
INTEROFFICE MEMORANDUM

TO: MAYOR AND COUNCIL

FROM: DINA RIMI, COMMUNITY DEVELOPMENT DIRECTOR

SUBJECT: ORDINANCES.

DATE: 1/24/2022

CC: HAROLD SIMMONS

During the Planning Commission's discussion on the R-25C zoning category a few items were recommended to be added to the requirements of this zoning category. After speaking with legal the staff advised the Mayor and Council that most of these items can be addressed through the Land Development regulations.

The attached document addresses the seven items that were recommended by the Planning Commission and where they can be located in the city ordinances. The staff instructed the Planning Commission during the October if they would like any of the items amended and application for a text amendment can be submitted to the city staff, this would then be heard by the Planning Commission and the Mayor and Council.

1. Promote the use of conservation subdivisions to preserve greenspace and rural setting –

This has been done by the creation of the R25C zoning category.

2. Continue multi-use paths between neighborhoods to increase connectivity and reduce car traffic

- **Sec. 74-147. - Connectivity improvements within IC district.**

A development strategy identified in the Draft 2016—2036 Comprehensive Plan states, "The city intends to protect these areas (R-40 residential developments) from incompatible adjacent development, particularly loud or noxious uses. The construction of sidewalks in these subdivisions where there are none. The connectivity of these subdivisions to each other and near to commercial areas via multi-use trails, paths, and sidewalks. The city shall endeavor to construct pedestrian and street connectivity to future developments." The provision of public improvements such as sidewalks to serve new inclusive community district neighborhoods is consistent with this plan strategy. Input gleaned from a visioning exercise revealed the following comments concerning housing that support the tenets of the inclusive community district:

Sec. 40-130. - Multiuse trail standards.

When required by the mayor and council, multiuse paths shall be installed by the developer and shall comply with the following standards:

(1)The alignment of the path shall conform to the general plan for the area or as directed by the planning commission. The path shall be located a minimum of four feet from any property line except where located on an easement for access to a street or where unique topographical features warrant such location. Such locations must be noted on the preliminary plat.

(2)All new multiuse paths shall be constructed at a minimum of ten feet in width, and shall be constructed of two-inch 9.5 mm Superpave asphalt over a four-inch compacted, aggregate base. The aggregate base shall extend a minimum of 36 inches on either side of the multiuse path. A clearance zone measuring four feet in width × eight feet four inches in height shall be provided and maintained as measured from the edge of the path. (A detail of these path standards is found within local design manual.)

(3)Where the city engineer shall direct existing ground conditions require cross drainage under paths, the pipe size and alignment of the culverts.

(4)After the paving is complete, the city engineer and any defects noted and the developer so notified of the deficiencies shall inspect the paths. Grassing and backfilling the edges of the path shall be included within the specifications.

(5)Easements for multiuse paths shall be 20 feet in width as a minimum.

(6)In all new residential subdivisions where a multiuse path is located between two platted lots, a city-owned greenbelt of no less than 50 feet in width shall be provided and deeded to the city as a part of the final plat process. Clearing and grading within the greenbelt shall be kept to the absolute minimum necessary to accommodate construction of the path.

3. Encourage sidewalk connections to existing network where appropriate

Sec. 74-196. - Pedestrian improvements.

(a) All developments shall provide sidewalks having a minimum width of six feet along all frontages of the lot that abut a public street.

(b) Continuous on site sidewalks having a minimum width of four feet shall be provided from the public sidewalk to the principal customer entrance of all buildings on the site. Such sidewalks shall provide weather protection features such as awnings or arcades along the building facade within 30 feet of all customer entrances. Sidewalks shall connect focal points of pedestrian activity such as, but not limited to, street crossings, building and store entrances.

(c) Sidewalks having a minimum width of six feet shall be provided along the full length of the building facade featuring a customer entrance, and along any facade abutting public parking areas

(d) All buildings shall provide direct pedestrian access from on-site parking areas as well as the public sidewalk.

(e) All on site sidewalks shall be distinguished from vehicular surfaces through the use of durable, low maintenance materials such as pavers, bricks, or scored concrete to enhance pedestrian safety.

4. Tree canopy preservation –

Please see the attached document

5. Encourage road network connectivity and connections to existing grid and future potential grid

Please see the attached document.

6. Utilize buffers and to protect rural setting where appropriate

Sec. 40-116. - Greenspace buffers.

In residential subdivisions, a greenspace buffer area shall be reserved between the right-of-way of arterial thoroughfares, major collectors, and minor streets, as follows:

(1) Along arterials and major collectors, the greenspace area shall be no less than 100 feet between the street right-of-way and property line.

(2) Along minor streets, the greenspace area shall be no less than 50 feet between the street right-of-way and property line

(3) The greenspace area shall be shown on the landscape plan.

The greenspace area will be designated on all plats as "City Greenspace Area" to be dedicated to the city.

This could be amended to have an undisturbed buffer with the exception of areas that may need to be disturbed for infrastructure. These areas will need to be shown on the construction drawings.

(Ord. of 7-1-2002, § 706; Ord. No. 18-10 , § 1, 1-7-2019)

7. **Promote a mix of housing types and price points – This has been done through the recently approved R-25C. The staff has also requested a revision to the Apartment and Townhome regulations to increase these types of developments, while maintaining the design standards that the city desires.**

ARTICLE XI. - VEGETATION PROTECTION AND LANDSCAPE REQUIREMENTS

Sec. 40-221. - Purpose.

Intent of article and declaration of public policy. The guiding presumption behind this chapter is the belief that the natural environment has significant value in and of itself, and that all reasonable measures available should be used in the preservation of that environment, consistent with the continued development of a viable Senoia.

The city council, therefore, declares it to be public policy to:

- (1) Aid in stabilizing the environment's ecological balance by contributing to the process of air purification, oxygen regeneration, groundwater recharge and stormwater runoff retardation, while at the same time aiding in noise, glare, and heat abatement;
- (2) Assist in providing adequate light and air by preventing overcrowding of land;
- (3) Provide visual buffering and enhance beautification of the city;
- (4) Safeguard and attempt to enhance property values and, in so doing, protect private and public investment;
- (5) Preserve, protect and further the unique identity and environment of Senoia, and, thereby, preserve the economic base attracted to the city by such factors;
- (6) Recognize that the protection and enhancement of the natural beauty, environment, and greenspace within Senoia contributes to the economy, as well as provides a truly necessary aesthetic balance to the development of an urban setting;
- (7) Conserve an ever-dwindling supply of energy, by the preservation and enhancement of the natural environment;
- (8) Protect the atmosphere, lands, and water from pollution, impairment or unnecessary destruction;
- (9) Protect natural vegetation except where its removal is necessary for responsible property development or control of disease and infestation. This chapter shall serve to dissuade the unnecessary clearing of land and its disturbance, so as to preserve, insofar as possible, the natural and existing growth of vegetation, and to replace whenever possible the removed foliage with new vegetation;
- (10) Protect vegetation within the intermediate regional flood plain and for a minimum ten feet from the banks and those streams not having defined intermediate regional flood plain elevation contour, so as to assist in the retention of stormwater runoff and the control of erosion, including particularly the protection of stream bank stability by vegetation protection or restoration;
- (11) Preserve protected and "specimen" trees or strands of trees which are exceptional

- (l) *Tree, protected.*
 - (1) Any deciduous canopy trees 15 inches in diameter four feet above ground.
 - (2) Any evergreen canopy trees 18 inches in diameter four feet above ground.
 - (3) Any understory tree four inches in diameter at four feet above ground.
- (m) *Tree removal.* Means cutting, uprooting, or severing the main trunk of the tree, or any other act which causes or may reasonably be expected to cause the death of a tree.
- (n) *Tree, "specimen."* Any tree reaching the upper range of the mature diameter and the height for that species of tree.
- (o) *Tree, understory.* Any tree, which is of relatively lesser height and spread than surrounding canopy trees, but still provides shade and a degree of protection to the earth and vegetation beneath it. Examples include dogwood, cherry, red bud, sassafras, crabapple, pear, American holly, red cedar, and magnolia.

(Ord. of 7-1-2002, § 1102)

Sec. 40-223. - Preservation of protected and specimen trees.

It shall be unlawful for any person or corporation to remove or cause the removal of any protected or specimen tree without having first received approval either through the process of site plan review, in the case of new development, or in the form of a tree-removal permit.

- (1) *Approval through site plan review.* When site plan review by the planning commission is required for any development, the actual or schematic locations of all protected or specimen trees shall be shown on all site plans by location, species and size. The site plans shall be submitted to the zoning administrator for evaluation and recommendation before submission to the planning commission. All site plans shall also include those requirements listed under tree removal application requirements (subsection (2) below). Final approval of the site plan shall constitute approval of the site plan shall constitute approval for removal of any protected or specimen trees impacted by development on the site plan.
- (2) *Application for permit to remove protected or specimen trees.* The application for a tree removal permit shall be on a form provided by the city for this purpose. An application for the removal of any protected or specimen trees on public or private property shall include the following:
 - a. The approximate location of the tree(s);
 - b. The diameter of the trunk of each tree, as measured four feet above natural grade level;
 - c. The approximate crown size of each tree (measured dripline to dripline) and any distinguishing characteristics of the tree(s);

Sec. 40-226. - Standards for review.

The zoning administrator shall approve any request for removal of a protected or specimen tree when a completed application has been received and justification is made in accordance with the provisions of section 40-224.

In making any determination concerning an application for any protected or specimen tree removal, the zoning administrator shall consider the following:

- (1) Desirability, of preserving any tree by reason of its size; age or some other outstanding quality, such as uniqueness, rarity or species or status as a landmark;
- (2) The extent to which the area would be subject to increased water runoff and other environmental degradation due to removal of the tree or trees;
- (3) The heightened desirability of preserving tree cover in densely developed or densely populated areas;
- (4) The need for visual screening or buffering in area of differing zoning or usage, or relief from glare or commercial or industrial ugliness or other affront to the visual sense;
- (5) The affect that the change in natural grade will have on the trees to be preserved;
- (6) Good forestry practice—i.e. the number of healthy trees or species of trees which the site or any portion thereof can support; and
- (7) Such other circumstances as may relate to a particular application.

(Ord. of 7-1-2002, § 1106)

Sec. 40-227. - Treatment and removal of infected and infested trees.

- (a) If any tree on public property is infested with insects or infected with a disease detrimental to surrounding vegetation, the city may remove the tree and otherwise control such infection and infestation.
- (b) *Private property.* It shall be the responsibility of any person having trees on his property to treat and/or remove any infected or infested tree. However, before removing said trees, the property owner must apply for a tree removal permit.

(Ord. of 7-1-2002, § 1107)

Sec. 40-228. - Enforcement.

Each protected or specimen tree removed without approval, as provide herein, shall be considered a separate offense, which is subject to a penalty as determined by the judge of the municipal court.

areas like islands, peninsulas, and medians. Parking areas designed to accommodate more than 20 automobiles must install interior landscaped areas so that no more than 12 adjacent parking spaces exist without a landscaped separation of at least five feet in width. If significant tree-save areas or natural areas exist within a parking area, the city may make an exception to this requirement, as appropriate.

- (11) Screening shall be used as a buffer between incompatible uses, and to reduce the effects of headlight glare, noise and other objectionable activities. The following minimum requirements shall apply to screening:
 - a. All vegetation used for screening shall be at least six feet in height at time of installation. Plants shall be placed as to provide for effective visual screening within three growing seasons. Planting beds required for screening shall be a minimum of six feet in width;
 - b. Screening may consist of a fence, a wall, or vegetation and/or a mix of any or all of the foregoing. The outer or public side of fences and walls shall be landscaped enough to soften the structure with a tree or shrub at least 50 feet; subject to approval of the zoning administrator;
 - c. Screening shall be installed on all lot lines where commercial, industrial, and institutional uses abut residential zoning districts except for entrances or exits;
 - d. No screening shall be removed without the written permission of the zoning administrator;
 - e. Screening vegetation and fencing shall be maintained in a healthy and attractive manner;
 - f. The zoning administrator may require screening in conjunction with the issuance of a building permit not requiring plat or site plan approval.
- (12) The zoning administrator upon site inspection and landscape plan review may require an applicant to naturalize areas, which visually impair public rights-of-way. The intent of this requirement is to supplement tree requirements with small caliper material (one-gallon maximum) in areas where screening or landscape visual continuity is required.
- (13) If significant trees are saved on a development site, then up to a 50 percent credit can be issued by the city. This will only be issued if the tree-save areas are considered to be aesthetically or environmentally significant by the zoning administrator.
- (14) If there are significant landscape problems on site (for example, areas totally void of trees), the zoning administrator may not allow tree credit, even though trees may be saved.
- (15) If a development involves an addition or modification to the side or rear of an existing building or structure which is already properly landscaped, the zoning administrator may allow up to a 50 percent reduction in the canopy and understory tree requirements.

Sec. 40-231. - Landscape plan approval procedures.

For any landscape plan required by these regulations, the following procedures shall be followed;

- (1) A developer shall submit to the zoning administrator three copies of a landscape plan, which meets the requirements of these regulations.
- (2) The landscape plan shall be submitted along with the required site plan and the required grading plan.
- (3) For consideration at a planning commission meeting, the landscape plan must be submitted to and accepted by the zoning administrator at least 15 days prior to the planning commission meeting.
- (4) The landscape plan will be reviewed by the zoning administrator if the landscape plan does not meet the requirements of these regulations; the zoning administrator will return the plan to the developer with comments and suggestions for correction. If the plan meets the requirements, the zoning administrator shall place the landscape plan on the next planning commission agenda.
- (5) The zoning administrator shall submit the results of their review in writing to the planning commission.
- (6) The planning commission will review the landscape plan, taking into consideration the requirements of these regulations, the zoning administrator's report and approve; disapprove; or approve with modifications.
- (7) If the planning commission approves the landscape plan, a copy will be returned to the developer with the approval inscribed thereon, along with a notation of any appropriate conditions or review comments.
- (8) If the planning commission does not approve the landscape plan, the developer may resubmit, with necessary changes, following the same procedures as if it were an original application.
- (9) An approved landscape plan must be implemented prior to the issuance of a certificate of occupancy; or the developer may choose to provide the city clerk with a performance bond or other acceptable security in an amount equal to 150 percent of the city's estimated cost of the required improvements which have not been installed or are not installed in a satisfactory manner.
- (10) Upon posting this bond or security, the developer shall have a one-year period in which to complete the required improvements in a satisfactory manner, or the bond or other security shall be forfeited and revoked, and the city shall then take whatever action is necessary to have the developer complete the required improvements as soon as possible thereafter.
- (11) When a developer has installed the required landscaping improvements, he shall request

ARTICLE VIII. - REQUIREMENTS FOR STREETS AND OTHER RIGHTS-OF-WAY

Sec. 40-151. - Purposes.

This chapter is enacted to provide standards and procedures for construction of streets in the City of Senoia.

(Ord. of 7-1-2002, § 801)

Sec. 40-152. - Plan submission requirements.

Prior to receiving a development or building permit, any person proposing development or construction in the city shall submit the following documents and plans to the city engineer for his approval:

- (1) Grading, erosion and sedimentation control and drainage plans, prepared by a professional engineer, or landscape architect currently registered and licensed in Georgia, which show compliance with this chapter.
- (2) Statement of projected work sequence for the proposed project.

(Ord. of 7-1-2002, § 801)

Sec. 40-153. - Design standards.

Unless otherwise specifically set forth herein, all of the materials, methods of construction and workmanship for street and drainage installation shall conform to or equal to standards published by the city.

If no city-published standard exists, the work shall conform to the latest specifications of the Georgia Department of Transportation.

(1) *Access.*

- a. All entrances or exits of any public or private street or drive onto any state highway must be approved by the Georgia Department of Transportation and the city council prior to the issuance of a city development permit.
- b. Curb cuts on all nonresidential streets shall be located no less than 50 feet, measured from back to curb, from any intersection.
- c. In all nonresidential zoning districts, curb cuts shall not be less than 50 feet apart measured between back of curbs.
- d. Curb cuts onto arterial and collector streets shall not be closer than 20 feet, measured from back to curb, to any property line in all zoning districts.
- e. All curb cuts onto arterial roads must be approved by the DOT and include a deceleration lane constructed to standards of the Georgia Department of Transportation.

(2) *Minimum right-of-way widths.*

- a. Divided street—130 feet.
- b. Major collector street—80 feet.
- c. Minor collector street—60 feet.
- d. Major industrial street—80 feet.
- e. Minor industrial street—60 feet.

- a. Residential street.
Six-inch compacted graded aggregate base.
Two-inch type "B" asphaltic concrete binder.
One-inch type "F" asphaltic concrete topping.
- b. Commercial/minor collector.
Eight-inch compacted graded aggregate base.
Three-inch type "B" asphaltic concrete binder.
One and one-half-inch type "E" asphaltic concrete topping.
- c. Industrial/major collector.
Eight-inch compacted graded aggregate base.
Three-inch asphaltic concrete base.
Two-inch type "B" asphaltic concrete binder.
One and one-half-inch type "E" asphaltic concrete topping.

(6) *Alignment.*

- a. Vertical arterial road profile grades shall be connected by vertical curves of a minimum length in accordance with standards published by the American Association of State Highway and Transportation Officials. Further, in approaches to intersections, there shall be a maximum four-percent grade for a distance of not less than 50 feet from the edge of pavement of an existing street.
- b. Horizontal minimum radii or centerline curvature shall be:
 1. Major and minor collector streets—400 feet.
 2. Industrial/commercial streets—400 feet
 3. Residential streets—250 feet.
- c. *Visibility requirements.* Minimum horizontal and vertical sight distances shall be as follows:
 1. Major collector streets—350 feet.
 2. Industrial/commercial streets—350 feet.
 3. Minor collector streets—275 feet.
 4. Residential streets—250 feet.

Vertical distance measured between two points shall be based on height of eye at 3.75 feet above pavement level and height of object at 0.5 feet.

(7) *Other design requirements.*

- a. *Curb and gutter sections.* All new public streets constructed within the city limits shall have 24-inch high back curbs and gutters constructed in accordance with standards adopted by the city.
- b. *Curb inlets.* Curb opening inlets shall be spaced to intercept 85 percent of the storm flows in the gutter section, based on the ten-year storm. Maximum inlet spacing should not exceed 600 feet unless drainage calculations by a professional engineer can show that gutter flow would be excessive

What Is Road Pattern | Different Types of Road Patterns | Grid Pattern Definition | Radial Pattern | Rectangular or Block Pattern | Minimum Travel Pattern

What Is Road Pattern | Different Types of Road Patterns | Grid Pattern Definition | Radial Pattern | Rectangular or Block Pattern | Minimum Travel Pattern

Builtup Area

Central Business Area or Focal Point

Radial Road

Ring Road

Radial (Star) and Grid Pattern

Radial or star & Circular pattern

Radial (Star) and Grid Pattern

Radial or Star and Circular Pattern
Radial or Star and Grid Pattern
Hexagonal Road Pattern
Minimum Travel Pattern
Grid Pattern Definition
History of Grid Pattern Road

Introduction of Road Pattern

Roadway patterns are very essential in the **development of the settlements of a city**. However, recent development in cities does not give importance to the study of the road patterns that give rise to numerous roads that are not interconnected, housing schemes and commercial **developments built far away from where roads are very distant from the centre of the town**.

The increasing **distance between the residential and commercial** hub of the city increases the **dependency upon cars** for the daily travel chores each **household member makes frequently**.

The roadway patterns also increase the response time the emergency response vehicles take to reach a certain place. There are **different types of road pattern** used in highways, when the road is constructed in a pattern like **rectangular pattern, radial pattern, hexagonal pattern**, etc. for proper management of traffic it is called a road pattern.

The roadway patterns also increase the response time, the **emergency response vehicles take more time to reach a certain place**.

Also, Read: [Fish Ladder | What Is Fish Ladder | Types of Fish Ladder | Fish Ladders in Dams](#)

What Is Road Pattern?

In this pattern, the whole area is **divided into rectangular blocks of plots**, with streets **intersecting at right angles**.

The main road which passes through the centre of the area should be **sufficiently wide and other branch roads may be comparatively narrow**.

The main road is provided with a **direct approach to outside the city**. This pattern has been **adopted in the city roads of Chandigarh**.

Pros of Rectangular or Block Pattern

1. The rectangular plots may be further divided into **small rectangular blocks** for the **construction of buildings placed back to back, having roads on their front**.
2. This pattern has been **adopted for the city roads**.
3. The construction and maintenance of **roads of this pattern are comparatively easier**.

Cons of Rectangular or Block Pattern

1. This pattern is not very much convenient because at the **intersections they are perpendicular**, thus the **vehicles face each other resulting in accidents**.

Also, Read: [What Is Rock Cycle](#) | [Types of Rocks](#) | [Processes in the Rock Cycle](#) | [What Are the Steps of the Rock Cycle](#) | [Uses of Rocks in the Construction](#)

#2. Radial Road Pattern

This **type of network** is a combination of **radial and block pattern of roads**. The entire area is divided into a radial network of roads radiating from the centre outwardly with **block pattern network of roads in between the radial main streets**.

Pros of Radial or Star & Block Pattern

1. Less risky compared to a rectangular pattern.
2. It reduces the **level of congestion at a primary bottleneck location**.
3. If one radial road is **blocked then another can be used as an alternative**.

Cons of Radial or Star & Block Pattern

1. Lack of safety appurtenances like **rail transitions, crash attenuators and post support bases**.
2. It is only effective when two-lane ramp traffic does not have to **merge at the downstream end of the ramp**.

Also, Read: [What Is a Low E Glass | Types of Low E Glass | Advantages & Disadvantages of Low E Glass](#)

#2b. Radial or Star & Circular Pattern

2. It affects the **driving ability** (mainly old drivers face this problem due to a decrease in vision).
3. It is necessary for the proper provision of the **traffic signal, road markings and lighting to alert the drivers.**
4. Splitter islands should be extended far enough to **provide crosswalk and describe the roundabout.**

Also, Read: What Is Pedestal | Functions of Pedestal | Methods of Construction: Pedestals | Advantages and Disadvantages of Pedestal

#2c. Radial or Star & Grid Pattern

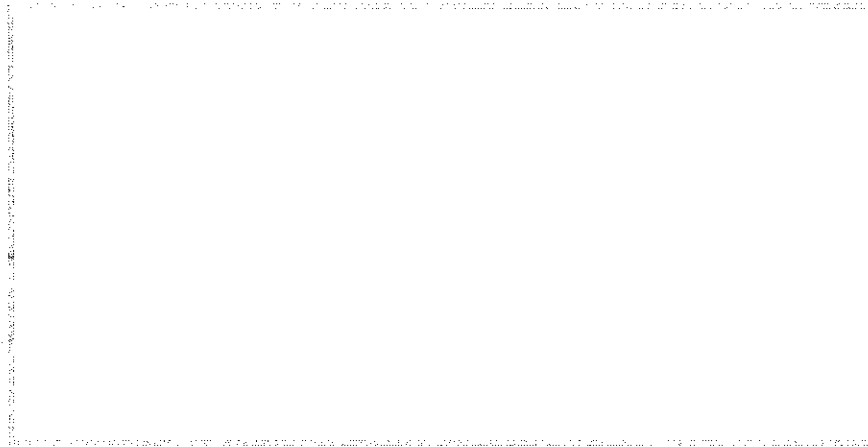


This type of network is a **combination of radial and grid pattern of roads**. A radial network of road radiates from the centre outwardly. Then the main radial streets are **interconnected by providing a grid pattern**.

Pros of Radial or Star & Grid Pattern

1. It increases the **efficiency of land usage and unit density**.
2. It improves the traffic flow in both **directions utilizing Savannah's cellular structure**.
3. It provides high safety to vehicular traffic with a **high proportion of 3-way intersections**.
4. It reduces the **cut-through traffic**.

Cons of Radial or Star & Grid Pattern



In this pattern, road pattern grows linearly in one direction possible (straight roads) only due to the presence of some adjacent **natural forces like sea or ocean on one side of the city**. These are **short roads**.

Pros of Minimum Travel Pattern

1. These types of potentially serious crashes essentially are **eliminated**.

Cons of Minimum Travel Pattern

1. **Traffic signs, pavement markings, and lighting** should be adequate so that drivers are aware that they should **reduce their travel speed**.
2. Intersections can be especially **challenging for older drivers**.

Also, Read: [What Is Pneumatic Structures](#) | [Types of Pneumatic Structures](#) | [Advantages & Disadvantages of Pneumatic Structures](#) | [Uses of the Pneumatic Structures](#)

#5. Grid Pattern

3. Navigating a grid is **fairly straightforward**.

Cons of Grid Pattern

1. Grids are bad for drivers and bicyclists because they have a **lot of intersections and therefore many potential conflict points**.
2. Grids can encourage people to **use residential streets as shortcuts**.
3. Grids are a poor fit for cities with a **lot of hills because they lead to unnecessarily steep streets**.
4. An inconsistent or incomplete grid can **easily result in traffic chaos**.

Also, Read: What Is Softening Point | Ring-Ball Test for Softening Point of Bitumen | List of Proposed to Determine the Softening Point

History of Grid Pattern Road

In ancient Rome, the grid plan method of land measurement was called a centurion. The grid plan dates from antiquity and originated in multiple cultures; some of the earliest planned cities were built using grid plans.

By 2600 BC, Mohenjo-Daro and Harappa, major cities of the Indus Valley Civilization, were built with blocks divided by a grid of straight streets, running north-south and east-west.

Each block was subdivided by small lanes. The cities and monasteries of Sirkap, Taxila and Thimi (in the Indus Valley Kathmandu Valleys), dating from the 1st millennium BC to the 11th century AD, also had grid-based designs.

A workers' village (2570–2500 BC) at Giza, Egypt, housed a rotating labour force and was laid out in blocks of long galleries separated by streets in a formal grid.

Many pyramid-cult cities used a common orientation: a north-south axis from the royal palace and an east-west axis from the temple, meeting at a central plaza where King and God merged and crossed.

Hammurabi of the Babylonian Empire in the 18th century BC ordered the rebuilding of Babylon: constructing and restoring temples, city walls, public buildings, and irrigation canals.

The streets of Babylon were wide and straight, intersected approximately at right angles, and were paved with bricks and bitumen.

The tradition of grid plans is continuous in China from the 15th century BC onward in the traditional urban planning of various ancient Chinese states.

Guidelines put into written form in the Kaogongji during the Spring and Autumn period (770-476 BC) stated: "a capital city should be square on plan."

called **road pattern**.

Rectangular or Block Pattern

The **rectangular/ block/ grid pattern** is a plan where the streets and roads are in the form of grids or **blocks** running perpendicularly into each other thus forming a grid or **block**. Usually the main road is wide which passes through the centre of the area and other roads connecting to it are narrow.

Also, Read: [Cantilever Bridge | Cantilever Bridge Advantages and Disadvantages | Cantilever Bridge Facts](#)

Radial or Star & Block Pattern

It is a combination of **star** and **block pattern**. The entire area is divided into a **radial** network of roads radiating from the centre outwardly with **block pattern** network of roads in between the **radial** main streets.

Radial or Star and Circular Pattern

In this system, the main **radial** roads radiating from a central business area are connected together with concentric roads. In these areas, boundary by adjacent **radial** roads and corresponding **circular** roads, the built-up area is planned with a curved block system.

Radial or Star and Grid Pattern

The **radial** and **grid pattern** is a combination of **radial** and **grid patterns** through which the **radial** network of roads originates externally from the centre. The main **radial** roads are interconnected by offering a **grid pattern** between the principal roads.

Hexagonal Road Pattern

In this **pattern**, the entire area is provided with a network of **roads** formatting **hexagonal** figures. At each corner of the **hexagon**, three **roads** meet the built-up area boundary by the sides of the **hexagons** is further divided in suitable sizes.

Also, Read: [What Is a Brick Bat Coba | Procedure of Brick Bat Coba Waterproofing | Advantages & Disadvantage of Brick Bat Coba Waterproofing](#)

Minimum Travel Pattern

In this road **pattern**, the city is contented by sector centre, suburban centre and neighbourhood centre by the road which required **minimum** to connect the city centre.

Leave a Reply

Your email address will not be published. Required fields are marked *

Comment

Name *

Email *

Website

POST COMMENT

**Write For Us And Earn
Money**



[Privacy Policy](#) | [Contact Us](#) | [Cookie Policy](#) | [Sitemap](#) | [Sitemap For Hindi](#)

© Copyright 2019-2022 CivilJungle.Com | The Content May Not Be Reproduced On Other Websites | Website Maintained By CivilJungle