

STRATEGIC COMMUNITY PLANNING ORIENTATION

Part I. How Community Goals are established

Community Goals and Objectives are discovered in community assessments, during data collection and analysis. Community members focus on the direction and goals that needs to be accomplished within a specific time frame. Sometimes, the community plans their development for duration of four years, due to tribal election terms. Goals should be set beyond four years to reach its full potential growth and continuity should be stressed and maintained to ensure community goals are accomplished. Citizen Participation is the key ingredient in developing the community goals and objectives. This is where the membership provides input and debate on how the land use plan will be developed. Public hearing is a forum for public education and how community leaders provide guidance and leadership brings the community into a unified goal.

There is a difference between small-populated chapter and large populated chapter. Small populated chapter are in the infancy stage of development of leaning towards basic necessary services, such as; roads, electricity, plumbing, domestic water distribution system, sewer system, and community facilities. Large populated chapter has many demands for large service outlets, mass distribution system, large education system, road system, health facilities, etc. As a result, there is a great need to organize community infrastructure, housing, employment and other necessary services.

The Use and Purpose of Community Assessments

Community Assessments are used to identify the composition of what the community has and does not have. It reveals the way the community is structured, socially, politically and physically. Majority of the studies are focused on the needs of the people, and how the community uses the land and its resources. It is a study of the land, vegetation, wildlife, people, water, soils, drainage system, culture, roads, communication system, employment, facilities, etc.

Based on the Assessment and size of the population, the community generally develops a land use plan depending on the needs. A small-populated chapter or community may use a community based land use

plan. A mid size populated community may develop a master or general land use plan. A larger populated area that is growing rapidly will need a comprehensive land use plan that will accommodate the growth of businesses and population. This plan will need a specific land use, and that are designed and identified as zoning plans. In some cases, a small community can develop a zoning plan for all future developments to control the growth patterns for future land use. This type of activity presents an organizational community building of all infrastructures, and other developments needed in the community. IT reduces random development and prevents unwanted development.

What kinds of planning are combined to develop a community that will reflect the wishes and dreams of its residents?

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| Land Use Planning | Planning for Housing |
| Transportation Planning | Social Planning |
| Environmental Planning | Regional Planning |
| Parks & Open Space Planning | Culture & Historic Preservation |
| Planning for Utilities and Infrastructure | Economic Planning |
| Planning for School Facilities | |
| Neighborhood Planning | |

Funding & Planning Community Projects

Community Planning involves seeking funds from various sources to implement the first phase of development. The Community Services Coordinators or the Chapter Officials will initiate the first step by developing a proposal for the project and acquire all necessary documentation needed in the application process. This type of project require different types of funding, such as planning grants, matching funds, construction funds and Administration funds. The submission of project application and chapter resolutions should be submitted one week before the timeline or deadline of any agency funding source.

Lobbying and monitoring of your application is very important to your project life. Your Chapter may need to make special visits or hold meetings with the funding sources to explain the need and purpose of your proposals. There are different funding cycles with funding sources. The designated individual that submits the proposal must understand the eligibility criteria and conditions of the grant. Most funding agencies have allowed a project life of two years. This means that the project grant shall expire within two-year period. Some times, it can be extend for one year. Depending upon the size of the project, some may stretched into three years with amendment or agreement.

Funding should be divided into three phases

1. Planning Grant for architect designs, drainage system, road system, site surveys, right of way, archeological and environmental clearances and land acquisitions.
2. Construction Grant for site clearances, leveling, water and sewer system, foundations, electrical, plumbing, and constructions.
3. Administration Grant-Operation & Maintenance Plan and insurance plans are needed for risk management.

Planning Grant should be the first grant that can be used to plan out the design of the facilities, roads, and surveyed. All types of maps can be collected and reviewed for discussion, planning and implementation stage. Land Acquisition can be used to handle right of way, compensation, public education, archeological and environmental assessment of the proposed land site.

Construction Grant is used to purchase building materials, installation of the plumbing system, water and sewer system, heating system, air-conditioning system, etc. The majority of cost will go towards the actual construction of the project.

Maintenance and Operation funds, The funds are usually already secured for this part by the owners. The need for risk-management funds and maintenance plan are needed to ensure that the property or project is secured for the future and there is a maintenance plan for the upkeep of the facility.

Performance Evaluation

Some Funding agencies review the performances of the grantee (Chapters) various funding sources measure the performances of the recipients (Chapters) as to how well they manage the grant and if it was successful. Questions are posed in these decisions.

1. Was the project done within the date of the agreement?
2. Was the money used appropriately?
3. Who, and how many clients benefited from this grant?
4. Was there any non-compliance evolved within the duration of the grant?
5. Was all procurement and purchase done within the conditions of the grant?

Seeking Funding Sources

The Navajo Nation Chapters are familiar with different funding sources for community projects. The most common sources are;

1. Tribal Funds
2. State Funds
3. Federal Funds
4. County Funds
5. Non-Profit
6. Church Organization Funds
7. Donations from Enterprises or Millionaires

Land use plans are very instrumental and important to funding sources. It gives them an idea of what your community looks like, population statistics, topography and how you organize your growth in your community. It provides a future outlook of what the community wants and has. It is an advantage to have a land use plan. It identifies the general area of development.

Funding Cycles:

Funding cycles are usually different from each other. The federal grants Usually falls in late September or October of each year. State Legislatures are different also. The Navajo Reservation is under three states and has good opportunity to Utah, Arizona and New Mexico. Under the States, the counties have their funding level for small projects. The funding sources are under re-imburement fashion, direct grants, or loans.

These grants or loans are usually designed with conditions of appropriations, written in legal contracts and some are under a reimbursement fashions. It also lists criteria of eligibility guidelines, which indicate what activities the grant can be used for and has mandatory compliance schedule for monitoring and reports to its funding agency. Life of the grant is considered in the allocation. Some grants or loans attached a limitation of how many years it would take to complete a project and indicates a life of the project and on some conditions, an extension are usually compromised between the community and funding source.

Available Sources

Community Development Block Grant
Navajo Nation Capital Improvement Office
New Mexico State Legislature/ Office of Indian Affairs
Arizona State Legislature/ Representatives
Utah State Legislature

Navajo Revitalization Act
Utah Commission
County Offices
United States Department of Agriculture.
Farms Service Agency
Rural Development
Natural Resources Soil Conservation
Non-Profit Organizations
Church Organizations
Other federal agencies through the Internet Network

Tasks:

Phase I. Proposal Development/Securing a Grant/ Tasks

- a) Land acquisition and architectural designs
- b) Right of way cost are anticipated
- c) Land With drawl or lease for construction site
- d) Site Analysis & site selection
- e) Archeological clearance
- f) Environmental assessments

Phase II. Implementation Schedule/Monitoring plan/ Contractual Agreements

- a) Devise a project schedule
- b) Monitoring plan and reporting system on expenditures
- c) Procurement Process/ Selection of Contractors/subcontracts

Phase III. Construction Phase

- a) Site Development/ Soil studies/ Material storage & Inventory Control
- b) Employment
- c) Construction plans
- d) Inspection schedules
- e) Exit Conference

Mapping

A thorough mapping should be done to get a clear idea of the size and distinct growth of the community, that will reveal all the topography, drainage system, road system, residential, industrial layout, open space or undeveloped areas. The map will show the physical locations of all community facilities, and where all proposed plans that are being considered by the planning group. There are different maps that can be

collected to show specific areas on water and sewer system, telephone system, and all electrical lines. These maps can be obtained from NTUA, Indian Health Services, Navajo Communication and Bureau of Indian Affairs and Internet Websites.

Soil maps can be used to identify what types of soils are, at the proposed sites. It will provide the answer if it will accommodate future building structures?

Population density can be used to find out where the main traffic or traffic circulations are most common. Maps are very useful to get a clear picture of the community growth patterns and understanding what a community has or does not have.

Schematic site plans are very useful in all future land use.

Part II. Land Withdrawal Process

Ernie can do this one by pictures or diagrams.

Part III. Site Selection and Resource Analysis

What are the steps to site planning for infrastructure?

Site selection and resource analysis should be done, prior any development.

To develop the best site for accommodating project objectives, a program must be carefully prepared. Because, the program develops from specific needs, these needs determine the overall objectives. Program development is based upon the study of factors, such as site requirements and sizes, types of building and site construction, and the uses of materials. A completely developed program will include a schedule of required facilities, times of completion, and their priority for construction.

If there is no site planning completed, it becomes very difficult for the construction phase. The selection of poor site will often make the construction very costly and produce a lot of unnecessary work or activities. It may ruin a scenic area, which can be saved for future recreation area.

Site Analysis

What is resources analysis process? There are three (3) areas to consider.

1. **Natural factors** (7)- Physical
2. **Cultural factors** (7) People
3. **Aesthetic factors** (2) Scenic/Env.

Natural factors: geology, physiography, soils, and hydrology.

How does geology, physiography, soils and hydrology have in common in planning for infrastructure, community facilities, and roads?

The first area to consider is, which geologic processes have affected the site, its formation and the type of bedrock below the surface of the soil? To understand the process, that have occurred in the past it is useful to review the historical evolution of a region. You would have to understand the composition of the earth. The interior of the earth, with its dense core of about 4224 miles in diameter and a mantle 1,863 miles is less dense. The earth's crust ranges from 6.2 miles and 7.5 miles. Ocean basins are 18.5 to 25 miles under the continents.

Bedrock is a consolidated rock material lying at various depths below all points of the earth's surface. The type and dept of bedrock presents many questions of its adequacy as a base for foundations of buildings, walls or roads.

Surficial Geologic Materials (land surface) is above bedrock; surficial geologic materials extend to the surface soil. These materials may be porous and serve as aquifers. (like a sponge or filter)

Mass Movement of Land Surface

Some regions of the country are prone to movement of the earth's surface by tectonic movement through crustal stress, shock by earthquakes, or movement caused by surficial processes, including rock falls, landslides, mudflows and soil creep.

Tectonic movements may be caused along faults, often accompanying earthquakes. Many people live in unstable tectonic regions such as the earthquake belt, which includes the cities of Los Angeles and San Francisco.

Surficial processes also powers mass movement of materials by the force of gravity. These are often started by heavy rainfall or sudden thaws that saturates rock and soil with water to the point where gravity can cause movement. Shock can also cause movements.

In Limestone area subsidence may be cause as rock dissolve in solution. Subsidence also occurs when subsurface materials have been removed.

(Coal mining areas) Movement by water, wind and ice can also cause mass movement.

Sources of Data; University Geology Departments, Book stores, and State Geologic surveys. This is where you can find information on with U.S. Geological Surveys

Which provides Engineering Geology maps of many areas showing various characteristics such as

- a) Distribution and thickness of rock formations.
- b) Terrain, slope and slope stability.
- c) Drainage, permeability and water table.
- d) Frost susceptibility
- e) Suitability for foundations
- f) Earthquake stability
- g) Excavation characteristics
- h) Suitability for sub grade fill or borrow/compaction

Topographic Surveys is used do site analysis which shows locations and elevations of natural and man-made features, relief and vegetation. Specific characteristics such hydrograph, roads, buildings, and features such as bogs, swamps, and marshes are also included in the maps. Information required on Topographic Maps.

Title, location, owners name

True Magnetic North, scale

Property and building lines

Existing easements, right of way on or adjacent to site

Name of property owners on adjacent sites

Location of structures on site, basement and first floor elevations of buildings, as well as walls, curbs, steps, ramps, tree wells, drives and parking lots.

Location and sizes of storm and sewage system, manhole, catch basins and curb inlet drains with rim and invert elevations.

Outline of wooded areas, location, elevation on ground and type and size of trees

Hydrographic features, rivers, lakes and streams and swamps.

Location of telephone poles, light standards, fire hydrants

Rock outcrop or other outstanding site features

Road elevation at intervals of 50 feet

Grid system of elevation at intervals of 50 feet

Contour intervals

Slope Analysis (Mudslides, water runoff, thawing of snow, floods, etc.)

A slope analysis aids in recognizing areas on the site that lend themselves to building locations, roads, parking, or playing areas. It may also show if construction is feasible. Anything under 5% is ok and feasible for development.

Hydrology (Why is water important to site planning?)

Both the surface and subsurface drainage patterns on a site may greatly influence land use. All water bodies-rivers, streams, drainage channels, marshes or wetlands, floodplains and aquifers must be inventoried and analyzed for their opportunities or constraints. Hydrologic features have a bearing in relating activities to the land and are of primary importance in developing a system for site drainage that makes use of existing watershed drainage patterns. In United States, over half of the precipitation runs over land surfaces and into water bodies or wetlands. The rest percolates through the soil or is intercepted and taken by vegetation.

Marshes (not recommended for development)

In some locations, a resource such as marshes may be scarce or unique feature requiring protection. Some fresh and saltwater marshes provide wildlife habitat of much value.

Floodplains (not recommended for development)

Floodplains must be studied carefully, to see if development should be excluded or if a land use such as recreation maybe located that would receive little damage by flooding.

The rule is that building adjacent to streams or rivers detailed flood studies and special permits may be necessary from state agencies.

Aquifers (Importance of water, sediments and rocks)

Aquifers are water-bearings strata of rock, gravel or sand in which groundwater is stored. Located by use of geologic maps, aquifers are very valuable resources of potable water. These resources should be protected from uses such as septic system that may pollute the aquifer. Even sewer line may leak pollutants and be hazardous.

The Aquifer recharge areas are the points where surface water meets or interchanges with the aquifers. The movement of groundwater contributes to the surface water in streams and rivers especially in periods of low flow. Polluted rivers or streams can therefore contaminate aquifers.

Soils (Why is soil important to site planning?)

What type of soil exists on the particular site? What types of land uses are suitable?

This information is available with your local US Conservation Service Offices in each state. Data are available on factors such as; dept to bedrock, seasonal high water table, permeability, shrinking and swell potential and vegetation.

Suitability for land use such as absorption field for septic tanks, sewer lagoon, streets, parking, dwellings with basements, ponds or reservoir areas, recreation facilities should be assessed very carefully.

Why?

The data in the soil surveys for a particular site are valuable in determining suitability for land uses. For example: the dept of water table is important. If it is too close to the surface (6ft) or so there will be adverse effects on a building basement and the project cost will rise as increased water proofing, pumping and the use of piling becomes necessary. If the water table is too low, problems of water supply and cost may occur.

In areas where septic tanks are to be used in conjunction with residential development, the ability of soils to absorb and degrade sewage effluent quickly must be studied. If soil is suited for this use, problems such as water pollution and the smell of raw sewage will occur.

Vegetation- (The importance of vegetation, in the early stages of site planning)

On small sites existing vegetation must be reviewed before development takes place.

Trees take a long time to grow or reach maturity and preserving vegetation can be most important to the overall designs of a project and to its economy since many small trees will not have to be purchased and subsequently requires many years to maturity. Note the name, size, and location of large existing trees. 3-4 inches or more in caliper. Observe the form, branch structure, foliage color and texture. If a site is heavily wooded, a carefully

Planning thinning of the trees may open potential vistas.

Review the ecology of the surrounding area to find which trees or shrubs are native and which varieties may be added for wind protection, shade, buffer zones, screens or backdrops.

Ecosystems (against human traffic)(disruption of cycles)

Earth, water, air and sunlight are abiotic (non-living). They provide the base in which

Plants and animals may grow. Biotic or living elements combine in complex relationship with biotic elements to produce ecosystem. Two broad classes of ecosystems are terrestrial (land related) and aquatic.

Wildlife

Wildlife relates closely to habitats provided by plant communities. Various habitat elements are essential to the different species of wildlife. The Soil Conservation Services divides these elements into three groups.

Open wildlife: Open land wildlife includes birds and mammals commonly associated with crop fields, meadows, pastures and non-forested overgrown land, etc.

Woodland Wildlife: upland plants, hardwood plants, cone bearing shrubs, pines, cedars and yews.

Wetland Wildlife: Wetland species includes birds and mammals needing habitats with

A wetland food plants or wild herbaceous plants of moist wet sites. Floating water plants, shallow water development, excavated ponds suitable for fish and wildlife.

Wildlife is important consideration especially when choosing sites for park or recreation areas. Since fishing and hunting are major recreational activities, choosing land for these depend on wildlife as a natural resource. Wildlife also adds color, form and movement of landscape. Existing wooded areas inhabited by wildlife may be preserved as parkland, along with residential sub-divisions.

Climate (what does climate have to do with site planning?)

Energy consumption, latent heat storage, flows of air and sunlight and vegetation.)

US Dept. of Commerce and National Oceanic and Atmospheric Administration have monthly summaries of their data. Data summaries contains information average temperatures, degree days, precipitation, relative humidity, wind speed and direction

Total precipitation and snowfall.

Humidity is the amount of water vapor in the air. Relative humidity is the amount of vapor the air is holding expressed as percentage of the amount of air can hold at certain temperature.

If a particular temperature air is saturated with water vapor it has 100% relative humidity. Warmer temperatures are capable of holding more water vapor before saturation is reached.

Degree-day is a unit based on temperature difference and the time used in estimating fuel consumption and specifying the nominal heating load in a building in the winter. Small building or tall buildings are of different temperature ranges.

Each 300 ft rise in height from the earth's surface, temperatures decrease approximately 1 degree in the summer. Some cities are located in at higher altitude in the otherwise hot climate of the tropics. Differing height in topography also affects microclimate, cool airflows towards low points or valleys at night, but higher side slopes remain warmer.

Precipitation and temperature are two factors affecting vegetation, although wind, humidity and soil characteristics are important influences.

In cool and temperate climates vegetation may be used to block winter winds. Sometimes trees have adjusted to being part of a forest area and if left to stand alone as single element, may die because of stronger winter winds. Wooded areas can also be opened or thinned to allow sunlight pockets for residential or development in cool climates.

Deciduous trees (trees without leaves) are used to provide shade and may change microclimate several degrees in the summer. This can be important for energy conservation. Water bodies also influence the climate of the site. Oceans and large lakes retain their heat in winter months as landmasses cool and they are cool in the summer and landmasses warm. The water bodies adjacent to land therefore, moderate temperature. This influence, decrease with the distance inland from the water body.

Climate is divided into four general types.

- a) Cool
- b) Temperate
- c) Hot
- d) Arid/hot humid

Fog and its effects:

Fog is formed when the relative humidity of the air is increased to the saturation point by cooling or by the addition of moisture. On clear nights, land loses its heat by radiation; the ground may cool lower layers of air enough to create fog. This type of fog is generally in the low areas.

Persistent fog results when moist air passes over cooler land or water in coastal areas.

During winter and spring flow or advection of humid air from the ocean traveling over land may also cause dense fog.

Culture Factors

Existing Land use

The pattern of existing land use must be designated in relation to the site. Community facilities, both public and semi-public, residential, commercial, industrial and recreational are inventoried to denote the overall trend in development that may have a bearing on uses of land adjacent to and including the site under study.

Off site Nuisances

Off site nuisances, whether visual, auditory or olfactory and safety hazards must be investigated. If one or more of these problems are uncontrollable, an alternative site may be chosen. Among visually disruptive elements are power lines, water towers, certain industrial complexes, highways, billboards and junkyards.

Possible auditory nuisances include heavy equipments, heavy vehicle traffic, rails, or air traffic or noise made by large amount of people.

Olfactory nuisances originate in dumps, chemicals, and other wastes. Safety hazards results from lack of linkages in areas of heavy traffic. Severe and sudden changes in land, such as steep cliff at the edge of a site, may be hazard. Air pollution, another safety hazards, may be caused by traffic in congested areas.

Linkages

While studying the site and its relations to adjacent properties and to the community, all existing linkages or ties, if any should be specified.

Linkage may involve the movement of people, goods and communication.

By addition of future projects, such as parkway, pedestrian overpass or underpass, how would they affect activities on that land? Do they strengthen the linkages?

Community facilities, such as shopping centers, employment hubs, residential areas, churches, schools, and playgrounds should be inventoried in relations to the site. Does adequate linkage exist and if not decide how they can be established or improved for future development.

Traffic and Transit

What is the relationship of traffic patterns to each other and to the site? Are there adequate roads in the vicinity? If the site is urban, does the public transportation serve the area? The automobiles, bus, railroad and air circulation should be reviewed to show if and how these facilities will integrate with future site development.

Density and Zoning

Density is an important sociological and legal element in most types of development. In residential development, it is expressed in numbers of families dwelling units per acre.

Density may also be used to express floor area ratio or gross floor area covering the site.

Cities have zoning regulations concerning standards of density because of economic, social and functional implications. Zoning over 50 years supporting legal opinions is a form of legal regulation. Zoning provides the division of municipality into land use areas that are designated by height; building coverage, open space or density of the population.

Density may influence privacy, freedom of movement or social contact among people.

Zoning regulations, easement, codes, and mineral rights must be checked before a site is developed.

Socioeconomic Factors

The study of a community and its social and economic structure is important in determining the feasibility of a project. Who is the user of a project? Are the users being programmed into the project? Use public opinion survey for this question.

Social factors have a broad range of effects on community facilities and services.

Sometimes new facilities displace homes, businesses, or other community activities.

For example: a new highway may cut through an area severing its cohesion by creating

Visual or physical barriers and affect business and property values.

Market Analysis

Socioeconomic feasibility is based on a market analysis. A city or community in certain region or an entire local area is the unit on which the analysis is carried out.

Population

Population is the base of many planning decisions. Population characteristics within an area can identify the potential users of consumer. These characteristics include population change by births, deaths, migration, age, sex, family size, occupation, and income levels. Housing accommodations, tax rates, and assessments. This information reveals who the consumers are and the direction of urban growth.

Utilities

All utilities located or adjacent to the site under study should be shown graphically for consideration in site development. Utility Companies should be contacted early in the planning process to see if the project can be met.

Potable Water

Water is the most critical utility for growth at the community level. Primary source of water are rivers, lakes, springs, and sub-surface supplies, such as aquifers. There are several types of distribution system, such as gravity from a reservoir, where water is stored and distributed by the force of gravity and direct pressure, where water is pumped into the main system. Cities structure their water system supply domestic, fire and industrial users from a distribution system. In high-density areas, high-pressure fire mains are sometimes used. Water supply are usually often in branch or grid patterns can have a loop that provide services from two or more directions. Main used for water supply has size requirements set by fire protection use and minimums are 6 inches for residential areas and 8 inches for high value areas. Valves are placed in the main lines, so that breaks will affect no more than 500 feet of pipe, which are placed below the frost level to prevent problems due to freezing.

Fire Hydrants are placed about 150 to 600 feet apart and closer for higher value areas.

50-75 gallons of water are used per person per day as the average estimate.

Sanitary

Sewage is disposed of in system separate from storm water and carried to a disposal plant where it is treated and into effluent, which may discharged into a river, stream, or other natural body of water. Sanitary pipe system often work by gravity, but may require pumping stations to reach a common point of discharge. Sanitary systems provide a closed system connected to sinks and toilets drains with traps to keep out odors.

The minimum size of sewer pipe is generally 8 inches for main and laterals at 6 inches.

Residential development where septic tank systems are being considered soils data must be reviewed to check for permeability. Sub-division regulation set lot sizes where septic system is permitted, lots require a minimum of one half to a full acre. Percolation tests are required to make sure lot has a suitable absorption capacity. Areas of seasonal high water table can create problems with effluent causing it rise near the soil surface.

Electric Power

Power is transmitted on primary high voltage lines and then by the use of transformers stepped down to secondary low voltage lines. Traditionally power poles about 120 ft apart have been placed along street with overhead wires. These wires are unsightly and in areas of high value, placed underground. While underground distribution is about three times as expensive in front end cost, there is a reduction of breakage due to high winds and elimination of interference with trees and the clutter of wires.

Telephone

These lines are placed overhead on electrical power poles or are placed in underground conduits. From the underground, service is directed to each residence or building. Some states have laws to have the telephone lines installed underground.

Gas

Gas is piped in an underground system similar to water distribution lines. Gas transmission lines have pressure ranging from 100 to 500 lbs psi (pounds per square inch) service pressures range from 10 to 100 psi/. Pipe size varies from 12-36 inches for transmissions.

Steam

Steam is suitable in urban areas where a large number of customers can be served. The mains are large and add to the cost of installation. The cost of operation is high with return on investment low during the summer.

Storm water

Storm water system pickup surface water and carry it to local streams or lakes where it can be discharged safely. Storm pipes is often a minimum of 15 inches to prevent clogging with manholes 300-500 feet apart for cleaning and changing direction or the size of the pipe. Catch basins placed in roads or other areas pick up the water. Pipes are set below frost level.

Existing Buildings

If a project is to be expanded building on the site, must be shown graphically and their uses and facilities studied. Size, floor area and existing conditions must be inventoried.

Existing buildings will strongly influence the physical layout of the new site plan and will help to establish the grading and drainage pattern on the site. They may also determine the choice of future architectural expression in building type, color, façade, texture, materials, window type and roof type to insure coherence and unity in design.

History- Historic Preservation factors-

Aesthetic Factors

Sites on which future development is planned must be analyzed to determine significant aesthetic factors. Natural features and spatial patterns are all important in relating design elements.

Sites with endowed with outstanding natural features of earth, rock, water, or plant material. Landforms, rock outcrops, ledges, boulders, lake streams, bogs, or wooded areas have scenic value and may be incorporated, along with architecture, in site development.

Spatial Patterns

Views

Views on a site may be pleasing or objectionable. They may bear heavily on the orientation of a building and therefore should be carefully studied. An outstanding view must be handled properly, to be preserved or accentuated.

Views are framed, open, filtered, screened or enclosed. Do they seem static or mystery, attract attention and draw movement towards them? Your proposed site for development must be located in site where it will bring the best exposure to the public and in line with your goal.

Land Use and Circulation/ Thoroughfare Plan

The type of construction will also influence the land use plan. If a plan is economically feasible because of excessive site work an alternative may be necessary. On the other hand, the type of construction may be a factor in determining a particular land use and may require a specific site, which is flat, rolling or hilly area.

Circulation

Circulation systems are vital linkages that relate activities and uses on the land. The vehicle circulation system in particular produces one of the primary structuring elements of a land use plan. Its major role is bringing people, goods and services to the site.

On the proposed site and in conjunction with buildings or recreational activities, the circulation pattern must solve the difficulties of approach, Drop off and parking and service in all in a clear and organized sequence.

One of the concerns of Planners is the development of the vehicular and pedestrian circulation system, but utility and communication networks are directly related to roads and walk patterns.

Vehicle Circulation Patterns

Circulation system is not simply haphazard; they fall into categories or classification.

Grid System

Radial System

Linear System

Curvilinear System

Grid System is comprised of equally space streets running perpendicular to each other. Generally used on a flat or slightly rolling land.

Radial System directs flow to a common center, where high levels of activities exist, however the center may become hard to manage.

Linear System of circulation connects flow between two points and is illustrated by railroad lines or irrigation canals. A loop is added to aid the flow of traffic.

Curvilinear System takes advantage of topography by following the land As closely as possible. This system is closely related to traffic at the local level and may have a variety of streets alignment readily adaptable to topography. It has fewer streets and has cul-de-sacs (dead end streets) The system is designed to slow down traffic.

Visitors and other parking

Visitor parking should link with building approach and drop off areas and be within short walking distance of the building it serves.

Service Areas: to be continued.....