MIXED-USE/COMMERCIAL CENTERS

Introduction

- Mixed-use pedestrian oriented centers are an important component of new community development and are an important consideration in planning for future growth in North Moorhead.

- They can create a sense of community and establish an alternative to sprawl by forming community gathering places, providing services and promoting employment opportunities for the community.

- They are located for convenience, accommodate the automobile and integrate with the greater community.

- They may serve as an identity marker for the community.

- Centers exist in a range of scales and types: Neighborhood Centers, Community Centers, Regional Centers, Super-Regional Centers, and specialty, or themed centers.

- Centers are characterized by their concept, size, lease-able area, anchor tenants, and primary trade area.

Types of Centers

1. Regional Center

- Mostly dominated by commercial/retail uses including several large anchors that offer a vast selection of related merchandise at very competitive retail prices.

- Retail space typically ranges from 300,000 – 800,000 square feet.

- Consumes around 40-100 acres of land and serve a 15 mile trade area.

2. Town Center

- Most often located near multi-family residential neighborhoods.

- Caters to the retail needs and "lifestyle" pursuits of consumers in its trading area.

- Typically has an open air configuration and includes a mix of uses (retail, office and housing).

- Includes a minimum of 50,000 square feet of retail space occupied by upscale national chain specialty stores, but may include anywhere from 100,000 – 500,000 square feet of retail.

- May be a multi-purpose leisure-time destination and/or living environment including places to live, work, shop, dine and be entertained.

- Sometimes includes amenities such as fountains, plazas and streetscape furnishings to make it more vibrant and walkable.

3. Community Center

- Usually includes a wider variety of land uses and range of retail offerings than a neighborhood center.

- May include multi-family residential, office, civic, and retail uses.

- May be associated with or developed alongside a community scaled park or open space.

- The major draw to a community center my be a blend of civic or recreational uses, but is typically anchored by a mix of retail uses.

- Among the more common retail anchors are supermarkets, super drugstores, and discount department stores.

- May also include retailers selling home improvement products, furnishings, electronics, apparel, or sporting goods.

- Typically include from 100,000 – 350,000 square feet of retail space developed on 10-40 acres of land.

- Serve several neighborhoods located within a 5 mile radius.

4. Neighborhood Center

- Provides the immediate neighborhood with places to shop and play as well as promote social gathering.

- May be located near a school along a collector or arterial street.

- May include neighborhood park space, and usually include neighborhood-oriented retail uses.

- Designed to provide convenience shopping for the day-to-day needs of residents and consumers in the immediate neighborhood.

- Many neighborhood centers are anchored by a supermarket.

- Typically includes from 30,000 – 150,000 square feet of retail space on 3-15 acres of land.

PARKS, TRAILS and OPEN SPACE

Introduction

- Communities that preserve their scenic, ecological, and recreational assets have a competitive edge over those that do not.

- People are drawn to parks and to walking and biking trails, public squares and gardens, tree-lined streets and sidewalks, water features and sports facilities.

- A goal of the parks trails and open space system should be to provide all the elements necessary to ensure a rich variety of social and recreational needs for all residents in the community.

- The following list identifies several basic components for a comprehensive parks and open space system:

Types of Parks Trails and Open Spaces

1. Special Facilities

- Special amenities provide for unique social, educational or recreational needs not normally fulfilled by conventional public park facilities.

- Examples include:
  - golf courses
  - equestrian centers
  - historical sites
  - museums
  - gardens
  - cemeteries

2. Natural Green Space or Open Space

- Varying sizes of natural green space should be accessible by the entire community to provide access to nature and natural systems.

- Include areas of diverse environmental quality including sensitive and scenic lands targeted for conservation and wildlife habitat.

- Natural open space should be provided at approximately 5 acres per 1,000-population minimum.
- Includes trails and trail heads, sitting areas, limited picnic areas, and environmental learning experiences.

3. Community Parks with Sports Facilities

- Open space allocated for large-muscle activities such as soccer, baseball, tennis and swimming.

- Community parks are generally a minimum of 30 acres in size and located to be easily accessible to the entire community.

- Community park space should be provided at approximately 1 acre per 1,000 population.

- May include active recreation facilities, large open lawn, large natural areas, gardens, walking sitting and picnicking.

4. Neighborhood and Small Scale Parks

- Neighborhood parks range from 3 – 7 acres in size.

- Located so they are within a ¼ mile walk from most homes in a community.

- Neighborhood parks should provide play courts, children's play equipment, ballfields and practice areas for informal games, and picnic facilities.

- May also include swimming pools, restrooms or community gardens.

- Provided at 2 acres per 1,000 population.

5. School Playfields

- Amenities include ballfields and other outdoor recreational facilities typically associated with schools.

- Additional facilities can be included for music, drama and nature study and for neighborhood social gatherings.

- School playgrounds are usually 3-7 acres in size

- Located adjacent and contiguous to elementary and middle schools and accessible to several neighborhoods.

- School playgrounds should be provided at 1 acre per 1,000 population or 1 per elementary school.

6. Kids Playgrounds

- Kids playgrounds are usually 1 acre in size and serve a walking distance radius of 660 feet.

- They should be provided at ½ acre per 1,000 population.

- Used primarily by small children supervised by parents.

- May include play equipment, swings, slides, sitting and lawn areas.

- They are ideally located within neighborhoods, with homes fronting on them to provide supervision.

7. Linear Parks, Parkways, and Trails

- Linear open space can expand recreational and scenic opportunities.

- Linear parks, parkways and trails can connect parks and open spaces with neighborhoods, centers and community destinations.

- Should include provisions for walking, hiking, biking, horseback riding, snowmobiling, and skiing.

- They can be located along major roadways and include multi-use trails, sidewalks, bus shelters etc.

8. Urban Plazas and Squares

- Gathering areas located in and around urban areas that provide outdoor space for sitting, social gathering, events, etc.

- They may include provisions for live performances and cultural events.

ROADWAY SYSTEM

Introduction

- Streets provide public access to property, but they also moderate the form, structure and comfort of the community.

- They may orient and direct, and they may provide a sense of district identity through their design, materials and form.

- They are places of social and commercial encounter and exchange.

- They are places for the movement of cars, trucks, buses, bicycles and pedestrians.

- They may also be integrated with the community open space system in the form of linear parks or parkways.

Roadway Types

1. Arterial Streets

- Designed to provide a high degree of mobility and serve longer vehicle trips to, from and within the community.

- Interconnects major destinations, facilities, centers and residential areas within the city.

- The movement of people and goods, rather than access to adjacent uses, is the primary function of an arterial street.

- With the emphasis on mobility, arterials are generally designed to accommodate vehicle trips in the form of passenger cars, trucks and buses. Bicycle facilities may be provided.

- Pedestrian walkways may be provided but may vary in width and character depending on the adjacent land use.

- Generally serve higher density and intensity land uses adjacent to the street.

2. Collector Streets

- Designed to provide greater balance between mobility and land access within residential, commercial and industrial areas.

- Design and character is largely dependent on the density, size, and type of adjacent development.

- Typically designed to accommodate bicycle and pedestrian activity while still serving the needs of the motoring public.

- Provide connectivity between important neighborhood activity centers such as commercial areas, town centers, schools, parks and residential neighborhoods.

3. Commercial Streets

- Provide a high degree of access to intense mixed land uses including office, retail, residential, and public uses.

- Travel by alternative modes should be encouraged to reduce congestion and minimize the amount of land devoted to vehicular traffic and parking.

- Designed to accommodate a complex transportation network with the following characteristics:

  Higher levels of mobility during peak hours
  Heavy pedestrian activity and bicycle travel
  Public transportation routes and stops
  Loading and unloading activity
  On and off-street parking
  Complex underground utility systems

- Designed to promote pedestrian activity with wide sidewalks, crosswalks, seating and shelter from the elements, street trees, public art and identity signage.

4. Parkways and Boulevards

- Parkways have particular significance in many cities because of their influence on development and unique physical character of the city.

- They may function as arterials, collectors or local streets.

- They provide important connections between major community destinations, particularly parks, open spaces, civic uses, activity centers and residential areas.

- May be included as an integral component of the parks, trails and open space network within a given community.

5. Local Streets

- Design features of local streets are influenced less by traffic volumes and more to providing local access to homes and businesses and improving community livability.

- Mobility on local streets is typically incidental and involves relatively short trips at lower speeds to and from collector streets.

- Pedestrian and bicycle safety and aesthetics are generally high priorities on local streets in residential and commercial areas.

OFFICE PARK and INDUSTRIAL

Introduction

- Office and industrial uses will be an important land use for future economic growth in North Moorhead.

- Office and industrial uses located in North Moorhead can provide a variety of employment opportunities for the local and regional community.

- Office and industrial uses are located adjacent to major vehicular routes, rail lines and airports for convenience of access, circulation and distribution purposes.

- These uses are also located where land costs are affordable and the land is readily accessible for development.

Types of Office and Industrial Uses

1. Office

- Office uses may be developed as stand alone office buildings, in a campus setting with other office buildings, or as part of a mixed use building or development.

- Many office developments are being planned and built in campus-like settings (office parks). These tend to be attractive to young college graduates and create a unique corporate identity.

- The quality of the work environment is becoming more important in the recruiting and retention of talented and valuable employees.

- Many office parks include amenities such as dining, fitness centers, banking and dry cleaning services to improve the quality of the work environment, reduce travel times and improve productivity.

- Many new office buildings are developed with flexibility in mind in order to adapt to future tenant changes.

- Biotechnology office parks are developed where there is a strong relationship to nearby research facilities.

- Office buildings house everything from medical clinics, law services, computer technology, food production and biotechnology to graphic design, printing, engineering and architectural services.

2. Industrial

- Industrial uses are involved with manufacturing, storage and/or distribution of goods and products.

- They may also serve important utilitarian needs for municipalities such as the treatment of water, sewage, composting, trash services, power plants, or storage of equipment.

- Industrial uses may be considered heavy or light industry. Heavy industries can be differentiated from light industries as being more capital intensive, where light industries are more labor intensive.

- Heavy industry produces products for other industries instead of end users.

- Light industries are easier to relocate than heavy industry, and can be built with less investment.

RESIDENTIAL

Introduction

- More and more, communities are seeing a need to provide a mix of housing types to address a diverse population and ever-changing lifestyles.
- By allowing a mix of housing types, a community can help satisfy a wide range of local housing needs while reducing the impact on traffic, infrastructure and open space.
- A broad mix of housing and household types is better able to support public amenities and nearby retail activity.
- A mix of housing types at a full range of prices helps make it possible for local employees to live near their jobs.
- A diverse mix of housing types can address lifecycle housing needs, allowing seniors and empty nesters the ability to continue living in the neighborhoods they grew up and raised their families in.
- A mix of housing types and costs can maximize absorption for a development and provide the flexibility to accommodate changes in the market.
- By responding to the evolving makeup of today's – and tomorrows – households, a development that provides a mix of housing types can create greater value for the entire community.

Housing Types

1. Single Family Detached

- The basic building block of single family housing.
- Lot sizes vary from 2,500 square feet to several acres.
- Density can range from 0-15 dwelling units per acre.
- The trend is to develop smaller, more affordable lots and to mix various lot sizes within a block or neighborhood.

2. Duplex (Twin Homes)

- Typically includes 2 single family homes that share a common wall.
- Density typically ranges from 8-16 dwelling units per acre.

3. Carriage House

- A carriage house, or accessory unit, is typically built above the garage and may be attached or detached from the main residence.
- May provide housing for an extended family member (ie. grandparents), for rental, or is often used for a home office.
- May provide a better alternative to aging baby boomers than isolated retirement communities and nursing homes.
- Allows for greater density than single family detached housing.

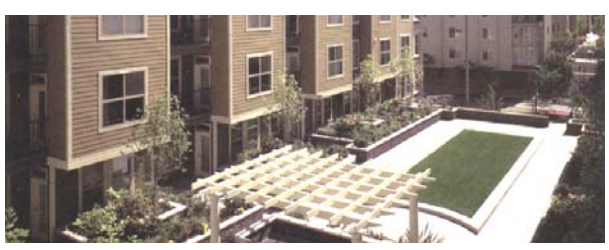
4. Townhouse

- Several single family housing units attached with common walls.
- Typically 2-3 story units, built as a rowhouse or in cluster development.
- Very adaptable to many site conditions and efficient use of land.
- Townhomes are being integrated into single family housing to increase overall project densities, while maintaining a pedestrian-oriented presence on the street.
- Typically allows for 12-24 dwelling units per acre.

5. Manor or Mansion House

- Includes 2-4 housing units grouped in a single building that has the presence and formality of a mansion.
- Mansion houses are being developed adjacent to real mansions to increase overall project density while blending into the scale and character of the real mansions.
- Densities can range from 8-24 dwelling units per acre.

6. Courtyard/Cluster



- Courtyard and/or cluster type housing can be single family or multi-family housing organized around a semipublic open space.
- Courtyard housing can create a substantial presence on the street, while offering more intimate semiprivate courtyards where unit entrances are located.
- Clustering typically preserves more public open space than traditional single family lotting.
- Densities of 12-30 dwelling units per acre can be obtained.

7. Live/Work Building

- Live/work units, combining living and working spaces, are similar to rowhouses.
- The residence is above the place of work, with separate public entrances to each.
- Often located near the center of neighborhoods, as a transition between primarily commercial and primarily residential areas.
- Densities typically range from 12-24 dwelling units per acre.

8. Low-Rise Building

- May include for-rent apartments and/or for-sale condominium housing units.
- Building height ranges from 2-4 stories.
- Provides greater densities on relatively small and urban building sites.
- May be built of timber frame construction, keeping building costs down.
- Densities typically range from 24-50 dwelling units per acre.

9. Mid-Rise Building

- May include for-rent apartments and/or for-sale condominium housing units.
- Building height ranges from 5-7 stories.
- Provides greater densities on relatively small and urban building sites.
- Usually require steel and/or concrete construction.
- Densities typically range from 50-80 dwelling units per acre.

10. High-Rise Building

- May include for-rent apartments and/or for-sale condominium housing units.
- Building height is above 8 stories.
- Provides greater densities on relatively small and urban building sites.
- Requires steel and/or concrete construction.
- Densities typically range above 80 dwelling units per acre.

STORMWATER MANAGEMENT

Introduction

- Stormwater is the flow of water that results from precipitation and which occurs immediately following rainfall or as a result of snowmelt.

- When a rainfall event occurs, several things can happen to the precipitation. Some of the precipitation infiltrates into the soil surface, some is taken up by plants, and some is evaporated into the atmosphere. Stormwater is the rest of the precipitation that runs off land surfaces and impervious areas.

- Stormwater discharges are generated by precipitation and runoff from land, pavements, building rooftops and other surfaces. These hardened surfaces are called 'impervious surfaces' and they do not allow rainfall to infiltrate into the soil surface like natural vegetation, so more of the rainfall becomes stormwater runoff.

- Stormwater runoff accumulates pollutants as it travels across land. Heavy precipitation or snowmelt can also cause sewer overflows that may contaminate water sources.

- Stormwater management is the management of stormwater runoff, often using water retention facilities, to provide controlled release into receiving streams.

- The goal of stormwater management is to use stormwater as a resource, reduce nonpoint source pollution, maintain natural hydrology, and mitigate the impacts of urban runoff and associated pollution. The following is a general list of best practices for managing stormwater runoff:

Best Practices

- Encourage low impact development (LID) as a strategy for controlling runoff volume and protecting receiving waters from polluted stormwater. LID's goal is to mimic a site's predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to its source.

- Instead of conveying, managing and treating stormwater in large, costly end-of-pipe facilities located at the bottom of drainage

areas, LID addresses stormwater through small, cost-effective landscape features located at the lot level. This includes not only open space, but also rooftops, streetscapes, parking lots, sidewalks, and medians.

- Whether LID is appropriate depends on site conditions including slope, depth of water table, and permeability of the soil.

- Install non-traditional swales with natural meanders and stone check dams to slow water runoff, creating visual amenities for the community.

- By integrating stormwater management systems with parks, parkways and open spaces, managing runoff can become an amenity for the community by creating ponds, streams and raingardens that are aesthetically pleasing, benefiting the community by increasing the sales performance of those neighborhoods that have views and access to these amenities.

- A well-designed and integrated surface stormwater management system can provide benefits to the environment by reducing downstream flooding, improving water quality

and reducing pollution, and improving wildlife habitats and corridors.

- Drainage costs can be reduced and water can be used for irrigation or aquifer recharge by incorporating three basic management techniques:

  1. Capture runoff water close to where it falls.
  2. Reuse runoff water as close to the source as possible.
  3. Avoid creating concentrated runoff and erosion.