reference surveys used;
- 11. Total acreage of tract and if more than one section show breakdown of acreage as to each section;
- 12. Names and locations of adjoining property owner, the deed book and page;
- 13. Deed book and page by which owner acquired said property;
- 14. The surveyor's signature and seal or stamp and certification to a field survey;
- 15. Provide a closure sheet showing acreage and error of closure. The error of closure of a survey not to be greater than 1:10,000;
- The location and size of all existing visible site structures and improvements including but not limited to: leach lines, septic systems, driveways, buildings, sheds, decks and patios;
- 17. Square footage as well as acreage of the parcel that is being created as well as the remaining portion of the parcel;
- 18. The location of all easements must be shown in such a manner to be reestablished in the field. Deed Book and Page shall be referenced on any existing easements of record; and
- 19. Drawing standards shall be as outlined in Section 8.01 (C) of these regulations.
- 20. If property extends to the centerline of an improved road, a dimension is also to be shown at the right-of-way line. Frontage is measured at the right-of-way line, not the center of the improved road.
- 21. Access conditions and or easements as provided for in the Butler County Access Management Regulations or requirements made in Section 3.03(A).

3.05 Processing and Review Fees for Minor Subdivisions

For the processing and review of minor subdivisions (lot splits) as provided herein, fees shall be set by the County Commissioners and other appropriate county agencies and shall be due at the time of split approval and shall be payable to the respective agencies where fees are owed.

3.06 Presubmittal Assistance Recommended for a Platted Subdivision

Prior to the submittal of a preliminary plat, the subdivider is encouraged to seek the assistance of the subdivision review staff, and other appropriate county agencies. The purpose of this meeting is to discuss early and informally the purpose and effect of these regulations and the criteria and standards contained therein; and to ascertain the location of proposed highways, public ways, parks, playgrounds, and other planned developments.

3.07 Preliminary Plat Requirement for a Platted Subdivision

In planning and developing a platted subdivision, the developer or their agent shall comply with the general principles of design and minimum requirements for the layout of subdivisions set forth in Article IV of these regulations, and with the rules and regulations concerning required improvements set forth in these regulations, and in every case shall pursue the following procedure:

- A. After the presubmittal stage, the subdivider shall submit a preliminary plat of the proposed subdivision which shall conform with the requirements set forth in Article IV, and must be prepared by a registered surveyor and/or consultant. The purpose of the preliminary plat is to show, on a map, all the facts which may enable the Butler County Planning Commission to determine whether the proposed layout of the land meets the requirements of these regulations and is satisfactory from the standpoint of the public interest.
- B. The proper zoning for the subdivision must be in place prior to the consideration of the preliminary plat by the Planning Commission.
- C. Any person proposing a subdivision or new lot(s) for on-site household sewage treatment system for review by the Board of Health shall submit an application and sufficient information to determine compliance with the requirements of Ohio Administrative Code (OAC) 3701-29-08. Soil evaluations shall be completed by a professional soil scientist or an individual that meets the standards set forth with OAC 3701-29-07. Board of Health approval as described above must be submitted prior to the consideration of the preliminary plat by the Planning Commission.

3.08 Preliminary Plat Submittal

The developer and their surveyor shall prepare a preliminary plat of the proposed subdivision which shall conform with the requirements set forth in Article IV of these regulations and shall file with the Planning Department and subdivision review staff a written submittal for the review of said plat accompanied by ten (10) black line or blue prints, at least three (3) weeks prior to the meeting of the Planning Commission at which action is desired (Planning Commission meets once a month). This submittal requirement

may vary depending on the number of subdivisions under review at the time of submittal or if there are significant problems with the subdivision at the time of design.

3.09 Preliminary Plat Review

The preliminary plat will be checked by the Planning Commission as to its conformity with Butler County's Official Land Use Plan, Thoroughfare Plan, Access Management Regulations, Flood Damage Prevention Regulations and other applicable zoning codes and the principles, standards and requirements hereinafter set forth. The Planning Commission shall also forward copies of the preliminary plat and supplemental information to such officials and agencies as may be necessary for the purpose of study and recommendation. Such officials and agencies shall include:

(a) Township Trustees and Zoning Department (if any), of the jurisdiction within which the proposal is located;

- (b) County Engineer;
- (c) Butler County Soil and Water Conservation District;
- (d) County Building Administrator;
- (e) County Board of Health;
- (f) Butler County Water & Sewer Department;

(g) Affected school districts if so requested, (for informational purposes only);

- (h) Ohio Department of Transportation;
- (i) and the Plat Department of the County Engineer's Office.

3.10 Approval/Disapproval of Preliminary Plat

Upon receipt of the recommendations and advice from agencies listed in the preceding section, the Planning Commission will approve or disapprove the preliminary plat, or approve it with modifications, noting any changes that will be required. Upon giving said approval or approval with modifications, a notice shall be sent to the subdivider and/or consultant with the date of said approval and the list of any modifications. In the case of disapproval, the subdivider and/or consultant shall receive a copy of the Planning Commission resolution which denied approval. If the preliminary plat is not approved, the subdivider and/or consultant must start the preliminary plat submittal process over again. The approval of the preliminary plat by the Planning Commission is to be considered only as a tentative approval of the layout, with the understanding that the County Engineer, or other officials having jurisdiction may modify any engineering or construction details proposed by the subdivider, whenever required for the protection of the

public interest. All sections of an approved preliminary plat shall be filed for final plat approval within five (5) years of the date of the approval of the preliminary plat. When this five-year time period expires, the preliminary plat will be considered void.

3.11 Processing and Review Fees for Preliminary Plats

For the processing and review of plats as provided herein, fees shall be set by the County Commissioners and shall be due at the time of preliminary plat submittal. Payment shall be directed to the Butler County Planning Commission.

3.12 Submittal of Improvement Plans

- A. Upon preliminary plat approval, which is effective for five (5) years, the subdivider may submit improvement plans.
- B. At this time, the subdivider and their engineer must submit six (6) sets of improvement plans for review to the Planning Department. At this same time, an application form and payment of Plan Review Fees shall be submitted to the Butler County Water & Sewer Department.
- C. These plans shall conform with the requirements set forth in Article V (Site Drainage & Roadway Design Standards), Article VI (Water and Sanitary Sewer Improvements), and Article VII (Soil and Water Management Standards) of these regulations and any stipulations set forth in the preliminary approval, and the plans must be prepared by a registered engineer.
- D. Improvement plans shall also be accompanied by the SESC Plan, as submitted to the Ohio Environmental Protection Agency (OEPA) for the purposes of obtaining a National Pollution Discharge Elimination System (NPDES) permit. A copy of this permit shall be submitted to Butler County prior to the start of construction.

3.13 Improvement Plan Review

The improvement plans will be checked by the subdivision review staff as to its conformity to the preliminary plat approval. The Planning Department shall also forward, as appropriate, copies of improvement plans, drainage calculations and the Soil Erosion and Sediment Control (SESC) Plan to relevant agencies for the purpose of study and recommendation. Such agencies shall include:

(a) County Engineer (See Article V of these regulations);

(b) Butler County Water & Sewer Department (See Article VI of these regulations);

(c) County Soil and Water Conservation District (See Article VII of these

regulations);

- (d) Southwest Regional Water District (where applicable);
- (e) County Zoning and Floodplain Administrator.

3.14 Approval/Disapproval of Improvement Plans

- A. All requirements of Article V of these regulations and any stipulations set forth in the preliminary approval must be met prior to any approval of improvement plans by the County Engineer and Storm Water District.
- B. All requirements of Article VI of these regulations and any stipulations set forth in the preliminary approval must be met prior to any approval of improvement plans by the Butler County Water & Sewer Department.
- C. All requirements of Article VII of these regulations and any stipulations set forth in the preliminary approval must be met prior to any approval of improvement plans and the SESC Plan by the Butler County Soil and Water Conservation District.
- D. No work shall commence on the site until the improvement plans submitted have been approved by each respective office above. Any work that has been started prior to approval of the final plat or prior to approval from the OEPA shall be done so at the risk of the developer.
- E. Where an improvement has not been constructed in its entirety, and the preliminary plat has expired, then the improvement plans will be considered void until such time a new preliminary plat approval has been granted. Depending upon approval conditions, by the Planning Commission, modifications and or changes to the improvement plan may be required. This includes but is not limited to traffic impact studies, storm water management, and grading.

3.15 Other Permits

It shall be the sole responsibility of the developer, not the Planning Commission or its representatives, to obtain any and all applicable permits from the appropriate agencies, including all local, state and federal agencies. All requirements of these permits must be met prior to recording of the final plat.

3.16 Inspection of Improvements

A. Any work and any materials are subject to inspection by the Butler County Engineer's Office. Such inspection may extend to any part of the work. Any work, including backfill operations within the right of way, shall at a minimum meet the minimum requirements of the current State of Ohio Department of Transportation Construction and Materials Specifications. The contractor, upon request, shall furnish the County Engineer all information with samples relating to the work and the materials. The inspector shall have authority to reject defective material and to suspend any work that is being done improperly.

- B. Public water and sanitary sewer improvements shall be verified by "As Built" data and submitted to the Butler County Water & Sewer Department by the Developer's engineer. If there are any discrepancies from approved plans, they must be resolved prior to acceptance of the testing.
- C. Any erosion control measures as indicated on the Soil Erosion and Sediment Control (SESC) Plan must be in place and functioning properly prior to recording of the final plat.

3.17 Inspection Fees

- A. An inspection/review fee shall be charged for all roadway-related items. This fee shall be set by and paid to the Butler County Engineer's Office prior to the start of any construction or prior to the recording of the plat.
- B. Inspection fees, as designated in Article VI, Section 6.01(F)(2), must also be submitted to the Butler County Water & Sewer Department for construction costs for water and sanitary sewer related items.
- C. An inspection/review fee shall be charged for all drainage-related items. This fee shall be set by and paid to the Butler County Engineer's Office prior to the start of any construction or prior to the recording of the plat.

3.18 Final Plat Submittal

- A. The developer and its surveyor shall prepare a record plat that shall conform with the requirements set forth in Article VIII of these regulations and shall file with Planning Department and subdivision review staff a written submittal for the approval of said plat accompanied by ten (10) black line or blue prints. The final plat shall incorporate all changes required by the Planning Commission and the subdivision review staff, the contents of the improvement plans and the preliminary plat if a preliminary plat has been reviewed and given approval by the Planning Commission. The final plat and/or record plat shall be prepared by a registered surveyor.
- B. No work shall begin on the improvements until the developer submits proof of liability insurance which holds the county harmless from any claims by third parties. If the developer wishes to construct a building on the acreage prior to the recording of a plat, but after preliminary approval, that building must meet all the requirements and conditions of the preliminary plat.

3.19 Final Plat Review

The final plat will be checked by the subdivision review staff as to its conformity with Butler County's *Official Land Use Plan* and *Thoroughfare Plan* and the principles, standards, and requirements hereinafter set forth. The Planning Department shall also forward copies of the final plat and supplemental information that may be necessary to the subdivision review staff for the purpose of study and recommendation. Such officials and agencies shall include:

(a) Township Trustees or Zoning Department (if any) of the jurisdiction within which the proposal is located;

(b) The County Engineer / Storm Water District;

(c) Butler County Soil and Water Conservation District;

(d) County Building Administrator;

(e) County Board of Health;

(f) Butler County Water & Sewer Department;

(g) Affected School Districts if so requested, (for informational purposes only);

(h) Ohio Department of Transportation;

(i) Transportation Improvement District (TID), if the proposal is located within the proposed Hamilton connector or any other proposed TID project;

(j) and the Plat Department of the County Engineer's Office.

3.20 Approval or Disapproval of Final Plat

Upon receipt of the recommendation and advice from agencies in the preceding section, the Planning Commission will approve or disapprove the final plat. Should the Planning Commission approve the final plat, it shall enter such approval thereon in writing by its Chair and Secretary. (The approval of the final or record plat by the Planning Commission shall not constitute a dedication or acceptance of any proposed street Right-of-Way (ROW) shown on said plat.) If the final plat is approved by the Planning Commission, the record plat must be submitted to the County Commissioners, as provided in these regulations (Article III, Section 3.22), for the dedication of the land for street Right-of-Way (ROW) purposes. If the final plat is disapproved by the Planning Commission, then a revised final plat must be resubmitted to the Planning Commission for final approval.

All sections of the preliminary plat must be submitted for final approval within five years from the date of preliminary approval. If not, a new

preliminary plat must be resubmitted and approved before final approval can be given.

3.21 **Processing and Review Fees for Final Plats**

For the processing and filing of final plats as provided herein, fees shall be set by the County Commissioners and shall be due at the time of final plat submittal and shall be made payable to Butler County Planning Commission.

3.22 Dedication Procedures

When submitting a final or record plat for recording, the developer and/or consultant must complete the following steps, before the plat can be forwarded to the County Commissioners for the dedication of the right-of-way:

- A. File paperwork with the Butler County Engineer's Office (BCEO) to set up a Homeowners' Association (HOA), Property Owners Association (POA), or petition the county for the maintenance of storm drainage system outside of the right-of-way. If county ditch petition is chosen, all paperwork must be completed prior to the recording of the final plat.
- B. To ensure Butler County that the construction and installation of such improvements as street surfacing, curbs, gutters, sidewalks, drainage, sanitary sewers, and water supply items will be built, the subdivider shall enter into the following agreements:
 - Prior to the County Commissioners signatures on the record plat, the developer must furnish a Performance Bond (Please see Appendix B, figure B-1 for an example) made payable to the County Commissioners in the amount of 10% of the total cost of all earthwork, roadway (Public & Private), sidewalks, storm water facilities, drainage structures, and erosion control related items plus 120% of any uncompleted work as mentioned above. Bond amount will be determined by the County Engineer's Office and based on an acceptable contractor's estimate. Letters of credit will not be accepted for the performance bond.

Construction of improvements identified in the Plan pertaining to Public Streets, Roads, Turn Lanes, and Storm Water Detention and Drainage Facilities shall commence prior to or after the date of recording of the final plat in the Butler County Recorder's Office, Butler County, Ohio and shall be completed within five (5) years from the date of recording. If the number of Lots built upon is greater than fifty-percent (50%) and level course is one (1) year, Developer shall request a punch list inspection from the County Engineer's Office. Upon completion and acceptance of the punch list work, Developer shall submit a Maintenance Bond in the amount determined by the County Engineer. Should the number of lots built upon not exceed 50% within the first five (5) years, County Engineer will require a new Performance Bond using current construction costs. After submittal of a replacement Performance Bond the Developer shall construct the improvements within five (5) years after such time, no additional extensions will be given.

At the time the Performance Bond is submitted to the County Engineer's Office, at a minimum, Surety Company must have a Financial Strength rating of "A-"or "Excellent" by A.M. Best Company.

For the latest rating access http://www.ambest.com/

Surety Company shall be licensed in the State of Ohio

Punch list inspections: after an initial punch list inspection and one subsequent re-inspection, all other re-inspections will be charged at a rate of \$500. Fee shall be paid within 90 days of invoice, failure to pay re-inspection fee will result in the county filing a claim against the performance and/or maintenance bond.

- 2. Prior to the County Commissioners' signatures on the record plat, the developer must furnish a Performance Bond (Please see Appendix B, figure B-1 for an example) made payable to the Butler County Commissioners in the amount of 100% of the total cost of the uncompleted water and sewer related improvements. Bond amount will be determined by the Butler County Water and Sewer Department and based on an acceptable contractor's estimate. Letters of credit will not be accepted for the performance bond. The developer must also submit a maintenance bond (Please see Appendix B, figure B-2 for an example) in the amount of 10% of the total cost of all water and sewer related items.
- 3. All erosion control related items must be completed prior to recording of the final plat.
- 4. Developer may enter into an agreement with the Township for snow removal and deicing of streets. Developer is responsible for all snow removal, deicing of snow and ice, street cleaning and similar maintenance until such time the subdivision has been accepted by the County and released from its Maintenance Bond.
- C. Acceptance and recording of all easements not included in the subdivision plat must be submitted along with applicable platting fees.
- D. Board of Health approval is required for all subdivisions served by on-site private water systems and/or on-site household sewage treatment

systems. See 8.04(G) for the appropriate note to be included on the final plat.

- E. Submit a certificate of title to the Planning Department (See Appendix B, figure B-3, for a sample Certificate of Title), which shows the ownership of all lands to be dedicated to the public and that the title thereof is free and unencumbered. If the title is not free and unencumbered then two requirements shall be met:
 - If a mortgage exists on the property which is to be dedicated to the public, a release of mortgage must be filed with the County Recorder or the mortgagee (the bank or whoever holds title to the mortgage on the property) must sign the record plat;
 - If an easement of record exists through any proposed right-of-way which is to be dedicated to the public, that easement must be subordinated to Butler County or vacated (See Appendix B, figure B-4, for a standard agreement form).
- F. Submit to the Planning Department the mylar drawing of the subdivision which shall be signed and stamped by a registered surveyor. All owners and mortgage holders signatures must be notarized and dated and have two witnesses per signature.
- G. Pay all Review Fees outstanding with the appropriate departments.

3.23 County Commissioners' Approval

When the developer and their engineer have completed all the steps in the record plat submittal stage, the plat may be submitted for consideration by the Board of County Commissioners. A date and time will be scheduled for a hearing with the Commissioners at the next available regular meeting.

3.24 Recording Procedures

Upon approval of the final plat by the Planning Commission and the County Commissioners, the plat shall go through the following procedures:

- 1. The Planning Department forwards it to the Plat Department where it is assigned a permanent parcel number;
- 2. The Plat Department forwards it to the Auditor's Office for review and processing. The subdivider is then responsible for picking up the plat and paying an auditor's fee set by the Auditor's Office;
- 3. The subdivider must take the approved plat to the Recorder's Office and pay a Recording fee set by the Recorder's Office;
- 4. After steps 1-3 are completed, the approved plat shall be recorded and scanned. Digital scans of recorded plats are available from the Recorder's

Office. The Planning Department also receives the original mylar copy of the approved plat from the Recorder's Office to be filed for public record.

5. Upon approval and recording, the subdivider may then pick up the approved record plat, provided the developer leaves a duplicate mylar copy with the Planning Department. At this time, the subdivider or builder may apply for building permits.

3.25 Submittal of "As-Built" Plans

- A. At the completion of construction, the plans shall be revised as necessary to provide "As-Built" plans. "As-Built" plans are to show location (by station number & offset), lengths, inverts and percent grades on all storm sewer pipes, catch basin grates, manhole lids, windows within catch basins, orifice plates, forebay, sanitary sewers plus locations of all water appurtenances, and the depth of the top of the water valve nuts plus the station number and offset of each water and sewer service lateral. Asbuilt topography of the storm water detention/retention facility, volume calculation (WQv & storage), and an outlet routing is to be submitted to verify the required detention is met. The spillway, top of levee and concrete gutter in the facility is also to be as-built. Cross-section and centerline profile of the flood route is to be included on the as-built drawing. Flood route profile is to begin at centerline of street and continue to storm water facility or rear of Lot.
- B. "As-Built" plans shall be drawn on mylar (or submitted electronically as a PDF) and submitted to the Butler County Engineer prior to the final course of pavement being placed. Electronic PDF submittals shall have as-built information denoted using bold red text and/or line work, and be stamped/sealed per State Board of Registration for Professional Engineers and Surveyors in Ohio.
- C. Three sets of black-line as-built plans are to be submitted to the Butler County Water and Sewer Department within 60 days of the initial acceptance of the water and/or sewer improvements.

3.26 County Engineer's Acceptance Requirements

The subdivider shall submit a written request to the Butler County Engineer's Office for acceptance of the streets. The subdivider shall maintain, repair, or replace any BMP, structure, pavement, drainage, seeding, or any other part of the subdivision or existing facility as directed by the County Engineer. At the time of acceptance, after all construction work is complete, the subdivider shall furnish a one-year maintenance bond made payable to the Butler County Commissioners. This bond shall be for a minimum value of ten percent (10%) of the total construction costs with the exclusion of erosion control, water and sanitary sewer related items as determined by the Butler County Engineer's Office. If the sidewalk is not complete at this time, a performance bond guaranteeing its completion shall be required.

3.27 Final Sanitary Sewer and/or Water Inspections

The final inspection of water and sanitary sewer related items will be scheduled eleven (11) months from the start of the one (1) year maintenance period. When the inspection is satisfactory to the Butler County Water & Sewer Department, the Board of County Commissioners may release the Maintenance Bond.

3.28 Final County Engineer's Inspection

Prior to the end of the one year maintenance period, the County Engineer's Office shall conduct a final inspection of the subdivision, excluding water and sanitary sewer related items. Once the inspection passes, the Butler County Engineer's Office may recommend that the Board of County Commissioners release the maintenance bond. If the sidewalk is not complete at this time, a performance bond guaranteeing its completion shall be required.

Preliminary Subdivision Plat Requirements

4.01 General Statement

All regulations in this Article shall control the general manner in which streets, lots, storm water facilities, and other elements of a subdivision are arranged on the land. These regulations shall help ensure convenient and safe streets, creation of usable lots, provision of space for public utilities, and reservation of land for recreational uses. The planning of attractive and functional neighborhoods shall be promoted, minimizing the undesirable features of unplanned, haphazard growth.

Subdivisions are encouraged to be planned to take advantage of the topography of the land, to minimize destruction of trees and the disturbance of topsoil and to preserve such natural features as watercourses, sites of historical and archaeological significance and other assets which, if preserved, will add attractiveness and value to the subdivision and community.

The Subdivision Review Committee has the responsibility for reviewing the design of each future subdivision early in its design development. The committee is also responsible for making sure that existing roads have the capacity to handle all new development. If the Butler County Planning Commission or their agent feels that it is in the public interest they may require that a traffic impact analysis be completed at the developers expense. Any road improvements called for by this analysis which are the result of the proposed development shall be made at the developer's expense.

4.02 Form

The preliminary plat shall be clearly and legibly drawn. The size of the plat shall not be less than eighteen (18) by twenty-four (24) inches. If possible maximum plat size should not exceed twenty-four (24) by thirty-six (36) inches. The plan of a subdivision containing six (6) acres or less may be drawn at a scale of one (1) inch equals fifty (50) feet. All other subdivisions shall be drawn at a scale of one (1) inch equals one hundred (100) feet. The vertical scale of street and sewer profiles should be twenty (20) feet or less to the inch if required by the subdivision review staff.

4.03 Number of Copies to be Filed

For review, the subdivider shall file the following with the Planning Department:

- A. Ten (10) full-size copies of the final plat, which must be prepared by a registered professional surveyor and/or consultant, authorized to practice under the laws of the State of Ohio.
- B. One (1) reduced version of the final plat measuring 11" by 17"
- C. A completed *Application for Subdivision Plat Review*, available from the Planning Department.
- D. The required review fee established per the County Commissioners.

4.04 Conformity to Long Range Development Plans

- A. The subdivision layout shall conform to Butler County's *Official Land Use Plan, Thoroughfare Plan,* and any other officially adopted long-range plans of Butler County.
 - Whenever a tract to be subdivided abuts any part of a highway, thoroughfare or parkway, so designated on said plan, such part of such public way shall be platted by the subdivider in the approximate location and at the appropriate width on the Plan.
 - 2. Where a proposed park or other recreational area school site or other public ground shown in any adopted long-range plan for Butler County is located in whole or part within the proposed subdivision, such proposed public ground or part, if not dedicated to the County, or Board of Education, or Park Board, shall be reserved to be acquired by the County within a period of five (5) years by purchase or other means.
- B. Where held appropriate by the Planning Commission, open spaces, constituting a reasonable proportion of the gross acreage of the subdivision based on a developed set of standards suitably located and of adequate size for parks, playgrounds, or other recreational purposes for local or neighborhood use shall be provided for in the proposed subdivision and if not dedicated to the County, shall be reserved for the common use of all property owners in the proposed subdivision by covenant in the deeds which shall be maintained and operated by the Property Owners Association.

4.05 Lots

The following requirements shall be taken into consideration when submitting the preliminary plat:

A. The size, shape and orientation of lots shall be appropriate for the location of the proposed subdivision and for the type of development planned. All lots shall be buildable based on a review by county staff, agents, or designees. Additional survey data may be required prior to Planning Commission Approval.

- B. Excessive depth in relation to width shall be avoided. (A proportion of 2 to 1 shall normally be considered as appropriate).
- C. Every lot shall abut on a publicly dedicated street. (This may not be a requirement of a PUD Development).
- D. Lots for residential purposes shall comply with all applicable zoning codes concerning the area and width of each lot.
- E. Dual access on double-frontage lots shall be avoided (Please see Appendix A, drawing A4 for a sample drawing).
- F. Side lot lines shall be approximately at right angles to the right-of-way line of the street on which the lot faces or radial to the curve (Please see Appendix A, drawing A-1 for a sample drawing).
- G. Corner lots for residential use shall be platted wider than interior lots in order to permit conformance with the front yard set-back on the side street required by the appropriate Zoning Resolution.
- H. Residential lots fronting or abutting on major or minor arterials or major or minor collectors should have extra depth to permit deep set-backs for the building from such traffic ways (50 feet depth).

4.06 Information to be Contained on the Preliminary Plat

The following information shall be contained on the preliminary plat (Please see Appendix A, drawing A-6 for a sample drawing):

[For a summary of information to be contained on a preliminary PUD plan, please refer to the Butler County Rural Zoning Resolution or applicable Township Zoning Resolutions].

- A. A vicinity sketch showing the subdivision as it relates to the surrounding area at any scale.
- B. A superimposed plan of the subdivision at a scale of three-hundred (300) feet or more to the inch shall be drawn on the preliminary plat in that particular township section that the development is located in. This shall show the relationship of the proposed subdivision or use to other nearby developments or landmarks and community facilities and services within Butler County in order to better locate and orient the area in question. This sketch shall also show all street rights-of-way.
- C. The proposed name of the subdivision which shall not duplicate or closely approximate the name of any other subdivision in Butler County.
- D. The names, addresses, and phone numbers of the owner of record, the subdivider and the engineer, surveyor or consultant for the project.
- E. The boundary lines, accurate in scale, of the tract to be subdivided.

- F. The location, widths, and names of all existing or platted streets or other public ways within or adjacent to the tract, and other important features such as existing permanent buildings, tree mass, water courses, railroad lines, corporation lines, township lines, pipe lines, pole lines, high tension lines, bridges, section lines, wetlands, etc.
- G. Existing sewers, water mains, culverts and other underground structures within the tract and immediately adjacent thereto with pipe sizes.
- H. Contours, normally with intervals of two (2) feet referenced to United States Geological Survey (U.S.G.S.) Datum, as required by the Planning Commission.
- The layout, numbers and approximate dimensions of proposed lots (For additions to existing subdivisions, the new lot number should continue from the last recorded number). The layout, proposed names and widths of proposed streets (with Typical Section), alleys and easements. Proposed street names shall not duplicate or closely approximate any existing street names in Butler County, except extensions of existing streets. A street may be named avenue, street, lane, drive, court, or boulevard, but not road.
- J. The location and approximate sizes of proposed water and sewer lines, catch basins, culverts, adequate drainage outlets, and other drainage structures.
- K. Zoning boundary lines if any; proposed uses of property and proposed front yard set-back lines. In some cases rear and side yard set-back lines or building footprints may be required.
- L. All parcels of land intended to be dedicated or temporarily reserved for public use, or to be reserved in the deeds for the common use of property owners in the subdivision, with the purpose, condition, or limitations of such reservation indicated.
- M. The total acreage of the subdivision.
- N. The total number of lots.
- O. North-point, graphical scale and date.
- P. Private streets shall conform to the Local Street pavement thickness as defined in this document unless the township has determined design criteria.

4.07 Preliminary Drainage

All proposed subdivisions shall have a storm drainage system designed to serve the area being developed. It shall be compatible to any adjacent storm drainage systems and shall have in all cases a clear and unobstructed outlet. The storm drainage system shall be designed in such a manner to minimize the effects on the downstream properties within reasonable limits. The preliminary drainage plan shall show the general suitability of the proposed development to support a storm water management system. (Please see Appendix A, drawing A-7 for a sample drawing).

- A. The preliminary drainage plan shall be due at the time of preliminary plat submittal on a two (2) foot topographical contour map and should consist of two (2) parts:
 - a. The major system is comprised of the 100 year flood route, storm water retention / detention facilities, open channels, culverts, and bridge structures. This system should be laid out in a manner as to direct all excess storm water into the storm water retention / detention facility.
 - b. The minor system is comprised of storm sewers, inlets, etc.
- B. This plan should also include the following information:
 - a. Storm water detention or retention facilities which are required for each subdivision.
 - b. The approximate location of any 100 year flood boundary areas shall be shown.
 - c. Location and type of water quality BMP's.
 - d. Estimate of OEPA's water quality volume calculations.
- C. The developer, owner or their engineer may apply to the Planning Commission for an exception to the detention or retention requirement. Each request will be reviewed as it affects the entire drainage area in which it lies. The developer's engineer will be required to show adequate reasons for requesting the exemptions and provide the Butler County Planning Commission with any information deemed necessary.
- D. The Butler County Planning Commission may require additional information if the site warrants.
- E. In-Line storm water detention/retention facilities may require Federal, State and or Local permits and approvals. Proof that these agencies have either approved or denied a request to install an in-line storm water facility must be provided to the Planning Commission prior to construction drawing approval.

Site Drainage and Roadway Design Standards

5.01 General Statement

It is not the intent of this Article to take away from the designing engineer any responsibility for the technical adequacy of their design or ability to use their engineering judgment and discretion in the practice of their profession. It is recognized that matters of engineering design cannot be set out in writing to cover all situations; however, the design standards as set out herein represent good engineering practice. All variances and the reasons for their use are to be submitted to the Butler County Planning Commission for review.

Subdivision streets are to be designed to discourage thru-traffic movements and encourage operating speeds of approximately twenty-five (25) miles per hour. All street and drainage design shall be done in accordance with the current *Ohio Department of Transportation Location and Design Manual* and the *American Association of State Highway Transportation Officials "Green Book"* unless otherwise specified in this document. If a street has been stubbed to the property to be developed, those streets must be continued into the proposed development from that point. The Butler County Planning Commission has the right to accept, deny or require that a road be connected to any existing road if it is in the public interest.

The County Engineer or County Drainage Consultant, at any time during design or construction or even after the recording of the final plat, shall have the authority to modify any engineering or construction detail, whenever required for the protection of the public interest.

All sites greater than one acre must comply with the Ohio Environmental Protection Agency NPDES (National Pollution Discharge Elimination System) Permit for Storm Water Discharges Associated with Construction Activity, and any other requirements of the MS4.

5.02 Street Design Standards

- A. The street layout of the subdivision shall be in general conformity with a plan for the most advantageous development of adjoining areas and the entire neighborhood.
 - Neighborhood Collectors are to provide connections between a higher road classification in the thoroughfare system, have restricted access near intersections (internal and at both termini), and are used for collection of neighborhood traffic. Where appropriate to design, proposed streets shall be continuous and in

alignment with existing, planned or platted streets with which they are to connect.

- 2. Proposed streets shall be extended to the boundary lines of the tract to be subdivided, unless, in the opinion of Planning Commission, such extension is not necessary or desirable for the coordination of the layout of the subdivision with the existing layout or the most advantageous future development of adjacent tracts. Cul-de-sac streets shall serve a maximum of twenty-five (25) lots.
- 3. Proposed streets shall intersect one another as nearly at right angles as topography and other factors of good design permit.
- 4. Wherever there exists adjacent to the tract to be subdivided a dedicated or platted and recorded half-width street or alley, the other half width of such street or alley shall be platted.
- 5. Access Management of the major thoroughfares shall be taken into consideration in the design of the subdivision plat. The designer shall use the Butler County Access Management Regulations as guidance when determining access point(s) along all thoroughfares identified in the latest version of the *Butler County Thoroughfare Plan*.
- 6. Residential developments abutting Major or Minor Arterials or Major Collectors shall be platted in such a manner to cushion the impact of the heavily traveled highway. This may be accomplished in several ways (Please see Appendix A, drawing A-4 for a sample drawing).
 - a. The most desirable method consists of not fronting the lots on the highway but on a minor street paralleling the highway or on a cul-de-sac extending toward the highway. All lots abutting the highway shall be platted at the setback line with a generous lot depth of fifty (50) feet or whatever the zoning code specifies for that particular zoning district (whichever is greater). Driveway access from the lots will not be permitted onto the main thoroughfare.
 - b. Fronting lots on Arterials or Collector streets is discouraged and will generally only be approved if there is some special feature of the land to be subdivided which prohibits the method described above from being used. In all cases where there will be lots fronting on the main thoroughfare, the lots shall be platted at a very generous depth (50 feet) and vehicular access to the lots shall be provided by means of service drives or common driveways. Access to the main thoroughfare should be held to a minimum.

- 7. Public improvements will not be approved if located under any private street.
- 8. Sidewalks shall be provided on both sides of all newly dedicated streets. This applies to all residential, commercial and industrial developments. Curb ramps are to be provided at the intersection of all sidewalks and all streets. All sidewalks and curb ramps are to be constructed as per the typical construction detail (Please refer to Appendix C, drawing C-2 C-5 for detailed drawings).
- 9. In order to provide better access to schools and business districts, subdivisions that abut existing Arterials shall provide sidewalks along the Arterial for the full distance of the development.
- 10. Public streets are required to comply with State water quality requirements identified in the latest NPDES Permit for storm water discharges associated with construction activity. Water quality treatment shall comply with the current Ohio Department of Transportation Location and Design Manual. Post-construction BMP's and water quality treatment shall be contained within the limits of the public right-of-way or easement.
 - a. Dedicate additional right-of-way or easement to encompass the post-construction BMP
 - b. Provide water quality treatment in a regional postconstruction BMP
 - c. Mitigate the water quality treatment with an off-site BMP, with the approval of OEPA.
- 11. A reduced street width of 25' B/B may be used if the conditions in Appendix D, table D1 are met.
- 12. Plan shall include location, size and type of both streets name regulatory signs. All regulatory signage shall meet the requirements of the Ohio Manual of Uniform Traffic Control Devices (OMUTCD).
- B. The arrangement, character, extent, width, grade, construction and location of all streets shall conform to the standards herein set forth (Please refer to Appendix D, table D-1). All street design shall be done in accordance with the current *Ohio Department of Transportation Location and Design Manual* and the *American Association of State Highway Transportation Officials "Green Book"*.
 - Temporary dead-end streets shall be permitted where necessitated by the design of the subdivision; provided that temporary turn-around shall be constructed where a sum of six lots are fronting (including corner lots) on such temporary dead-

end streets (Please see Appendix C, drawing C-21 for temporary turnaround details). Turnarounds must be installed prior to platting of the subdivision.

- 2. The grades of streets shall not be less than one-half of one (0.5) percent and shall not exceed ten (10) percent.
- 3. All changes in street grades above one (1) per cent shall be connected by vertical curves of a minimum length of fifty (50) feet.
- 4. All subdivision streets must be designed for curb and gutter unless the lots contain a minimum of 65,000 square feet and a minimum of 150 feet of public road frontage.

5.03 Intersections

- A. At Local Street intersections the right-of-way line shall be rounded by an arc, the minimum radius of which shall be twenty (20) feet.
- B. Local Streets that intersect a higher roadway classification, the right-ofway line shall be the chord of a rounded arc, the minimum radius of which shall be thirty (30) feet. (Please refer to Appendix C, drawing C-19 for standard intersection drawings for minimum radius requirements for the different types of roadway).
- C. All intersections of proposed subdivision streets must meet ODOT intersection sight distance requirements. In addition, the existing county or township road must meet ODOT stopping sight distance, and sight triangle requirements. This is particularly important where a proposed street comes out on the top of an existing crest vertical curve.

If unique and unusual circumstances warrant, the developer and their engineer may apply to the Planning Commission for design exceptions.

5.04 Improvement Plans

A. Standard Drawings

Butler County Standard Drawings (See contents of Appendix C), shall be used to show the details of improvements which are frequently used. ODOT Standard drawings, State Office, Columbus, Ohio, shall be used for all improvements not covered by County Standards. Those Standard Drawings which will be used for the construction, shall be listed on the title page of the Improvement Plan. Special details are to be included in the plans for all structures not covered by standard drawings.

B. General Notes

General notes shall include any pertinent information that is not covered in the Standard Drawings. A note shall be included as follows: "All work shall be performed in accordance with the Butler County Subdivision Regulations and the authority having responsibility for utilities in the area". (Please see Appendix A, Drawing A-11, for a sample drawing).

C. Plan Contents

- 1. A detailed typical cross-section of the proposed street(s) is to be included on the plan. (Please refer to Appendix C, appropriate drawings C-1 thru C-5)
- 2. All proposed lots and streets are to be shown on the plan. All bearings, angles, distances and curve information must also be provided.
- 3. All streets, curbs, sidewalks, water lines, sewer lines, drainage structures and all other improvements must be shown in plan view and in profile with all sizes, elevations, distances and percent grades clearly indicated.
- 4. A grading plan showing existing and proposed contour lines and lot grading arrows shall be provided. Cross-sections may also be required.
- 5. The locations shall be shown on existing utilities, structures, drives, etc. which may be affected by the improvement.
- 6. Where a street ends and may be extended in the future, the profile shall be shown for at least 200 feet beyond the end of the street.
- 7. Street names, lot numbers, lot dimensions and easements shall be shown. Easements shall be provided for all existing or proposed channels. All easements for a water course or ditch shall be wide enough to contain said ditch, including side slopes, plus ample clearance for maintenance operation. All easements shall be shown and labeled on the record plat and on the construction drawings.
- 8. All plans are to be done on a scale of 1" = 50' or greater.
- 9. A minimum opening and back of curb elevation where pertinent shall be labeled.
- A detailed typical cross-section of proposed hiker/biker trails or pathways are to be included on the plan. (Please refer to Appendix C, appropriate drawings C-30)
- Streets Location of all post-construction BMP's with a standard detail referenced on the title sheet. Water quality and postconstruction BMP's shall be in conformance with the current Ohio Department of Transportation Location and Design Manual.

5.05 Final Drainage Plan

A final drainage plan shall be prepared consistent with ODOT's current *Location and Design Manual* and/or ODNR's *Rainwater and Land Development Manual*, and the following criteria unless otherwise approved. If in conflict, the Subdivision Rules and Regulations shall prevail. All developments are to comply with the current Ohio Environmental Protection Agency Permit for Storm Water Discharges Associated with Construction Activity under the National Pollutant Discharge Elimination System (NPDES).

A. Minor System Design:

- General The minor system design shall be based on a post development 10 year storm. This system includes all closed storm sewer, open channels, inlets, manholes and all features designed to collect storm water from streets and lots including the necessary piping for the collection of sump pump drains. The Rational Method (Please see Appendix D, table D-2) will normally be used when calculating peak rate of runoff in determining conduit size and grade.
- 2. **Hydrologic Analysis** Storm runoff can be calculated using the Rational Method (Please refer to Appendix D, table D-2 thru D-4) or the SCS (Urban Hydrology for Small Watersheds) Technical Release 55 (TR55). In cases of large channels, regression equations may be used. The Rational Method shall not be used for drainage areas of greater than 20 acres, TR55 should be used for drainage areas greater than 20 acres.

3. Storm Sewer Design:

- General All conduits are to be designed on a 10 year flowing full design using the Manning Formula. (Please refer to Appendix D, Table D-5) The minimum diameter shall be 12 inches.
- b. Material Pipe material for culverts and storm sewers shall comply with current Ohio Department of Transportation (ODOT) specifications. (Please refer to Appendix D, Table D-6 and D-7 for the applicable ODOT specification numbers).
- c. Roughness Coefficient (n) Manufacturers "n" value plus .004 to account for bends and junction losses is to be used.
- Velocity The allowable velocity in the storm sewer shall not be less than 3.5 feet per second or greater than 14 feet per second for corrugated metal pipe and twenty (20) feet per second for concrete and plastic pipe based on a ten (10) year frequency storm.

- e. Cover All pipes shall meet the manufacturer's minimum requirements for depth of cover as to not crush or deform the pipe in any way.
- f. All changes in storm sewer, grade, alignment and the intersection of two or more sewers must take place in a manhole or catch basin.
- g. A drop manhole or catch basin shall be utilized on steep slopes or on hillsides with long runs of storm sewer pipe.
- 4. **Storm Sewer Inlets** The curb inlet shall be spaced a maximum distance of 300' from another catch basin or high point. Closer spacing may be necessary if the capacity of the inlet is less than the flow tributary to the inlet. Curb inlets shall be placed in such a manner that no storm water shall flow through any intersection.

5. Storm Sewer Outlets:

- a. Energy dissipation must be used at the outlet of all storm sewer structures and storm water facilities.
- b. Rock Channel Protection should be installed at all storm sewer pipe outlets to swales, ditches, creeks or streams. The rock should be installed at a minimum width of 4' or the width of the headwall, whichever is greater and at a depth of 1.5'. Geotextile fabric or a 6" (#3 or #4) granular bed should be laid under the rock to prevent undermining of the rocks. If fabric is used, overlaps should be at a 12" minimum and should be to ASTM standards (ASTM D-1777 and ASTM D-1682). Rock size shall be determined using ODOT's current Location and Design Manual.
- c. Level Spreader should be used to convert concentrated flow into sheet flow. This should only be used when the storm sewer outlets within 200 feet of a floodplain, a wetland area or densely vegetated areas with no defined conveyance. Level spreaders shall not be used where the natural topography will re-concentrate flow below the point of discharge or in areas with highly erosive soils. (Please refer to Appendix C, appropriate drawings C-31)
- d. Energy Dissipation headwall shall be installed on all storm sewer pipe outlets unless the outlet is within the storm water detention / retention facility or is a culvert. The use of prefabricated headwalls with energy dissipation blocks is required. Rock channel protection immediately downstream of the device is still required; however the length of protection can be reduced by half. See Appendix C, appropriate drawing C-13. Culverts with erosive velocities

may incorporate energy dissipation headwalls in their design

- 6. **Sump Pump Lines** No sump pump lines may be connected to the sanitary sewer or outlet to the curb. A separate pipe of 4 or 6 inch diameter is to be run behind the back of the curb and tie into the nearest possible catch basin or storm manhole. The size of the sump line is to be determined as per Appendix D, Table D-7.
 - a. Standard "Y"'s or "T"s should be installed 10 feet from the property line on the downhill side of the lot and marked in the field. Cleanouts should be spaced approximately every 400 feet.
 - b. No downspouts may be tied to the sump line. All downspouts must be run separately to catch basins or released on splash blocks.
 - c. All sump pumps must be connected to the sump lines provided at the street or at an adjacent catch basin, storm sewer manhole or acceptable watercourse.
- B. Major System Design:
 - General The intent of planning a flood routing system is to ensure that storm water runoff which exceeds the capacity of the storm sewer system shall have a route to follow which will not cause a major loss of property or life. Flood routes are to be directed towards storm water retention / detention facilities or acceptable watercourse.
 - a. Minimum opening elevations are to be set by the engineer on lots adjacent to one-hundred (100) year flood routes and storm water retention / detention facilities. These elevations are to be a minimum of one (1) foot above the one-hundred (100) year water elevation. These elevations are to be clearly labeled on the plan and the record plat. A benchmark location and elevation should be noted on the final record plat.
 - b. Since streets may be used as a routing path, the major system must be taken into account in the initial design of the development. It shall be designed in such a manner as to direct the storm water into the detention or retention area.
 - c. Provide profile of major flood routes from centerline of street to rear of lot.

- 2. **Capacity** The combination of the major and minor system shall have the capacity to carry runoff from a 100 year frequency storm.
 - a. Where the street is designated as the major drainage way, the depth of flow shall not exceed 8 inches at the face of the curb.
 - b. When the major drainage way is located outside a street right-of-way, easements shall be provided and a grading plan is to be submitted with detailed elevations showing the flood being contained in this area.

C. Culvert Design:

 Methodology - Technical Release 55 and the Hydraulic Circular No. 5, which can be obtained from the Superintendent of Documents, U.S. Government Printing Office, are the required procedures for design.

2. Design:

- a. A single span culvert should always be used.
- b. All culverts shall be designed for the fifty (50) year storm with head water and a flood route provided to accept a one hundred (100) year storm.
- c. Maximum allowable fifty (50 year) head water elevation:

18" below top of the curb

12" below the edge of the pavement (non curb & gutter section)

- d. The design of the drainage system should not cause backwater onto any adjacent property or affect lowest openings on adjacent structures. If additional backwater is caused, an easement from the affected property owner must be obtained or redesigned for a lesser backwater condition. The backwater condition should be checked on the fifty (50) and one-hundred (100) year frequency storms. All easements shall be obtained for the one-hundred (100) year condition.
- e. A structure having a clear opening of 10 feet or more shall be classified as a bridge. See the Bridge Design section within this document.
- f. Entrance Loss Coefficient see Appendix D, Table D-8 represents standard entrance coefficients to be used in culvert design.

3. Design Considerations:

- a. Adjust the locations of inlets and outlets of a culvert as it relates to sidewalks, bicycle facilities, pathways or trails, houses and open space areas utilized as common playgrounds or areas, meeting places, walking paths or trails – such that it does not interfere or cause potential erosion.
- b. Structures crossing a public road not conveying storm water runoff or having a purpose other than storm water conveyance must submit Tunnel Maintenance Agreement.

D. Open Channel Design

 General - Any newly designed open channel shall only accommodate a small drainage area (i.e. lot swale). All other design drainage features shall be enclosed with storm sewer, with the exception of large, major channels. Relocated channels should have similar sinuosity, meander, and frequency. Large, major channels may fall within the requirements of the Butler County Flood Damage and Prevention Regulations, OEPA and or Army Corps of Engineers.

2. Design:

- a. Open channels are to be designed using a full flow 10 year frequency storm unless the channel is part of the major storm system then it must be designed using a 100 year storm frequency. Please refer to Appendix D, Table D-9 for a list of acceptable manning coefficients for use in the manning equation for open channel design.
- b. Special provisions such as a check or drop structure will be addressed on an individual basis.
- c. The longitudinal slope of a channel should be 1% or greater. Any channel with a slope below 1% or with a small continuous flow must have a paved bottom, or underdrained with a low flow pipe. All side slopes shall be 4:1 or flatter in residential areas and 3:1 or flatter in commercial and industrial areas unless otherwise approved by the County Engineer's Office.
- 3. **Permissible Velocities** In designing an open channel, the low flow and grade shall be addressed as to prevent stagnation. The velocity is to be calculated using a bank full condition or a minimum 10-year frequency storm, whichever is greater. Channel linings or protection shall conform to *Ohio Department of Transportation Location and Design Manual* (Ditch Design

Criteria 1102.3). Permanent protection shall conform to ODOT Specifications 659, 660, 670, or Supplemental Specification 836)

E. Storm Water Facilities -Detention / Retention

- General The objective of a detention/retention facility is to regulate the rate of runoff, control the peak discharges, and improve water quality by reducing the impact on the downstream drainage system. Design of the facility must account for vehicular access to and around the storm water facility for the purpose of maintenance, repair, and or replacement. In areas with geologic and hydrologic conditions that promote rapid infiltration of recharge waters to an aquifer; see Section 5.06, Ground Water Pollution Potential.
- 2. Design Criteria Storm water management facilities are to be designed with flow rates meeting the Butler County Modified Critical Storm Method in Appendix D, Table D-11. For all storm events greater than the Critical Storm, reduce the flow rate by one storm event (i.e. Post-100 to Pre-50, Post-50 to Pre-25, etc.). Facilities may incorporate the current Ohio Environmental Protection Agency Permit for Storm Water Discharges Associated with Construction Activity under the National Pollutant Discharge Elimination System (NPDES), provided the design meets the criteria specified in this document.

Traditional – Utilization of this facility occurs near a creek, stream or other receiving conveyance. This facility should be design with a staged discharge that meets the above design criteria.

- a. In detention facilities, a post-construction sediment trap shall be constructed immediately upstream of the facilities outlet structure. Sediment trap design shall comply with ODNR's *Rainwater and Land Development Manual*.
- b. Facility may be utilized as the site's temporary sedimentation and erosion control basin.

Side Saddle – The facility is to be utilized immediately adjacent to creeks and streams or when floodplain volume compensation is required. This facility should be design with a staged discharge.

 Maximum water surface elevation for storm water detention/retention shall be at or below the main channels 10 (ten) year storm elevation. Compensated floodplain volume may not be accounted for as required storm water storage however; it can be added to the storm water storage volume.

- A spillway is required at both the upstream and downstream end of the storm water facility. Spillways are to have protection from toe of channel to the toe of detention/retention.
- c. Upstream and downstream spillway is to be set at the channels 10 (ten) year flow elevation and designed for the channels 100 (one-hundred) year flowrate.
- d. May be utilized as the site's temporary sedimentation and erosion control basin.
- e. In detention facilities, a post-construction sediment trap shall be constructed immediately upstream of the facilities outlet structure. Sediment trap design shall comply with ODNR's *Rainwater and Land Development Manual*.

In-Line – A facility that is constructed in and across the existing creek or stream. This facility should be design with a staged discharge. Due to the nature of this facility, the design should be evaluated on a watershed scale. Assume the off-site watershed as fully developed without upstream storm water detention/retention facilities. These facilities may require Federal, State and or Local permits and approvals. Proof that these agencies have either approved or denied a request to install an inline storm water facility must be provided to the Planning Commission prior to construction drawing approval. These facilities are not eligible under the Ditch Maintenance Program.

- Prior to design of such facility, the developer/engineer shall scope the design parameters with the County Engineer's Office. In general, these facilities should evaluate watershed based water quality and quantity.
- b. Facilities may be subject to Army Corps of Engineers and/or Ohio Environmental Protection Agency reviews and permits.
- 3. **Design Requirements for all Storm Water Facilities** When designing a storm water facility, the following criteria must be followed as to provide for proper appearance, and maintenance.
 - a. The bottom of the detention area should be constructed with sufficient slopes to drain properly (.5% min).
 - b. All storm sewer pipe outlets are to be set above or at the normal water surface elevation of any pond; submerged or partially submerged pipes are not permitted. A submerged pipe at the outlet control structure to accomplish water quality volume is acceptable. Culverts connecting two or

more ponds may be submerged upon the approval of the County Engineer.

- c. Paved gutter or a low flow underdrain shall be constructed from all inlet pipes, and or swales, to the outlet structure. Concrete cut off walls shall be constructed at the beginning and end of the gutter except where the gutter intersects with a catch basin or headwall. Where two gutters intersect, large radii shall be used so that the change in direction of flow is gradual.
- d. Side slopes for detention facilities shall be no steeper than
 4:1 unless existing natural conditions do not make this possible and are not being disturbed as shown on the grading plan.
- e. Anti-seep collars shall be used on all pipe outlets of retention basins, ponds, and or storm water facilities that have incorporated water quality volume. For specifics on Anti-seep collars, see Appendix D, Table D-10.
- f. There shall be a minimum of twelve (12) inches of freeboard between the top of the dike and the postdeveloped 100 (one-hundred) year water surface in the facility, with the emergency spillway flowing at the predeveloped 100 (one hundred) year design flow.
- g. The emergency spillway shall safely pass the peak flow for a pre-developed 100 (one-hundred) year frequency storm with a safe velocity (8.0 fps max). The spillway is to be cut on existing ground or other protection on the fill slope be provided. Spillways constructed on fill dirt shall be constructed of concrete with a minimum thickness of six (6) inches. Rock channel protection or concrete matting shall be installed from the spillway down to the toe of the downstream slope of the facility or to the top of bank.
- h. The drainage easement for this facility shall encompass the Post-100 (onehundred) year water surface elevation plus a horizontal offset of ten feet (10') for maintenance and access.
- A twenty (20) foot access easement shall be provided for easy ingress and egress to and from the basin. Location of the access is preferred to be from an existing County or Township Thoroughfare directly to the storm water facility. This access shall have a maximum slope of 12%.
- j. Trash guards should be installed when clogging of the outlet structure is probable.

- k. Temporary riser pipes should be installed at all outlet pipes to the detention basins.
- I. Construct a sediment forebay at inlets to the storm water facility. Bottom of forebay is to be concrete hard surfaced.
- F. Bridge Design/Construction
 - Methodology Use Technical Release 55 (TR-55) to estimate peak runoff flow rates in conjunction with a HEC-RAS model in determining the limits of the existing and proposed one-hundred (100) year water surface elevation, and floodplain.
 - General A certified ODOT contractor is required for the installation of cast-in-place or pour-in-place structures. All designs shall conform to the latest edition of the Ohio Department of Transportation Bridge Design Manual unless specified in this document. To minimize bank erosion and failure, structures are to align with the existing channel. Design shall also comply with the Butler County Flood Damage Prevention Regulations.
 - 3. **Design** The following items must be addressed and included with the subdivision plan submittal:
 - a. Hydraulic and hydrologic analysis using TR-55 and HEC-RAS. Structure hydraulic evaluation shall be determined using the HEC-RAS program in lieu of manufacturer's design software. All designs shall pass the 100 (onehundred) year event.
 - b. Scour protection based upon an analysis, shown and noted on the plan.
 - c. Shop drawings and design detailed drawings (of both substructure and super-structure) stamped by a registered engineer
 - d. Structures shall be designed using HS-25 loading
 - e. Soil borings will be required for all structures. Borings are to be at the location of the proposed bridge substructure. Submit a soils report with the plan submittal, and include recommendation for the substructure and soil bearing capacity by a geotechnical engineer.
 - 4. **Design Requirements** Preferred designs for larger spans are concrete pre-cast single span units or concrete box beam. A single span opening is required for all structures having a clear span of 100 (one hundred) feet or less. A multi-span structure is permissible for spans greater than 100 (one hundred) feet. Precast concrete box units are permissible for structures having a

clear span less than 16 (sixteen) feet. The engineer shall also consider maintenance of the structure when determining the structures height. At a minimum, the height of the structure shall be 8 (eight) feet.

- 5. **Right-of-Way Requirements** In all cases, the engineer shall consider how to access the structure for maintenance. A right-ofway shall be provided around the entire structure at a minimum distance of 30 (thirty) feet. Additional right-of-way or access easement maybe required due to site conditions. Show right-ofway as proposed dedication on the record plat, not by easement.
- 6. Structures crossing a public road not conveying storm water runoff or have a purpose other than storm water conveyance must enter into a Tunnel Maintenance Agreement.
- G. Water Quality Policies (Per Ohio EPA Permit for Storm Water Discharges Associated with Construction Activity); Non-point Source Pollution
 - Refer to Ohio EPA Post-Construction Q&A Document for guidance. References made to MS4 or Engineer of local jurisdiction must be discussed and approved by the County Engineer, and or Planning Commission.
 - 2. When designing storm water facilities for both water quality volume and flood/peak discharge control, the flood/peak control volume shall be stacked on top of the required water quality volume (in other words, use the top of the water quality volume as the base elevation for the flood control volume).
 - 3. Water quality openings smaller than four (4) inches, or having an equivalent area, are not permitted in dry (detention) facilities. In designed retention ponds, the water quality opening shall be submerged or protected to prevent clogging.
 - 4. In the case where the water quality volume outlet is smaller than four (4) inches for a dry facility, an alternate BMP is required.
 - 5. The use of alternative BMP not listed in Ohio EPA Permit for Storm Water Discharges Associated with Construction Activity must have written approval from Ohio EPA prior to plan approval by the MS4 or County Engineer.
 - 6. When an existing storm water facility, utilized for new development has not incorporated OEPA's water quality volume, the facility shall be retrofitted and brought into conformance with the current Ohio Environmental Protection Agency Permit for Storm Water Discharges Associated with Construction Activity under the National Pollutant Discharge Elimination System (NPDES).

- 7. Water Quality BMP's for public roadways, and or streets, must be within the public right-of-way. The design of BMP's within the public right-of-way must comply with the current *ODOT Location and Design Manual Volume Two, Drainage Design.*
 - a. Exception: Water Quality BMP's are not required to be constructed within the public right-of-way if a regional water quality BMP is to be constructed, and owned and operated by the MS4. This requires the developer to meet the requirements of acceptance of the BMP by the MS4. IE Ditch Petition or Storm Water Maintenance Agreement, see Section 5.07 POST-CONSTRUCTION STORM WATER OPERATION & MAINTENANCE PLAN
- 8. All developments are required to regulate the contribution of pollutants to the Municipal Separate Storm Sewer System (MS4) owned or operated by Butler County. Allowable storm water discharges are defined in the Illicit Discharge Detection and Elimination Regulations, as adopted by the County Commissioners in resolution No. 09-11-1954.

5.06 Ground Water Pollution Potential; Non-point Source Pollution

- A. General The intent of this section is to determine how vulnerable ground water is to contamination. Designers shall refer to the latest edition of the *Ground Water Pollution Potential of Butler County, Ohio* prepared by the Ohio Department of Natural Resources, Division of Water – Ground Water Resources Section and Groundwater Research Center, University of Cincinnati or approved DRASTIC Map.
- B. Purpose To assist developers, engineers, planners, local officials and general public in evaluating the potential for contamination from sources of pollution. Pollution potential maps may also be applied successfully where non-point source pollution is a concern. Non-point source pollution can occur when land use activities are changed or by the addition of impervious area. Reference ODNR Fact Sheet 97-43 & 44. Also reference the *Trenton Area Storm Water Management Project*, prepared by FMSM 2007 for the Butler County Storm Water District. Susceptible aquifer recharge areas are those with geologic and hydrologic conditions that promote rapid infiltration of recharge waters to groundwater aquifers. This includes any portion of Butler County with a DRASTIC index of greater than or equal to 180 points as determined using the U.S. Environmental Protection Agency DRASTIC methodology: *Drastic: A Standardized System for Evaluating Ground Water Pollution Using Hydrogeologic Settings* (EPA 600287035).
- C. **Design** Maps providing information on relative vulnerability (DRASTIC) can be used to guide the selection and implementation of appropriate

best management practices in different areas. Best Management Practices should be chosen based upon consideration of chemical and physical processes that occur from the site, and the effect these processes may have in areas susceptible or highly susceptible to contamination. In these areas, infiltration of the water quality volume is required. A Site Sensitivity Analysis should be performed that evaluates the effectiveness of infiltration. The analysis may eliminate an infiltration practice or determine an appropriate way to avoid groundwater pollution.

- 1. Components of a Site Sensitivity Analysis:
 - a. Runoff water quality. If runoff water will contain any significant concentration of soluble pollutants that could degrade ground water quality, such as runoff from industrial sites or even from heavily salted parking lots and roadways, a careful review of the pretreatment systems is necessary to assure that the pollutants of concern do not simply pass through.
 - b. Uses of the ground water -- Is the ground water a solesource aquifer, in a wellhead-protection area or a significant natural resource? If not, are there current or likely future drinking water supply wells tapping the receiving aquifer in the vicinity?
 - c. Geologic (ground water) sensitivity. A site with a highly sensitive geology, such as those with carbonate or karst features, may eliminate these areas from consideration.
 - d. Depth to water table. The water table must be far enough below the bottom of the structure to allow the structure to function hydraulically.
 - e. Soil permeability. Soil permeability must be great enough to drain the system in a reasonable amount to time, generally 72 hours or less.
 - f. Soil characteristics. Evaluate the soil's ability to trap or treat pollutants expected at the given site and provide the required infiltration rate.

Pollution Potential Index Range		
Susceptible	180-199	Pretreatment BMP required prior to storm water facility
Highly Susceptible	200+	Pretreatment train (or series) of BMP's prior to storm water facility

D. **Pretreatment BMP's** – Used to remove dissolved materials, silt, solids, floating materials, grease and oils from runoff to the maximum extent

feasible before runoff enters an infiltration device. These devices can be ponds with skimmers, vegetative filters, sand filters, grassed swales, biofilters, bioretention, filter strips or oil/grit separators prior to infiltrating storm water.

5.07 Post-Construction Operation & Maintenance Plan

The developer of any subdivision with a storm water system must provide the Planning Department with written evidence of a perpetual postconstruction storm water operation & maintenance plan and the manner in which it is to be funded. The plan shall be structured so that all property owners within the subdivision shall participate in the maintenance funding of the storm water facilities. The *Ohio Revised Code* (Chapter 6131, Ditch Petition) outlines one acceptable method by which a perpetual maintenance agreement is established with the county and funded through tax assessments on the subdivided property. [No retention ponds or in-line facilities will be accepted under this method]. Another acceptable method of maintenance is through an incorporated Home Owners Association with the abilities to maintain all storm sewer facilities outside the right-of-way. A copy of the Association documents is to be submitted to the Butler County Engineer's Office for review. At a minimum the following is required in the post-construction storm water operation & maintenance plan;

- 1. Identify the responsible party or person for the operation and maintenance of the storm water facilities
- 2. Provide contact information for the responsibly party/person. Include name, address, telephone number and email address if available
- 3. A full set of approved construction drawings showing the location and type of storm water facilities
- 4. Standard inspection and maintenance schedule for the storm water facilities
- 5. Routine and non-routine maintenance tasks for storm water facilities
- 6. A copy of the subdivision record plat showing all easements for storm water facilities
- 7. Identification and implementation of a funding mechanism for operation and maintenance of the storm water facilities

Once the plan has been approved by the County Engineer, the owner/developer shall record the document at the County Recorder's Office. Proof of recording will be required prior to final plat approval.

5.08 Construction Requirements

- A. Street name signs of a type meeting the standard specification of the County Engineer shall be erected at each highway, road or street intersection. (Please refer to Appendix C, drawing C-23).
- B. Permanent Monumentation:
 - All permanent corners of the subdivision (any point of change in bearing) shall be either six inch diameter concrete monuments, thirty-six inches in length, with a suitable centerpoint (one-half inch iron pin, cross notch, or brass plate) or one inch diameter solid iron pins with minimum thirty inch length.
 - 2. All street centerlines at intersections, center and offsets of cul-desacs, points of tangency and points of curvatures shall be marked with three quarter inch iron pins, minimum thirty inches in length and one quarter inch counter sunk or six inch railroad spikes one quarter inch counter sunk.
 - 3. All monumentation must be in place prior to the release of the performance bond.
 - 4. All subdivision monumentation shall be tied to state plane coordinates if a state plane coordinate reference monument exists within one half mile of the subdivision. It is important that coordinate pairs for the subdivision be referenced to a monument for the section within which your subdivision lies.
- C. The subdivider shall be responsible for the movement of traffic over the work in accordance with the Ohio Manual of Uniform Traffic Control Devices (OMUTCD) until the street is accepted in accordance with Chapter 711 of the Ohio Revised Code. This includes installation of stop signs in accordance with the guidance with the OMUTCD. The subdivider shall also provide ingress and egress for residents and the general public.
- D. Top course of pavement is not to be placed for a minimum of twelve (12) months after the leveling course and fifty (50) percent of the homes are completed. If after two (2) years, fifty (50) percent of the homes have not been completed, then the top course may be applied. As built drawings must be submitted prior to the placement of the top course of pavement (See Section 3.25 for details).
- E. All fills are to be constructed per ODOT Standards, per Section 203 ODOT Construction and Material Specs unless otherwise specified by the appropriate approving authority.
- F. All construction is to be done in accordance with the latest edition of the Ohio Department of Transportation Construction and Material Specifications Book.

- G. It shall be the responsibility of the developer of the subdivision to maintain a clean street surface during all phases of construction. All future plat approvals concerning the subdivision will be suspended unless the streets are clean. In cases where streets are not kept clean after the plat has been recorded then work will be suspended on building under construction and no new permits will be issued in that subdivision until the streets are cleaned. It will be the responsibility of the developer to establish a method to achieve this and if necessary require it of the builders.
- H. All ponds remaining as a part of the proposed subdivision development shall be in an acceptable condition based on standards outlined by the NRCS Engineering Standards for ponds prior to recording of the final plat.
- I. Developer and Contractor are responsible to identify an area or areas where concrete trucks, during the construction of the roadway and homes, may washout and clean their vehicles. Purpose of the washout area(s) is to reduce the potential for and illicit discharge into a stream, creek, drainage swale or channel, river, and storm sewer catch basin or storm water detention/retention facility. The washout area(s) are to be shown on the construction drawings.

5.09 Failure to Comply

- A. Whenever public improvements have not been constructed and/or maintained in accordance with these regulations, the Board of County Commissioners may exercise its rights of;
 - 1. Foreclosure of the bonds
 - 2. Non-acceptance of future record plats
 - 3. Suspension of Earth Moving, Driveway, Building, and/or Lot Erosion Sediment Control permits
- B. Whenever public improvements have not been constructed and/or maintained in accordance with these regulations, the Butler County Planning Commission may exercise its rights to;
 - 1. Deny future Preliminary Plat approval in developer associated subdivisions
 - 2. Deny future Final Plat approval in developer associated subdivisions
 - 3. Suspend Preliminary Plat approval in all developer associated subdivisions

Water and Sanitary Sewer Improvements

6.01 Water Main Specifications

- A. Water Main
- (1) Size:
 - a. Residential Area 8" Minimum except for short cul-de-sacs and some secondary loop connections which may be 6" if approved by Butler County Water & Sewer Department.
 - b. Commercial/Industrial Area 10" Minimum unless specifically authorized by Butler County Water & Sewer Department.
- (2) For materials and design criteria applicable to water mains, fittings, valves, hydrants, and service connections, please refer to the Butler County Water & Sewer Department's *Standard Specifications for Water & Sanitary Sewer Construction* and the *Developer's Manual*.

B. Valves

Water valves shall be located every 800' main line extension and at each branch main connection. Valves located at street intersections shall be placed at the radius tangent point. Between intersections valves shall be placed at or near property line.

C. Fire Hydrants

Fire hydrants shall be located so as to generally provide a 250' radius coverage. Hydrants located at street corners shall be placed near the radius tangent point. Hydrants located between intersections shall be placed at property lines.

D. Service Connection

- (1) A service connection shall be installed for each serviceable lot ending with a curb stop just behind the easement or right-of-way line. Minimum depth shall be 48".
- (2) A 2 x 4 Service Marker shall be placed in a vertical position at the end of each service connection, extending approximately 3' above the existing grade. Marker shall be painted blue.
- (3) It is the responsibility of the developer, builder and lot owner to see that the meter pit or curb stop-box is adjusted to finished grade.

E. Inspection

- All work and materials must be inspected by an authorized agent of the Butler County Water & Sewer Department. Contractors must notify the Department at least 48 hours in advance of initiating construction or amending a construction schedule.
- (2) Fees are to be paid according to schedules kept by the Butler County Water & Sewer Department.
- (3) A hydrostatic and purity test shall be conducted prior to acceptance. Tests shall be conducted by the contractor under the supervision of the County. Please refer to the Butler County Water & Sewer Department's *Standard Specifications for Water & Sanitary Sewer Construction* and the *Developer's Manual* for testing standards.
- (4) Initial acceptance may occur only after the water mains and all appurtenances have been installed, tested and approved; as-built drawings approved; and a one (1) year Maintenance Bond is submitted. Final acceptance and the release of the Maintenance Bond may occur only after final grade is established; appurtenances are adjusted to final grade; concrete collars are set around each valve box; at least one full year of satisfactory operation is achieved; and final inspection has passed.

F. Water Easements

Water mains installed outside the public right-of-way shall be located in an easement having a minimum width of 20 feet (10 feet each side of the centerline). Private water services installed within said easement shall extend to the edge of the easement with meter pits located at the edge of the easement.

G. Extension to Development Boundaries

Water mains must be extended to the development boundary along each public roadway within or adjacent to the development.

6.02 Design Standards for Sanitary Sewers

A. Minimum Sewer Size

No sewer shall be less than eight inches (8") in diameter. Trunk sewers shall be sized in accordance with master plans in the Butler County Water & Sewer Department. For materials and design criteria applicable to sanitary sewer mains, please refer to the Butler County Water & Sewer Department's Standard Specifications for Water & Sanitary Sewer Construction and the Developer's Manual.

B. Manhole Spacing

- (1) Manholes shall be located at all changes in sewer size, material, grade, and alignment. Manholes shall also be located at all junctions of public sewer. Maximum spacing for all pipe sizes is 400 feet.
- (2) For materials and design criteria applicable to sanitary sewer manholes, please refer to the Butler County Water & Sewer Department's Standard Specifications for Water & Sanitary Sewer Construction and the Developer's Manual.

C. Inspection

- All work and materials must be inspected by an authorized agent of the Butler County Water & Sewer Department. Contractors must notify the Butler County Water & Sewer Department at least 48 hours in advance of initiating construction or amending a construction schedule.
- (2) Fees are to be paid according to schedule kept by the Butler County Water & Sewer Department.
- (3) For testing and construction requirements, please refer to the Butler County Water & Sewer Department's Standard Specifications for Water & Sanitary Sewer Construction and the Developer's Manual.

D. Private Sewer Laterals

A private sewer lateral shall be installed for each lot or building site during the construction of local sewers. Private sewer laterals shall be six inches (6") in diameter and shall terminate at a point ten (10) feet inside of the property line or right-of-way line.

E. Sewer Easements

Sewers installed outside the public right-of-way shall reside in an easement of a width to be determined by the depth of the sanitary sewer. Private sewer laterals installed within said easement shall extend to the edge of the easement.

F. Extension To Development Boundaries

All sewers shall be extended to all upstream boundaries of the property or development being served except for those areas where the natural or planned topography makes it unreasonable to plan for later extensions of the sewer.

G. County Water & Sewer Specifications

For additional information regarding the design and installation of water and sanitary sewer mains, please refer to the Butler County Water & Sewer Department's *Standard Specifications* and *Developer's Manual*. Both

documents can be found online at <u>des.butlercountyohio.org</u> or can be obtained from the Butler County Water & Sewer Department, located on the fifth floor of the Administrative Center, 130 High Street, Hamilton, Ohio.

Soil and Water Management Standards

7.01 General Statement

These regulations establish technically feasible and economically reasonable standards to achieve a level of subdivision design and construction to minimize damage to property, degradation of natural resources, and to promote and maintain the health, safety and general well-being of all life and inhabitants of Butler County. Further, these regulations:

- A. Promote development while keeping downstream flooding, erosion and sedimentation at existing levels;
- B. Reduce damage to receiving streams and drainage systems which may be caused by impairment of their capacity which may be caused by sedimentation.

7.02 Performance Standards

A. Permit Required

Owner/operator must obtain a Butler County Earth Moving Permit with construction drawing approval from the Butler County Storm Water District before any Earth Disturbing Activity may begin, including clearing, grubbing, and cut/fill activity unless the proposed project is regulated by Section 5.01, Lot Erosion and Sediment Control permit. All projects that have one acre or more of disturbance must have either an Earth Moving Permit or a Lot Erosion and Sediment Control Permit.

B. Erosion and Sediment Control

To the maximum extent practicable, having all ESC's from the approved construction drawings installed and functioning, Erosion and Sediment is to be kept on Development Area. Erosion and sedimentation caused by storm water runoff over the Development Area due to Earth Disturbing Activities shall be stabilized and confined to within the boundaries of the Development Area.

C. Storm Water Discharges.

The Butler County Storm Water District has defined allowable storm water discharges per its NPDES Phase II Permit as described in its *Illicit Discharge Detection and Elimination Regulations*.

D. Structural and Nonstructural Soil and Water Management

- Non-structural and Structural Controls shall be designed in accordance with requirements and standards specified in these regulations and/or the current Ohio Environmental Protection Agency Permit for Storm Water Discharges Associated with Construction Activity under the National Pollutant Discharge Elimination System (NPDES).
- (2) Permanent Structural and Non-structural Controls shall be placed in easements and recorded on the subdivision record plat and/or property deeds on which they are located and shall remain unaltered unless first approved by the Butler County Engineers Office. See Article VIII Subdivision Plat Requirements.
- (3) In designing Structural Controls, access, storage volume, flood prevention and water quality benefits shall be considered to the maximum extent practicable to protect life and property. Refer to Article V for additional design criteria.

E. Channel Protection

- The Owner/Operator will protect channels from degradation due to water run-off. Structural or Non-structural Controls shall be constructed by the Owner/Operator as prescribed in the latest edition of *Rainwater and Land Development* and/or *ODOT Location & Design Manual*.
- (2) The design and installation of any storm water Channel shall comply with Article V of these regulations.
- F. Unsuitable Soils
- (1) When a soil with a high water table, as defined in the Butler County Soil Survey, is present, a note must be placed by the designing engineer on the final plat stating: "High water table soils are apparent in this area. If basements are constructed, it is the responsibility of the builder to take special precautions to ensure the basement stays dry." If this note is not on the plans as the Butler Soil and Water Conservation District is reviewing the plans, revisions will be required with the note before the plans will be approved.
- (2) Upon review of the construction drawings by Butler Soil and Water Conservation District, if soil type and/or severity of slopes require additional testing as determined by the Butler Soil and Water Conservation District, a report from a State Registered geotechnical engineer will be required. The report results of surface and subsurface exploration, conditions of the land, procedures for performing the grading operations, maximum slope to satisfy stability, and other geotechnical design requirements for the requested lots will determine if there are problematic conditions to overcome, what those problematic conditions may be, and possible solutions to overcome them to protect

the home buyer. This report must be received and checked by the Butler Soil and Water Conservation District so that the conclusions appear reasonable and credible prior to construction drawing approval. The results of this report may warrant additional studies prior to the building permit being issued due to building code requirements.

- (3) If a hydric soil or soils with hydric components, wetland vegetation and/or possible hydrologic conditions are present, Butler Soil and Water Conservation District may require a wetland delineation study be done. A note shall be placed on the preliminary plat stating, "A wetland delineation study shall be complete for the necessary lots prior to construction drawing approval." The delineated wetland boundaries shall be shown on the construction drawings, final plat and included within an easement on the property.
- G. Temporary Soil Stabilization of Development Area due to Earth Disturbing Activity and Soil Stockpiles
- (1) Temporary Vegetation shall be established within Development Areas subject to Earth Disturbing Activities as specified in Table 7-1, below.
- (2) Soil stabilization measures should be appropriate for the time of year, Development Area conditions, and estimated time of use. Stabilization methods include vegetation, mulching, and the early application of gravel base on areas to be paved.
- (3) Topsoil to be stored on Development Area shall be stabilized with quick growing plants or other means, so that it is protected from wind and water erosion. Topsoil to be redistributed on project site shall be maintained in a usable condition for sustaining vegetation and reused on the Development Area.

Area requiring Temporary Vegetation	Time frame to apply Temporary Vegetation
Any disturbed areas within 50 feet of a stream and not at final grade.	Within 2 days of the most recent disturbance if that area will remain idle for more than 21 days.
For all construction activities within Disturbed Area, including soil stockpiles, that will be dormant for more than 21 days but less than one year.	Within 7 days of the most recent disturbance within the area.
Disturbed areas that will be idle over winter.	Prior to onset of winter weather.

Table 7-1: Temporary Soil Stabilization

- H. Permanent Soil Stabilization of Development Area due to Earth Disturbing Activity
- (1) Permanent Vegetation shall be established on Development Areas as specified in Table 7-2, below.
- (2) Permanent vegetation shall not be considered established until a ground cover is achieved which is mature enough to control soil erosion.

Table 7-2: I	Permanent Soil	Stabilization
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Area requiring Permanent Vegetation	Time frame to apply Permanent Vegetation
Any area that will lie dormant for 6 months or more	Within 7 days of the most recent disturbance
Any area at final grade	Within 7 days of reaching final grade within that area

I. Cut And Fill Slopes

- (1) Cut and fill slopes shall be designed, constructed, and stabilized in a manner which will minimize erosion. Consideration should be given to the length and steepness of the slope, the soil type, upslope drainage area, groundwater conditions, and other applicable factors. If, after final grading, there is excessive erosion, where rill erosion becomes gully erosion, additional slope stabilizing measures by the owner, developer, or builder will be required until the problem is corrected. The following guidelines are provided to aid in developing an adequate design.
 - a. Roughened soil surfaces are generally preferred to smooth surfaces on slopes.
 - b. Diversions should be constructed at the top of long steep slopes which have significant drainage areas above the slope. Diversions or terraces may also be used to reduce slope length.
 - c. Concentrated storm water should not be allowed to flow down cut or fill slopes unless contained within an adequate channel, flume or slope drain structure.
 - d. Wherever a slope face crosses a water seepage plane which endangers the stability of the slope, adequate drainage or other protection should be provided.
 - e. Fills of five (5) or more feet located at the proposed primary structure location and 10 feet around the perimeter of the proposed primary structure should be compacted to densities not less than 98 percent of the Standard Proctor maximum Dry Density, ASTM D698. All other fill should be compacted to at least 95 percent Standard Proctor Dry Density ASTM D698. Compaction test results shall be submitted and approved by the Butler Soil and Water Conservation District prior to final plat approval.

J. Protection Of Adjacent Properties/Public Right-of-Ways

Properties, public right-of-ways, and thoroughfares adjacent to the Development Area of an earth disturbing activity shall be protected from sediment deposition. This may be accomplished by preserving a wellvegetated Buffer at the perimeter of the Development Area; by installing perimeter controls such as sediment barriers, filters, dikes, sediment basins; or by a combination of such measures.

K. Erosion & Sediment Control's (ESC's)

- (1) ESC's shall be used to control erosion and trap sediment on a Development Area remaining disturbed for more than 14 days. Such structures may include, but are not limited to, silt fences, mulch berms, storm drain inlet protection, sediment traps, sediment basins, and diversions or channels which direct runoff to a sediment basin. All ESC's must be installed to function as their designed intent.
- (2) ESC's shall be constructed as a first step in grading and be made functional before upslope Earth Disturbing Activities take place. Earthen ESC's such as dams, dikes, and diversions shall be seeded and mulched as soon as the installation is complete. ESC's shall be functional throughout the course of Earth Disturbing Activity and until the Development Area is stabilized with Permanent Vegetation.
- (3) Sheet flow runoff from the Development Area shall be intercepted by silt fence, mulch berms or diversions. Silt fence or mulch berms shall be placed on a level contour and shall be capable of temporarily ponding runoff. As a guideline, the relationship between the maximum slope lengths above silt fence for a particular slope range is shown in Table 7-3 below or a plan of design from a professional engineer may be submitted, whichever is more appropriate.

Maximum Slope Length Above Silt Fence				
Slope		Slope Length (ft.)		
0% - 2%	Flatter than 50:1	250		
2% - 10%	50:1 - 10:1	125		
10% - 20%	10:1 - 5:1	100		
20% - 33%	5:1 - 3:1	75		
33% - 50%	3:1 - 2:1	50		
> 50%	> 2:1	25		

Table 7-3: Maximum Slope Length Above Silt Fence

Note: For larger drainage areas, see standards for temporary diversions, sediment traps and sediment basins.

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Drainage Area:

- (4) Storm water diversion practices shall be used to keep runoff away from disturbed areas and steep slopes. Such devices, which include swales, dikes, or berms, may receive storm water runoff from areas up to 10 acres.
- (5) Whenever storm water detention is required per Article V, the storm water runoff from the Development Area shall pass through a sediment basin or other suitable sediment trapping facility before discharge to Waters of the State. The Butler County Storm Water District may require sediment basins or traps for smaller disturbed areas where deemed necessary due to Development Area challenges or issues that are not controllable with standards set forth within these regulations.

L. Stabilization Of Waterways And Outlets

- (1) All on-site, man-made storm water conveyance channels shall be designed and constructed to withstand the expected velocity of flow without erosion as described in Article V. Conveyance channels are to be seeded and mulched within 14 days of completion. Methods adequate to prevent erosion shall also be provided at the outlets of all pipes and paved channels. Outlet will be stabilized with rock rip rap and/or other energy dissipation devices as approved by the Butler County Storm Water District.
- (2) Channel design and preventative scour measures to prevent erosion are to be designed per Article V.

M. Storm Sewer Inlet Protection

All storm sewer inlets shall be protected so that sediment-laden water will not enter the conveyance system without first being filtered or otherwise treated to remove sediment. A rolled tile wrapped inlet sediment filter shall be used for all curb inlet protection or equivalent BMP.

N. Working In or Crossing Watercourses

- (1) All activities shall be kept out of watercourses to the maximum extent possible. Where in-channel work is necessary, precautions shall be taken to stabilize the work area during construction to minimize erosion. The channel (including bed and banks) shall be restored to its original crosssection and all disturbed area stabilized immediately after in-channel work is completed.
- (2) Where a watercourse will be crossed regularly during construction, a temporary Stream crossing shall be constructed per specifications of the U.S. Army Corps of Engineers and the latest edition of the *Rainwater and Land Development Manual*. The Stream crossing will be used for the shortest period possible to complete the work, removed following Development Area construction, and restored as described in Section 2.12 (a) above.

0. Maintenance and Removal Of Temporary Measures

- (1) All temporary erosion and sediment control practices shall be maintained and repaired by the Owner/Operator to assure continued performance.
- (2) All temporary erosion and sediment control measures shall be removed within thirty (30) days after final Development Area stabilization is achieved or after the temporary measures are no longer needed. Trapped sediment and other disturbed soil areas resulting from the removal of temporary measures shall have the final grade re-established and be permanently stabilized to prevent further erosion and sedimentation.
- P. Control Of Construction Development Area Debris and Wastes
- (1) All owners, applicants, contractors, and developers shall properly dispose of discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste on the Development Area in order to keep streets and gutters clear of all sediment and debris from the Development Area. Any burial pits on site must be shown on the final plat.
- (2) A defined washout area shall be located within the Development Area and protected such that washout does not leave the area. Proper removal and disposal of the material shall take place upon hardening or drying.
- Q. Use, Safety, and Maintenance of Storm water / Erosion Control Practices
- (1) Storm water management practices shall be designed for the permitted use of the Development Area and function safely and with minimal maintenance.
- (2) If an inspection reveals that a control practice is in need of repair or maintenance because it is failing, with the exception of a sediment settling pond, it must be repaired or maintained within three days of the inspection by Owner/Operator. Sediment settling ponds must be repaired or maintained to the approved construction drawings within 10 days of the inspection Owner/Operator.
- R. Inspection of Storm Water Controls/ Internal Inspections
- (1) Development Area discharge locations shall be inspected to ascertain whether erosion and sediment control measures are effective in preventing significant impacts to the maximum extent practicable to the receiving Waters of the State.
- (2) All controls on the Development Area shall be inspected at least once every seven calendar days and within 24 hours after any storm event greater than one-half inch of rain per 24 hour period and repaired or maintained as described in Section 2.17 above. The Development Area Owner/Operator shall assign a qualified inspection personnel, experienced in the installation and maintenance of erosion and runoff

controls, to conduct these inspections to ensure that all storm water control practices are functional, that all provisions of the SWP3 and this regulation are being met, and whether additional control measures are required.

- (3) All ESC's shall be periodically inspected by the developer to ensure proper function and to identify failures. If the inspection reveals that a control practice is in need of repair or maintenance, with the exception of a sediment settling pond, it must be repaired or maintained within three(3) days of the initial inspection. Sediment settling ponds must be repaired or maintained within 10 days of the inspection.
- (4) The Development Area Owner/Operator shall maintain for three (3) years following the final stabilization of the Development Area a record summarizing inspections, names(s) and qualifications of personnel making the inspections, the date(s) of inspections, major observations relating to the implementation of the SWP3, a certification as to whether the Development Area is in compliance with the SWP3, and identification of any incidents of non-compliance.

S. Accessibility and Easements

All permanent storm water management measures shall have easements sufficient to cover the facility and to provide access for inspection and maintenance. See Articles V and VIII for additional information.

T. General Standards

The standards identified in this Section are general guidelines. Each application shall be reviewed on a case by case basis and some may require additional and more stringent requirements, while others may have individual requirements waived by the authorized agent.

7.03 Storm Water Pollution Prevention Plan (SWP3) Requirements

- A. Storm Water Pollution Prevention Plans (SWP3s) are intended to provide information on all soil erosion and runoff control activities and Best Management Practices (BMPs) to be used and incorporated on the Development Area both during and after Development Area development. This information includes, but is not limited to, Development Area grading, storm water management facilities and practices, erosion and runoff control information, maintenance plans, and other measures that focus on managing the effects of Earth Disturbing Activities on the Development Area.
- B. Each SWP3 shall provide Development Area designs that meet the Performance Standards presented in Section III and provide practical treatment for both water quality and quantity of storm water from the Development Area as appropriate.

- C. In general, SWP3s need to address:
 - Erosion and Sediment Control. Providing measures that endeavor to ensure that Earth Disturbing Activities at the Development Area during and after development will be managed in a manner that will not increase erosion and sedimentation, to the maximum extent practicable, from the Development Area, resulting in impacts to water quality and that the Performance Standards specified in Section II are met.
 - 2. **Runoff Control.** Providing measures to ensure that the rate of surface water runoff from the Development Area during and after construction will not exceed pre-development conditions and that meet the Performance Standards specified in Section II.
- D. The SWP3 shall specifically include all the following:
 - 1. A **Development Area Plan Map** that shows the location of existing features and proposed improvements on the Development Area including:
 - a. Total area of the Development Area and the area of the Development Area that is expected to be disturbed (i.e. grubbing, clearing, excavation, filling or grading, including off-site borrow areas).
 - b. Known surface water locations, including springs, wetlands, Streams, lakes, water wells, etc., on or within 50 feet of the Development Area, including the boundaries of known wetlands or Stream channels and first subsequent named receiving water(s) the Owner/Operator intends to fill or relocate for which the Owner/Operator is seeking approval from the Army Corps of Engineers and/or Ohio EPA.
 - c. The general directions of surface water flow and 100-year floodplain when applicable.
 - d. All proposed improvements, including buildings, retaining walls, sidewalks, streets, parking lots, driveways, utilities and storm water basins, drainage impoundments, channels and outlets, etc.
 - e. Appropriate soil information for the Development Area describing locations of bedrock, unstable or highly erodible soils as determined by the Butler County Soil Survey, and/or soil tests. Show location of any soil test borings on plan. Other soils information such as permeability, high water table, etc. may be mentioned.

- f. If required by preliminary plat approval the geotechnical study must be completed and approved at the SWP3 review step.
- g. An estimate of the impervious area and percent imperviousness created by the Earth Disturbing Activity.
- 2. The contents of the SWP3 required by the current Ohio Environmental Protection Agency Permit for Storm Water Discharges Associated with Construction Activity under the National Pollutant Discharge Elimination System (NPDES) and incorporated here by reference. This Plan may be submitted as developed for the Ohio EPA, in conjunction with the other requirements of Subsection 5.04. The contents of the Ohio EPA's SWP3 include, but are not limited to:
 - a. A description of current land uses at the Development Area.
 - b. Existing data describing if available, the quality of any discharge from the Development Area.
 - c. Appropriate soil information for the Development Area describing locations of bedrock, unstable, or highly erodible soils as determined by the Butler County Soil Survey and/or soil tests. Show location of any soil test borings on plan. Other soils information such as permeability, perched water table, etc. may be mentioned.
 - d. A determination of runoff coefficients or curve numbers for both the pre-construction and post construction Development Area conditions.
 - e. For all Earth Disturbing Activities (involving the disturbance of five or more acres of land or will disturb less than five acres, but part of a larger common plan of development or sale which will disturb five or more acres of land), a description of post construction BMP(s) chosen and designed to detain and treat a water quality volume (WQv) equivalent to the volume of runoff from a 0.75-inch rainfall (See Ohio EPA Construction Activity Permit for methodology). Design of water quality volume within detention / retention facilities must comply with Article V.
 - f. For all small Earth Disturbing Activities (which disturb one or more, but less than five acres of land and is not a part of a larger common plan of development or sale which will disturb five or more acres of land), a description of measures that will be installed during the development process to control pollutants in storm water discharges

that will occur after construction operations have been completed.

- g. An implementation schedule which describes the sequence of major construction operations (i.e., grubbing, excavating, grading, utilities and infrastructure installation) and the implementation of erosion, sediment, and storm water management practices or facilities to be employed during each operation of the sequence.
- For subdivided developments where the SWP3 does not call for a centralized sediment control capable of controlling multiple individual lots, a detail drawing of a typical individual lot showing standard individual lot erosion and sediment control practices according to Section V.
- A detailed description of the storm water controls to be incorporated and how these meet or exceed the appropriate Performance Standards presented in Section II. This shall include the identification of which entity (developer, contractor, owner, etc.) is responsible for implementation of each individual control (e.g., contractor A will clear land and install perimeter controls and contractor B will maintain perimeter controls until final stabilization).
- j. A detailed maintenance plan that describes procedures (e.g. inspections- see section 2.18 Inspection of Storm Water Controls/ Internal Inspections) needed to ensure the continued performance of control practices shall be located at the entrance of the Development Area or at the job trailer in a well-marked container accessible at all times. Such plans must ensure that pollutants collected within structural post-construction practices, be disposed of in accordance with local, state, and federal regulations.
- E. Development Area Map that includes:
 - 1. Limits of Earth Disturbing Activity of the Development Area including associated off-site borrow or spoil areas.
 - 2. Soil types on the Development Area, including locations of unstable or highly erodible soils.
 - 3. Existing and proposed 2 foot contours. A delineation of drainage watersheds expected during and after major grading activities as well as the size of each drainage watershed, in acres.
 - 4. Existing and planned locations of buildings, roads, parking

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facilities and utilities.

- 5. The location of all erosion and sediment control practices, including areas likely to require temporary stabilization during development of the Development Area.
- 6. Sediment and storm water management basins noting their sediment settling volume and contributing drainage area.
- 7. Permanent storm water management practices to be used to control pollutants in storm water after construction operations have been completed.
- 8. Areas designated for the storage or disposal of solid, sanitary, and toxic wastes, including dumpster areas, cement truck washout areas, and vehicle fueling and maintenance.
- 9. The location of designated construction entrances where vehicles will access the Development Area.
- 10. The location of any in-Stream activities, including Stream crossings.
- F. Copies of pertinent Notices of Intent (NOI), permits, public notices and letters of authorization must be included with SWP3 submissions. These may include, but are not limited to, Ohio EPA NPDES Permit authorizing storm water discharges associated with construction activity, Ohio EPA Phase II Storm Water Permits, Section 401 and 404 Clean Water Act Permits, Ohio EPA Isolated Wetland Permit, and Ohio Dam Safety Law Permits.
- G. Supplemental requirements as provided in Subsection 3.06.
- H. Storm water discharge to critical areas with sensitive resources (i.e. wetlands, steep slopes, scenic river designation, recharge areas, etc.) may be subject to additional criteria or may need to utilize or restrict certain storm water practices to protect these critical areas with sensitive resources and functions
- I. Supplemental Requirements
 - 1. **Determination of Construction Development Runoff.** Each Development Area Management Plan shall include an evaluation of pre-development conditions together with construction conditions that quantifies the volume and rate of runoff from the Development Area by subdrainage areas. This evaluation shall be prepared according to methods prescribed in the latest edition of Rainwater and Land Development Manual or other appropriate sources. The evaluation shall:

- a. Show delineation and sequence of subdrainage units which comprise the area proposed for development.
- Indicate the hydraulic length of slope per individual subdrainage unit and the length of the natural or manmade watercourse which accommodates the surface runoff from each subdrainage unit.
- c. Indicate within the legend the average percent slope, erosion factor (K), and runoff curve number (CN) per individual subdrainage unit for a 24-hour storm of a oneyear frequency.
- J. Storm Water Pollution Prevention Plan Submission, Review and Action
 - Submission of the Storm Water Pollution Prevention Plan may be included in the improvement plan review process as stated in Section 3.13 of the Butler County Subdivision Regulations which initiates the review process. An Erosion and Sediment Control Butler County Earth Moving Permit application must be completed with all of the applicable fields filled in and attached to the improvement plan along with the appropriate fee.
 - 2. The SWP3 shall be reviewed by the Butler County Storm Water District to:
 - a. Verify background information furnished by the applicant and evaluate the proposed development in relation to existing Development Area conditions.
 - b. Assess the SWP3 in relation to the Performance Standards and requirements of this resolution.
 - 3. Upon submission of the complete SWP3 and the ESC Earth Moving Permit application to the Butler County Storm Water District, it shall be reviewed within 14 calendar days. If the review is not completed within 14 calendar days, the applicant may contact the Butler County Storm Water District to set the preconstruction meeting. The review will be finished at the time of the preconstruction meeting and, if any revisions are needed, they will be discussed at the preconstruction meeting. If no other approvals for the improvement plans are needed from other county agencies, then the developer/applicant may set up a preconstruction meeting with Butler County Storm Water District.
 - 4. With Butler County Storm Water District approval, the developer may opt to submit a preliminary ESC plan directly to Butler County Storm Water District with completed application. This option assumes the applicant shall have a completed (final) ESC

plan by the time construction drawings are submitted to the Department of Development and Planning.

- 5. The Butler County Storm Water District shall either:
 - a. Approve the SWP3 as submitted by the applicant; or
 - b. Conditionally approve the SWP3 and require the submission of additional and/or revised information by the applicant, in order to fully meet the intent and standards of this resolution; or
 - c. Disapprove the SWP3.
- 6. Revisions to conditionally approved SWP3s shall be prepared and submitted by the applicant to the Butler County Storm Water District for review.
- 7. Once the SWP3 plans are approved and a preconstruction meeting is held between the Butler County Storm Water District and the earth moving contractor or other appropriate party involved with the project, approval of the Earth Moving Permit will be granted.

7.04 Compliance Responsibility

A. Butler County Board of Commissioners hereby designate Butler County Storm Water District as its duly authorized representative for the purposes of enforcement activity permitted by O.R.C. 307.79

B. Performance Liability and Responsibility

- No provision of this resolution shall limit, increase, or otherwise affect the liabilities of the applicant nor impose any liability upon Butler County not otherwise imposed by law.
- 2. The applicant is responsible for carrying out all provisions of the approved Storm Water Pollution Prevention Plan and for meeting all the standards and requirements of this regulation.

C. No Release From Other Requirements

No condition of this permit shall release the applicant from any responsibility or requirements under other federal, state, or local environmental regulations. If requirements vary, the most restrictive requirement shall prevail.

D. Violations

 Earth moving activities regulated under this regulation shall not begin until the Butler County Earth Moving permit is granted as spelled out in Article VII Section 3.07 and all necessary state and federal permits and appropriate approvals of Storm water Pollution Prevention Plans have been granted to the Development Area owner/applicant.

2. No person shall violate or cause or knowingly permit to be violated any of the provisions of this resolution, or fail to comply with any of its provisions or with any lawful requirements of any public authority made pursuant to it, or knowingly use or cause or permit the use of any lands in violation of this resolution or in violation of any approval permit granted under this resolution.

E. Enforcement & Penalties

- 1. All Development Areas are subject to inspections by the Butler County Storm Water District to ensure compliance with the approved SWP3.
- 2. After each inspection, a status report shall be prepared and distributed to the appropriate person(s).
- 3. If it is found that the operations are being conducted in violation of the approved SWP3, then enforcement action as authorized in R.C. 307.79 shall be initiated.
- 4. Subsequent to the issuance of a stop-work order penalties may be imposed consistent with O.R.C. 307.79

F. Schedule of Fees.

- The schedule of fees set forth by the Board of County Commissioners for plan review, Development Area inspection and permit approval as established, and shall be due and payable upon the submission of the SWP3 and completed Butler County Earth Moving permit application to the Department of Development at the time of construction drawing submittal.
- 2. If earth moving begins without Earth Moving Permit and approval of SWPPP/construction drawings the Development Area will not be recorded until fee paid in full, application turned in and SWPPP/construction drawing approval letter/permit issued.
- 3. Make fee payable to Butler County, turn into the Department of Development and Planning. The SWPPP/ construction drawings and the Earth Moving permit application can be turned in at the Department of Development and Planning or the Butler County Storm Water District.

G. Complaints

The Butler County Storm Water District shall investigate any complaint related to Earth Disturbing Activities covered by this resolution in a timely manner. After inspection is completed, if found to be in violation, the Butler County Storm Water District will take necessary action to achieve compliance on the particular Development Area as described in Section 7.04(E).

H. Appeals Process

Any person denied a permit pursuant to section 3.07 (e) of the Butler County Subdivision regulations has the right to appeal to the Board of Supervisors of the Butler Soil and Water Conservation District in writing within 60 days of the grievance.

I. Effective Date and Validity

This resolution shall become effective within Butler County 30 days after adoption. If any section, subsection, paragraph, clause, phrase, or provision of this resolution is adjudged invalid or held unconstitutional, such a decision shall not affect or void any of the remaining portions.

7.05 Lot Pollution Prevention Control Plan; Lot Erosion and Sediment Control Permit (Residential & Commercial Builders)

A. Lot Erosion and Sediment Control Permit

Upon submittal for a Building Permit from the Butler County Department of Building and Zoning, a Lot ESC plan is required to be submitted if the parcel is greater than one acre or within a platted subdivision. A Butler County Lot Erosion and Sediment Control Permit is also required for each lot within a platted subdivision upon approval of the Lot ESC plan. The Builder/Owner is required to meet all requirements in section 5.02 in order to maintain an approved Lot Erosion and Sediment Control Permit.

B. Lot Pollution Prevention Control Plan and per lot building performance standards

- In general, the Lot Pollution Prevention Control Plan shall consist of the Development Area erosion & sediment control plan and describe/ show how waste construction material will be disposed of. See Appendix B for an example. A Pollution Prevention Plan is required for all other platted Lots and can be created with the Building and Zoning lot plan. This plan should include the following:
 - a. Provide the Parcel Number, Address, Lot Number, and Subdivision Name with appropriate Section or Block.
 - b. Show the existing contours and final proposed spot elevations with directional flow arrows of the Lot. Proposed contours may be required by Butler County Storm Water District as needed. Existing grading may be represented off of the development's grading plan. Show all existing and proposed locations of buildings, roads, parking facilities and utilities.

- c. Proposed grading of Lot shall not remove or change any existing surface drainage that have been recorded such as Watercourses, Swales, Streams, Flood Routes and or Channels without prior approval.
- d. Water runoff should be diverted away from Steep Slopes and areas with exposed soils.
- e. All concrete trucks should washout at designated areas as defined by the Developer or his Contractor. See Article VII Section 2.16 Control of Construction Development Area Debris and Wastes.
- f. Note and show the location of each proposed soil erosion & sediment control Best Management Practice (BMP) as specified in the ODNR Rainwater and Land Development Manual, including:
 - i. Perimeter sediment & erosion control BMP around the Lot and/or adjacent to surface drainage swale as topography and need determines. Appropriate BMP's may include, but are not limited to, a mulch berm, silt fence, compost logs, temporary sediment traps/basins, temporarily modified detention/retention facilities, check dams, curb and yard inlet protectors, temporary diversions, and proper Stream crossings.
 - ii. A construction entrance is required on all Lots within the subdivision. It is the Builder's responsibility to ensure the construction drive is maintained and properly dressed with stone. See appendix A. Construction vehicle access should be limited to one route, to the greatest extent practical.
 - iii. Mud tracked onto the street or sediment settled around curb inlet protection shall be inspected daily and cleaned as needed to prevent it from accumulating. It shall be removed by shoveling and scraping and shall NOT be washed off paved surfaces or into storm drains.
 - iv. Temporary seeding should be placed on any Lot that is to remain idle for period more than 21 days.
 Each Lot should be properly seeded and mulched within 7 days of completion of the rough grading.
 This includes stockpiles excavated from basements.

All stockpiles shall be situated away from streets, swales, or other waterways.

- C. Show the boundaries of Wetlands and Stream Channels on the Lot ESC plan. If they are to be modified or removed a permit may be required through the Army Corps of Engineers, Ohio Environmental Protection Agency, or Department of Natural Resources. It is the Builder's responsibility to acquire the appropriate permits.
- D. All ESC's shall be periodically inspected by the Builder/Owner to ensure proper function and to identify failures. If the inspection reveals that a control practice is in need of repair or maintenance, with the exception of a sediment settling pond, it must be repaired or maintained within three (3) days of the initial inspection. Sediment settling ponds must be repaired or maintained within 10 days of the inspection.
- E. The Builder/Owner shall maintain ESC's until Permanent Vegetation is established.

7.06 Compliance Responsibility & Failure to Comply

- A. Butler County Board of Commissioners hereby designates Butler County Storm Water District as its duly authorized representative for the purposes of enforcement activity permitted by O.R.C. 307.79
 - Whenever public improvements have not been constructed and/or maintained in accordance with these regulations, the Board of County Commissioners may exercise its rights of foreclosure on the bond to bring the improvements into compliance.
 - 2. Failure to comply with Section V Lot Pollution Prevention Control Plan may result in one or all of the following:
 - a. Loss of Butler County Lot Erosion and Sediment Control Permit
 - b. Stop work order No inspections
 - c. Failure to obtain additional permits/approvals
 - d. Fines or penalties as determined by the Board of Commissioners

B. Performance Liability and Responsibility

No provision of this resolution shall limit, increase, or otherwise affect the liabilities of the applicant nor impose any liability upon Butler County not otherwise imposed by law.

The applicant is responsible for carrying out all provisions of the approved Storm Water Pollution Prevention Plan and for meeting all the standards and requirements of this regulation.

C. No Release from Other Requirements

No condition of this permit shall release the applicant from any responsibility or requirements under other federal, state, or local environmental regulations. If requirements vary, the most restrictive requirement shall prevail or where context suggests it, requirements and/or restrictions may be cumulative. Failure to enforce a requirement is not a waiver of other applicable requirements.

D. Violations

- Earth moving activities regulated under this regulation shall not begin until the Butler County Earth Moving permit is granted as spelled out in Article VII Section 3.07 and all necessary state and federal permits and appropriate approvals of Storm Water Pollution Prevention Plans have been granted to the Development Area Owner/Applicant.
- 2. No person shall violate or cause or knowingly permit to be violated any of the provisions of this resolution, or fail to comply with any of its provisions or with any lawful requirements of any public authority made pursuant to it, or knowingly use or cause or permit the use of any lands in violation of this resolution or in violation of any approval permit granted under this resolution.

E. Enforcement & Penalties

- 1. All Development Areas are subject to inspections by the Butler County Storm Water District to ensure compliance with the approved SWP3.
- 2. After each inspection a status report of the ESC findings shall be prepared and distributed by Butler County Storm Water District to the Owner/Operator.
- 3. If it is found that the operations are being conducted in violation of the approved SWP3, then enforcement action as authorized in R.C. 307.79 shall be initiated.
- 4. Subsequent to the issuance of a stop-work order, penalties may be imposed consistent with O.R.C. 307.79

F. Schedule of Fees.

The schedule of fees shall set forth by the Board of County Commissioners for plan review, Development Area inspection and permit approval as established, and shall be due and payable upon the submission of the Butler County Lot Erosion and Sediment Control Permit application to the Department of Building and Zoning at the time of lot building construction.

Make Fee Payable to Butler County, turn in fee and application to the Department of Development: Building and Zoning.

G. Complaints

The Butler County Storm Water District shall investigate any complaint related to lot erosion and sediment control activities covered by this resolution in a timely manner. If investigation finds violations, the Butler County Storm Water District will take appropriate actions to achieve compliance on the particular Lot.

H. Appeal Process

Any person denied a permit pursuant to section 5.01 (1) of the Butler County Subdivision regulations has the right to appeal to the Board of Supervisors of the Butler Soil and Water Conservation District in writing within 60 days of the grievance.

I. Effective Date and Validity

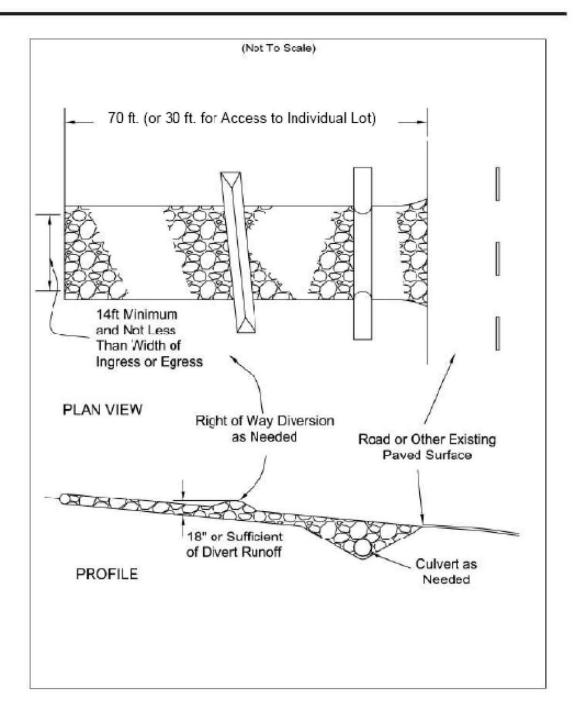
This resolution shall become effective within Butler County 30 days after adoption. If any section, subsection, paragraph, clause, phrase, or provision of this resolution is adjudged invalid or held unconstitutional, such a decision shall not affect or void any of the remaining portions.

Appendix 7-A

Specifications

for

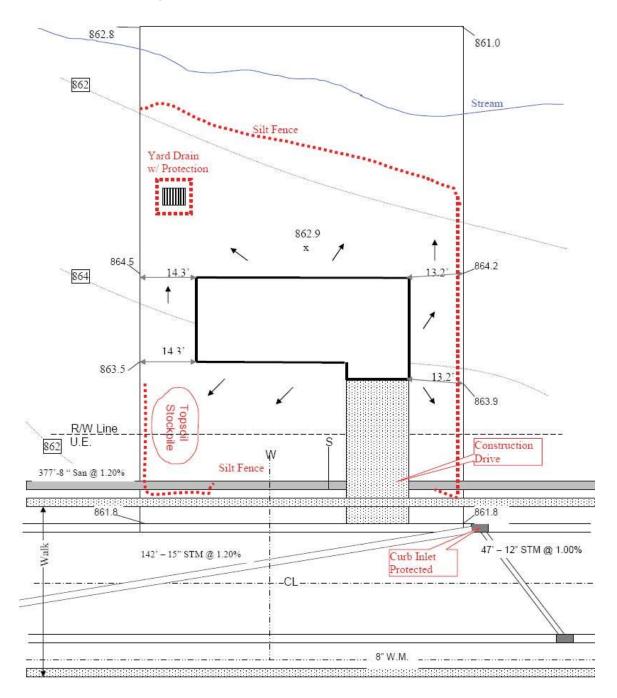
Construction Entrance



Butler County, Ohio, Subdivision and Land Development Regulations



Specifications for Small Construction Site Controls



Final Subdivision Plats

8.01 Final Plat Standards

- A. Sheet Size: The size of the plat shall not be less than eighteen (18) by twenty-four (24) inches nor larger than twenty-four (24) by thirty-six (36) inches.
- B. Scale: The plat of a subdivision containing six (6) acres or less shall be drawn at a scale of one (1) inch equals fifty (50) feet. All other subdivisions shall be drawn at a scale of one (1) inch equals one hundred (100) feet or larger.
- C. **Drawing Standards:** The final plat shall be clearly and legibly drawn. When submitting the final plat, the following standards are to be met per the Butler County Engineer's Tax Map Department:

1. Letter Size and Spacing:

- a. For smaller plats (18" x 24"), minimum letter height is 1/8" and minimum letter spacing is 1/16" or half the letter height used.
- b. For larger plats (24" x 36"), minimum letter height is 3/16" and minimum letter spacing is 3/32" or half the letter height used.
- 2. **Line Spacing:** The minimum space between lines of text shall be the same as the letter height.
- 3. Border: All plats shall have a $\frac{1}{2}$ " border.
- 4. **Material:** All plats shall be printed on mylar using permanent black ink.

5. Plat Condition:

- a. Pencil guidelines and smudge marks shall be removable with a gum eraser.
- b. No number or letters shall be drawn in shaded areas or over any other lines on the plat.
- c. Signatures shall be in a permanent black ink from a felt tip pen.
- d. Seals shall be shaded or in permanent ink.
- e. Folded, wrinkled or torn plats are not acceptable.

6. Letter Quality:

a. Technical pens shall be used for any hand lettering on the plat.

- b. Smaller letters and numbers shall be made with a fine tip pen, usually a pen numbered between zero and two.
- c. Letters and numbers shall be well defined and shall not run or bleed.
- d. If the plat drawing is difficult to read due to the labeling and dimensioning of easements and property lines, then all property lines and associated labeling are to be shown on one drawing and all easements and associated labeling are to be shown on another separate drawing on the plat.

8.02 Number of Copies to be Filed

For review, the subdivider shall file the following with the Planning Department:

- A. Ten (10) full-size copies of the final plat, which must be prepared by a registered professional surveyor and/or consultant, authorized to practice under the laws of the State of Ohio.
- B. One (1) reduced version of the final plat measuring 11" by 17"
- C. A completed *Application for Subdivision Plat Review*, available from the Planning Department.
- D. The required review fee established per the County Commissioners.

8.03 Information to be Contained on the Final Plat

The final plat shall contain the minimum information required by Sections 711.01 through 711.04, inclusive, of the *Ohio Revised Code* and shall also contain the following information: (Please refer to Appendix A, drawings A-8 thru A-10 for sample drawings).

- A. The name of the subdivision
- B. If a subdivision is to be submitted in sections and/or blocks, these divisions shall be indicated on the plat and shall be recorded consecutively from the last recorded section.
- C. The information shown on the final plat shall be consistent with improvements as indicated on the improvement drawings. Any revisions to the original design plan shall be shown on the final plat.
- D. All lots in a subdivision must meet the applicable zoning requirements and be buildable lots. Detention and retention areas must be contained on a building lot.

- E. All plat boundary lines shall be shown with lengths of courses to hundredths of a foot and bearings to half minutes. These boundaries shall be determined by an accurate survey in the field, which shall be balanced and closed with an error of closure of not to exceed 1 to 10,000. Provide a closure sheet showing acreage and error of closure.
- F. The exact location and the width along the property line of all existing recorded streets intersecting or paralleling the boundaries of the tract
- G. The plat shall show bearings and distances to nearest established street bounds, patents or other established survey lines, or other official monuments, which monuments shall be located or accurately described on the plat. Any patent or other established survey or corporation lines shall be accurately monumented and named.
- H. The accurate location and material of all permanent reference monuments, as described in Section 5.08 (B) of these regulations
- I. The exact layout of the subdivision including:
 - Street and alley lines, their names, bearings, centerline lengths, angles of intersection, and widths, including widths along the line of any obliquely-intersecting street;
 - 2. The lengths of all arcs, their radii, points of curvature and tangent bearings, chord bearings, and chord lengths;
 - 3. The location of all easements and rights-of-way, shown in such a manner as to be able to be re-established in the field; and
 - 4. The location of all lot lines with dimensions in feet and hundredths of feet, and bearings in degrees, minutes, and seconds.
- J. Lot Numbering: Lots shall be numbered in consecutive, numerical order from the last previously recorded lot.
 - 1. In tracts containing more than one block, the blocks shall be lettered in alphabetical order.
 - 2. In case there is a re-subdivision of lots in any block, such resubdivided lots shall be designated as such by their original lot numbers. The newly created lots shall be numbered and recorded in consecutive order from the last previously recorded lot.
- K. The accurate outline of all property which is offered for dedication for public use, and of all property that may be reserved by covenant in the deeds for the common use of the property owners in the subdivisions, with the purpose indicated thereon

L. The minimum width of drainage easements for culverts and storm sewers shall be as follows:

<u> Pipe Size (Diameter)</u>	Minimum Easement Width
33" and smaller	20 Feet
36" - 42"	25 Feet
48" - 60"	30 Feet
66" – 78"	35 Feet

The minimum width given above is for installations with depths of cover at 10 feet or less (measured from the top of pipe).

For each additional 5 feet of cover over 10 feet (rounded up), the minimum easement width shall be increased by 10 feet.

- M. All water courses within a subdivision are to be covered by either a Private Drainage Easement or Home Owner's Association Drainage Easement on the plat.
 - If the subdivision is to be maintained by a Home Owner's Association, a copy of the by-laws, covenants, restrictions, and post-construction storm water Operation & Maintenance plan is to be submitted to the County for review. The documents shall contain a schedule of maintenance items and frequency or inspection and or maintenance of all storm sewer facilities maintained by the Association. In addition, the document shall identify the responsible party or person for maintenance. Include contact name, contact number(s) and mailing address of the responsibly party or person for the Association.
- N. Front setback lines as established by the appropriate Zoning Resolution and any other set-back lines or street lines established by public authority, and those stipulated in the deed restrictions
- O. Boundaries of all areas affected by varying private restrictions and a description of those restrictions
- P. Names and recording locations of adjoining subdivisions; recording location and ownership of adjoining unsubdivided property
- Q. Name, address, and phone number for (1) the owner of record, (2) the subdivider, and (3) the engineer, surveyor and/or consultant
- R. North arrow, graphical scale, and date
- S. A vicinity sketch showing the subdivision as it relates to the surrounding area

- T. A superimposed plan of the subdivision at a scale of three hundred (300) feet to the inch shall be drawn on the final plat and shall also show the section of the subdivision which the developer wishes to be recorded. This sketch shall also show all street right-of-ways.
- U. The total acreage of the subdivision, total acreage from each township section, total acreage from each original parcel of each lot created, and the total linear feet of newly dedicated right-of-way as well as area of that right-of-way
- V. Stub streets shall be located on the plat to give access to adjoining unsubdivided property. These streets shall also be labeled as "Street to be extended in the future" at the discretion of the Planning Commission.
- W. Any information which the Planning Commission considers to be appropriate to provide full disclosure to potential lot purchasers. This includes, but is not limited to:
 - 1. One hundred (100) year floodplains within or adjacent to the subdivision
 - 2. Wetlands within or adjacent to the subdivision
 - 3. Rights-of-way for proposed highways which are journalized within the subdivision or abutting its borders
- X. The minimum opening and/or minimum basement elevations and curb elevations (low side, top of curb) for new structures should be stated on the final plat in order to keep them above the 100 year floodplain as determined by a flood study prior to platting.
- Y. One hundred (100) year flood drainage routes are to be labeled on the final plat.
- Z. The minimum sanitary building drain elevations in order to ensure sanitary sewer service where applicable
- AA. A benchmark and elevation is to be noted on the final plat.
- BB. All bury pits need to be shown as an easement. This is the responsibility of the developer to make sure the easement is on the plat. It is the responsibility of the builder to make sure the buried material, as permitted by the Ohio Environmental Protection Agency, is in the bury easement or a replat will be necessary.
- CC. Those lots identified by the Butler County Soil and Water Conservation District, during a preliminary investigation as needing soil testing, geotechnical reports or engineered fill prior to issuance of a building

permit, are to be noted on the final plat unless testing is completed before final plat approval to satisfy this provision. Any recommendations these studies show must be carried forth on the construction drawings or noted on the final plat. If these studies have been completed after the final plat is recorded, then any recommendations must be carried out when constructed the house and will become part of the final inspection for the house.

- DD. For general purposes and future utilities, a ten (10) foot utility easement shall be provided at the rear of each lot.
- EE. Acknowledgment of the owners and witnesses before an officer authorized to take the acknowledgment of deeds, which officer shall certify his official act on the plat (Notary)
- FF. Certification from a licensed practicing attorney that all taxes and assessments have been paid on the land within the subdivision (Certificate of Title)
- GG. Ohio Environmental Protection Agency (OEPA) approval must be submitted with the final plat or the developer must have a Permit To Install (PTI) water and sewer related items before the final plat will be approved by the Planning Commission.
- HH. All one-hundred year water surface elevations within storm water detention/retention facilities shall be shown and noted on the plat. A drainage easement shall encompass the limits of the one-hundred year water surface elevation.
- II. The subdivider or developer is responsible to ensure adequate drainage between and along the common Lot property line(s) has been achieved. A blanket easement shall be encumbered on all Lots for the purpose of addressing drainage between and along the common Lot property line(s), and within HOA easements. If the County determines or finds the drainage practice to be unacceptable, per the approved plans, it will be the subdivider or developers responsibility to make the necessary modifications to alleviate the surface drainage problem to the satisfaction of the County. Upon a successful completion of the one-year maintenance period, the County will then relieve the subdivider or developer of such responsibility, and the blanket easement shall revert to the private property owner of the Lot.

8.04 Notes to be Contained on the Final Plat

A. Dedication Statement:

The undersigned, being the owners of <u>(# of acres)</u> acres of land in Section <u>(#)</u>, Town <u>(#)</u>, Range <u>(#)</u>, in <u>(Name of Township)</u> Township, Butler County, Ohio, do hereby assent to and adopt the accompanying plat of subdivision to be known as <u>(Name of Subdivision)</u> and do hereby dedicate to the public forever, in accordance with the laws in such cases made and provided, the streets and roadways as shown on said plat, and declare the same to be free and unencumbered. The title acquired by Deed Book <u>(#)</u> Page <u>(#)</u>.

B. Utility Easement:

Easements on said plat, designated as utility easements, are provided for the construction, maintenance, and operation of poles, wires and conduits, and the necessary attachments in connection therewith, for the transmission of electric, telephone, cable television, and other purposes; for the construction and maintenance of service of underground storm water drains, pipelines for supplying gas, water, heat, and other public or quasipublic utility functions together with the necessary lateral connections; the right of ingress to and egress from said easements; and to cut, trim, or remove trees and undergrowth or overhanging branches within said easement or immediately adjacent thereto. No buildings or other structures may be built within said easements, nor may the easement area be physically altered so as to (1) reduce the clearance of either overhead or underground facilities; (2) impair the land support of said facilities; (3) impair the ability to maintain the facility; or (4) create a hazard

The above easements are also provided for other public uses as designated and shall be used for the construction of storm water drains, open channels, public and private sewers, pipelines for the supplying of water, cable television, and for any other public or quasi-public utility or function conducted, maintained or performed by ordinary methods beneath or above the surface of the ground together with the right of ingress and egress over and across lots to and from said easements.

C. Drainage Notes:

If the storm water facilities outside the right-of-way are planned to be maintained by a Home Owners' Association, note #1, following, must be on the record plat.

If the storm water facilities outside the right-of-way are to be maintained through the County Ditch Petition process (public drainage easements), then note #2, following, must be on the record plat.

1. Home Owners' Association Drainage Easements:

The Board of County Commissioners of Butler County does not accept any private drainage easements shown on this plat. The county of Butler is not obligated to maintain or repair any channels or installations in said easements. The easement area of each lot and all improvements in it shall be maintained continuously by the owner of the lot. Maintenance of all improvements within HOA drainage easements shall be the responsibility of the <u>(name of subdivision HOA)</u> as provided for in the declaration and in accordance with the standards and specifications of the Butler County Engineer. Within the easement area, no structure, planting, or other material shall be placed or permitted to remain which may obstruct, retard, of change the direction of the water flow.

- a. Such easements shall be labeled on the plat as "HOA Drainage Easement" or "HOA DR ESMT".
- 2. County Ditch Petition (Public Drainage Easements)

Easements shown on this plat are for the exclusive use of Butler County for the construction, operation, maintenance, repair, or replacement of storm sewer, manholes, catch basins, concrete channels, headwalls, detention basins, ditches, or other storm water facilities, unless specific permission is granted to an outside agency or utility.

Easements are also to provide ingress and egress for said purposes and are to be maintained as such.

No encroachments, buildings, sheds, decks, playground or swing sets, or other structures, shall be permitted within any Public Drainage Easement.

- a. Such easements shall be labeled on the plat as "**Public Drainage Easement**" or "**PUB DR ESMT**".
- 3. Private Drainage Easements

Butler County does not accept any private drainage easements or storm sewer easements shown on the accompanying plat, and Butler County is not obligated to maintain or repair any channels or installations in said easements. The easement area of each lot shall be maintained continuously by the owner of the lot. Within the easement area, no structure, planting, or other material shall be placed or permitted to remain in which may obstruct retard or change the direction of flow of the water.

a. Such easements shall be labeled on the plat as "**Private Drainage Easement**" or "**PVT DR ESMT**".

4. Minimum Opening Elevations

On any lot(s) with an identified Minimum Opening Elevation (MOE), no door, window, vent, or other opening through the wall of any structure may be located below the minimum elevation noted on the affected lot(s). If the basement floor is below the noted elevation, it is the responsibility of the builder to provide a sump well and sump pump, which shall discharge on the lot at or above the noted elevation.

D. Plat Alterations:

Any change to or alteration of this plat, including the splitting of any lot to create a new building site, shall require Planning Commission approval as a replat.

E. Street Construction:

The streets as shown in this subdivision shall be constructed in accordance with the approved plans on file in the office of the Butler County Engineer. The streets shall be constructed, with the exception of top course, within one year and shall be maintained and kept in repair for a period of one year from the date the constructed streets are approved by the Butler County Engineer.

- F. Water and Sewer:
 - It is understood that Butler County will not be able to issue any connection permits or building permits until the Ohio Environmental Protection Agency (EPA) has approved the plans for the proposed extensions of the public water and sewer systems within this subdivision, unless on-site systems are proposed and approved.
 - 2) All buildings to be served by the public sewer system shall be constructed so as to provide a minimum of four (4) feet of vertical separation between the public sanitary sewer, at the point of connection, and the lowest building level served by a gravity sewer connection. In addition, said building level shall be at least one (1) foot above the lowest point of free overflow (non-seated manhole cover) upstream of any treatment facility or wastewater pumping facility that receives the discharge from said building. Said minimum service levels shall be recorded on the "As-Built" plans for the development which will be kept on file in the office of the Butler County Water & Sewer Department.
 - 3) Private driveways, parking lots and other paved areas, earthen berms, or structures should not be constructed over private water or sewer service lines within the public road right-of-way or within easement areas for the public utilities. Should this occur, the

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property owner will be held responsible for the protection and repair of and for providing access to any curb stops, meter pits, manholes, cleanouts, etc. installed in conjunction with these private service lines and for any damage or restoration of the paved surfaces or structures that may result from the future operation, maintenance, repair or replacement of said service lines and appurtenances.

- 4) Easements on said plat, designated as 'Sanitary Sewer Easements' or 'Water Main Easements' are provided for the right to construct, use, maintain, and keep in repair thereon a sanitary sewer pipeline and/or water mains and appurtenances thereto necessary to the operation thereof.
- 5) The Butler County Water & Sewer Department does not accept any responsibility for the relocation, repair or replacement of any other utility installed within five (5) feet of the centerline of any sanitary main sewer or water main.

G. Board of Health:

Butler County Board of Health approval is required for all subdivisions to be served by on-site private water systems and/or on-site household sewage treatment systems. Include one of the following signature blocks on the final plat, as applicable:

- Approved for the placement of household sewage treatment systems and private water systems by the Board of Health, Butler County, Ohio, this (date) day of (month), (year).
 ______ Registered Sanitarian
- (Public water only) All lots in this subdivision to be served by public water systems. Approved for placement of household sewage treatment systems by the Board of Health, Butler County, Ohio, this (date) day of (month), (year).

_____ Registered Sanitarian

3) (Public sanitary sewers only) All lots in this subdivision to be served by public sanitary sewers. Approved for placement of private water systems by the Board of Health, Butler County, Ohio, this (date) day of (month), (year).

_____ Registered Sanitarian

If <u>all</u> lots in a subdivision are to be served by public water and sanitary sewer systems, include the following note on final plat. In this case, no Board of Health signature block is needed on the final plat.

4) All lots shown hereon shall be served by public sanitary sewers and water.

H. Certification Statement:

Certification by a registered surveyor to the effect that: (1) the plat represents a survey made by the surveyor and that all monuments indicated thereon actually exist and their location, size and material are correctly shown; and (2) that all requirements of these Subdivision Regulations have been fully complied with.

- I. General Notes:
 - 1) This plat is subject to present and future regulations of the County Board of Health.
 - 2) We, the Board of County Commissioners of Butler County, Ohio, do hereby approve and accept the dedication of land for the streets and other public improvements as shown on this plat of <u>(Name of Subdivision</u>) Subdivision, Section <u>(#)</u>, Block <u>(#)</u>, this <u>(#)</u> day of <u>(month)</u>, <u>(year)</u>. Although the Board's acceptance of such dedication vests fee simple title to such lands in the name of the Board, no streets or other public improvements constructed on such lands shall be accepted for public use and maintenance without the approval of the Butler County Engineer and/or the Butler County Water & Sewer Department.

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Administration and Enforcement

9.01 Recording of Plat

No plat of any subdivision located within the unincorporated area of Butler County shall be entitled to record in the office of the Recorder of Butler County or shall have any validity until it has been approved by the manner prescribed in these subdivision regulations. In the event any such unapproved plat is recorded, it shall be considered invalid and the Butler County Planning Commission shall institute proceedings to have the plat stricken from the records of Butler County, Ohio.

9.02 Revision of Plat after Approval

No changes, erasures, modifications, or revisions shall be made in any plat of a subdivision after approval has been given by the Planning Commission, and endorsed in writing on the plat, unless said plat is first resubmitted to the Planning Commission.

9.03 Resubdivision/Replat

Whenever a plat for an existing recorded subdivision is proposed to be changed or altered, such change or alteration shall be considered a resubdivision (i.e, replat) and shall be submitted to the Planning Commission for approval in compliance with these regulations.

9.04 Sale of Land within Subdivisions

No owner or agent of the owner of any land located within a subdivision shall transfer or sell any land by reference to, exhibition of, or by the use of a plat of the subdivision before such plat has been approved and recorded in the manner prescribed in these regulations. The description of such lot or parcel by metes and bounds in the instrument of transfer or other documents used in the process of selling or transferring shall not exempt the transaction from the provisions of these regulations.

9.05 Schedule of Fees, Charges, and Expenses

The Board of County Commissioners shall establish a schedule of fees, charges, and expenses, and a collection procedure for same, and other matters pertaining to these regulations. The schedule of fees shall be posted in the office of the Butler County Planning Department. Until all applicable fees, charges, and expenses have been paid in full, no action shall be taken on any application or appeal.

9.06 Variances

The following regulations shall govern the granting of variances and exceptions:

- A. Where the Planning Commission finds that extraordinary and unnecessary hardship may result from strict compliance with these regulations, due to exceptional topographic or other physical conditions, it may vary the regulations so as to relieve such hardship, provided such relief may be granted without detriment to the public interest and without impairing the intent and purpose of these regulations or the desirable development of the neighborhood and community. Such variations shall not have the effect of nullifying the intent and purpose of these regulations, the comprehensive plan, or the zoning resolution if such exists.
- B. In granting variances or modifications, the Planning Commission may require such conditions as will, in its judgment, secure substantially the objective of the standards or requirements so varied or modified.
- C. The general principles of design and the minimum requirements for the laying out of subdivisions, stipulated in *Articles V, VI, & VII* of these regulations, may be varied by the Planning Commission in the case of a subdivision large enough to constitute a more or less self-contained neighborhood to be developed in accordance with a more comprehensive plan safeguarded by appropriate restrictions, which in the judgment of the Planning Commission make adequate provision for all essential community requirements; provided however, that no modifications shall be granted by the Planning Commission which would conflict with the proposals of the *Official Land Use and Thoroughfare Plan*, or with other features of any adopted long range plan of Butler County or with the intent and purposes of said general principles of design and minimum requirements.

9.07 Appeals

Any person who believes he/she has been aggrieved by the regulations or the action of the Planning Commission, has all the rights of appeal as provided by Ohio law.

9.08 Vacation of Easements

If the Butler County Planning Commission deems it in the best interest of the future occupants of the proposed subdivision and the community to vacate an existing easement, that easement shall be vacated in the appropriate manner.

9.09 Penalties

- A. Whoever violates any rule or regulation adopted by the Board of County Commissioners for the purpose of setting standards and requiring and securing the construction of improvements with a subdivision or fails to comply with any order pursuant thereto is creating a public nuisance and the creation thereof may be enjoined and maintenance thereof may be abated by action at suit by the County or any citizen thereof. Whoever violates these regulations shall forfeit and pay not less than one-hundred (100) dollars nor more than one-thousand (1,000) dollars. Such sum may be recovered with costs in a civil action brought in the court of Common Pleas of Butler County (ORC 711.102).
- B. Every plat or subdivision of land within the unincorporated area of Butler County and every act of platting or subdividing thereof shall be subject to all rules and requirements of these regulations and of Chapter 711 of the *Ohio Revised Code* and any violation of such rules or requirements shall be subject to the penalties and forfeitures as set forth in this section and as set forth in the *Ohio Revised Code*.

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Enactment

10.01 Effective Date

These regulations as amended shall become effective from and after the date of their approval and adoption by the Butler County Planning Commission and Board of County Commissioners after public hearing and certification to the Butler County Recorder. Henceforth, any other rules and regulations regarding the subdivision, improvements, or conveyance of land adopted by Butler County under Chapter 711 of the *Ohio Revised Code* shall be deemed to be repealed. These regulations shall in no way affect any subdivision having received formal subdivision plan approval prior to the effective date provided, however, that no preliminary subdivision plan so approved shall be valid for more than five (5) years after its original approval date, and that no changes to the formal subdivision plan, as approved, are to be introduced by the subdivider.

10.02 Adoption

Public Hearings on the proposed revisions to these Subdivision and Land Development Regulations were held before the Butler County Planning Commission on May 15, 2017, and the Board of Commissioners of Butler County on March 12, 2018.

Approved by the Board of Commissioners of Butler County, Ohio, this 12th day of March, 2018, per Resolution Number 18-03-00498.