Prepared By: Community Development Department, 209 Pearl Street, Council Bluffs, IA 51503 - Phone: 328-4629
Return To: City Clerk, 209 Pearl Street, Council Bluffs, IA 51503 - Phone: 328-4616

RESOLUTION NO. 03-131

A RESOLUTION APPROVING THE EAST MANAWA MASTER PLAN.

WHEREAS, a new roadway has been proposed for the area east of Lake Manawa. The roadway is tentatively being referred to as East Manawa Drive and will connect Highway 92/275 to South Shore Drive. Consequently, a plan for the area is necessary to coordinate future projects with capital improvements, land use planning, and development policies; and

WHEREAS, City staff members from the Community Development, Parks and Recreation, Public Works, and Water Works Departments were involved in the compilation of the East Manawa Master Plan; and

WHEREAS, the City Planning Commission has reviewed the East Manawa Master Plan as submitted and recommends adoption by the City Council; and

WHEREAS, after study and consideration, it is in the belief of this City Council that approval of the East Manawa Master Plan is in the best interest of the City of Council Bluffs, Iowa.

NOW, THEREFORE, BE IT RESOLVED
BY THE CITY COUNCIL
OF THE
CITY OF COUNCIL BLUFFS, IOWA

That the East Manawa Master Plan attached thereto and made a part of hereof by reference is hereby approved by the City Council of Council Bluffs.

BE IT FURTHER RESOLVED,

The East Manawa Master Plan shall serve as an amendment to the 1994 Council Bluffs Comprehensive Plan.

PASSED
AND
APPROVED: June 9, 2003.

Thomas P. Hanafan Mayor

ATTEST:

Cheryl Punteney City Clerk

EAST MANAWA MASTER PLAN

PREPARED BY THE CITY OF COUNCIL BLUFFS
COMMUNITY DEVELOPMENT DEPARTMENT

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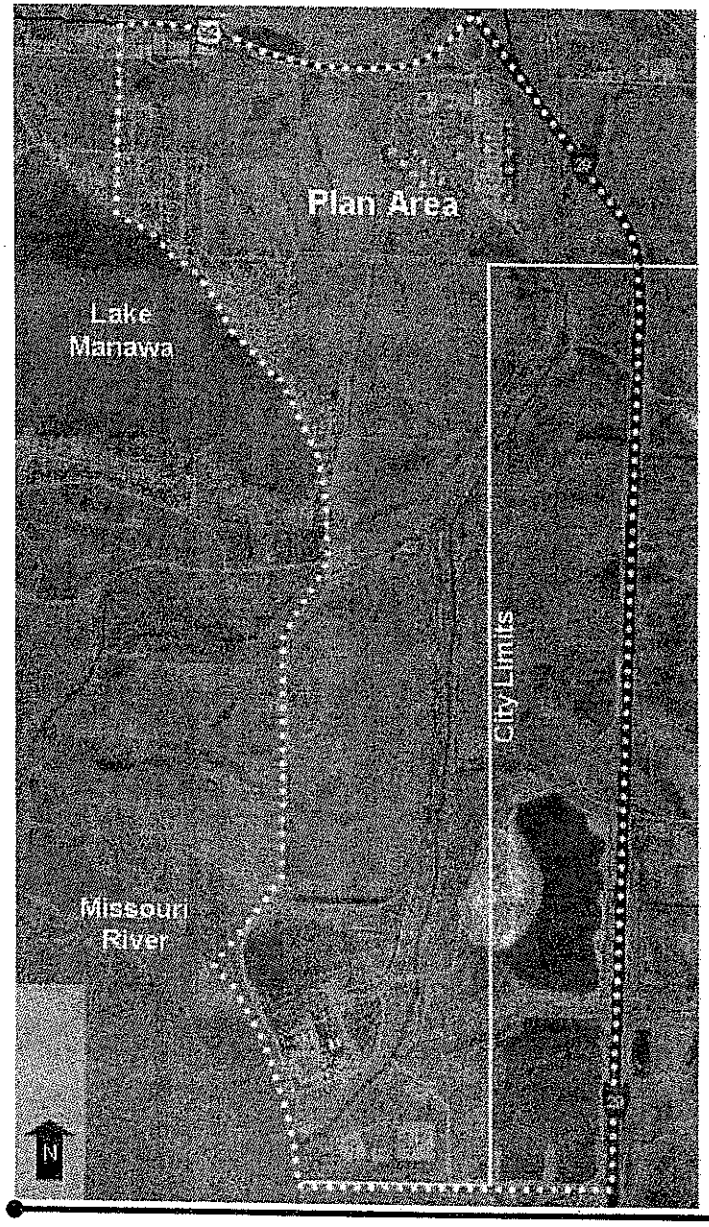


Area Boundary and Description

The East Manawa Plan encompasses the southeast portion of the City of Council Bluffs. The area is generally bound by Highway 92/275 on the north, Interstate 29 on the east, the current city limits boundary on the south, and Piute Street and Navajo Road on the west. See Illustration 1 for the East Manawa Plan Area Boundary. The planning area contains approximately four square miles or nearly 2,500 acres. The area is primarily vacant ground with scattered developments of various sizes and land uses. These developments include the Manawa Park Addition, Hannan Park Addition, Lakoma Addition, Ben Mar Addition, Lakeview Acres/Shore Acres, the east portion of Lakeshore Golf Course and Country Club, Mid American Energy, National Cooperative Refinery Association (NCRA), and numerous scattered individual residential uses.

Purpose of the Plan

This area of Council Bluffs has an inefficient transportation network. A new roadway has been proposed to address the current and anticipated traffic demands of the area. In addition to improving transportation access, the new roadway will open up surrounding areas that were once not available for development. Given the proximity to major transportation, commercial, and recreational areas combined with the existing developments this area is anticipated to be a growth area for Council Bluffs. Consequently, a plan for the area is necessary to coordinate future development projects with capital improvements, land use planning, and development policies. The intent of this plan is to address these issues by developing guidelines to insure proper development of infrastructure, land use, and aesthetics. This plan would serve as a sub-area plan for the southeast portion of the City and be an amendment to the 1994 Comprehensive Plan.

ILLUSTRATION 1 – PLAN AREA BOUNDARY

SECTION II - EXISTING AREA CONDITIONS

This section is intended to describe the existing infrastructure and environmental conditions of the planning area. This includes information on floodplains, floodways, soil types and conditions, slopes and drainage, noise impacts, environmentally sensitive or protected areas, land use, zoning, sewer, water, and transportation.

Floodplains and Floodways

The majority of the planning area is located in Zone X. Areas designated as Zone X are areas of 500-year flood or areas protected by flood control levees from 100-year flood on the Missouri River and Mosquito Creek. Zone X does not impose additional floodplain building restrictions. Zone A refers to areas where no base flood elevation has been determined. The areas of Lake Manawa and Lateral 5 are designated as Zone A. Zone AE refers to areas where base flood elevations have been determined. The area between the levee and Missouri River is located in the floodway or Zone AE, as well as the area along the Mosquito Creek. Zone AE restricts the placement of structures that would affect floodwaters. Consequently, areas located in the "A" and "AE" Zones should be used for passive recreational opportunities, which are consistent with the floodplain ordinance or remain as open space. A floodplain/floodway map of the planning area is shown in Illustration 2.

Noise

The area is located outside of the Eppley Airport Noise Corridor. However, the area is bounded by Interstate 29 on the east that produces significant noise levels. In addition, Highway 92 carries significant volumes of traffic and it is anticipated to experience an increase in traffic during the planning period. However, adequate set backs and land use planning should mitigate existing and future noise levels.

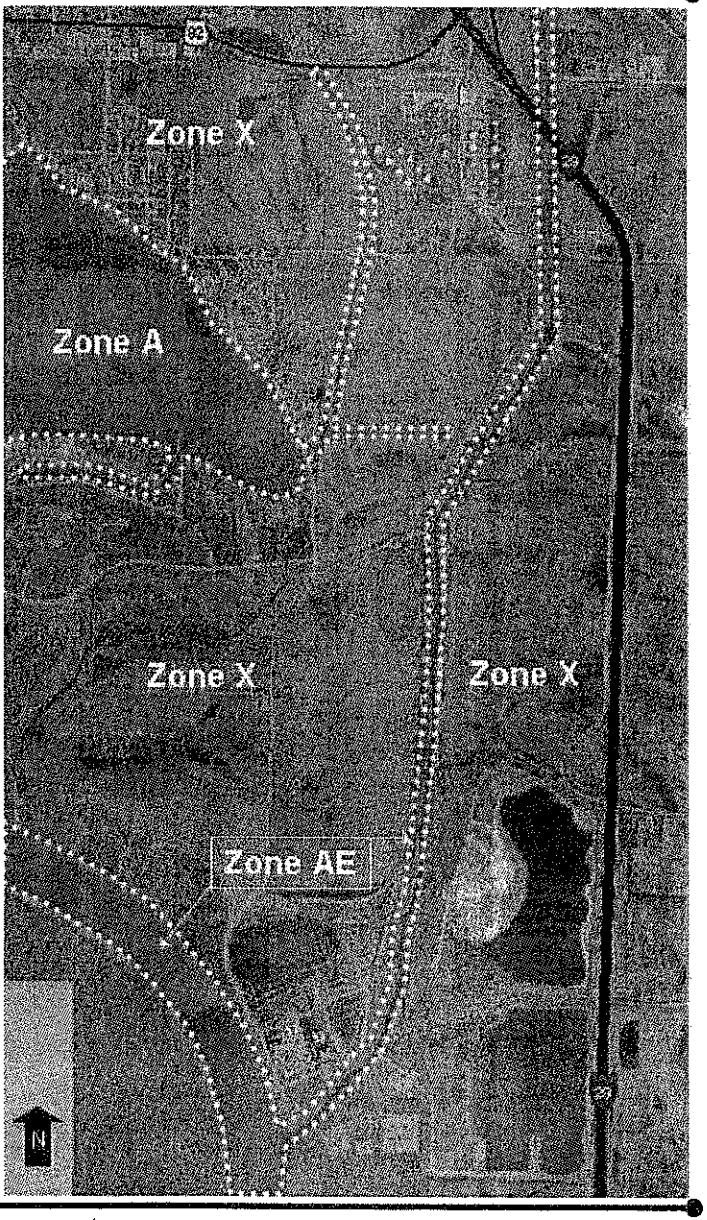


ILLUSTRATION 2 – FLOODPLAIN/FLOODWAY MAP

Soils and Slope

The soil classifications within the planning area vary from silty clay to silty loam types. These soil classifications are alluvial fill that are found on nearly level areas of bottom land. Percolation rates range from very low for clays to extremely high for the sandy soils. In addition, there is a high ground water table throughout the area. All these factors make it difficult to achieve proper compaction for development. Consequently, surcharging larger projects may be necessary. The soils information was taken from the *Soil Survey of Pottawattamie County, Iowa.* This manual was published by the Soil Conservation Service (SCS) and the United States Department of Agriculture (USDA).

The area is characterized by slopes of 0-2%. The highest elevation is 980 feet at the river levee near the power plant. The elevation at the tank farm is 979 feet and the elevation in the area of the golf course is 977 feet. The lowest elevation is 970 feet in the area southeast of Lake Manawa.

Considering the nearly flat topography and high water table the area is prone to poor drainage, which will require developments to surcharge for larger buildings and elevate development areas to establish positive drainage. In addition, the construction of on-site detention basins will be necessary for addressing stormwater runoff.

Environmentally Sensitive or Protected Areas

Environmentally sensitive or protected areas include land and water masses that are important to maintain and preserve. These could be publicly or privately owned areas with agriculture or passive recreation uses that are not harmful to the habitat. Future development will need to take into account environmental issues and control of pollution sources while protecting unique areas.

Wetlands - The National Wetlands Inventory shows few wetland areas within the planning area. Relatively small areas identified as Inland Forested Wetland, Inland Herbaceous Wetland, and Pond are found on the Lakeshore Golf Course. Also a small area east of the power plant is identified as Inland Herbaceous Wetland. Other than a small pond located just east of the Shore Acres subdivision, the remainder of the planning area is free of designated wetland areas. The overall lack of existing wetlands within the planning area is likely due to agricultural activities, construction of roadways, and various residential developments.

Wetlands are protected by Section 404 of the Federal Clean Water Act, which is administered by the U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency. Under Section 404 it is necessary to secure a permit from the Corps to discharge dredged or fill material into waters (includes wetlands) of the United States. This process should be incorporated into the City land use regulatory system to reduce time and energy in the development process. This will allow for identification of wetlands as an important consideration in the land use.

Ponding Areas - The U.S. Army Corps of Engineers has specified certain areas that are a necessary part of the levee system. Areas used for ponding in connection with pumping plants or temporary storage of interior runoff during flood periods shall not be allowed to become filled with silt, debris, or dumped material. These areas are also specified for no construction of structures that may limit the ability for ponding to occur.

Protected Areas – Lake Manawa State Park borders the plan area to the west. This state park is approximately 1,500 acres in size including the 660 acre lake. Lake Manawa State Park is regulated by the Iowa Department of Natural Resources.

Land Uses and Developments

The planning area contains three primary land use types; residential, industrial, and agricultural/open space. The following section provides a brief overview of the existing developments.

In February of 2003, the Community Development Department conducted a field survey in order to identify existing structural conditions within the residential portions of the East Manawa Planning Area. For the purpose of this survey the planning area was broken down by residential subdivision/addition. The survey was conducted by observing exterior conditions in order to determine the structural quality of each dwelling. Each dwelling was classified in one of four conditions: good, fair, substandard poor, or deteriorated poor. Structures classified in good condition do not need rehabilitation, structures in fair condition need minor rehabilitation, structures in substandard poor condition need major rehabilitation, and structures in deteriorated poor condition are blighted beyond benefit of rehabilitation efforts and therefore should be demolished. Illustration 3 shows a chart representing the results of the field survey for the planning area.

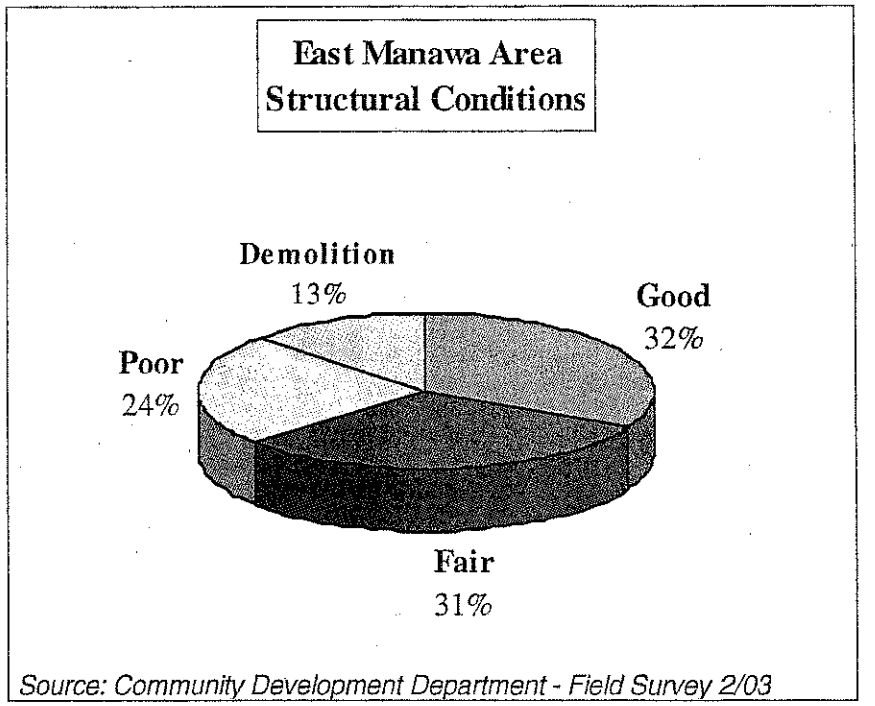


ILLUSTRATION 3 – STRUCTURAL CONDITIONS CHART

Residential Developments

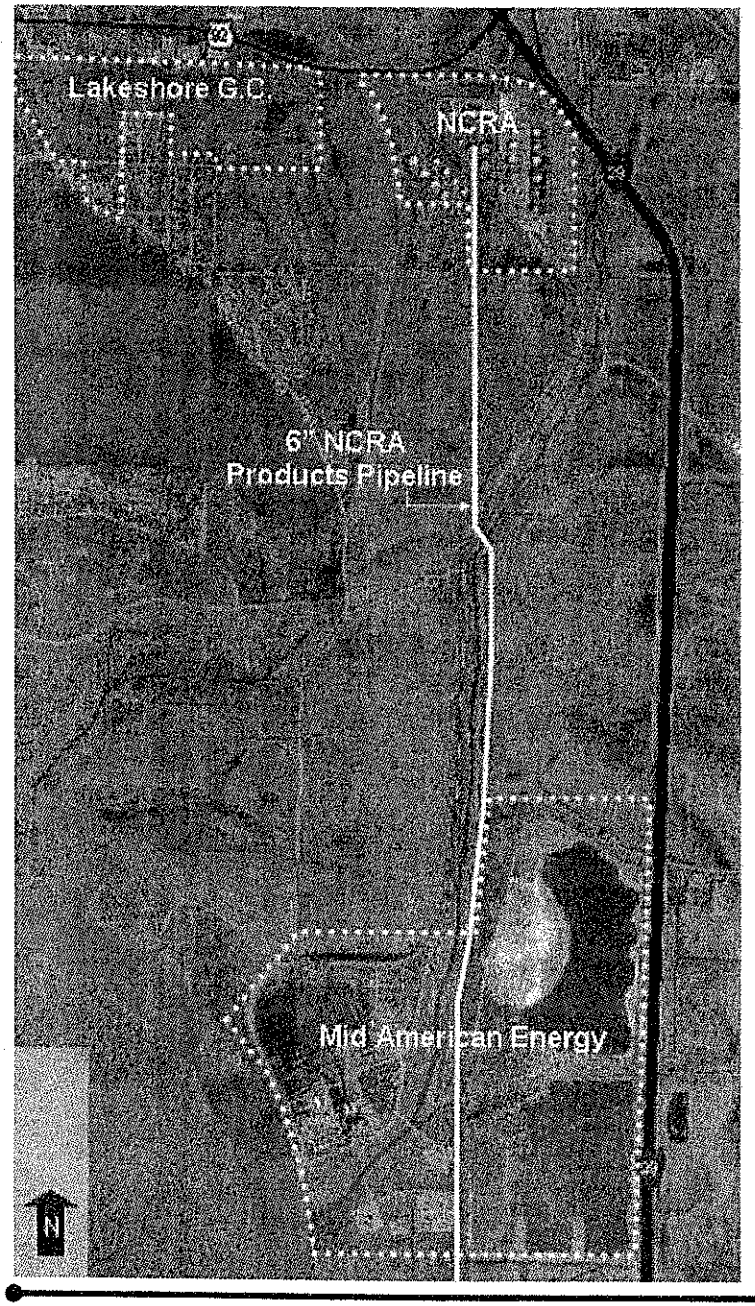
Manawa Park Addition – The Manawa Park development is a single-family subdivision located off the north shore of Lake Manawa. Homes within the Manawa Park Addition were generally constructed in the 1950's and 1960's, with scattered manufactured homes throughout the neighborhood. Our field survey indicates that of the 125 structures within the Manawa Park Addition 26% are in good condition, 42% are in fair condition, 22% are in poor condition, and 10% require demolition.

Hannan Park Addition – This residential development is located north of Lake Manawa and immediately east of Piute Street. Several lots within this area measure 3,200 square feet, which is well below the minimum 5,000 square feet required for single-family detached homes in the R-3 zoning district. Our field survey shows that of the 27 structures within the Hannan Park Addition 44% are in good condition, 30% are in fair condition, 19% are in poor condition, and 7% require demolition.

Lakoma Addition – The Lakoma Addition is a single-family subdivision located off the northeast shore of Lake Manawa. Many of the homes within this subdivision were constructed prior to 1950. The neighborhood has seen scattered manufactured homes and new home construction on vacant or cleared lots. As a result, the neighborhood has a mix of housing types and styles. Our field survey indicates that of the 151 dwellings in the Lakoma Addition 25% are in good condition, 28% are in fair condition, 30% are in poor condition, and 17% are in need of demolition.

Ben Mar Addition – The Ben Mar Addition is a small single-family subdivision located east of Lake Manawa. Most of the homes were constructed in the 1950's and 1960's. Our field survey shows that of the 18 dwellings within the Ben Mar Addition 55% are in good condition, 11% are in fair condition, 11% are in poor condition, and 23% are in need of demolition.

Lakeview Acres/Shore Acres – This residential subdivision is located off the east shore of Lake Manawa. Most of the homes within the Shore Acres subdivision were constructed in the 1970's. Our field survey indicates that of the 17 dwellings within the Lakeview Acres Subdivision 88% are in good condition and 12% are in fair condition.



Commercial and Industrial Developments

Lakeshore Golf Course – A portion of the golf course lies within the boundaries of the planning area. The new roadway will likely pass directly to the east of the golf course and should not have any adverse effect on its operation.

Mid American Energy – Mid American Energy's power plant is located in the southern portion of the planning area. Mid American Energy has recently expressed its intention to construct a second power plant adjacent to the existing plant location in the near future. The new power plant will likely increase traffic volumes in the planning area during the construction phase and continue once the new plant is operational.

National Cooperative Refinery Association (NCRA) – The tank farm operated by NCRA is located in the northeast portion of the planning area. Currently this facility has an independent access from Highway 92/275, however the City may require that this access be vacated and a new access created off of the proposed East Manawa Drive. In addition, NCRA has a 6" pipeline that runs north-south through the planning area. Future development within the area will need to provide the necessary easement to NCRA in order to access the pipeline. The Iowa Department of Transportation regulates pipeline transportation and requires a 100' easement, 50' left and right of the centerline, for a pipeline such as this. Illustration 4 shows the approximate location of the 6" NCRA pipeline.

ILLUSTRATION 4 – NCRA PIPELINE LOCATION

Zoning Classifications

The East Manawa area contains six city zoning districts and one overlay zone. These districts and overlay zone are shown in Illustration 5 and include the following:

A-1 Open Space Conservation
A-2 Parks, Estates and Agricultural District
C-2 General Commercial
I-2 General Industrial
PR Planned Residential Overlay
R-1 Single Family District
R-3 Low Density Multi-family District

A majority of the planning area is zoned A-2. The A-2 district is designated to preserve open space/farmland for eventual development or for park use. All existing residential developments are zoned R-1, R-3, or PR. These districts provide for the regulation of single family and multi-family developments. However, the majority of the residential area is zoned R-3, which is the city's low density multi-family zoning district. Given that the established residential areas are primarily single family in use these areas is largely over zoned, therefore down zoning should be considered.

A PR Overlay was established in the area northeast of the intersection of Navajo and S. Shore Drive. Areas of industrial use are appropriately zoned I-2 in order to regulate those uses. Industrial zoning has been established for the tank farm and power plant. Vacant land in the area just west of the tank farm has recently been rezoned from I-2 to A-2. This rezoning was requested by the Community Development Department, in order to prevent inappropriate development of land not served by municipal utilities.

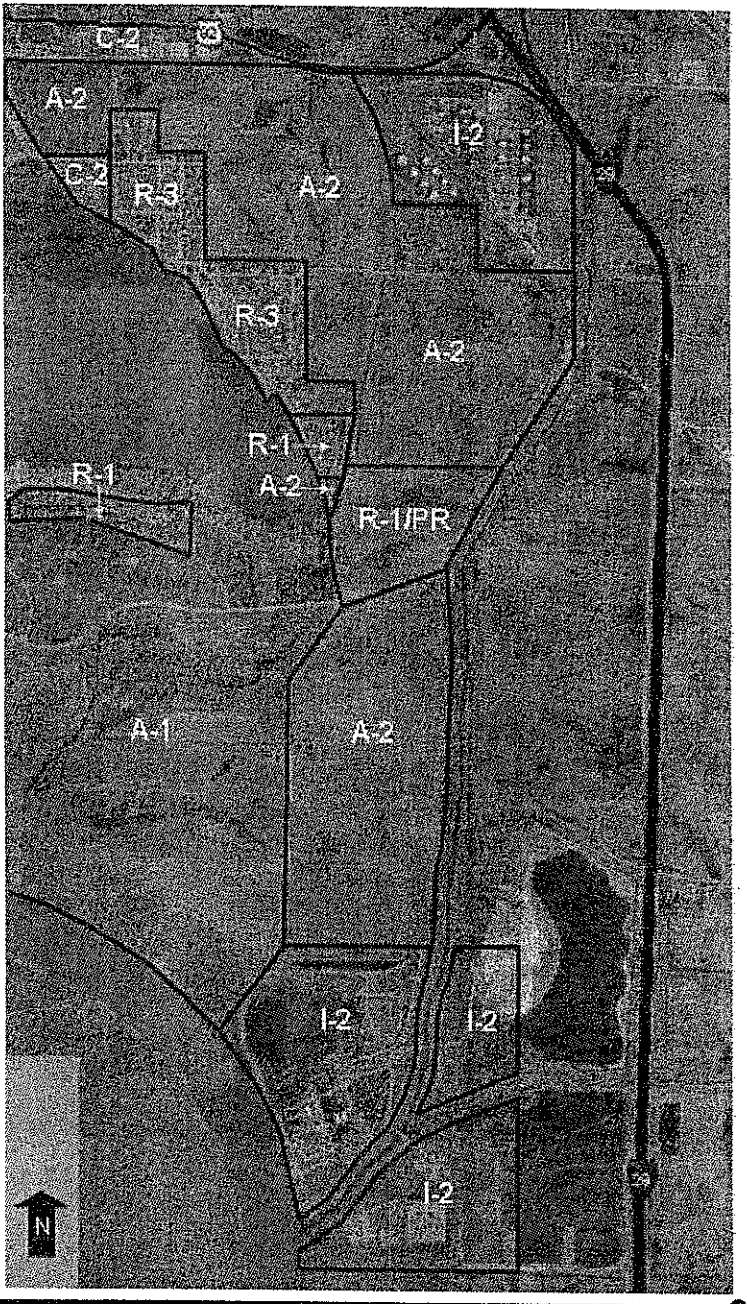


ILLUSTRATION 5 – CURRENT ZONING

Transportation System

The planning area is immediately west of Interstate 29 and south of Highway 92/275. According to MAPA traffic counts, Interstate 29 carries over 25,000 vehicles per day north of the Highway 92/275 interchange and over 20,000 vehicles per day south of the Highway 92/275 interchange. Reconstruction of the Interstate 29 and Highway 92/275 interchange is scheduled to occur in 2003 and will provide improved access to the area.

Highway 92/275 runs along the northern boundary of the area. MAPA traffic counts show that Highway 92/275 carries just over 10,000 vehicles per day between I-29 and Highway 192 (South Expressway). Highway 92/275 is currently a two-lane highway with signalization and turn lanes at the intersection of the South Expressway just northwest of the planning area. The Iowa Department of Transportation has determined that Highway 92/275 should be expanded from two lanes to a four lane divided roadway with turn pockets in order to accommodate current and future traffic volumes. Expansion of Highway 92/275 is scheduled to occur within the next five years.

Navajo Street currently carries a large amount of traffic within the planning area. Navajo is a poorly designed street that lacks curbing, storm sewer piping, and sufficient right-of-way. Navajo Street is classified as a minor collector street that carries nearly 3,000 vehicles per day north of S. Shore Drive and 600 vehicles per day south of S. Shore Drive. Traffic related to the surrounding residential areas and Lake Manawa, as well as traffic to and from the power plant is required to travel on Navajo Street. Illustration 6 shows the existing transportation network for the planning area.

ILLUSTRATION 6 – EXISTING TRANSPORTATION NETWORK

The traffic circulation and land use relationship policies will have a significant impact on the functional operation of the corridors. Access control measures should be part of the roadway design allowing reasonable access opportunities for developments instead of each use having direct access. The location and design of access points along the roadway will improve the safety and efficiency of both vehicle and pedestrian traffic. Uses such as fast food restaurants, convenience stores, service stations, and high-intensity commercial or industrial developments should locate at or near the major intersections to mitigate the effects of the transportation demands. A traffic impact analyses will be necessary to gauge the transportation impacts of proposed projects.

The importance of traffic circulation and land use correlation cannot be stressed enough. Often, the biggest obstacle to implementing adequate driveway spacing requirements is the presence of narrow lot widths abutting the corridor. Numerous residential lots within the planning area do not meet the current standard of 50 feet minimum lot width. New developments will be required to meet the current standards regarding minimum lot size and set back requirements according to the zoning district. Although emphasis is placed on the auto by proposing to improve or construct new roadways in the planning area, streets should be designed to offer options for pedestrians and bikers within developments (i.e. sidewalks, bike lanes, and alternative routes). In addition, the planning area should connect with the current or future trails system, as well as link to all parks within the area.

Park and Recreation System

The Manawa City Park is located at the intersection of Navajo and Mohawk Streets and serves the surrounding neighborhoods. This 0.8 acre park has been redeveloped over the last several years with modern playground equipment. The Manawa City Park is small with minimal amounts of open space.

Lake Manawa State Park borders the planning area to the west and offers multiple recreation activities within its 1,500 acre area, which includes a 660 acre lake. The state park offers fishing, boat ramps/boating, swimming/beach, camping, picnic areas, shelters, restrooms, open space, and nature trails. Bike and pedestrian trails are also located west and south of Lake Manawa providing more recreational opportunities. The continual expansion of the citywide trail system will need to be coordinated with future development along Highway 92/275 and the proposed East Manawa roadway to insure adequate right-of-way acquisition and compatible land uses. Lakeshore Golf Course is located in the northern portion of the planning area. This 18-hole private golf course provides recreation opportunity as well as aesthetically enhances the area.

Sanitary Sewer System

The existing residential developments including Manawa Park, Hannan Park, Lakoma, Shore Acres/Lakeview Acres, and Ben Mar Additions have sanitary sewer as shown in Illustration 7. These areas are served by a series of internal mains varying from 8" to 10" in size. This network of sanitary sewer mains was installed in 1970 and will be in need of replacement in the near future. The *East Manawa Infrastructure Reconstruction Program Study* calls for the replacement of the old cast iron sanitary sewer mains with new PVC sewer mains.

The 8" and 10" sanitary mains connect to a 30" gravity flow trunk line located just north of the Lakoma Addition and just south of the tank farm. This gravity flow trunk line carries waste water to the east where it connects to a 48" gravity flow trunk line that flows south along the Mosquito Creek R.O.W. The Mosquito Creek Pump Station then converts this 48" gravity flow main into a 24" force main and continues carrying waste water south along the Mosquito Creek R.O.W. This line merges with a 36" force main that runs east-west just north of the river levee. After the merge the two lines run south via a 42" force main before terminating at the treatment plant further south outside of the planning area.

Additional development will require the extension of trunk sewers and mains. Several criteria should be used in determining the proposed sewer alignments. One of the main objectives should be to serve the area as much as possible with gravity flow sewer mains. Pump stations add a high initial cost to any project as well as increase the city's operation and maintenance costs over the life of the system. Due to the very flat topography of the planning area it may be difficult to obtain enough slope to induce scour in order to prevent silt deposits from forming within the mains. Adequate right-of-way and future roadways should be determined beforehand to insure proper alignment and accessibility of the system.

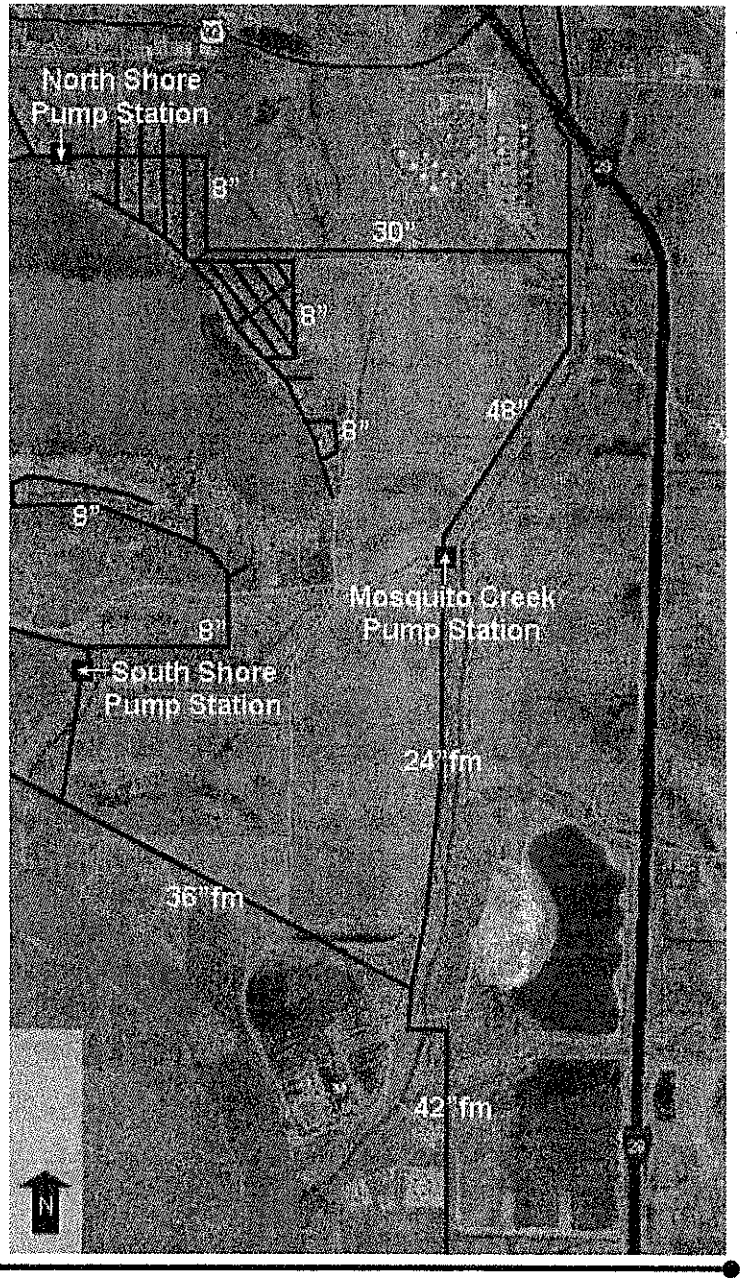
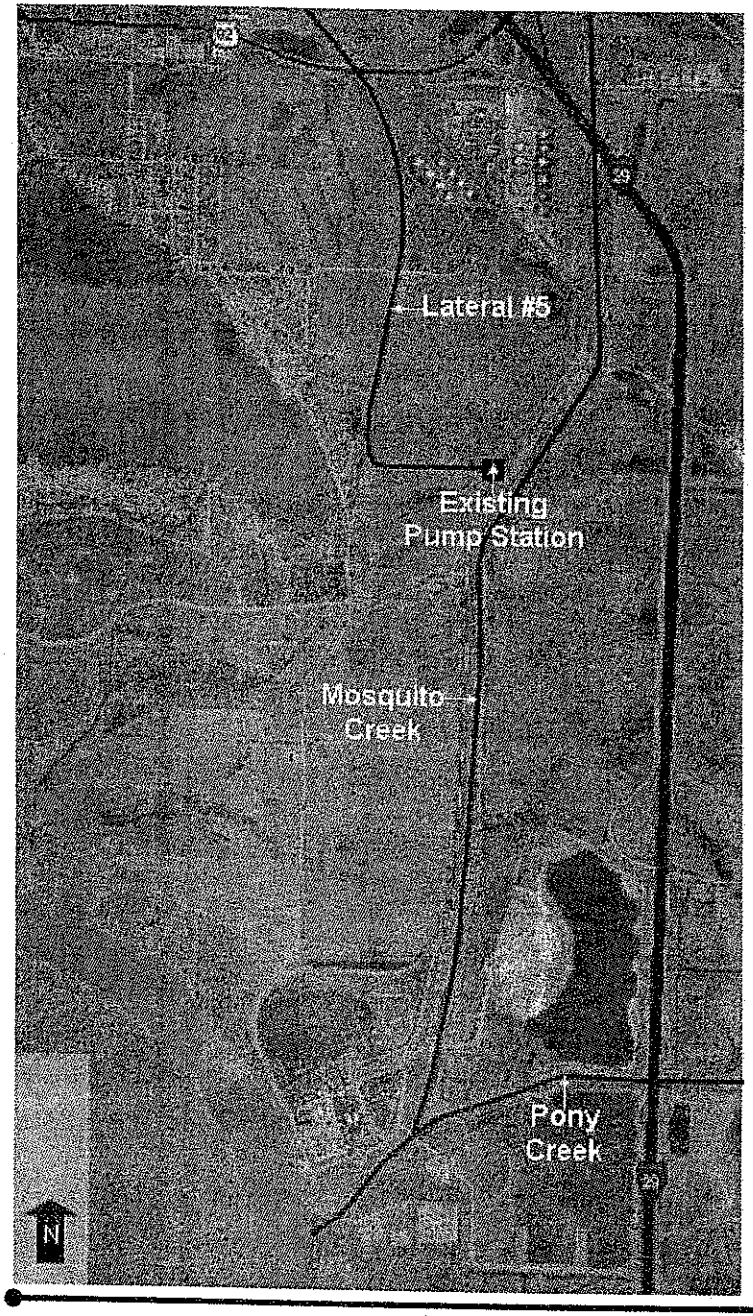


ILLUSTRATION 7 – EXISTING SANITARY SEWER SYSTEM



Storm Water System

Storm water management for the East Manawa plan area is handled by surface run-off and open ditches. A storm sewer system was not constructed in this area in 1970 when infrastructure reconstruction was done. However, in 1998 the Council Bluffs Public Works Department drafted the *East Manawa Infrastructure Reconstruction Program Study* which addressed the problems of deteriorating infrastructure throughout the East Manawa area. The following findings were published in the study.

The area east of Lake Manawa is very flat with low elevations, therefore precipitation collects in low lying areas and ditches until it can evaporate. Lateral 5 and Mosquito Creek collect some storm water run-off from the area via gravity feed. Limited storage capacity of other ponding areas and ditches along with no outlet system often leads to wet conditions. In many portions of the planning area, the street elevation is higher than the private yards. This causes drainage problems, therefore the streets will need to be lowered to insure correct drainage toward the streets. The study stated that the average section of roadway would need to be lowered 20 inches to achieve positive drainage.

The study recommended the construction of a storm water system and pump station to insure proper storm water control for the area. This is necessary to alleviate the wet conditions that frequently occur in the area during times of moderate to heavy precipitation. New development within the planning area will continue to add to this problem if a storm sewer system is not constructed. Subdivision regulations require any new development to construct a storm water management system.

ILLUSTRATION 8 – EXISTING STORM WATER SYSTEM

Water Distribution System

The water system in the planning area consists of a network of water mains ranging in size from 6" to 16". A 16" water main runs along Highway 92/275 and branches off into the smaller 6" to 10" water mains that feed the residential areas. Another 16" main can be found in the southern portion of the planning area. This 16" main originates at the water tank near Iowa School for the Deaf and runs south to the Bunge Soy processing plant where it turns to the west and crosses I-29. After crossing I-29, the water main then turns to the north where it enters the planning area and serves the power plant. The water distribution system for the planning area can be seen in Illustration 9.

Most developments within the planning area are served with municipal water. Undeveloped areas are not served by municipal water, therefore future developments will need to extend water facilities. As development occurs, the City will need to continue to assemble a comprehensive network of looped mains surrounding developing edges of the area. These looped mains will provide Council Bluffs with a framework for future growth, as well as for greater flexibility to prevent service interruptions in the area. A well planned, reliable transmission pattern will be necessary in this growth area.

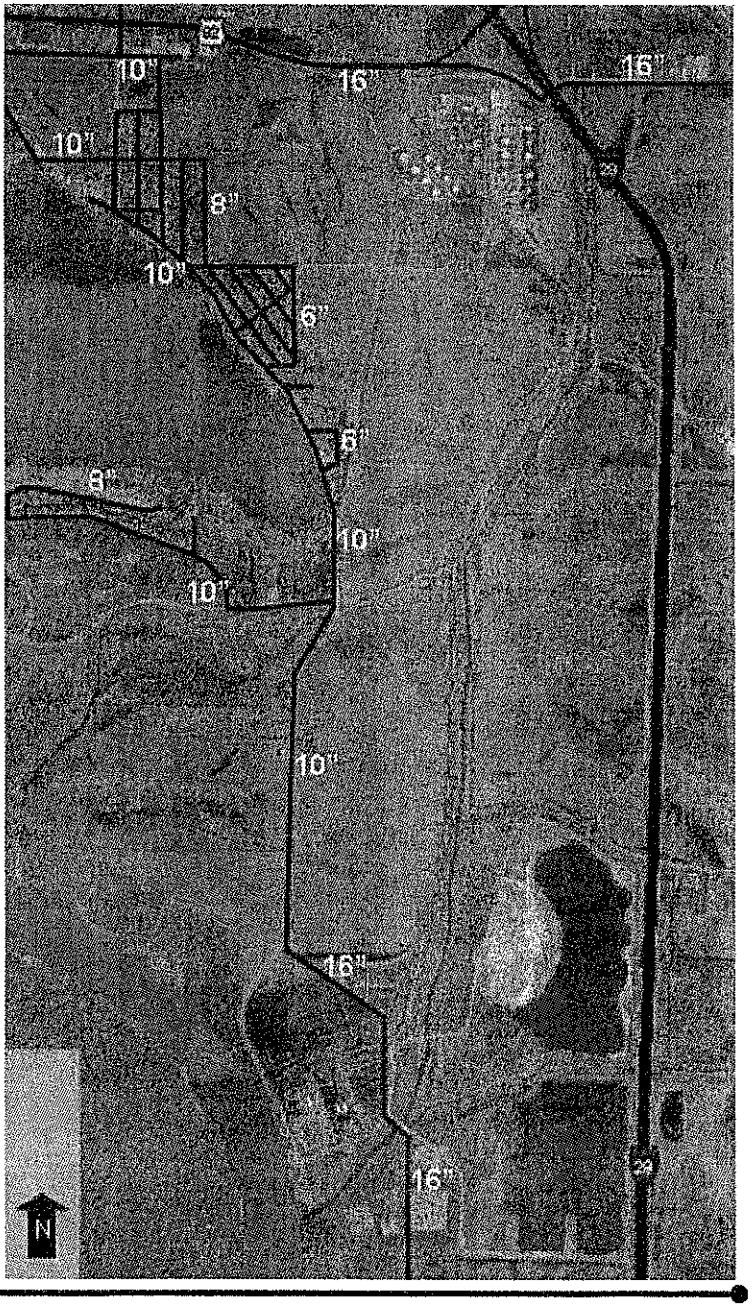


ILLUSTRATION 9 – EXISTING WATER DISTRIBUTION SYSTEM

Development Constraints

Based on an analysis of the existing conditions of the East Manawa area, a variety of development constraints have been identified. These constraints will need to be addressed in order for future development to occur. This will require the development and implementation of regulatory efforts on private development and the investment of capital improvements in the planning area by the City and others. These efforts need to be coordinated to facilitate and control additional private development. The development constraints that have been identified include the following:

- *Flat terrain and soil suitability.* Considering the factors outlined in the previous section, the area is prone to poor drainage because of the natural terrain. Poor drainage combined with a high water table will require surcharging of larger development sites and significant fill to establish positive drainage.

- *Poor drainage combined with a lack of a storm water system.* The planning area is not served with storm sewers and relies on surface drainage and open ditches along the transportation routes. A system of storm water mains, trunk lines, and pump stations will need to be developed to remove storm water generated from individual development projects. The coordination of these developments with an overall storm water management plan is essential for the area to be fully utilized.

- *Lack of sanitary sewer service.* As outlined in the previous section, Manawa Park Addition, Hannan Park Addition, Lakoma Addition, Ben Mar Addition, Lakeview Acres/Shore Acres, Lakeshore Golf Course, Mid American Energy, and NRCA are served with sanitary sewer. However, with the exception of these developments, the remaining area lacks sanitary sewer service. Future development will require the extension of new sanitary sewer trunk lines and mains. Due to the flat terrain of the area, it is likely that additional pump stations will need to be constructed. Because of the construction and maintenance cost of these pump stations, gravity sewers should serve the area as much as possible. Again, coordination of sanitary sewer with individual developments will be necessary to reduce private and public costs.

- *Existing industrial land uses.* The tank farm in the northeast portion of the plan area will likely have a negative impact on any new developments, so this use will need to be appropriately buffered from residential developments. Contamination issues may also be of concern in the areas adjacent to the tank farm and should be investigated and addressed prior to any development in those areas. Also, areas north of the power plant to South Shore Drive should remain as open space, as this will prevent any issues from arising due to the operation and future expansion of the power plant.

- *Inadequately developed areas.* Several residential developments within the planning area were haphazardly developed. Analysis of lot sizes within these developments reveals numerous substandard lots in the R-3 district. Generally these lots do not meet current standards for minimum lot size or minimum lot width, while the structures do not meet required setbacks and/or lot coverage limits. Single-family lots as small as 3,000 square feet can be found throughout the planning area. These lots are considered non-conforming under the R-3 zoning classification standards. This problem along with the overall lack of sufficient municipal infrastructure has discouraged additional private investment in the area.

- *Blighting influences.* As indicated by the structural conditions survey shown on pages 7 and 8, a significant number of homes in the planning area are blighted. The survey indicated that 55% of the homes within the planning area would benefit from rehabilitation efforts, while 13% are blighted beyond the benefit of rehabilitation and should be demolished.

- *The capacity and condition of Highway 92/275 and Interstate 29.* The expansion and reconstruction of Highway 92/275 is essential to accommodate additional development in the area. As indicated expansion of Highway 92/275 is scheduled to occur within the next five years. Anticipated increases in traffic volumes on these roadways are expected to exceed existing traffic capacities. As development occurs in the area, additional arterial streets will be necessary to accommodate anticipated traffic flows. Access to arterial streets will be controlled and limited to specific locations.

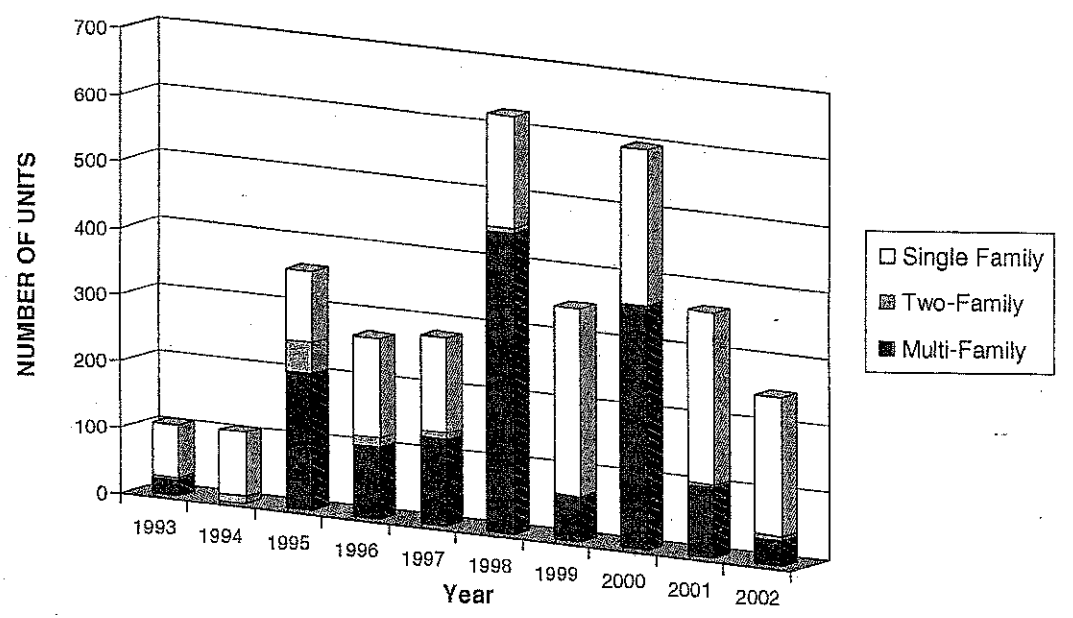
- *Inadequate transportation network.* Currently Navajo Street serves as the collector street for the residential developments, Lake Manawa State Park, and the Power Plant. As previously mentioned, MAPA traffic counts show that approximately 3,000 vehicles per day travel on Navajo. Navajo was designed as a residential street and not intended to serve as a collector street, therefore Navajo does not meet right-of-way standards. In order to adequately serve the transportation needs of the East Manawa Planning Area, a new collector roadway has been proposed. The proposed roadway will not only alleviate Navajo of current traffic demands, but will greatly improve transportation access for the entire area.

- *RISE program objectives.* The City of Council Bluffs received a RISE Grant from the Iowa Department of Transportation for the East Manawa Drive project. The RISE Program was created in 1985 to promote economic development in Iowa through the construction and/or improvement of streets and roadways. This grant was awarded to Council Bluffs because of the potential industrial job creation serviced by this road. The RISE Program is not intended to benefit residential development or retail commercial development, for that reason appropriate industrial development along the proposed roadway should be encouraged.

Development Potential

Although constraints to development exist, the study area has potential for additional residential and industrial development. The planning area combined with the southwest and the northeast sections of the community are the only undeveloped areas within or adjacent to the corporate limits that are capable of accommodating anticipated future development without annexation. Since this area is viewed as a potential area for development, growth assumptions and projections are necessary to establish a basis for future land use and utility planning.

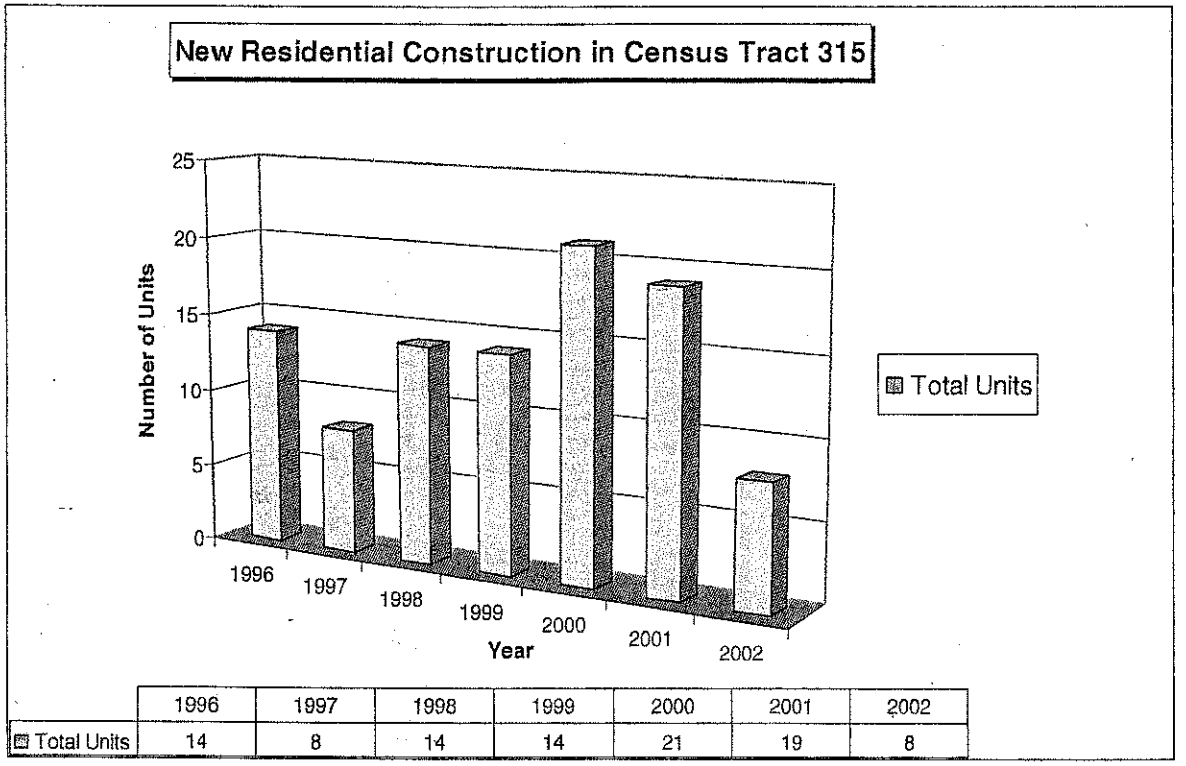
As depicted in Illustration 10, 3,104 residential units were permitted from 1993 through 2002. Based on these amounts the City has averaged 443 units per year for the past 10 years. Of this average amount, 53% were one and two-family dwellings and 47% were multi-family dwellings. This level of residential construction is projected to continue in the community and will be used as a basis for planning projections.



	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Single Family	79	96	108	150	143	168	282	235	258	208
Two-Family	4	10	46	14	10	8	0	2	4	6
Multi-Family	23	0	206	106	129	451	67	362	104	37

ILLUSTRATION 10 – NEW RESIDENTIAL CONSTRUCTION IN COUNCIL BLUFFS

Given the previously mentioned constraints, the number of residential permits in the study area has not been as positive as the rest of Council Bluffs. Illustration 11 depicts the number of residential permits issued in Census Tract 315, which is located in the southeast portion of Council Bluffs. The East Manawa Planning Area is located in Census Tract 315.



	1996	1997	1998	1999	2000	2001	2002
Total Units	14	8	14	14	21	19	8

ILLUSTRATION 11 – NEW RESIDENTIAL CONSTRUCTION IN CENSUS TRACT 315

Although the land area contained within Census Tract 315 exceeds the planning area, the numbers are an indication of permit activity. From 1996 through 2002, 98 residential permits were issued. Consequently Census Tract 315 accounted for approximately 3% of residential permits per year. On average, 14 units have been constructed on an annual basis within the southeast section of the community. Since this amount reflects permit activity in the entire Lake Manawa areas, the actual number of permits within the study area would be slightly less. In recent years, new construction has primarily occurred on the west side of Lake Manawa in the Pelican Cove and West Lake South Estates Subdivisions.

As previously indicated the potential for development in the area could exceed past permit activity. This assumes that many of the development constraints associated with the area can be addressed. It also assumes that permit activity within the community will continue to average over 400 new units per year. Based on the level of permit activity in the community and the limited areas for development, the East Manawa area is an area that has not fully achieved its development potential. It is believed that if the proposed East Manawa Drive is constructed and the previously mentioned constraints are addressed, development can and will occur in the planning area.

In order to plan for appropriate land use and utility needs, growth projections within the study area are required. Given past trends, development constraints, the ability to invest in capital improvements, and interest by the development community it is expected that 5% of all permits issued in the community in the next twenty years would be located in the study area. Based on an average of 443 permits citywide, approximately 25 residential units are anticipated annually within the study area. This would result in 500 units over a 20-year period.

Assuming a density of 3.0 units per acre, approximately 8 acres of land area per year would be necessary in order to accommodate annual growth projections. Over a 20-year period, a total of 160 acres of land would be necessary. The amount of projected land necessary to accommodate expected growth will be utilized in determining the amount and type of residential use shown in the future land use plan. The future land use plan is contained in the following section of this report.

The addition of 500 new dwelling units is expected to result in an increase of population by 1,250 persons. Population increases are based on 2.5 persons per dwelling unit multiplied by the number of new housing units (500 housing units x 2.5 persons per dwelling = 1,250 persons). Therefore assuming the growth scenario above, it is expected that 1,250 persons will be added to the existing population of the planning area in the next 20 years. Census data shows that Census Tract 315 had a population of 1,812 persons in 2000. This amount combined with the expected growth, would result in a total population of 3,062 by 2023.

Although Council Bluffs lacks a tract record to chart potential industrial land usage, there is a need for industrially zoned properties that are fully served by municipal utilities. In turn the City must rely on the need to buffer uses such as the tank farm or power plant from existing uses and the requirements outlined in the RISE grant in order to justify future land use planning. It is estimated that the demand for industrial land in Council Bluffs is currently 10 to 15 acres per year. Over a 20 year period as much as 300 acres of improved industrial land would be necessary to support this growth scenario; however, this development will occur throughout the City.

The future land use plan on the following page shows that the areas immediately west and south of the NCRA facility represent approximately 240 acres of potential industrial ground. Even though this ground is shown as light industrial, its development potential is limited by demand. The ground east of Mosquito Creek is not immediately serviceable with municipal utilities. Since this ground is not immediately serviceable, it has been designated as agricultural in the future land use plan that can be found on the following page.

SECTION IV - DEVELOPMENT PLAN AND POLICIES

This section of the plan outlines the development objectives and policies for the East Manawa area. These objectives and policies have been categorized into sub-sections on land use, transportation, sanitary sewer, storm sewer, water, and parks and recreation. Each sub-section outlines a specific plan and lists development policies concerning the future growth of the area. The development objectives and policies contained in this section will be utilized as a basis for decision making on future developments, capital improvements, and other actions.

Future Land Use and Development

This sub-section outlines the future land use plan for the area based on the development scenario outlined in the previous section. These projections will serve as the basis of future land use planning. The land use plan is intended to be a snapshot of how the area will be developed during the planning period (20 years). The future land use plan is depicted by Illustration 12 and is divided by land use types. The following are the future land use types:

- A/V Agricultural / Vacant (430 acres)
- P/R Parks / Recreation (100+ acres)
- SF One/Two Family Residential (200 acres)
- MF Multiple Family Residential (40 acres)
- C General Commercial (40 acres)
- LI Light Industrial (240 acres)
- GI General Industrial (100 acres)
- HI Heavy Industrial (650 acres)

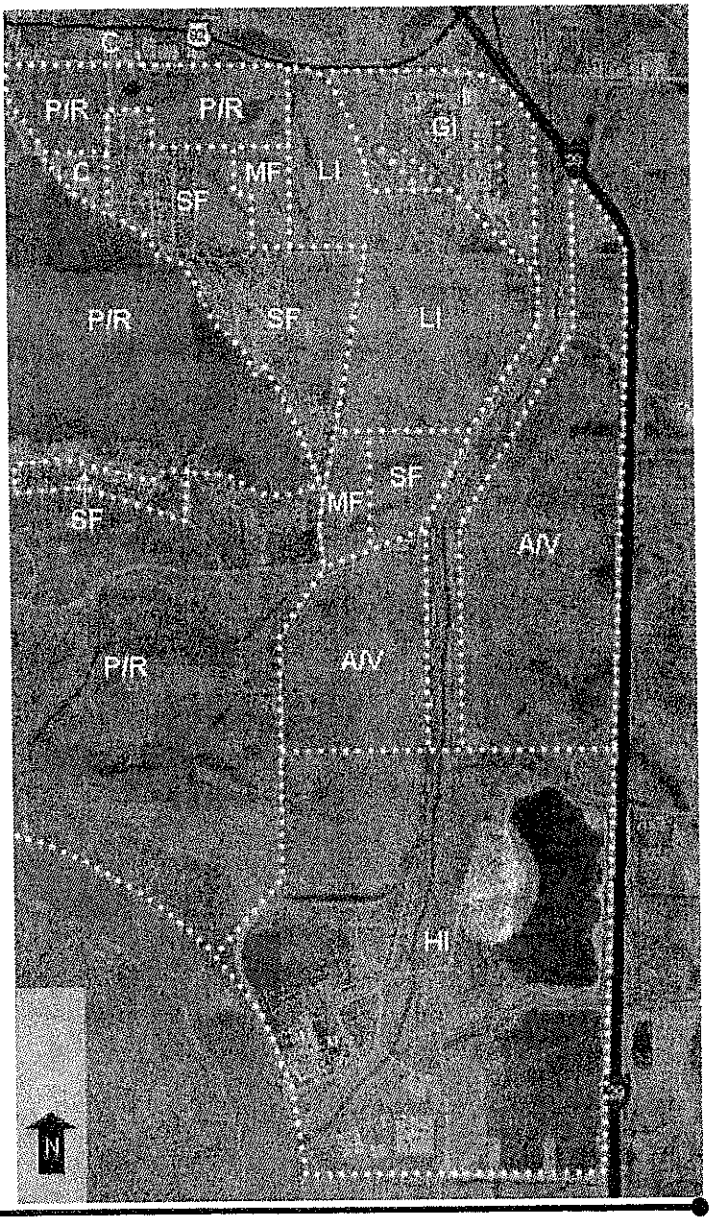


ILLUSTRATION 12 - FUTURE LAND USE PLAN

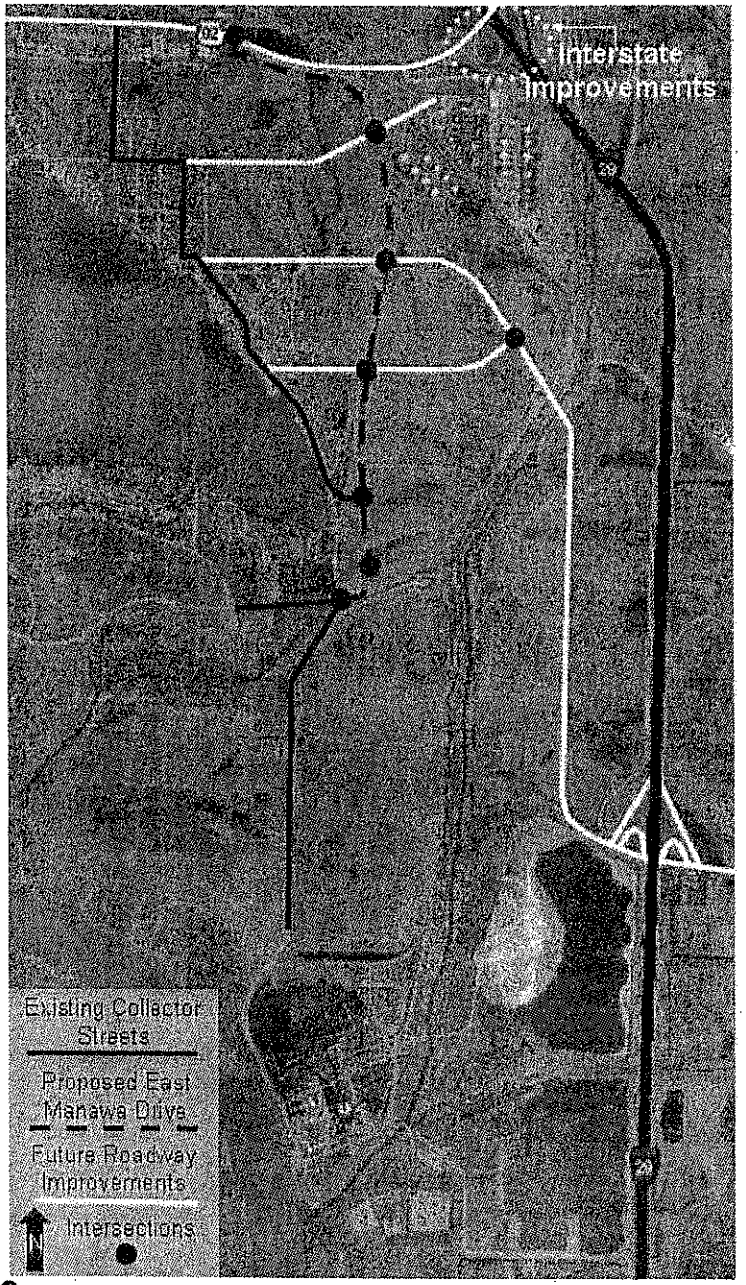
The Future Land Use Plan will assist in determining the type, direction, and timing of future growth. The criterion established in this plan is based on several factors, including:

- The current use of the land within and around the area
- The desired types of growth for specific locations
- The need to buffer incompatible land uses
- The location and availability of utilities and roadways
- The physical characteristics, strengths, and constraints to future growth
- Current population and economic trends affecting the area

Land Use Objectives and Policies

The land use objectives and policies for the East Manawa area include the following:

- Future zoning and subdivision decisions shall be based on the development policies contained in this plan and consistent with the Future Land Use Plan as depicted in Illustration 12.
- Insure that all areas for future development are equipped with adequate infrastructure and public facilities.
- Encourage development in areas that are adequately served by transportation systems.
- Encourage appropriate business development along the Highway 92/275 corridor.
- Promote the development of a mixture of residential land use types as outlined by this plan.
- The City shall continue to monitor trends in demand for various land use categories and determine if amendments are necessary to the land use plan.
- Screening such as uniform fencing, vegetation and landscaping, and/or additional green space shall be utilized to minimize conflicts between land use types and along major transportation corridors.



Transportation Framework

The City will provide for the safe and efficient movement of people, goods, and services throughout the planning area while minimizing the impact of the circulation system on residential neighborhoods. To accomplish this objective a convenient and clearly defined system of collector streets will be utilized to direct local traffic to existing arterial roadways and the interstate system. Illustration 13 depicts the transportation framework for the East Manawa area.

This transportation framework is intended to guide the location of collector and residential streets within future developments. In many cases, existing collector and residential streets will need to be reconstructed and/or extended to improve circulation within the planning area. Within this framework, the street systems will be expanded to serve individual developments. The street network in residential areas will be designed with multiple connections and direct routes. These systems will be designed with clear circulation patterns that discourage through traffic and high speeds while providing access to both local residents as well as service vehicles. Primary access for higher-intensity development through these neighborhoods will be discouraged. All public and privately constructed streets will be designed to meet public street standards.

ILLUSTRATION 13 – TRANSPORTATION FRAMEWORK

Transportation Objectives and Policies

The objectives and policies for the East Manawa area related to transportation and circulation include the following:

- Within the platting and rezoning process, the City will require that local, collector, and arterial streets be constructed to the plat boundary so that a logical extension may be made as various parcel areas are developed.
- Public and privately constructed streets shall be designed and constructed in accordance with the adopted standards of the City's Public Works Department.
- Within the platting and rezoning process, the City will require that development is consistent with the transportation framework as depicted in Illustration 13.
- Roadway connections to Highway 92/275 and the proposed East Manawa Drive shall be limited and consistent with the transportation plan.
- Development projects that generate significant traffic volumes shall be required to complete a traffic impact analysis as part of the regulatory review process.
- To the greatest extent possible all new streets will be constructed to minimize impact on existing storm water drainage ways.
- Roadway improvements shall be designed to minimize impacts on distinctive natural and environmental features.
- Roadway improvements shall be designed to include options for pedestrians and bicyclists.

Sanitary Sewer Facilities

The intricate phasing of sanitary sewer projects required to meet the existing and future development needs within the planning area will call for planning, reliable financing, and coordination between the City and private development entities. A well conceived capital improvement plan will direct the immediate and long-term goals for the management of wastewater including necessary trunk lines and lift stations within the planning area. It is anticipated that the majority of sanitary sewer extensions will be completed as part of the development process and developer financed. In addition, City review will insure that sanitary sewer facilities in each development are appropriately sized and engineered.

As depicted in Illustration 14, areas west of Mosquito Creek should connect with the existing gravity flow sanitary system north of the Mosquito Creek Pump Station. Since the cost of these sewer extensions exceeds the amount that can be expected from private investment, public participation may be required. However, the City will need to examine methods to recover the cost of these improvements through the use of connection fees or other methods.

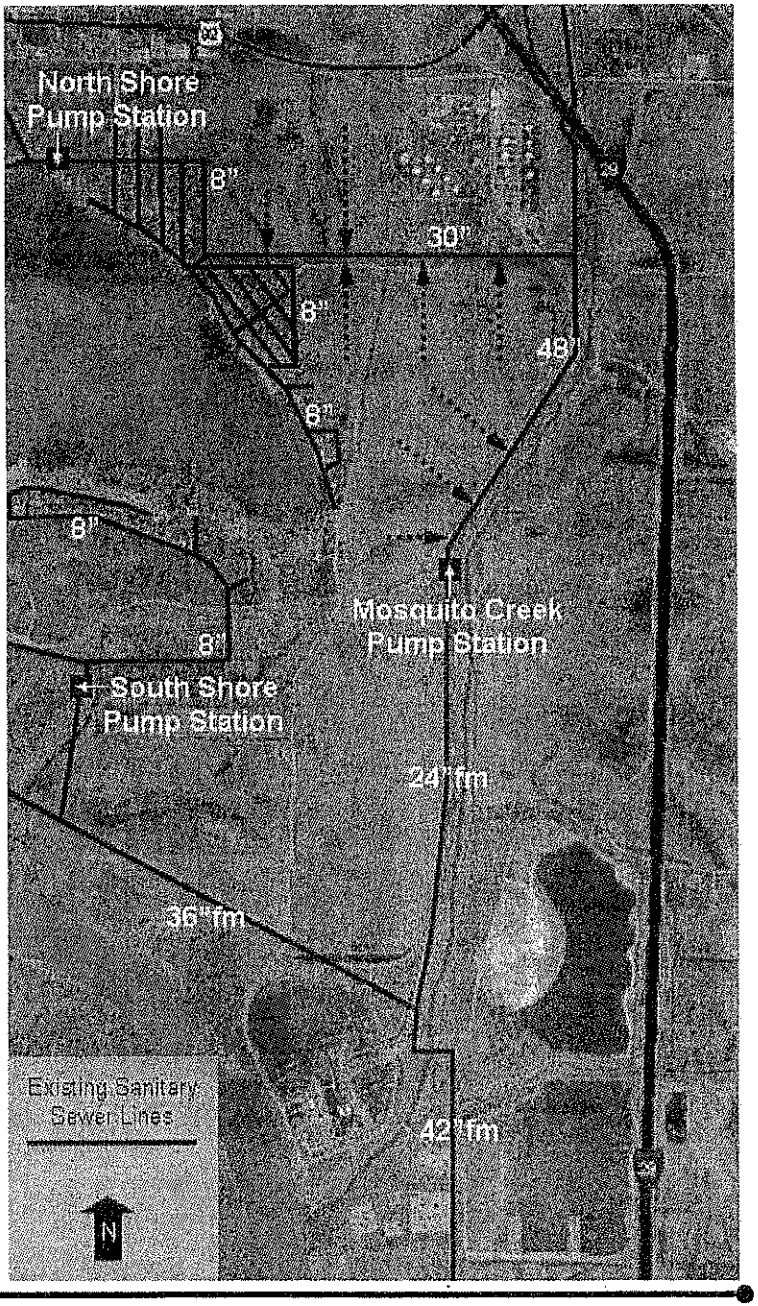
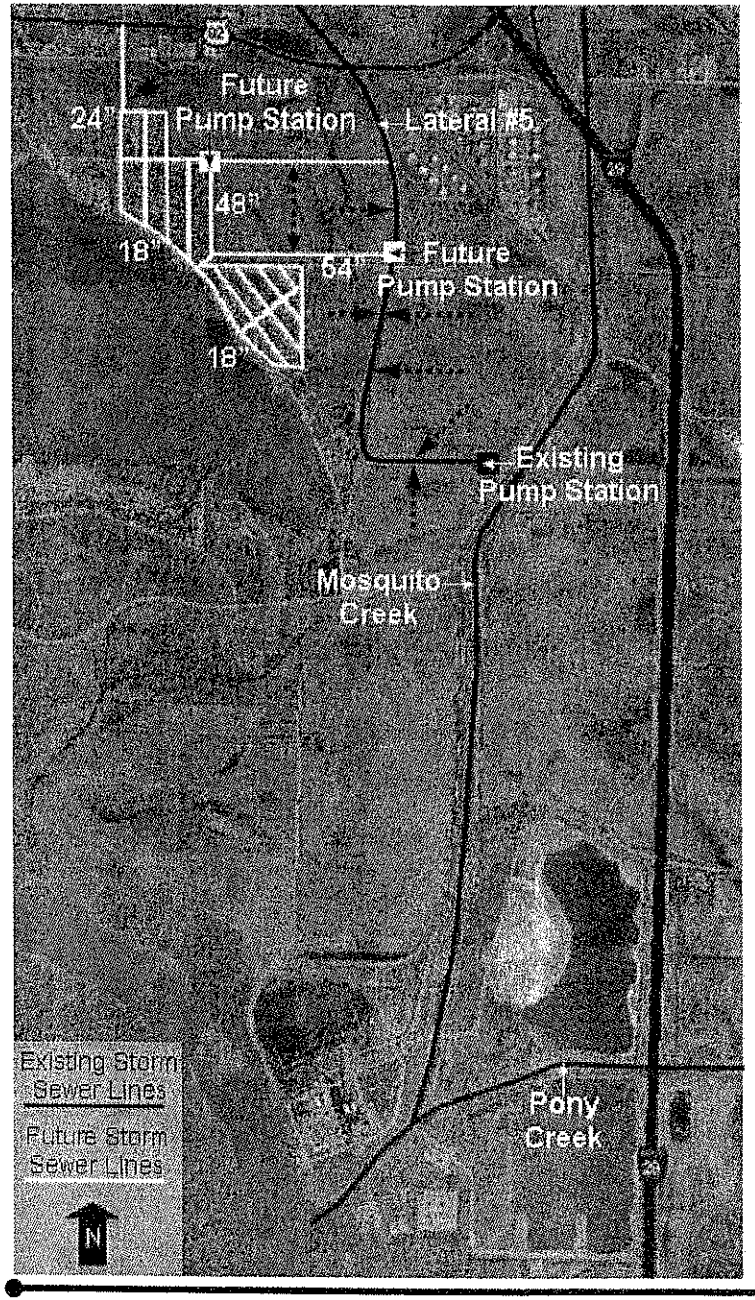


ILLUSTRATION 14 – SANITARY SEWER PLAN

Sanitary Sewer Objectives and Policies

- Sanitary sewer facilities shall be constructed as identified in the *East Manawa Reconstruction Program Study.*
- The developer as a subdivision improvement will construct and pay for sanitary sewer facilities located within a development.
- Sanitary sewer facilities shall be appropriately sized and engineered to accommodate future adjacent development.
- Whenever possible, new development should be contiguous with existing development to maximize usage of public utilities.
- The City will utilize the sanitary sewer tap fee ordinance or similar methods to provide sanitary sewer service and to recover the cost of sewer mains, trunk line extensions, and pump station construction. This may include the collection of fees on a per acre basis, which are calculated by the cost of the improvement and land area served by the improvement. In cases where the City requires a particular development to include an oversized sanitary sewer main to facilitate development, various methods of cost sharing and reimbursement will be utilized by the City. This will insure that the properties benefiting from the improvements bear the costs.
- The extension and construction of an interconnected gravity flow sanitary sewer system shall be encouraged and the construction of private sanitary sewer force main with pump stations and treatment facilities will be discouraged.



Storm Water Facilities

To promote growth of the planning area, the City will need to construct a storm water system as identified in the *East Manawa Infrastructure Reconstruction Program Study.* As previously mentioned, this study was conducted by the City's Public Works Department in 1998 and calls for the construction of storm water sewer facilities as shown in Illustration 15. It is anticipated that additional developer financed storm water facilities will be constructed in the future as part of the development process. Individual developments will be evaluated on the impact of existing drainage and adjoining property. An assessment of the impact will determine the design of storm water facilities for the development and the area.

Additionally the City may require developers to build or contribute to either an on-site or area detention facility, which will help mitigate the risk of run-off from intense storms. The City's subdivision and site plan review processes should allow for detention to be accomplished in the existing drainage courses on an area basis, rather than in engineered ponds that may be located on prime development land. In addition to the storm water improvements installed by private development, a series of storm water trunk lines and pump stations will be necessary to serve the planning area. Improvements to increase the capacity of the existing pump station on Lateral #5 will be necessary as development occurs. The City will need to evaluate and participate in the development of these storm water facilities to service existing and future developments.

ILLUSTRATION 15 – STORM WATER PLAN

Storm Sewer Objectives and Policies

- Storm sewer facilities shall be constructed as identified in the *East Manawa Reconstruction Program Study* shown in Illustration 15.

- Private development projects within the planning area shall be properly graded in order to establish positive drainage and be coordinated with adjacent developments and storm sewer facilities.

- As a part of the platting process, the developer will be responsible for the design and method of conveying runoff. This design may require some over-sized storm sewers. In cases where the City requires a particular development to construct an oversized storm sewer main to facilitate development, various methods of cost sharing and reimbursement will be utilized by the City. The release rate from the newly developed areas will be equivalent to the ten (10)-year undeveloped release.

- Consideration may be given for the creation of a regional storm water management system within the planning area.

- Storm sewer facilities and/or detention basins located within a development will be constructed and financed by the developer as a subdivision plat improvement.

- Subdivisions that are designed using detention ponds as a means of controlling runoff should use dry bottom facilities that require a minimal amount of land. At the developer's discretion and cost, wet-bottom ponds may be constructed as an amenity to a development.

Water Distribution

In accordance with Council Bluffs Water Works policies and as development proceeds, the City will continue to assemble a comprehensive network of looped water mains within the planning area. These looped mains will provide the City with a framework for future growth, as well as allow for greater flexibility to prevent service interruptions in any one portion of the East Manawa area. Since the design and construction of water facilities is under the jurisdiction of the Council Bluffs Water Works, this plan does not project future water facility needs. However, several basic policies are suggested to insure continued coordination with the Council Bluffs Water Works and to insure developments are served with water facilities.

Water Distribution Objectives and Policies

- All development will be served by adequately sized water mains and constructed by the developer as part of the subdivision and zoning process.
- The water transmission mains will be of sufficient size to provide fire protection service to existing and future development.
- The City will continue to involve and coordinate with the Council Bluffs Water Works in the development review process.
- The City will continue to coordinate with the Water Works Department on all projects with respect to the capital improvement program.

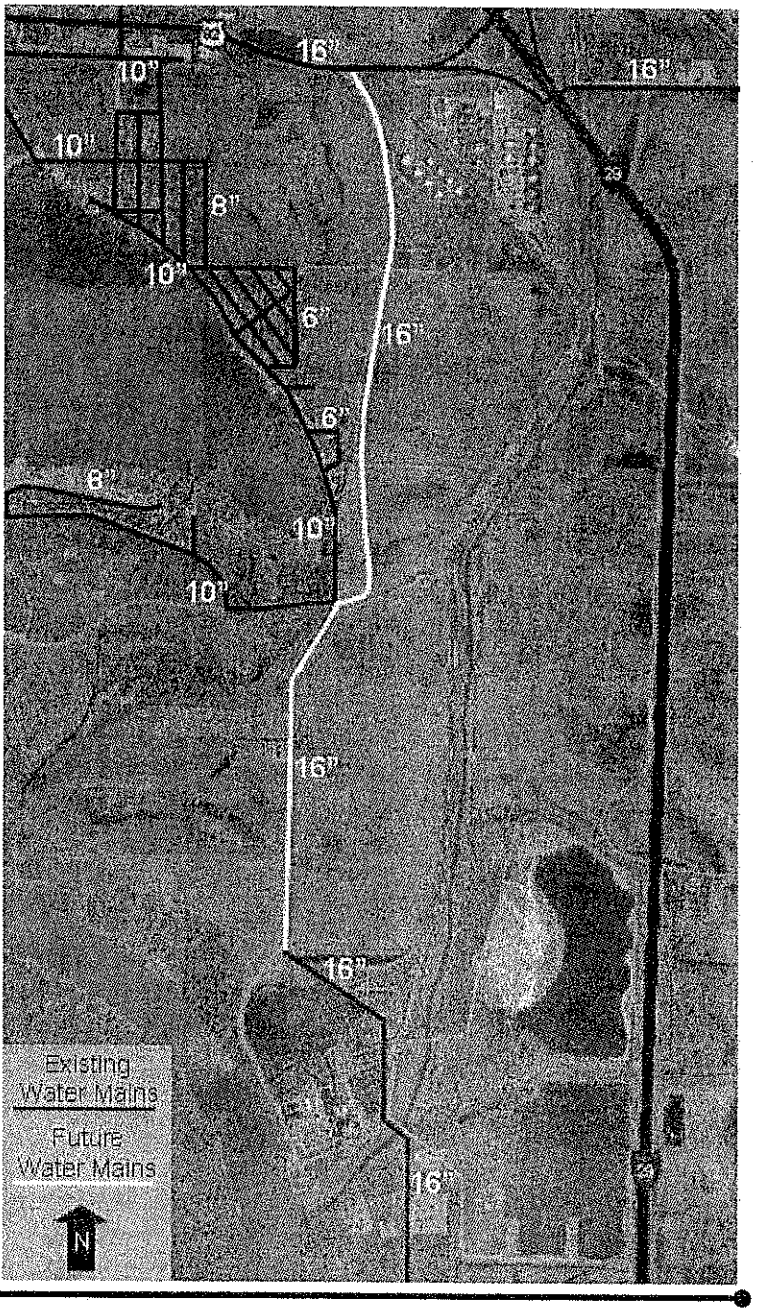


ILLUSTRATION 16 –WATER DISTRIBUTION PLAN

Parks and Recreation Facilities

Future development in the planning area will not likely require any additional City parks, only the expansion of existing parks. The Parks and Recreation Department has recently completed a Master Plan of the parks system in Council Bluffs. This plan evaluates the City's existing park and trail facilities, as well as identifies future park and trail needs. The master plan calls for the expansion of the Manawa City Park and the City's trail system within the planning area.

Specifically the master plan proposes the expansion of the Manawa City Park that will include additional open space area for the park. This expansion of the Manawa City Park could be incorporated into the blight removal process or by relocating the park on vacant land to the east.

Parks and Recreation Objectives and Policies

- Manawa City Park should be improved to provide additional open space as identified in the Park Master Plan.
- Pedestrian and bicycle paths that connect residential areas to municipal parks and recreational amenities should be developed as a component of future roadway improvements and extensions.
- Private developments shall be reviewed for consistency with the Park Master Plan.
- The City would support efforts by the State to expand Lake Manawa State Park to include the area immediately north of the power plant and west of Mosquito Creek.

SECTION V – PLAN MAINTENANCE AND CONCLUSION

Plan Amendment to Comprehensive Plan

As indicated by this plan, all future development will require the extension and coordination of infrastructure, transportation and roadways, rezoning, subdivision, or other related City actions. The guidelines and visions developed here are to insure proper development of infrastructure, land use, and aesthetics. The plan will serve as a subarea plan of the southeast portion of the City and an amendment to the 1994 Comprehensive Plan. This plan should under go continual review. When an amendment is being considered the following procedures shall be used.

Impact Analysis and Review

If this plan is to have any value, methods must be devised to make sure that actions and decisions conform to and do not detract from the plan. Every proposal that requires action by the City Planning Commission or the City Council should be accompanied by an evaluation of its potential to implement the plan. This evaluation can be quite simple in situations where the impact is minimal, amounting to no more than a brief indication of whether the plan provides directions and whether or not the proposal conforms to the plan. Where a requested proposal is inconsistent with the land use plan or is a comprehensive proposal affecting the overall plan, additional review procedures will be necessary.

Land Use Proposals. Interpretation of the plan should be composed of continuous and related analysis, with references to the goals and policies. Interpretation of the plan should not be based on excerpted analysis. Moreover when considering a proposed development, interpretation of the plan should include a thorough review of all sections of the plan. If a development proposal is not consistently supported by the plan, consideration should be given to regulating modifications to the proposal, or using the following criteria to determine if a plan amendment is justified:

- The character of the adjacent neighborhood
- The zoning and uses of nearby properties
- The suitability of the property for the uses allowed under the current zoning designation
- The type and extent of impact on adjacent properties, or the community at large
- The impact of the proposal on public utilities and facilities
- The length of time that the subject and adjacent properties have been utilized for their current uses;

- The benefits of the proposal to the public health, safety, and welfare compared to the hardship imposed on the applicant if the request is not approved
- Comparisons between the existing plan and the proposed change regarding the relative conformance to the objectives and policies
- Consideration of professional staff recommendations

Comprehensive Proposals. In more comprehensive proposals (such as a capital improvements program or a utility plan), a more extensive evaluation may be required to identify potential revisions to the proposal or to the plan. Comprehensive proposals should include an evaluation which includes the following:

- Description of the proposal
- Identification of elements of the plan affected by the proposal
- Evaluation of the effects of the proposal on the plan, by element (such as objectives and policies, land use, or public facilities and infrastructure). If the proposal supports the plan, the evaluation should indicate. If it conflicts, the conflicts should be identified and adjustments made to the plan or proposal. If adjustments to the plan are proposed, they should be undertaken and adopted per the plan amendment process before final action is taken on the comprehensive proposal.

Plan Amendment

Proposed plan amendments which may be suggested by individuals are encouraged to be compiled and reviewed once a year. By reviewing all proposed amendments at one time, the effects of each proposal can be evaluated for impacts on other proposals and all proposals can be reviewed for their net impact on the plan. If major, new, innovative development opportunities arise that impact several elements of the plan and are determined to be of importance to the City, a plan amendment may be proposed and considered separate from the annual review of other proposed plan amendments. The Director of Community Development shall determine if separate review is justified and prepare a report providing pertinent information on the proposal. This will include a recommended action on the proposed amendment. The plan amendment process should adhere to the adoption process utilized in the preparation and adoption of the plan.

Plan Update

The next plan update should be initiated within ten years. The next update process could be a comprehensive review, including forecasts to a new target year, analysis of alternate land use plans, and evaluation of alternate formats for the plan.

Conclusion

The objectives, policies, and specific action strategies contained in this plan are very challenging ones. They are worthy of a community that is concerned with broad concepts of growth, conservation, equity, and quality of life. Continued discussion is necessary to achieve these goals and policies. Implementation requires substantial dedication and commitment by both the public and private sectors. Specific actions to be accomplished in the near future must be identified so that the City's financial, human, and leadership resources can be directed toward their achievement.