

# Richland UDO

## Chapter 8: Subdivision Design Regulations

### A) General

1. Conditions for Approval.
  - a. The subdivision layout shall be of such a character that it protects the health, safety, and general welfare of the residents in the jurisdiction of the PC. Considerations for approval, in addition to the other criteria and requirements in this UDO include:
    - i) Protection of all Primary Conservation Areas;
    - ii) Preservation and maintenance of woodlands, existing fields, pastures, meadows, and orchards and creation of sufficient buffer areas to minimize conflicts between uses, including residential and agricultural uses;
    - iii) Protection of wildlife habitat areas and sites of historic, archaeological or cultural value;
2. Exemptions.
  - a. Commercial Subdivisions.
    - i) Reserved.
  - b. Industrial Subdivisions.
    - i) Reserved.
  - c. Residential Subdivision – Minor. The following subdivisions are exempt from the requirements of this section for Minor Residential Subdivisions if the Technical Advisory Committee (TAC) reviews and approves the plan. If the applicant disagrees with the TAC recommendation, the petition must be presented to the PC as a minor plat.
    - i) Agricultural sales: A subdivision where the resulting lots are intended solely for agricultural uses, are at least twenty (20) acres in area, and abut existing public ways.
    - ii) Two-lot subdivision: A subdivision resulting in only two (2) building lots where the parent lot, tract or parcel existed prior to the passage of this UDO.
    - iii) Adjoining transfers: A subdivision resulting in the transfer or sale of land between adjoining lot owners that does not create additional building sites.
  - d. Residential Subdivisions – Major.
    - i) Reserved.

### B) Drainage and Erosion Control

1. Environmental Restrictions.
  - a. No land shall be subdivided that is found to be unsuitable for subdivisions by reason of flooding, ponding, poor drainage, adverse soil conditions, adverse soil conditions, adverse geological formations, unsatisfactory topography or other conditions likely to be harmful to public health, safety or general welfare, unless such unsuitable conditions are to the satisfaction of the Town.
  - b. No subdivision containing land located in a floodway or a flood hazard area shall be approved by the PC with the approval of Indiana Department of Environmental

Management. No lot shall be located so as to include land located within a floodway or flood hazard area unless the lot is such size and shape it will contain a buildable area not within a floodway or flood hazard area, suitable for development as allowed by the UDO for zone in which the lot is located.

2. Minimum Requirements.

- a. In order to provide more suitable sites for building and other uses, improve surface drainage, and control erosion, the following requirements shall be met:
  - i) The locations, grading, and placement of sub-grade (base) material of all street, public driveway, and public parking areas shall be accomplished as the first work done on a development plan.
  - ii) All lots, tracts, or parcels shall be graded to provide proper drainage away from the buildings and dispose of it without ponding, and all land within the development shall be graded to drain and dispose of surface water without ponding, except where approved by the Spencer County Drainage Board. Around each permanent building foundation there shall be a slope with a minimum vertical fall of six (6) inches for the area measured from the foundation to a point ten (10) feet from the building foundation or to the property line, whichever is closer.
  - iii) All drainage provisions shall be of such design to adequately handle the surface runoff and carry it to the nearest suitable outlet such as a curbed street, storm drain, or natural watercourse. Where drainage swales are used to divert surface waters away from buildings, they shall be sodded or planted as required and shall be of such slope, shape, and size as to conform to the requirements of the PC.
  - iv) Concentration of surface water runoff shall only be permitted in swales or watercourses.
  - v) Land alteration shall be accomplished in such a way that the grades left at the time that the work is completed will be permanent and stable.

3. Excavation and Fills.

- a. Cuts and fills shall not endanger adjoining property.
- b. Fill shall be placed and compacted so as to minimize sliding or erosion of the soil,
- c. Fills shall not encroach or impede flows on natural watercourses or constructed channels.
- d. Fills placed adjacent to natural watercourses or constructed channels shall have suitable protection against erosion during this period of construction.
- e. Grading will not be done in such a way so as to divert water onto the property of another land owner without the expressed consent of the Administrator.
- f. During grading operations, necessary measures for dust control will be exercised.
- g. Grading equipment will not be allowed to cross live streams. Provision will be made for the installation of temporary or permanent culverts or bridges.

4. Sedimentation.

- a. Whenever sedimentation is caused by stripping, vegetation, regrading, or other development activities, it shall be the responsibility of the applicant, person, corporation, and/or other entity causing such sedimentation to remove it from all

adjoining surfaces, drainage systems, and watercourses and to repair any damage at his expense as quickly as possible.

5. Maintenance.
  - a. Maintenance of all driveways, parking areas, drainage facilities, and watercourses within any development plan area is the responsibility of the subdivider, provided that said facilities have not been dedicated to the public and accepted by the Town Council for public maintenance.
6. Drainage Ways.
  - a. Construction Along Waterways. It is the responsibility of the applicant and any person, corporation, or other entity doing any act on or across a communal stream, watercourse, or swale or upon the floodplain, floodway, or floodway fringe area of any watercourse during the period of development to return these areas to their original or equal conditions upon completion of said activities.
  - b. Construction in Drainage Ways. No applicant or person, corporation, or other entity shall block, impede the flow of, alter, construct any structure, or deposit any material or thing, or commit any act which will affect normal or flood flow in any communal stream or watercourse without having obtained prior approval from the Spencer County Drainage Board and/or the IDNR Division of Water, whichever is applicable.
7. Design, Installation, and Maintenance.
  - a. The design, installation, and maintenance of the required drainage facilities and erosion and sediment control measures shall be in accordance with the standards and specifications set forth in the county's drainage ordinance (if applicable).
8. Plan Approval.
  - a. The approval of plans and specifications for the control of erosion and sedimentation shall be concurrent with the approval of the development, and shall become a part thereof.
9. Grading/Clearing.
  - a. Permission for clearing and grading prior to the approval of the development plan may be obtained under temporary easements or other conditions satisfactory to the Administrator.
  - b. In the event the subdivider proceeds to clear and grade prior to the approval of the subdivision or development plan, without satisfying conditions specified herein, the jurisdictional agency having authority over the approval of said subdivision or development plans may revoke the approval of all plans and a suit for an injunction may be instituted by the PC to halt further construction until development plans are approved.
  - c. Topsoil shall not be removed from residential lots or used as spoil, but shall be redistributed so as to provide at least adequate cover on the lots. No cut trees, timber, debris, earth, rocks, stones, soil, junk, rubbish, or other waste materials of any kind shall be buried in any land, or left deposited on any lot or street in the subdivision.

10. Other.

- a. Land which exhibits severe limitations to urban development due to flooding, inadequate drainage, poor soils, or other features likely to be harmful to the safety, welfare, and general health of future residents, shall not be subdivided, unless adequate remedies to overcome said limitations are formulated by the subdivider and approved by the PC and other appropriate officials and agencies.
- b. Land which exhibits very severe limitations to urban development, such as floodplains and very poorly drained organic (muck) soils, characterized by seasonal high water tables at or near the surface, ponding, or frequent to occasional flooding, shall not be platted for urban development or used for non-agricultural structures.
- c. The subdivider shall provide the subdivision with an adequate storm water sewer system in accordance with the county's drainage ordinance (if applicable). When the surface drainage is adequate, easements for such surface drainage shall be provided. Curbs and gutters along streets are required; however, if the PC finds it necessary to waive this requirement, a shallow swale with its low point at least three (3) inches below the elevation of the subgrade of the pavement shall be installed. In this case, one (1) of the following types of improvements shall be furnished at driveway crossings:
  - i) A corrugated metal pipe, at least twelve (12) inches in diameter and fourteen (14) feet in length to be placed where required for each driveway; or
  - ii) A proper length vertical curve concrete pavement, twenty-four (24) feet in length, twelve (12) feet minimum width, and six (6) inches thick, designed to meet INDOT Standard Specifications so as not to create a hazard to the under parts of automobiles, at the entrance of each driveway.
- d. Upon completion of the storm sewer installation, the plans for such system as built shall be filed with the PC and the Spencer County Surveyor.

**C) Lots and Setbacks**

1. General.

- a. Subdivision lots shall be in accordance with the land use and design standards set forth in each respective zoning district.

2. Commercial Subdivisions.

a. Access.

- i) All lots shall abut on a street.
- ii) For the purposes of establishing lot lines, street right-of-way lines shall be considered as the front line of lots and tracts bordering such street.
- iii) Lots shall not derive access exclusively from an arterial, major collector, or minor collector. Where driveway access from an arterial, major collector, or minor collector may be necessary for several adjoining lots, the PC may require that such lots be served by a shared driveway in order to limit possible traffic hazards on such street. Because of their limited nature, shared driveways are not required to meet public roadway requirements.
- iv) Driveways shall be adequately separated from roadway intersections in order to minimize conflict with intersection traffic. No driveway shall enter the adjoining

street at a point closer than the distances shown below to the intersection of the street right-of-way lines, or in the case of a rounded property corner, from the intersection of the street right-of-way lines extended:

1. Local Street: 50 feet
  2. Collectors: 75 feet
  3. Arterials: 100 feet
- b. Orientation and Configuration.
- i) Side lines of lots shall be at approximately right angles to straight streets and on radial lines on curved streets. Some variation from this requirement is permissible, but pointed or very irregular lots should be avoided.
  - ii) Double frontage lots should not be platted, except that, where desired along interstates, arterials, major collectors, or minor collectors, lots may face on a local street and back on such thoroughfares. In that event a bufferyard of no less than Bufferyard D of *Chapter 3, Section A Landscaping & Bufferyards* shall be provided along the back of each lot.
- c. Shape.
- i) The depth and width of any lot shall not exceed a three-to-one (3:1) depth to width ratio.
  - ii) The lot size, width, depth, shape, grade location, and orientation shall be in proper relation to street and block design and to existing and proposed topographical conditions.
  - iii) Building lines shall conform to the provisions of the respective zoning district.
  - iv) Corner lots shall be sufficiently larger than interior lots to allow maintenance of building lines on both streets.
  - v) Lots abutting a watercourse, drainage way, channel, or stream, outside of the area designated as open space shall have additional minimum width or depth as required to provide an adequate building site and afford the minimum usable area required by the respective zoning district for front, rear, and side yards.
- d. Other.
- i) Whenever possible, unit shopping centers, based upon sound development standards, should be designed in contrast to the platting of lots for individual commercial use.
3. Industrial Subdivisions.
- a. Access.
- i) All lots shall abut on a street.
  - ii) For the purposes of establishing lot lines, street right-of-way lines shall be considered as the front line of lots and tracts bordering such street.
  - iii) Lots shall not derive access exclusively from an arterial, major collector, or minor collector. Where driveway access from an arterial, major collector, or minor collector may be necessary for several adjoining lots, the PC may require that such lots be served by a shared driveway in order to limit possible traffic hazards on such

street. Because of their limited nature, shared driveways are not required to meet public roadway requirements.

- b. Orientation and Configuration.
    - i) Side lines of lots shall be at approximately right angles to straight streets and on radial lines on curved streets. Some variation from this requirement is permissible, but pointed or very irregular lots should be avoided.
    - ii) Double frontage lots should not be platted, except that, where desired along interstates, arterials, major collectors, or minor collectors, lots may face on a local street and back on such thoroughfares. In that event a bufferyard of no less than Bufferyard D of the UDO shall be provided along the back of each lot.
  - b. Shape.
    - i) The depth and width of any lot shall not exceed a three-to-one (3:1) depth to width ratio.
    - ii) The lot size, width, depth, shape, grade location, and orientation shall be in proper relation to street and block design and to existing and proposed topographical conditions.
    - iii) Building lines shall conform to the provisions of the UDO.
    - iv) Corner lots shall be sufficiently larger than interior lots to allow maintenance of building lines on both streets. A corner lot shall include a vision clearance space between three (3) feet and twelve (12) feet above the established grade at the street corner which is free from any kind of obstruction to vision. The vision clearance space shall occupy the triangular space at the street corner which is above a diagonal line connecting two (2) points measured fifteen (15) feet equidistant from the street corner along each property line.
    - v) Lots abutting a watercourse, drainage way, channel, or stream, outside of the area designated as open space shall have additional minimum width or depth as required to provide an adequate building site and afford the minimum usable area required by the UDO for front, rear, and side yards.
  - c. Other.
    - i) Reserved.
4. Residential Subdivisions - Minor.
- a. Access.
    - i) All lots shall abut on a street.
    - ii) For the purposes of establishing lot lines, street right-of-way lines shall be considered as the front line of lots and tracts bordering such street.
    - iii) Lots shall not derive access exclusively from an arterial, major collector or minor collector. Where driveway access from an arterial, major collector or minor collector may be necessary for several adjoining lots, the PC may require that such lots be served by a shared driveway in order to limit possible traffic hazards on such street. Because of their limited nature, shared driveways are not required to meet public roadway requirements.

- b. Orientation and Configuration.
    - i) All residential subdivisions must depict an arrangement of residential lots so as to reduce, to the maximum extent feasible, any nuisance or conflict between residential and agricultural uses, both within the tract and in relation to adjoining and nearby tracts and to demonstrate compatibility of the proposed minor plat and existing agricultural uses.
    - ii) In order to preserve agricultural ground, minor subdivisions in the AG – General Agricultural zoning district shall be laid out in a cluster design. This is best accomplished by contiguously grouping the lots in such a manner so as to consume the least amount of land possible given the constraints of the landscape.
    - iii) Minor subdivision plats must locate and arrange the residential lots so as to protect, to the maximum extent possible, that portion of the tract preserved for agricultural use.
    - iv) Side lines of lots shall be at approximately right angles to straight streets and on radial lines on curved streets. Some variation from this requirement is permissible, but pointed or very irregular lots should be avoided.
    - v) Double frontage lots should not be platted, except that, where desired along interstates, arterials, major collectors, or minor collectors, lots may face on a local street and back on such thoroughfares. In that event a bufferyard of no less than Bufferyard D of the UDO shall be provided along the back of each lot.
  - c. Shape.
    - i) The depth and width of any lot shall not exceed a three-to-one (3:1) depth to width ratio.
    - ii) The lot size, width, depth, shape, grade location, and orientation shall be in proper relation to street and block design and to existing and proposed topographical conditions.
    - iii) Building lines shall conform to the provisions of the UDO.
    - iv) Corner lots shall be sufficiently larger than interior lots to allow maintenance of building lines on both streets. A corner lot shall include a vision clearance space between three (3) feet and twelve (12) feet above the established grade at the street corner which is free from any kind of obstruction to vision. The vision clearance space shall occupy the triangular space at the street corner which is above a diagonal line connecting two (2) points measured fifteen (15) feet equidistant from the street corner along each property line.
  - d. Lots abutting a watercourse, drainage way, channel, or stream, outside of the area designated as open space shall have additional minimum width or depth as required to provide an adequate building site and afford the minimum usable area required by the UDO for front, rear, and side yards.
  - e. Other.
    - i) Reserved.
5. Residential Subdivisions - Major.
- a. Access.

- i) All lots shall abut on a street.
  - ii) For the purposes of establishing lot lines, street right-of-way lines shall be considered as the front line of lots and tracts bordering such street.
  - iii) Lots shall not derive access exclusively from an arterial, major collector, or minor collector. Where driveway access from an arterial, major collector, or minor collector may be necessary for several adjoining lots, the PC may require that such lots be served by a shared driveway in order to limit possible traffic hazards on such street. Because of their limited nature, shared driveways are not required to meet public roadway requirements.
  - iv) In order to provide extended flexibility in design, road frontage requirements may be reduced by up to twenty percent (20%) on up to twenty percent (20%) of all lots in a subdivision.
- b. Orientation and Configuration.
- i) All residential subdivisions must depict an arrangement of residential lots so as to reduce, to the maximum extent feasible, any nuisance or conflict between residential and agricultural uses, both within the tract and in relation to adjoining and nearby tracts and to demonstrate compatibility of the proposed minor plat and existing agricultural uses.
  - ii) Side lines of lots shall be at approximately right angles to straight streets and on radial lines on curved streets. Some variation from this requirement is permissible, but pointed or very irregular lots should be avoided.
  - iii) Double frontage lots should not be platted, except that, where desired along interstates, arterials, major collectors, or minor collectors, lots may face on a local street and back on such thoroughfares. In that event a bufferyard of no less than Bufferyard D of the UDO shall be provided along the back of each lot.
- c. Shape.
- i) The depth and width of any lot shall not exceed a three-to-one (3:1) depth to width ratio.
  - ii) The lot size, width, depth, shape, grade location, and orientation shall be in proper relation to street and block design and to existing and proposed topographical conditions.
  - iii) Corner Lots.
    1. All corner lots shall be twenty-five percent (25%) larger in lot area and lot width than the minimum requirements for the applicable zoning district found in the UDO.
    2. Corner lots shall be sufficiently larger than interior lots to allow maintenance of building lines on both streets. A corner lot shall include a vision clearance space between three (3) feet and twelve (12) feet above the established grade at the street corner which is free from any kind of obstruction to vision. The vision clearance space shall occupy the triangular space at the street corner which is above a diagonal line connecting two (2)



points measured fifteen (15) feet equidistant from the street corner along each property line.

- d. Setbacks. Building lines shall conform to the provisions of the UDO.
  - i) Front Setback.
    - 1. Patterns. Irregular patterns of established front setbacks are encouraged. Additionally, front porches (allowed projections into the front setback) and variations in rooflines should be used to create the illusion of variations in established front setback.
  - ii) Lots abutting a watercourse, drainage way, channel, or stream, outside of the area designated as open space shall have additional minimum width or depth as required to provide an adequate building site and afford the minimum usable area required by the UDO for front, rear, and side yards.
- e. Other.
  - i) Reserved.

#### **D) Open Space**

- 1. Ponds.
  - a. Detention/retention ponds may be included as part of the open space area, as may land within easements for underground pipelines and high-tension power lines, provided that no more than twenty-five percent (25%) of all open space areas within the subdivision shall be used for these purposes. Waiver from this requirement may be requested at the time of Primary or Secondary Plat application.
- 2. Ownership.
  - a. Open space areas shall be owned and managed by an owners' association, a recognized land trust or conservancy, or a public entity. Open space may not be owned by an individual property owner.
    - i) Offer of Dedication. Dedication of open space may be made to any public or private agency interested in accepting the responsibility for continued management. Dedication shall take the form of fee simple ownership. Such accepting entity may, but shall not be required to accept open space. Any entity accepting open space and its continued management may require the posting of financial surety to ensure structural integrity of said improvements as well as the functioning of said improvements for a term not to exceed three (3) years from the date of acceptance of dedication. The amount of financial surety shall not exceed twenty percent (20%) of the actual cost of installation of said improvements.
    - ii) Owner's Association. Any owners' association holding in common ownership. The undivided open space and associated facilities shall be formed and operated under the following minimum provisions:
      - 1. The subdivider shall provide a description of the association, including its bylaws, covenants, restrictions and methods for maintaining the open space.

2. Membership in the association is mandatory for all purchasers of property therein and their successors. The conditions and timing of transferring control of the association from subdivider to owners shall be identified.
  3. The owners' association shall be responsible for maintenance of insurance and payment of taxes on undivided open space, enforceable by liens placed by the Town or PC on the owners' association. The owners' association may place liens on the improvements or lots of its members who fail to pay their association dues in a timely manner, if provided for in the covenants and restrictions.
  4. The members of the owners' association shall share equitably the costs of maintaining and developing such undivided open space.
  5. In the event of a proposed transfer, within the methods permitted in this UDO, of undivided open space land by the owners' association, or of the assumption of maintenance of the undivided open space land by a public or private agency, notice of such action shall be given to all property owners within the subdivision.
  6. The owners' association shall obtain adequate staff to administer common facilities and properly and continually maintain the undivided open space.
  7. Lease. The owners' association may lease undivided open space lands to any qualified person, or corporation, for operation and maintenance of open space lands, but such a lease or agreement shall provide:
    - a. That the residents or tenants of the subdivision shall at all times have access to the open space lands and facilities (except open space lands used for agricultural purposes);
    - b. That the undivided open space to be leased shall be maintained for the purposes set forth in this UDO; and
    - c. Any lease shall be subject to the approval of the board of the association and any transfer or assignment of the lease shall be further subject to the approval of the board of the association.
- iii) Dedication of Easements. A public agency may, but shall not be required to, accept easements for public use of any portion of undivided open space land and facilities, title of which is to remain in ownership by the owners' association provided that such land and facilities are available to the general public and that a satisfactory maintenance agreement is reached between the subdivider or owners' association and the public agency.
- iv) Transfer of Easements. An owners' association may transfer easements to a private, nonprofit organization, among whose purposes it is to conserve open space and natural resources provided that the conveyance contains appropriate provisions for proper reverter or retransfer in the event that the organization becomes unwilling or unable to continue to carry out its functions and that a maintenance agreement acceptable to the board of the association is entered into by the subdivider or owners' association and the organization.

3. Maintenance.
  - a. The owner of the open space shall be responsible for maintaining operation, maintenance and physical improvements to open space lands and facilities, through use of annual dues, special assessments or other financial capacity. A homeowners' association shall be authorized under its bylaws to place liens on the property of residents who fall delinquent in payment of such dues or assessments.
4. Failure to Maintain.
  - a. Failure to adequately maintain the divided and undivided open space in reasonable order and condition in accordance with recorded covenants and restrictions, constitutes a violation of this UDO subject to any and all enforcement measures authorized by this UDO necessary to obtain compliance. In the event that the association or any successor organization shall, at any time after establishment of a subdivision containing open space, fail to maintain the divided or undivided open space in reasonable order and condition in accordance with recorded covenants and restrictions, the PC may serve written notice upon the owner of record, setting forth the manner in which the owner of record has failed to maintain the open space. If no association is functioning, each property owner shall be individually and jointly liable for the assessed cost of maintenance.

**E) Plat Sheets**

1. Required Plat Language.
  - a. The following paragraphs shall be required as a provision of the restrictive covenants and on the plats sheets to which they apply:
    - i) Title Block:
      1. Signature line for PC President
      2. Signature line for Secretary
      3. Date of PC approval of the secondary plat
    - ii) Site Distance and Visibility: "No fence, wall, hedge, tree, or shrub planting which obstructs sight lines and elevations between three (3) and twelve (12) feet above the street shall be placed or permitted to remain on any corner lot within the triangular area formed by the street right-of-way lines and a line connecting a point twenty-five (25) feet from the intersection of said street lines, or in the case of a rounded property corner from the intersection of the street right-of-way lines extended."

**F) Spaces Set Aside for Public Use**

1. Public Use Sites.
  - a. Where sites for schools, fire prevention, law enforcement, day care, or other public uses indicated by the applicant, such shall be reserved for a negotiated period of time, following the date of the final approval of the plan. In the event a government agency or other entity concerned passes a resolution expressing its intent to acquire the land for its intended purpose, the reservation period shall be extended for not more than one (1) additional year.

## G) Streets

### 1. Local Street Classifications.

- a. Per the Comprehensive Plan, streets in Richland are classified as Rural Other Principal Arterial, Rural Minor Arterial, Rural Major Collector, Rural Minor Collector, and Local Street. For the purposes of subdivision development, Local roads shall be further classified and defined as Subcollector, Feeder Road, and Access Street.
  - i) Subcollector. Subcollectors operate as the principal traffic artery within subdivision development. Subcollectors commonly carry relatively high volumes and convey traffic from collectors and other roads outside of the development. Subcollectors are designed to promote the free flow of traffic. Parking along a subcollector shall be prohibited and road cuts shall be minimized.
  - ii) Feeder Road. Feeders convey traffic from access streets to subcollectors, collectors and other roads. Feeders commonly carry a relatively low volume of traffic. Feeders may be used for road frontage and access to lots.
  - iii) Access Street. Access streets convey traffic from the subdivision lot to feeders or subcollectors. Access streets commonly carry no through traffic and include short streets, often ending in a cul-de-sac. Access streets are designed to serve a limited number of dwellings or establishments.

### 2. Considerations for Local Street Classification.

- a. In classification of streets, the average daily traffic (ADT) shall be considered. In the instance that a use is not indicated, the applicant shall either propose, to the satisfaction of the Administrator, a similar but indicated use, or provide sufficient private information regarding such use as to provide an accurate estimate of average daily traffic including but not limited to:
  - i) Density and lot width,
  - ii) Abutting land use,
  - iii) Availability of off-street parking ,
  - iv) Proximity of residential to commercial (or commercial to residential) development and other services, and
  - v) Public service such as trash collection, snow removal and public safety.

### 3. Layout.

- a. The street layout shall provide adequate vehicular and pedestrian access to all lots and parcels of land within the subdivision and where streets cross other streets, jogs shall not be created. Streets shall conform to the following principles and standards:
  - i) Proposed streets shall be adjusted to the contour of the land so as to produce usable lots and streets of reasonable gradient.
  - ii) Residential street systems may be designed to minimize through traffic movement, but certain proposed streets, where appropriate, shall be extended to the boundary line of the tract to be subdivided so as to provide for normal circulation of traffic within the vicinity.

- iii) Wherever there exists a dedicated or platted portion of a street adjacent to the proposed subdivision, the remainder of the street to the prescribed width shall be platted within the proposed subdivision.
- iv) Residential street patterns shall provide reasonably direct access to the primary circulation system.
- v) Local circulation systems and land development patterns shall not conflict with the efficiency of bordering thoroughfares.
- vi) Widths of thoroughfares shall conform to the Richland Standard Specifications and Details.
- vii) The minimum right-of-way of residential streets or cul-de-sacs shall be fifty (50) feet. All cul-de-sacs longer than six hundred (600) feet shall terminate in a right-of-way with a minimum diameter of one hundred (100) feet and minimum roadway diameter of ninety-five (95) feet.
- viii) The center lines of streets should intersect as nearly at right angles as possible.
- ix) At intersections of streets, property line corners shall be rounded by arcs of at least twenty (20) feet radii or by chords of such arcs.
- x) If the smaller angle of intersection of two (2) streets is less than sixty degrees (60°), the radius of the arc at the intersection of property lines shall be increased as deemed advisable by the PC.
- xi) Intersections of more than two (2) streets at one (1) point shall be avoided.
- xii) Street jogs with centerline off-sets of less than one hundred twenty-five (125) feet shall not be permitted when intersecting an access or feeder road, or two hundred fifty (250) feet when intersecting a subcollector or collector road.
- xiii) Where parkways or special types of streets are involved, the PC may apply special standards to be followed in their design.
- xiv) Whenever the proposed subdivision contains or is adjacent to a railroad right-of-way, arterial, major collector, or minor collector, frontage or access road to be built in such a manner as to provide adequate and safe access, parking and loading to the site while minimizing road cuts.
- xv) A temporarily dead-ended street shall be permitted in any case in which a street is proposed to be and should logically be extended but is not yet constructed. An adequate easement for a turn-around shall be provided for any such temporary dead-end street which extends two hundred (200) feet or more in length. Such easement shall be automatically vacated to abutting property owners when said dead-ended street is legally extended.
- xvi) In subdivisions that adjoin or include existing streets that do not conform to the minimum right-of-way dimensions as established by the Richland Standard Specifications and Details, the subdivider shall dedicate additional width along either one (1) or both sides, of such streets of inadequate width so as to bring them up to standards, provided the area to be used for widening is owned by the subdivider or under his control.

- xvii) Horizontal visibility on curved streets and vertical visibility on all streets must be maintained along the center line as follows:
  - 1. Major Arterial, Minor Arterial, and Major Collector – five hundred (500) feet;
  - 2. Minor Collector – three hundred (300) feet;
  - 3. Local Street – two hundred (200) feet.
- xviii) Curvature measure along the center line shall have a minimum radius as follows:
  - 1. Major Arterial, Minor Arterial, and Major Collector – five hundred (500) feet;
  - 2. Minor Collector – three hundred (300) feet;
  - 3. Local Street – two hundred (200) feet.
  - 4. Between reversed curves of Major Arterials, Minor Arterials, Major Collectors, and Minor Collectors, there shall be a tangent of not less than one hundred (100) feet and on Local Streets such tangent shall be not less than forty (40) feet.
- xix) Maximum grades for streets shall be as follows:
  - 1. Major Arterials, Minor Arterials, Major Collectors, and Minor Collectors: not greater than six percent (6%).
  - 2. Local Streets: not greater than eight percent (8%).
  - 3. The minimum grade of any street gutter shall not be less than five tenths percent (0.5%).

4. Installation.

- a. Streets shall be completed to grades shown on plans, profiles, and cross-sections, provided by the subdivider, and prepared by a registered professional engineer and approved by the PC.
  - i) The streets shall be graded, surfaced, and improved to the dimensions required by such plans, profiles and cross-sections and the work shall be performed in the manner prescribed in “Standard Specifications for Road and Bridge Construction and Maintenance” (current issue) of INDOT and construction standards of this UDO and the appropriate Highway Department. References in the following paragraphs refer to the INDOT Standard Specifications.
  - ii) The street pavement shall be of Portland Cement Concrete or a flexible asphalt concrete pavement in accordance with design standards noted in the Richland Standard Specifications and Details. Acceptable pavement alternatives are also available in the Richland Standard Specifications and Details. All concrete pavement and flexible asphalt pavement mix designs shall meet or exceed all minimum INDOT Standard Specifications. A gradation report of all materials used in the mix designs and the mix design shall be furnished to the appropriate Highway Department. Recycled Asphalt Pavement (RAP) shall not exceed ten percent (10%) of base or binder mix designs. No RAP will be allowed in the asphalt surface mix design.

- iii) No asphalt base, binder or surface layer shall be placed until air temperature is forty-five degrees (45o) and rising as in accordance with INDOT standards and the applicable Highway Department requirements. An asphalt emulsion tack coat is required on the full face of any curb and in between the base or binder and surface layer. Before any surface layer can be applied it should be cleaned to the approval of the appropriate Highway Department.
- iv) The asphalt contractor shall have an adequate supply of equipment on the job site approved by the Highway Inspector.
- v) Compaction of all pavement shall be in accordance with INDOT standards specifications.
- vi) All stone aggregates used shall meet or exceed INDOT Standard Specifications and shall be a Class A Type "O" aggregate. A gradation report of the material dated no more than five (5) days prior to delivery of material to the subdivision shall be supplied to the appropriate Highway Department prior to placement of stone material. If the stone does not have enough moisture in it to get adequate compaction then the contractor shall have a water truck available to apply a sufficient amount of water needed to obtain the required compaction. All stone bases shall be compacted by a minimum ten (10) ton vibratory roller. Each stone base shall be inspected by the appropriate Highway Department before the next course can be applied.
- vii) Under drains shall be required under both sides of streets and shall be located as indicated in the Richland Standard Specifications and Details and shall discharge into a storm drainage system. A gradation report for stone or gravel shall be provided to the appropriate Highway Department and the Spencer County Surveyor prior to placement of material.
- viii) Subcollector streets for commercial or industrial development shall be required to meet all specifications for residential collector streets while feeder or access streets shall be required to meet all specifications for residential subcollector streets.
- ix) Where an arterial, major collector or minor collector is located within a subdivision as established by this UDO, the subdivider shall construct such street pavement in accordance with the Richland Standard Specifications and Details.
- x) Prior to placing the street surface, adequate drainage for the street shall be provided by the subdivider. Culvert drainage pipe, when required, shall be concrete pipe or a similar type not less than twelve (12) inches in diameter approved by the PC. Upon the completion of the street improvements, plans and profiles as built shall be filed with the PC. Longitudinal sub-grade drainage shall be provided below the depth of the sub-grade.
- xi) Before any performance bond covering a street installation is released, the PC, the Town Council, or appropriate Highway Department may request that core borings of the street be done at the subdivider's expense. Cores shall be sent to the appropriate Highway Department and/or an independent testing laboratory for analysis. The subdivider may request permission of the PC and the Town Council to

delay the installation of the one and a half (1.5) inch surface layer of asphalt until the binder layer of asphalt has had a sufficient time period to prove its durability under the stress of heavy construction traffic. The subdivider shall be required to submit a separate performance bond to cover the cost of the installation of the one and a half (1.5) inch surface layer of asphalt.

5. Block Standards.
  - a. Block length and width or acreage within bounding streets shall be such as to accommodate all requirements of this UDO in the zoning district in which the subdivision is to be located, and to provide convenient access, circulation control, and safety of traffic. Blocks that are unreasonably large or small shall not be approved.
  - b. Blocks shall not exceed one thousand two hundred (1,200) feet in length. In the design of blocks longer than eight hundred (800) feet, the PC may specify the provision of pedestrian crosswalks or interior trails near the center of the block, or wherever would be most useful to facilitate pedestrian circulation to a school, park, recreation area, shopping center, or other significant neighborhood destination.
6. Curbs and Gutters.
  - a. The PC shall require curb and gutter to be installed on each side of the street surface. The curb and gutter shall be constructed according to the following specifications:
    - i) Curb and gutters shall be placed on a well compacted aggregate base that extends approximately one (1) foot outside the back of the curb.
    - ii) All gutters and curbs shall be constructed in accordance with the Richland Standard Specifications and Details.
    - iii) All materials in the curb mix shall meet or exceed INDOT Standard Specifications Class A Concrete and a gradation report for all materials shall be furnished to the Highway Inspector prior to installation.
  - b. No concrete curb mix shall be placed below air temperatures of forty degrees (40o).
7. Sidewalks and Trails.
  - a. Sidewalks shall be required on both sides of any Major Collector, Minor Collector, subcollector, feeder, or access street upon which development occurs. The Administrator, PC, or Plat Committee may allow a minimum five (5) foot wide asphalt trail as an alternate.
  - b. Sidewalks shall be constructed of Class A Portland Cement Concrete in accordance with the Richland Standard Specifications and Details.
  - c. When possible, trails should be provided within the subdivision and should complement the sidewalk system. Trails shall be comprised of asphalt and shall maintain a minimum width of five (5) feet.
8. Street Signs.
  - a. The subdivider shall provide the subdivision with standard Town street signs at the intersection of all streets.
    - i) Stop signs shall be constructed of thirty (30) inch by thirty (30) inch High Intensity 3M sheeting. Stop signs shall be mounted on flanged u-channel sign posts, shall weigh three (3) pounds per foot and extend twelve (12) feet in length.



- ii) Speed limit signs shall be constructed on Engineer Grade 3M sheeting and be mounted on flanged u-channel sign posts which shall weigh three (3) pounds per foot and extend twelve (12) feet in length.
  - iii) All street name signs are to be constructed on nine (9) inch aluminum plate High Intensity sheeting. Street signs shall be green with six (6) inch white letters and a white border. All street signs are to be mounted on tubular sign posts, twelve (12) feet in length.
  - iv) All mounting brackets shall be provided by the Highway Department.
  - v) All street signs shall conform to the Manual on Uniform Traffic Control Devices (MUTCD) for Conventional Roads.
- 9. Street Lights.
  - a. Street lights may be required to be installed at intersections throughout the subdivision and such installations shall conform to the requirements of the public utility providing such lighting.
- 10. Acceleration and Deceleration Lanes.
  - a. Acceleration and deceleration lanes shall be provided at the intersection of any proposed Local street and arterial, major collector or minor collector.
- 11. Bridges and Culverts.
  - a. All bridges and culverts shall be constructed in accordance with applicable engineering standards as approved by the Spencer County Highway Department.
- 12. Street Names.
  - a. No street names may be used which will duplicate, or be confused with, the names of any existing streets unless said proposed streets are the logical extension of continuation of, or obviously in alignment with an existing platted street, in which case the proposed streets shall bear the names of such existing streets. The PC shall have final authority to approve names for all streets.
- 13. Improvements to Adjacent Streets.
  - a. Whenever a proposed subdivision borders an existing street, the PC may require the reconstruction or widening of such street as a condition of plat approval. Additional dedication of right-of-way may also be required.
- 14. Private Roadways.
  - a. Major Subdivisions. Private roadways are not permitted in any type of major subdivisions.
  - b. Minor Residential Subdivision.
    - i) Private roadways may be constructed to serve lots in minor residential subdivisions. The owners of each lot parallel to the roadway shall own, as tenants in common, an undivided interest in the private roadway.
    - ii) Minor subdivisions may utilize a private, shared driveway as an alternative to development of a public street.

## **H) Utilities**

- 1. General Design Standards.

- a. Underground installation of communication and electric utilities is required. At least eighty percent (80%) of all homes in a subdivision shall be served from the rear of the lots. Such installations shall be placed along the rear lot lines within dedicated utility easements.
2. Utility Easements.
  - a. Utility easements shall have minimum width of twenty (20) feet, and where located along lot lines, no more than one-half (1/2) the width shall be taken from each lot. In the case of lots extending to the boundary of the lands platted and not adjoining another plat, the full width of the easements shall be provided on such peripheral lots. Before determining the location of easements, the plan shall be discussed with the local public utilities to assure their proper placing for the installation of such services.
3. Sewage Disposal.
  - a. The subdivider shall provide the subdivision with a complete sewer system, which shall connect with an existing approved public sewer utility and have a documented commitment by that public utility to provide sewer service. The plans for the installation of a sanitary sewer system shall be provided by the subdivider and approved by the Indiana State Board of Health (Refer to Regulation H. S. E. -14, I. S. B. H.). All public utility installations shall be designed and installed at least to the standards and specifications as permitted by law of an incorporated area if within two (2) miles of the development.
4. Water.
  - a. The subdivider shall provide the subdivision with a complete water supply system, which shall be connected to an existing approved municipal water utility, except that when no such supply is available, the subdivider shall provide one (1) of the following:
    - i) A complete community water supply system to be provided in accordance with the minimum requirements of the Indiana State Board of Health. The plans for the installation of water main supply systems shall be provided by the subdivider and approved by the Indiana State Board of Health.
    - ii) An individual water supply on each lot in the subdivision in accordance with the minimum requirements of the Spencer County Health Department. In the case of private water supply the subdivider shall provide evidence that such facility can feasibly be installed and function on the site.