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INTRODUCTION

The Specific Plan for the North Avenue Industrial Triangle was developed at the direction of the City Council to achieve a number of objectives. The most important was to program a course of action whereby the City of Fresno and private industry forces, working jointly, could develop an extensive heavy industrial district with rail access within the city and could avoid or minimize the problems inherent in changing a 930-acre area primarily devoted to agriculture to a smoothly functioning industrial district. By coordinating City and private efforts, the problems of drainage, water supply, sewer service, street widening and improvement, and extension of rail service and other facilities could be resolved more efficiently.

The Industrial Triangle will benefit private industry by offering an investment opportunity in an industrial subdivision developed according to a comprehensive plan which provides fully serviced sites for a community of compatible industry. Convenient and efficient rail and truck access, an available labor market, and an attractive physical environment are additional assets.

The City would benefit from effective utilization of its resources resulting in enhancement of the tax base, economy of scale in providing services, and expanded employment opportunities within an orderly workable design for urban growth.

Conversion of the North Avenue Industrial Triangle to an industrial district will occur as a series of interrelated events. The first is the annexation of a significant portion of the district to the City to permit expenditure of capital improvement funds for the extension of city services to the district. Currently, through a series of three annexations, an additional 592 acres has been or is in the process of being incorporated into the city. This will place almost all of the area north of North Avenue within the city. The remaining 300 acres south of this street will be held in reserve for future expansion as demand warrants. However, through this specific plan, the methods of extending city services to future industrial developments in that area will have been pre-planned.

Extension of services within the North Avenue Industrial Triangle will occur in three basic phases. Phase I will achieve the basic extension of water and sewer service within the city limits. This work will be performed by the city. Additionally, in conformance with its general annexation policy, street lights and fire hydrants will be installed. Working cooperatively with the Fresno Metropolitan Flood Control District, the City will assist in the provision of permanent flood control facilities. Other projects for which the City may assume financial responsibility will also be performed. It is contemplated that the majority of Phase I projects will be commenced or completed in the 1973-74 fiscal year.

The majority of the work to be performed in Phase II will generally be the responsibility of the private developer. This will deal with the widening of streets, subdividing, and other private development. Here again, the City may be able to assist the private industry sector either by the establishment of assessment districts or minor extensions of public services. During this phase, some street rebuilding, installation of traffic signals, and the provision of additional fire protection will be achieved as demand warrants.

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Phase III will deal with the area south of North Avenue, consisting primarily of planning for the installation of necessary facilities upon such time as the area is annexed and/or developed.

In order to establish uniform use provisions and property development standards throughout the North Avenue Industrial Triangle, all properties within the City that are not currently zoned for heavy industrial activity will be rezoned to M-3, heavy industrial district. Rezoning applications necessary for this will be initiated by the City of Fresno at no cost to the property owner. Those properties which are now in the unincorporated portion of the district will be similarly zoned M-3 upon annexation to the city to maintain the industrial integrity of the district.

BACKGROUND

Many factors led to the recognition of the need for joint public and private development of the North Avenue Industrial Triangle. The most important factor was that many companies experienced difficulty in locating their operations in the city of Fresno because the city had an inadequate inventory of developed or developable industrial lots to which a full range of public services could be provided.

Participation in the creation of this heavy industrial district represents the first venture by the City in overcoming this industrial land deficiency. Precedent for such action was established by the Fresno Industrial Sites Foundation, which was a non-profit venture of the Chamber of Commerce. Its basic objective was to organize the development of industrial areas in such a manner that an industrial prospect could move onto a given property and begin immediate construction of his plant. Further industrial development was continued on a smaller scale by private developers in unincorporated areas. While such development provided reasonably good industrial sites, there was a general deficiency as to availability of larger sized parcels, integrated transportation, and a full range of public services. Some of this initial development was based on a deferral of improvements and/or a relaxation of standards which now result in some problems needing correction.

During 1970, it became apparent that the City of Fresno would have to participate in the creation of an additional heavy industrial district if the current industrial growth rate was to be continued. Preliminary discussions were undertaken with the Santa Fe Railway regarding annexation of their lands to the city. Since that initial contact, all necessary annexations have been processed, and a mutually cooperative effort for the planning for, and developing of, this district has commenced. This planning effort includes the assistance of the Chamber of Commerce, the Fresno Development Corporation, the Fresno Metropolitan Flood Control District, the Santa Fe Railway, and other individual property owners.

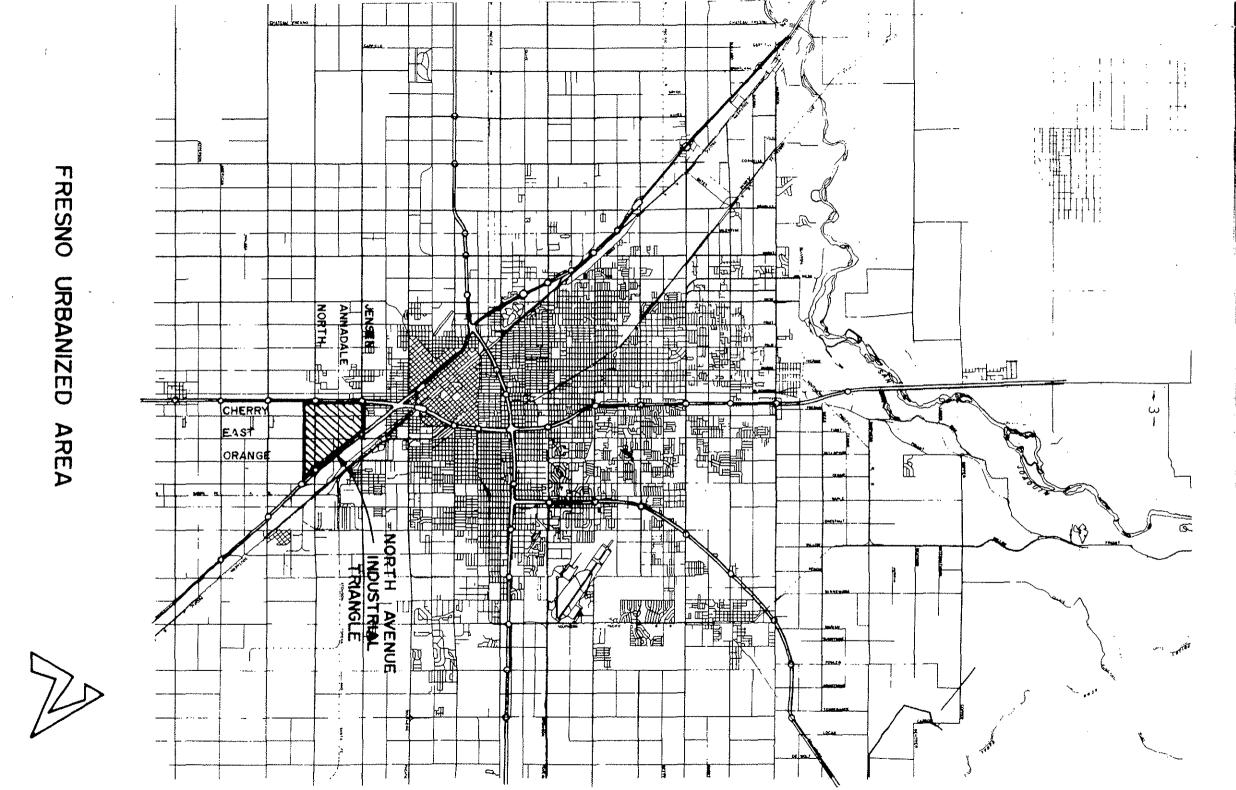
Based on this, the Specific Plan for the North Avenue Industrial Triangle represents a formal declaration of the steps and procedures that the City of Fresno and private industry will undertake to achieve full implementation of this joint program.

THE PLANNING AREA

The North Avenue Industrial Triangle is in an advantageous location in the southerly area of Fresno, approximately 2-1/2 miles from the center of downtown Fresno. It is in close proximity to the

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Fresno Metropolitan Area's concentration of heavy industry. It is in an area designated for heavy industrial development under the Fresno-Clovis Metropolitan Area General Plan. It is at the convergence of transportation service, being adjacent to Freeway 99 and the scheduled Freeway 41. It receives direct and indirect rail service by intercontinental railroads, and is inter-connected with local and regional markets by expressways and arterials streets.

The district is close to an extensive labor pool. Land values are reasonably low, especially when it is considered that the full range of public utilities and services in the form of water, sewers, gas, and electricity are basically provided. Expansion of these services to all properties within the district may be accomplished without undue difficulty, and, to help insure the industrial viability of the district, it is the City's commitment to assist in the extension of these basic services, particularly sewer and water.

LAND USE

Because the North Avenue Industrial Triangle is at the beginning stage of its industrial growth, the predominant land use feature of the area is still agricultural production. This is particularly true of the industrial reserve area south of North Avenue where the larger holdings are located. In the northern portion of the district, a tendency for some agricultural production to be abandoned in favor of vacant holdings is being experienced, indicating that near term conversion to industrial usage would be practicable.

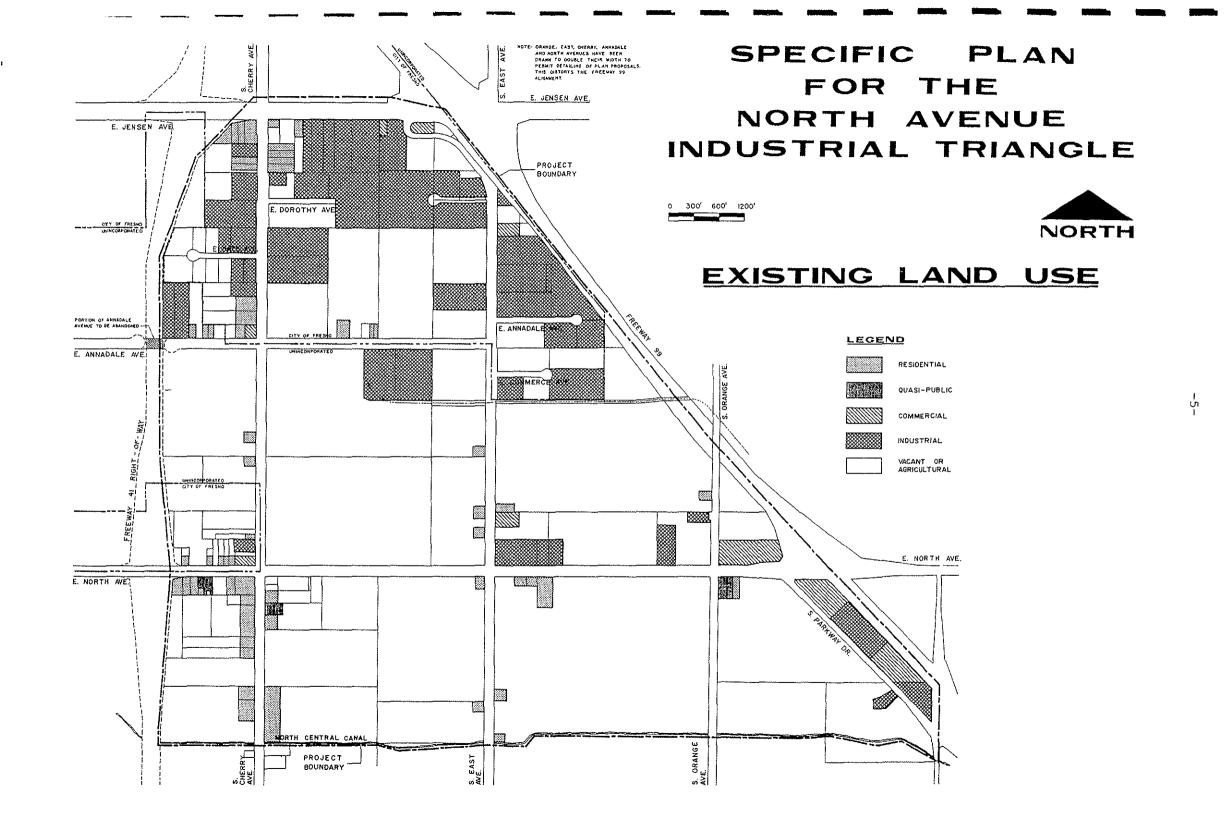
Industrial development is currently concentrated in the northern section of the district, primarily between Annadale and Jensen Avenue. The concentration of new construction is occurring on the east side of East Avenue, between this street and Freeway 99. Industrial subdivision has recently commenced, generally providing smaller sized lots for users who do not need rail service. This has occurred adjacent to both East and Cherry Avenues.

Residential development within the district follows the rural pattern, being generally comprised of groups of small parcels located in isolated strips along major streets. Overall quality of housing is generally substandard, with the exception of units recently relocated as a by-product of freeway construction. The addition of these relocated units to the district's housing inventory is occurring primarily along Cherry Avenue in the area held in reserve for future industrial expansion.

Residential development in an industrial district represents some problems to industrial development. The two uses are not compatible with each other, and residential parcels are generally too small to be utilized effectively by heavy industry. As the district develops to industrial uses, it is expected that residential uses will be phased out through the interaction of market demands, and that the residential building sites of the district will be reassembled into usable industrial parcels.

ZONING

The area of the North Avenue Industrial Triangle is zoned either M-1, light manufacturing district, or M-3, heavy industrial district, excepting for a small area of R-A, single-family residential district, on the north side of North Avenue west of Cherry Avenue. Zoning in the industrial reserve area is divided relatively equally between



R-A and AE-5, five-acre agricultural district, excepting two M-3 parcels adjacent to the North Central Canal.

Ultimately, and in conformance with the General Plan and the Specific Plan for the North Avenue Industrial Triangle, all 930 acres of the district will be rezoned to M-3 to assure that all properties will have the widest range of industrial uses possible and that property development standards will be uniform.

This will not correct the residential-industrial incompatibility mentioned above. However, within the City portion of the district, residential development will become a non-conforming use which may legally be continued and maintained, but cannot be expanded. This will place a ceiling upon the level of industrial-residential conflicts, thereby helping to maintain and protect the industrial enviroment of the district. It should also help accelerate the removal of residential units through the market demand process.

This condition will not apply to the R-A portion of the reserve area which will temporarily remain under the jurisdiction of Fresno County. Here, residential development may continue. Should it be expanded much beyond its present level, particularly along Cherry Avenue, a situation could occur under which a wider distribution of residential units could prevent creation of a viable industrial development in that area.

CIRCULATION

With the completion of the circulation system designed for this area, the North Avenue Industrial Triangle will have the most extensive combination of freeways, arterial streets, and collector streets of any industrial district in the Fresno Metropolitan Area. As a result, it will also have the most efficient industrial street system in the Fresno area.

Two freeways will provide regional access for the North Avenue Industrial Triangle. These are the existing Freeway 99 and Freeway 41 which is scheduled for construction sometime after 1977. The freeway system will furnish an important secondary benefit in that this will be the only industrial district which will enjoy almost complete separation or isolation from adjoining incompatible land use areas because of the buffering effect.

Two arterial streets traverse the North Avenue Industrial Triangle, furnishing access to the freeway system and providing access to the balance of the metropolitan area. Jensen Avenue is fully developed, with the exception of its median islands.

North Avenue is a fairly well-paved, two-lane street, which is partially widened in the area of its interchange with Freeway 99. It will ultimately be completely widened to a four-lane divided street with appropriate median islands within a 106-foot right-ofway. This is provided for by Official Plan Line #62, jointly adopted by the City and County of Fresno. Tractor trailer movements should not be a problem on this street if property frontages are large enough and access controls are designed properly. A possible exception to this may be the residential uses on small lots between Cherry Avenue and Freeway 41., If these smaller parcels cannot be aggregated into larger industrial lots upon expiration of the residential use, suitable access may not be capable of being designed for that area.

Three collector streets provide for the basic north-south movements in the district. Orange Avenue is a narrow two-lane road with pavement in moderate condition. Official Plan Line #72 provides

for the widening of this street. It will be necessary to analyze the expected future truck movements on this street to ascertain the validity of the presently called for 84-foot right-of-way. Should that be excessive, the Official Plan Line would be redesigned. East and Cherry Avenues are two-lane streets having pavement in fair-to-good condition. These streets are currently experiencing piecemeal widening as individual abutting properties are developed. These streets will ultimately have undivided four-lane roadways within 84-foot rights-of-way.

All other streets, except for the private cul-de-sac westward from East Avenue on the Dorothy Avenue alignment, will be local streets with 48 feet of paving within a 64-foot right-of-way. Annadale Avenue, which is in poor condition, will be severed by Freeway 41. Recently installed cul-de-sac streets have been developed to industrial standards. These are Commerce Avenue, Annadale Avenue east of East Avenue, and Date Avenue. Dorothy Avenue is an incompleted street which should be terminated in a cul-de-sac. Future local streets will be developed as an option of subdivision.

Upon completion of annexation, the basic street lighting system will be installed by the City. Upon subdivision, or development of individual properties, the balance of the system will be installed by developers. As traffic demands warrant, the major intersections will receive traffic signals.

Sidewalks have been developed only spasmodically within the district. Present development standards require sidewalks on arterial and collector streets. In view of the fact that no heavy pedestrian movements are expected within the district, the minimum sidewalk width consonant with state standards will be permitted.

PUBLIC UTILITIES

The North Avenue Industrial Triangle is very well served by a basic network of public utilities, particularly in the northern portion of the district. Primary electrical service is 12,000 volts which is extended along all streets in the district. Gas distribution occurs in 12-inch and 16-inch transmission lines throughout the district, with local service being performed by two-inch and fourinch high pressure distribution lines.

WATER SERVICE

Distribution of water service within the district is based upon a primary network of 10-inch and 12-inch mains and local distribution upon a secondary network of eight-inch lines. Only the northern portion of the district is currently served, with primary distribution having been extended on Cherry Avenue to Date Avenue, and on East Avenue to Commerce Avenue. Newly developed subdivisions have been provided with water. Existing mains will be extended to North Avenue where they will be interconnected with existing water service outside the district at Elm Avenue.

It is contemplated that as many as four pump stations may be required in the area if heavy water-using industries locate in the district. It is premature to specify the exact number of pump stations that should be installed, but no matter what the ultimate demand for water will be, an adequate volume of water for all purposes can be made progressively available.

SEWER SERVICE

The North Avenue Industrial Triangle is very well provided with sewer service with most of the industrial facilities being adjacent to, or connected to, existing sewer lines. The area is traversed by trunk lines serving other portions of the metropolitan area, with Jensen Avenue having a 48-inch line, North Avenue a 60-inch line, and Cherry Avenue a 36-inch line. Sewer lines on all north-south streets are capable of providing immediate service to abutting properties.

For the area north of North Avenue, only three sewer lines will need to be installed to provide service to all street frontages. These will be either eight-inch or ten-inch lines on Dorothy, Annadale, and North Avenues. The industrial reserve area south of North Avenue will ultimately be sewered by lines of appropriate size as development requires. To accommodate certain special developments, it can be foreseen that publicly maintained sewer lines will have to be placed within easements. This will be permissible, but will require installation of cast-iron pipe rather than the conventional vitrified clay or transite pipes normally allowed.

FLOOD CONTROL

The North Avenue Industrial Triangle has not reached the level of development sufficient to cause serious drainage problems. Topography is almost flat with a slight slope and with the general elevation dropping about five feet per mile. A moderate amount of land filling will be needed in some areas, and a flood control program will be necessary as drainage and runoff characteristics are modified through the construction of buildings and paving of parking facilities.

The area encompasses parts of three drainage districts. The area west of Cherry Avenue is in District KK. Storm waters will be controlled by surface flow, with ultimate pickup at Annadale Avenue for delivery to a drainage basin west of Freeway 41. The drainage divide east of Cherry Avenue is the Ward Ditch, which separates District LL on the north from District AW on the south. District LL will be served by a drainage basin centrally located north of Annadale Avenue, while District AW will be served by two smaller basins south of North Avenue.

Flood control will be managed by the Fresno Metropolitan Flood Control District. The City of Fresno will participate in the installation of the District LL drainage basin, the initial facility to be installed in the North Avenue Industrial Triangle. However, as an interim measure, flood control may have to be handled on a temporary basis for each lot developed until the proposed drainage basins are put into operation. It is recognized that the development of temporary on-site drainage facilities by the developer represents a double payment for flood control service, a condition that the City and flood control district is attempting to prevent.

While the flood control district and the City will begin the initial phase of the drainage system detailed in the Flood Control Element, the development of a complete drainage system will be financed by drainage fees paid by developers at the time building permits are issued, allowing installation of facilities as industrial development occurs.

PROTECTIVE SERVICES

Two levels of protective services, police protection and fire suppression, are provided in the North Avenue Industrial Triangle. In the unincorporated area, police protection is provided by the Sheriff's Office and fire suppression is provided by the Mid-Valley Fire Department. Within the City portion of the area, these services are provided by the City's Police Department and the Fire Department.

Properties within the City receive a full range of police service, including regular mobile patrol. This higher level of protective service will be immediately provided to additional properties within the district upon completion of their annexation to the City.

Upon annexation, the City's urban level of fire protective services will be substituted for the rural fire service currently provided for unincorporated areas. In most instances, especially where city water and fire hydrants are provided, the rural Class 8 insurance rating may be reduced to the City's Class 2 insurance rating. An exception to this would be for fire exposures located more than 300 feet from a City fire hydrant, or more than 300 feet from the front property line. In these cases, a Class 9 insurance rating would occur. In the case of industrial development of the deeper would occur. parcels, a Class 2 insurance rating is achievable through the private extension of on-site water lines and the provision of suit-To help the industrialist to achieve even able fire hydrants. lower insurance premiums, the North Avenue Industrial Triangle could be designated a sprinklerized district in which all fire exposures would be protected by sprinkler systems installed through joint public and private funding.

Regarding the availability of hydrants within 300 feet of the property to be served, as water mains are extended, fire hydrant risers will be installed at appropriate intervals to permit installation of the hydrant as new industrial facilities are constructed.

At the present time, City fire suppression will occur from the station located at Church and Holly Avenues. To improve fire protection capabilities for both the North Avenue Industrial Triangle and West Fresno, the Church Avenue station will be relocated to a site on Cherry Avenue south of Jensen Avenue.

RAIL SERVICE

The middle portion of the North Avenue Industrial Triangle receives rail service via a Santa Fe Railway lead track. Potentially, more than half of the undeveloped land in the district is capable of receiving this service. To achieve this, the lead track would have to be extended in a loop crossing North Avenue and leaving the district at its southeast corner to interconnect with the main line east of Cedar Avenue. There is only one grade crossing on East Avenue at the present time. To achieve a full level of rail service in the district, it will be necessary to develop additional grade crossings on Cherry, North, East, and Orange Avenues within the district, and Cedar Avenue outside the district.

The extension of the lead track with full protection, including street lights and gates, will be the sole responsibility of the Santa Fe Railway because of the private ownership aspects of the development. However, as rail service is a prime prerequisite to the success of a heavy industrial district, the City of Fresno will assist wherever possible in this extension.

IRRIGATION

Irrigation water for agricultural production is provided by two facilities--the North Central Canal and the Ward Ditch. The North Central Canal distributes water on an areawide basis, and will have to remain as a permanent facility. The Ward Ditch should be considered as a short-lived facility that should either be phased out or replaced. This constitutes a major problem within the district.

A basic objective of establishing an industrial district would be the conversion of agricultural lands to industrial uses, but while this is occurring, the legal commitment to continue irrigation water service must be met. The subdivision or development of the land adjacent to the Ward Ditch will require that the ditch be pipelined. This is illogical in that an expensive, permanent alternative will have to be developed to serve a temporary use.

The situation concerning the ditch is that two properties, totaling approximately 60 acres, are located on the west side of Freeway 41, outside the North Avenue Industrial Triangle. They have water rights which will remain in effect until the freeway is constructed. Two properties between Cherry Avenue and the freeway utilize water, and one property on the west side of East Avenue does the same. These properties have the right to receive water until the agricultural use is voluntarily abandoned, or until such time as an alternate solution is agreed upon. Achievement of a solution will require cooperation between the public and private parties affected by this problem. Potential alternatives range from the outright acquisition of these properties by a public agency, the purchase of agricultural or irrigation rights from the property owners, to the development of an alternative water supply.

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SPECIFIC PLAN PROPOSALS

OBJECTIVE

Implementation of this Specific Plan will help achieve the objective of causing industrial expansion with the City of Fresno in conformance with the goals and policies of the Fresno-Clovis Metropolitan Area General Plan and with those of the Interim Policy Plan. Within the context that the North Avenue Industrial Triangle is only a part of the Fresno-Clovis Metropolitan Area, conformance of this specific plan with the City's goals and policies will occur in the following respects:

General Plan Goals:

To achieve orderly development of the Metropolitan Area by providing a workable design for urban growth;

To develop a well-balanced land use pattern to meet the needs of all residents of the Metropolitan Area and to strengthen the local economy.

General Plan Policy:

As shown on the General Plan map, to foster industrial development in the South Fresno Community of the Metropolitan Area. (However, it should be noted that as a result of the modification of planning community boundaries, the North Avenue Industrial Triangle has become a part of the West Fresno Community.)

Interim Policy Plan - General Goal:

To achieve orderly development in the Metropolitan Area by providing a workable design for urban growth;

To secure a well-ordered, healthy, economic development and equal employment opportunities for all residents.

Interim Policy Plan - Urban Growth and Development Goal:

To promote development and redevelopment within areas already adequately serviced by municipal utilities and protective services.

Interim Policy Plan - Urban Growth and Development Policy:

To encourage development within the present corporate limits of the city.

- a. Supply levels of municipal services sufficiently high to encourage and retain development within the present corporate limits of the city.
- b. Develop industrial park sites and promote their occupancy through a City Industrial Development Committee.
- c. Utilize metropolitan, community, and specific plans as the basis for zoning decisions in order that the County Tax Assessor may rely upon the adopted plans as the basis for determining fair market value.

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Interim Policy Plan - Economic Goal:

To increase the real income and the real wealth benefit from the economy for all residents of the City of Fresno.

Interim Policy Plan - Economic Policies:

To promote the creation of more jobs in Fresno;

To upgrade the quality of employment opportunities in Fresno;

To promote a broader range of economic activities and jobs in Fresno;

To promote expansion of existing business and industry in Fresno;

To advance the career skills of the labor force in Fresno;

To promote a more optimal and equitable distribution of development in Fresno;

To expand the tax base of the City of Fresno;

To pursue a program of well-planned and administrated industrial park development in Fresno by developing a specific detailed plan for industrial park development;

Interim Policy Plan - Land Use Goal:

To promote a pattern of industrial development in the Fresno-Clovis Metropolitan Area which will meet the economic needs of both the individual and community in a complementary relationship with the total range of urban land uses.

Interim Policy Plan - Land Use Policies:

To promote planned industrial development so as to reduce land use conflict with neighboring activities;

- Conflicting commercial and residential land uses should be eliminated in industrial areas;
- b. Prime industrial areas should be provided with adequate area for expansion which is protected from encroachment by conflicting uses;
- c. Application of design principles should be required at the fringe of industrial areas to reduce potential conflict with adjoining areas.

To promote planned industrial development, to promote economy in the provision of local services, and maximize the attractiveness of local industrial sites.

- a. Industry should be located only in areas which can be efficiently served by public services and utilities as determined in the Urban Growth and Development Element.
- b. Industrial concentrations should be located only in areas which can be efficiently served by metropolitan and regional transportation facilities.

c. Industrial land uses should be clustered with reference to their common needs and compatibility in order to maximize the operational efficiency of similar activities.

Interim Policy Plan - Transportation and Circulation Policy:

To develop a transportation system as broadly based as possible, to maintain and enhance Fresno's regional economic position, so as to assure that all components of a transportation system may be inter-related with public and private commercial and industrial expansion programs and redevelopment programs.

LAND USE ELEMENT

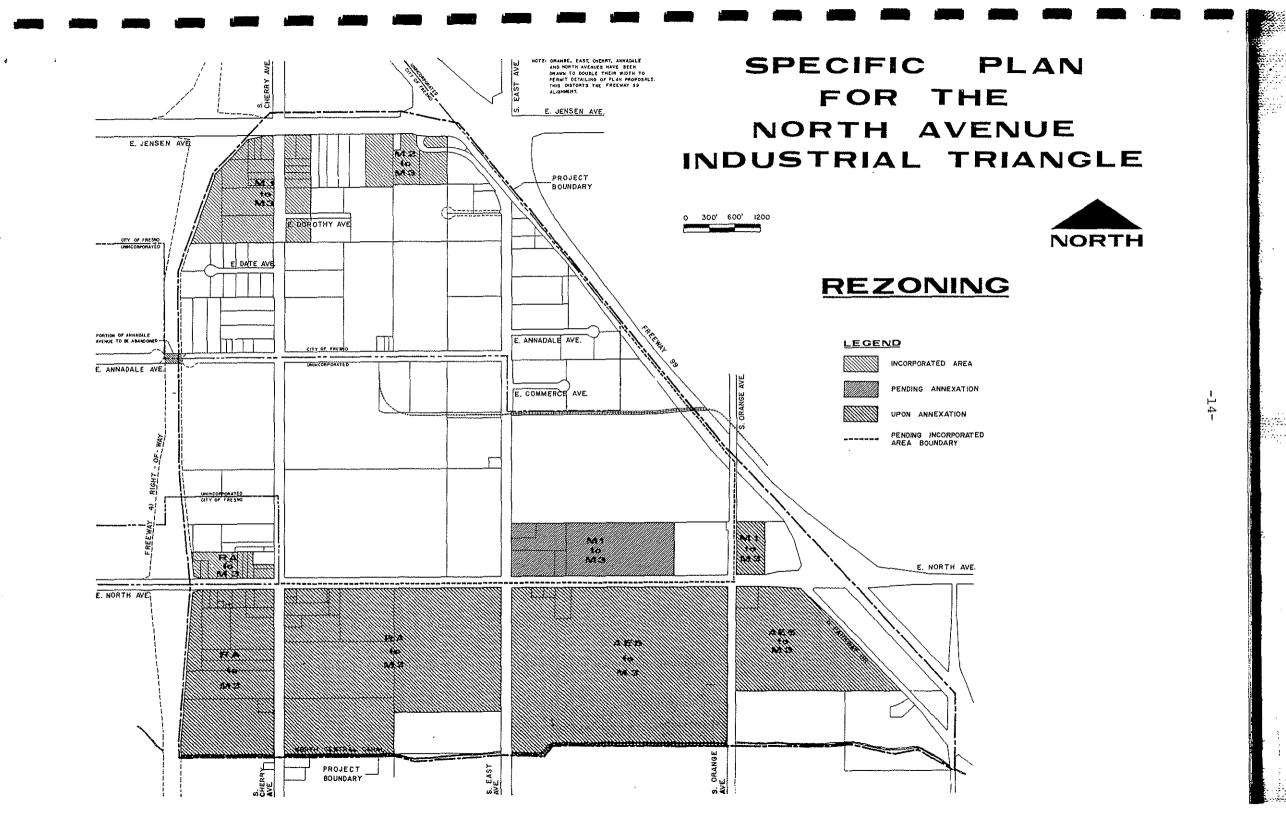
With the adoption of the Fresno-Clovis Metropolitan Area General Plan on July 17, 1958, the Fresno City Council signified that heavy industrial development would be the most appropriate land use for the North Avenue Industrial Triangle. The area north of North Avenue was designated as lands susceptible to industrial development within the planning period of that General Plan. The area south of North Avenue was designated as an industrial reserve area. With the amendment of the General Plan on August 27, 1964, the City Council designated the entire North Avenue Industrial Triangle as a heavy industrial district. The implication of these actions is that they establish a planning history in excess of 15 years, during which it has been contemplated that this area would be developed to heavy industrial uses.

The statement of purpose of the M-3 district states, "The M-3, heavy industrial district, is intended to provide for the establishment of industrial uses essential to the development of a balanced economic base." In keeping with the purpose of the General Plan, the Specific Plan for the North Avenue Industrial Triangle has as its basic objective the creation of a completely serviced, selfcontained industrial district permitting the fullest range of industrial activity. To accomplish this, all lands within the city portion of the district not presently zoned M-3 will be rezoned to that category. As additional lands are annexed, their zoning classification will also be changed to M-3.

The effects of this rezoning program will be as follows. The uses permitted and the property development standards will become uniform. Those heavy industrial uses, permitted under the conditional use permit process, could be located in the area, but under reasonable controls which would protect the environment against the impacts of smoke, odor, dust, or visual appearance. Height limitations would be removed, which represents neither an advantage nor disadvantage in that few new industrial facilities exceed a two-story height.

Adoption of M-3 zoning will not remove the residential-industrial land use conflicts within the district. However, such rezoning will place a ceiling on the amount of this conflict, and will offer an eventual economic incentive for the reassembly of residential sites into industrial parcels.

The effect of not rezoning all properties would be the retention of dissimilar use provisions within the district and perpetuation of residential uses within an industrial complex, both of which would be detrimental to the industrial environment. Perpetuating the residential patterns is not an adequate alternative in that



it would constrain the city's capability of developing an industrial street system, particularly on North Avenue where this street interchanges with Freeway 41.

Land Use Phasing:

Phase I

Upon adoption of the ordinance approving the Specific Plan for the North Avenue Industrial Triangle, and under City Council initiation, rezone those properties that are within the City of Fresno and zoned other than M-3 to M-3.

Phase III

Upon annexation of properties within the North Avenue Industrial Triangle which are currently within the unincorporated area of the district, rezone those properties zoned other than M-3 to M-3.

CIRCULATION ELEMENT

The circulation pattern and the functional classification of streets in the North Avenue Industrial Triangle has been predetermined by the Circulation Element of the Fresno-Clovis Metropolitan Area General Plan. This was to provide an industrial street system capable of supporting the heavy industrial activity expected and planned for in this district. Due to the need for constructing streets which can handle the movement of tractor trailers and other heavy equipment, it is offered that there are no practical alternatives to the construction of this street system.

Freeways

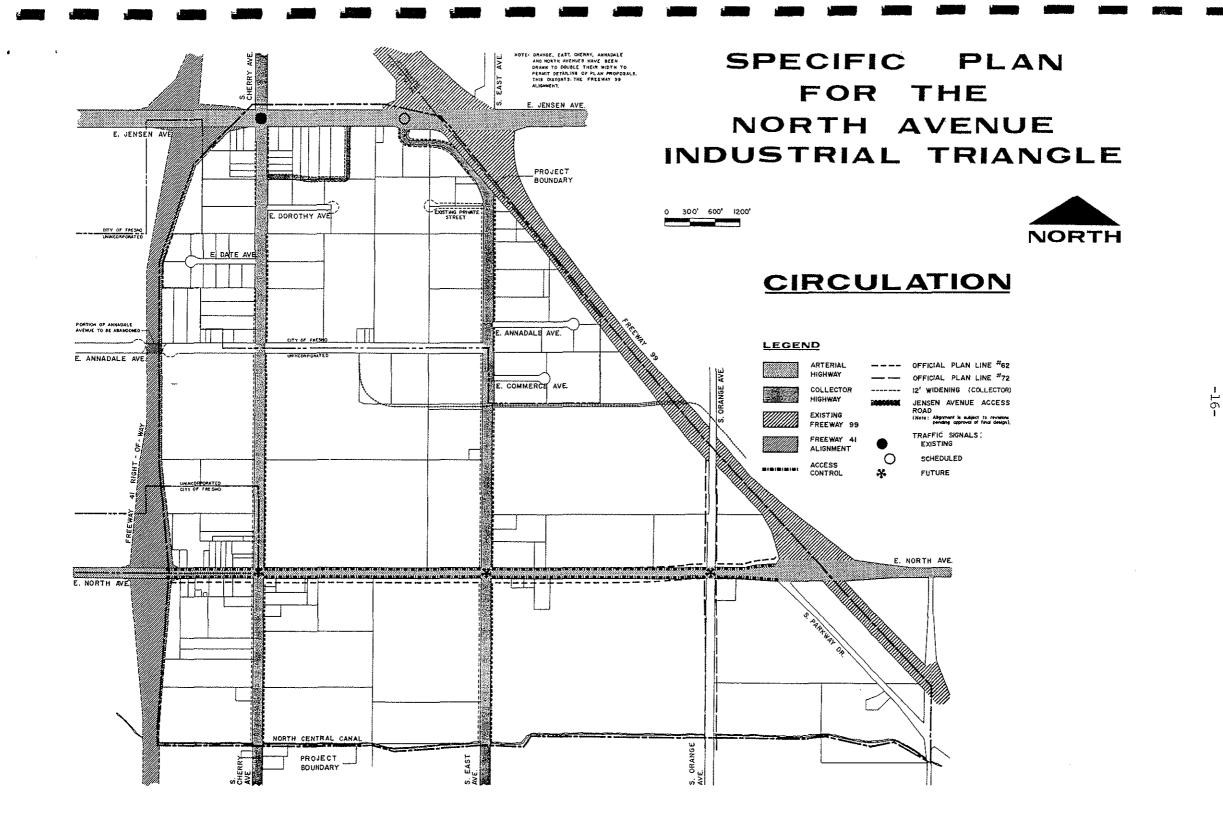
Construction of Freeway 41 will be undertaken as a function of the California State Department of Transportation. The responsibility imposed upon the City of Fresno and the County of Fresno in this project will be the preparation of North Avenue to accept traffic movements to and from the freeway. Increased traffic movements on North Avenue to the freeway interchange will be generated as industrialization of the North Avenue Industrial Triangle continues. This will cause adverse impacts upon the residential areas located between Cherry Avenue and the freeway. This cannot be avoided if the goal of industrialization of the North Avenue Industrial Triangle is to be achieved.

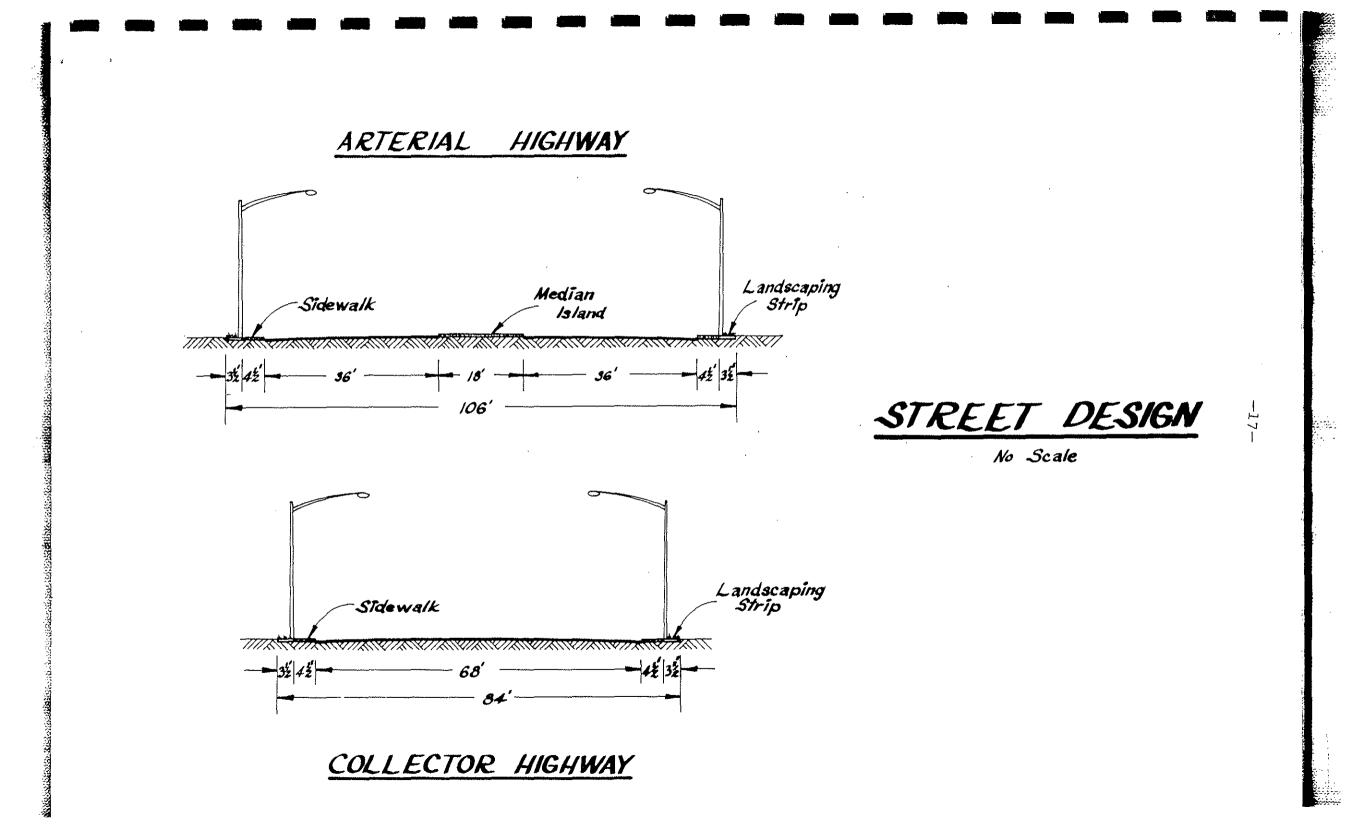
Arterial Streets

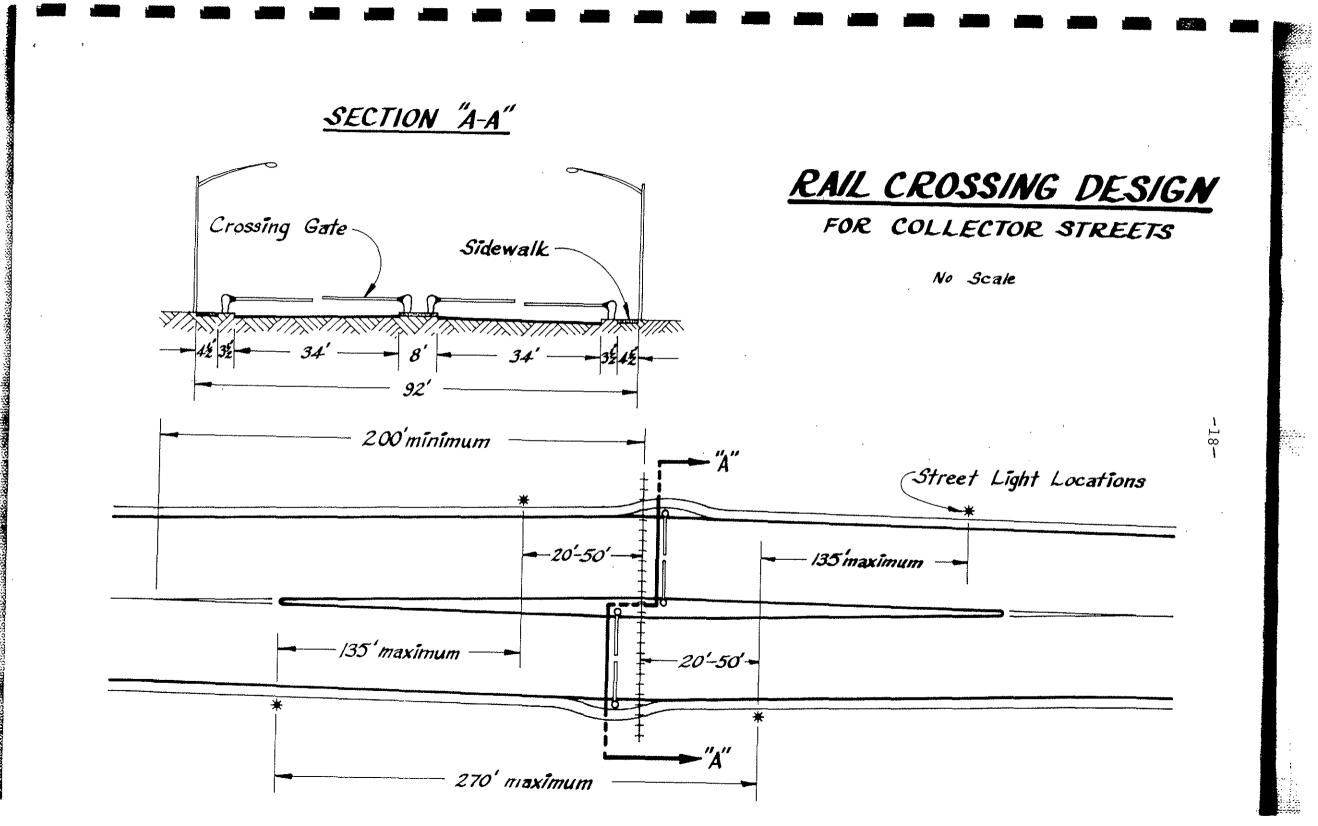
The two arterial streets traversing the North Avenue Industrial Triangle are Jensen and North Avenues. Jensen Avenue has been completed with the exception of constructing its median islands. This delay reflected the concerns of the property owners on the south side of this street that heavy trucks would not have adequate access to their businesses. To remove this conflict, the specific plan proposes the construction of an access road extending from Cherry Avenue to the rear of these properties, and then extending northward to Jensen Avenue. 'As was originally proposed, development of this access road would be by assessment district.

The need for constructing this access road is variable, depending upon the value judgments employed. Should the property owners

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affected by the proposed assessment district determine that the access road was not in their best interests, it would not be constructed. However, such a decision would not remove the need for developing the Jensen Avenue median islands. As traffic volume increases, this street will have a potentially dangerous mixture of fast-moving, light vehicles and slow-moving, heavy vehicles. Should the necessary median islands impede the turning movements of heavy trucks, the truckers would then adopt alternative travel patterns to facilitate their mobility. An alternative routing, for example, would be a movement off of Freeway 99 which would result in northbound travel on Cherry Avenue, leading to a right turn movement onto Jensen Avenue for access to those properties.

North Avenue is protected by Official Plan Line #62, which provides for constructing this street as a divided four-lane road within a 106-foot right-of-way. It will be extremely important to both the abutting property owners and the City that the efficiency of either the future industrial activity or of the use of this roadway should not be impaired by improperly designed accessways.

To help achieve the greatest safety possible, two requirements of this specific plan will deal with access control. It will be required that the City Traffic Engineer review and approve the access proposals for properties abutting North Avenue within the City portion of the North Avenue Industrial Triangle as a condition of issuing building permits. It will also be required that all truck movements into loading facilities occur on the property being served and that accessways and loading facilities be designed so that trucks may enter and leave properties with a forward movement only.

Collector Streets

The street standards of the Circulation Element of the Fresno-Clovis Metropolitan Area General Plan will control the development of collector streets. Unless a different street width is determined to be either feasible or necessary, and determined by an analysis of the projected type and volume of traffic movements, the requirement for a 68-foot, undivided, four-lane road within an 84-foot right-of-way will prevail. This will be accomplished by a uniform 12-foot dedication on each side of East and Cherry Avenues. To accommodate the anticipated high volume of heavy truck movements, a curb return of 50-feet will also be required at major intersections.

Conditions on Orange Avenue differ somewhat in that the right-ofway is protected by Official Plan Line #72, which calls for a variable dedication. It is felt that the required 84-foot rightof-way is excessive and that it could be reduced to the 64-foot local collector status. Consequently, it is the recommendation of this specific plan that the official plan line be reanalyzed to determine if such a reduction can be made.

To provide greater safety of movement, the street standard at railroad grade crossings should be increased to provide sufficient space for installing crossing gate equipment. As shown in the Street Standards diagram, it is recommended that the collector street standard be increased to 92 feet at the point the track crosses the roadway.

Local Streets

The standard for a local street is a 48-foot road within a 64-foot right-of-way. To allow truck turning movements within a cul-de-sac

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bulb terminating a local street, the bulb should have radii of 65 feet for the road and 73 feet for the right-of-way.

Conventionally, the precise locations for local streets are specified in the Circulation Element of a specific plan. The lack of local street coverage is intentional in this specific plan to permit the widest reasonable latitude in designing industrial subdivisions in the North Avenue Industrial Triangle. To eliminate possibilities of creating landlocked parcels or lots with inadequate street access, the City staff will assist property owners and industrial developers in designing street networks needed for development of industrial lots.

Circulation Equipment

The installation of street lights, traffic signals, street name signs, and other street furniture will be accomplished in accordance with city standards, and conforming to city codes and regulations.

Sidewalks will be required on arterial and collector streets, but not on local streets. They would not be required on Orange Avenue if the official plan line requirements are reduced to a 64-foot right-of-way. It is the recommendation of this specific plan that a four-foot sidewalk area be constructed adjacent to the curb to provide an unobstructed 4-1/2 foot overall width within the eightfoot sidewalk area. To achieve this, utilities and street furniture should be placed in the area behind the sidewalk wherever possible. The 3-1/2 foot utility strip should be kept clear and retained for landscaping. It could not be utilized with asphaltic paving for parking or other on-site uses.

Circulation Phasing:

Phase I

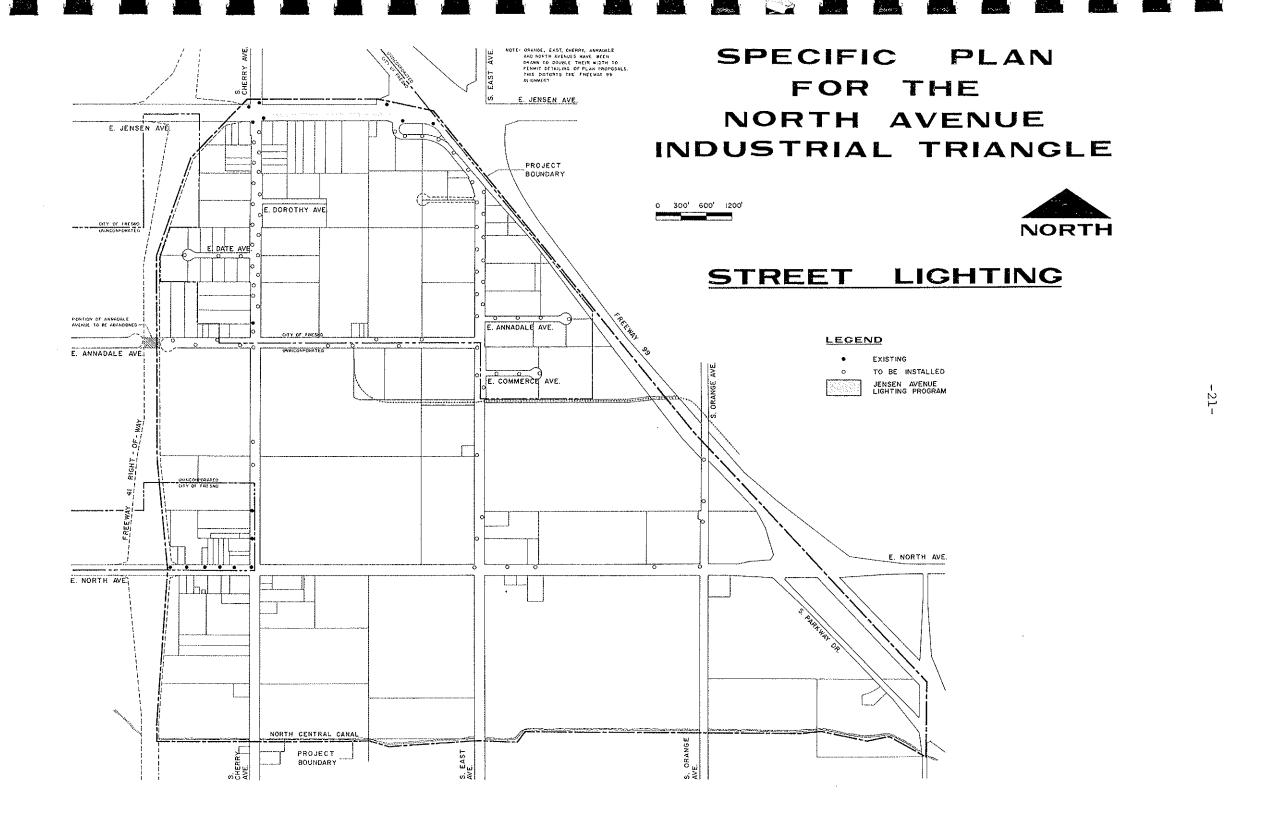
Establish procedures for City Traffic Engineer review of access control for North Avenue. Conduct analysis of Orange Avenue Official Plan Line (OPL #72) and prepare new plan lines if warranted. Install street lights at existing intersections and at existing industrial developments. Implement revised street standards adopted in the Specific Plan.

Phase II

Construct the Jensen Avenue median islands. Upon approval of the necessary assessment district, construct the Jensen Avenue access road. Through a combined public and private program, widen Orange, East, and Cherry Avenues. Through private subdivision, open new local streets. Expand the street lighting system as industrial development progresses. Install traffic signals as demand warrants. Install sidewalks on those arterial and collector streets where this facility is required.

Phase III

Construct Freeway 41. Widen North Avenue. Improve Orange, East, and Cherry Avenues and Parkway Drive south of North Avenue. Install street lights upon annexation of properties south of North Avenue.



PUBLIC FACILITIES ELEMENT

The requirements for public facilities became generally defined when the General Plan originally designated the North Avenue Industrial Triangle as a heavy industrial district. It follows that the district should have an adequate public water supply which would permit the processing of raw materials, meet public health requirements, and provide adequate fire protection potentials. Public sewer service is a mandatory requirement to assure collection and adequate treatment of liquid industrial wastes. Because of the serious potential industrial districts for a conflagration of major magnitude, a high level of fire protective service is essential. Relative to Fresno's flat terrain, the need for appropriately located and sized flood control facilities is a necessary undertaking, and, within legal and economic possibilities, the problems associated with the distribution of irrigation water should be addressed.

In general terms, the usage of the services enumerated above would be more intense in an industrial district than in other districts. In order to develop the self-contained industrial district proposed in this specific plan, there would be no practical alternatives to providing the levels of service recommended below. Of all the services recommended, the two most urgently needed are water and sewers. These also represent the facilities which the City can provide most readily, in terms of both immediacy of installation and contributions of developmental front money.

Water Service

The ultimate level of water consumption in the North Avenue Industrial Triangle will not be known until the district is substantially developed to industrial use. No matter what this demand level will be, an adequate volume of water for all purposes can be made progressively available. In order to assure this, it is contemplated that as many as four pump stations may have to be acquired and developed if a large number of high water-demand industries locate in the district.

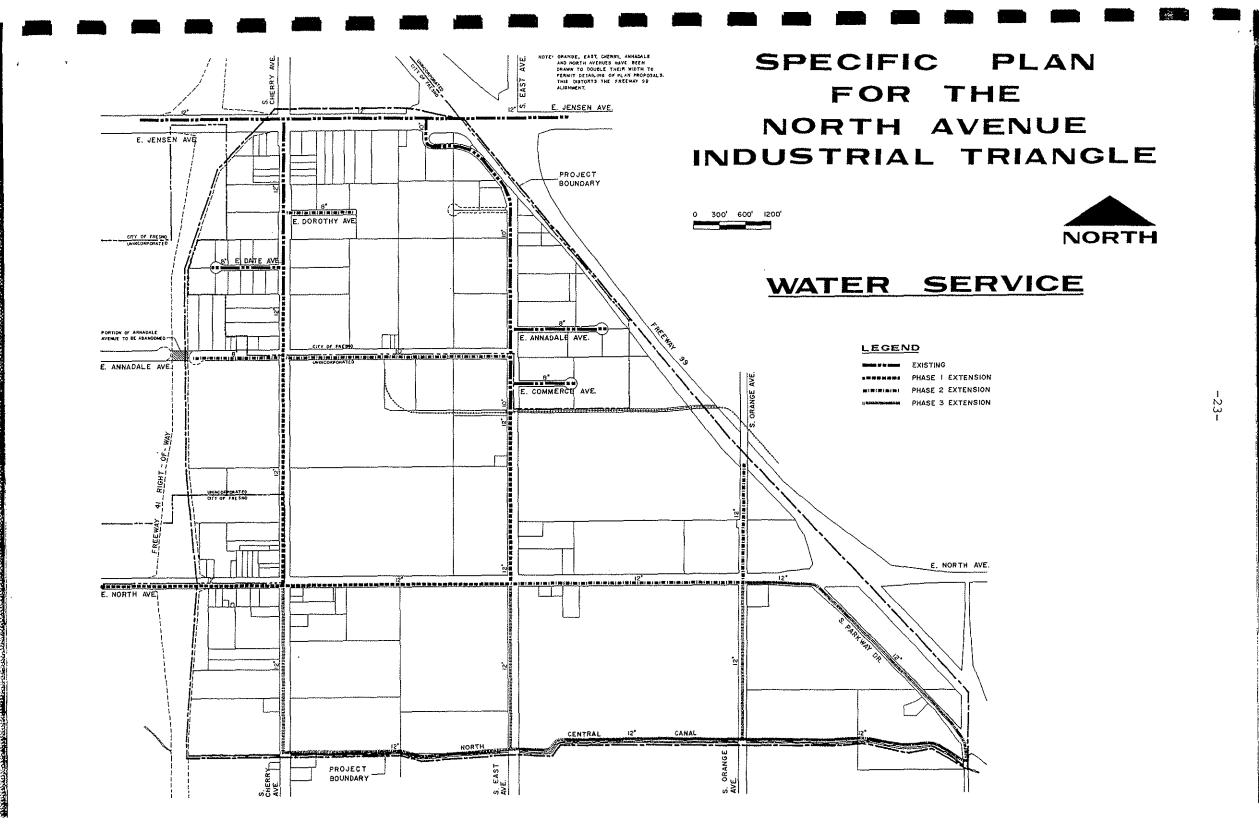
At this early stage of development, only generalized statements can be made concerning water quality control conditions. The location of high intensity industrial development in the North Avenue Industrial Triangle should not affect the quality of water in the underground water supply because industrial liquid waste water will not be recirculated through the underground reservoir. Potential drawdown of the water table cannot be predicted at this time. There is a potential that the drawdown may be minimal by virtue of the fact that this district is at a lower elevation than most of the city of Fresno, which would cause it to receive a portion of its water supply by hydrostatic pressure through the city's interconnected water distribution system.

As a general statement of present conditions, water service is not yet provided south of Annadale Avenue. Under the recommendations of this specific plan, water service will be extended in three basic phases, as follows:

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Phase I

Existing service on Cherry and East Avenues will be extended to North Avenue. Service on North Avenue will be extended from Elm Avenue, westerly of the district to interconnect the Cherry and East Avenue water lines with the balance of the city's water system.



Phase II

Through a combination of private extensions, as properties are developed, and future extensions by the city, water service will be provided on Annadale and Dorothy Avenues. Extension of service on North Avenue will occur as demand requires, or when service to Orange Avenue becomes necessary. Install city water pump stations as needed.

Phase III

For the industrial reserve area south of North Avenue, service extension would not be contemplated until such time as the area is either annexed to the city or special water demand conditions require it. In order to provide effective water service to this area, extensions southward along Parkway Drive, Orange, East, and Cherry Avenues will have to be interconnected by a water main placed adjacent to the North Central Canal.

A secondary, but equally important function of the water distribution system is the provision of standby water for firefighting. Seventeen fire hydrants were recently installed in the northern portion of the district which was just annexed to the city, in conformance with city policy. As the Phase I water main extension occurs, fire hydrant risers will also be installed so that any industrial development adjacent to these mains can receive immediate installation of one or more fire hydrants.

Sewer Service

The basic sewer network for the North Avenue Industrial Triangle is already installed, permitting immediate connection for the greater portion of the properties located north of North Avenue. Under the recommendations of this specific plan sewer service will be extended in three basic phases, as follows:

Phase I

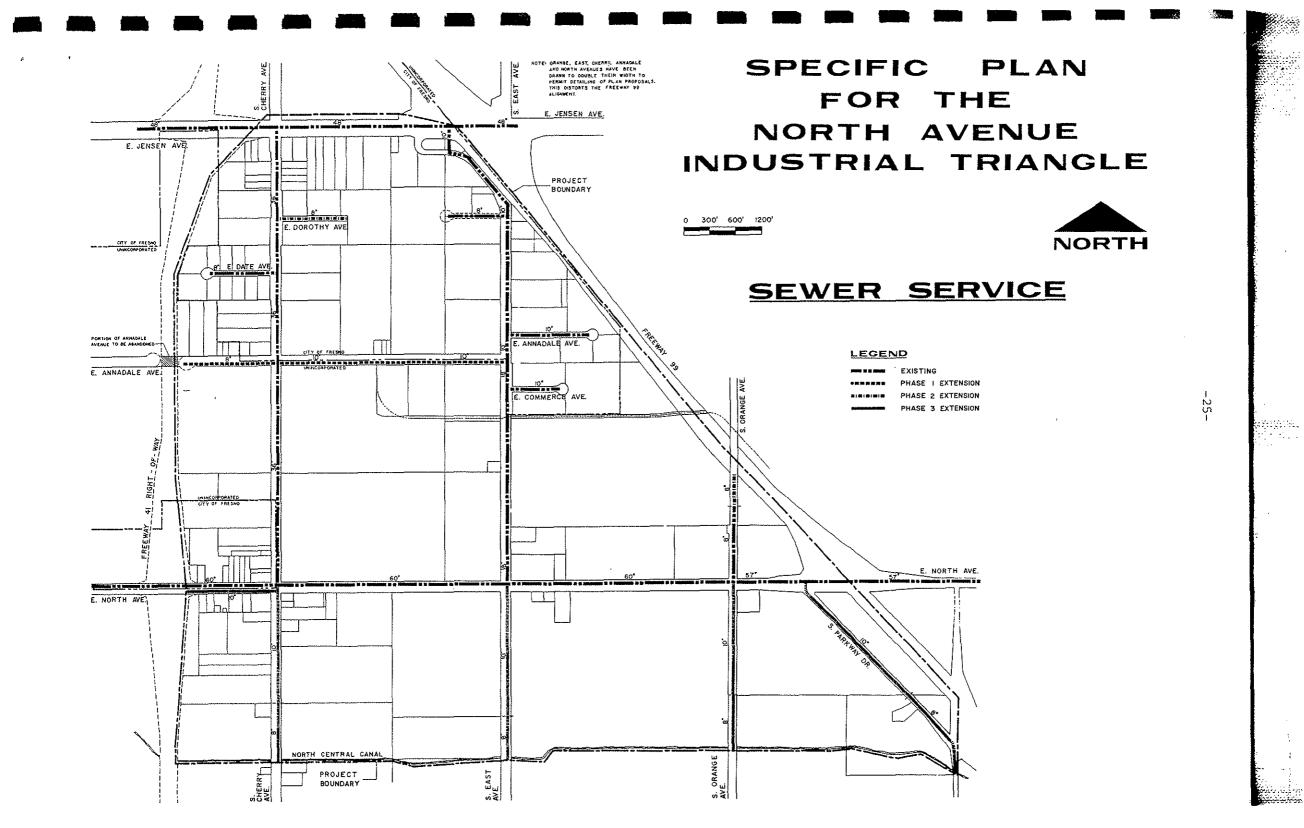
Annadale Avenue will receive 8-inch service westward from Cherry Avenue to the east boundary of the Freeway 41 alignment. Ten-inch service will be extended from Cherry Avenue to East Avenue for the remaining portion of this street.

Phase II

Combined public and private extensions will achieve 8-inch service on Dorothy Avenue and the remaining portion of Orange Avenue not presently sewered.

Phase III

A 10-inch sewer will be placed parallel to the 60-inch sewer trunk line on North Avenue between Cherry Avenue and Freeway 41 to serve the residential pocket in this area. Such service will be to eliminate potential damage to the trunkline from placing too many small connections within a short distance. Cherry, East, and Orange Avenues, and Parkview Drive in the industrial reserve area would receive combinations of 10-inch and 8-inch service at such time as the area is either annexed to the city or special sewer service demand conditions require it.



There are no practical alternatives to the installation of this proposed sewer system. The collection of liquid industrial wastes

is imperative to prevent possible contamination of the underground water supply. Such collection will require that these wastes are transported to the city's sewer treatment plant for processing. At this early stage of development, it cannot be ascertained what effects the industrialization of the North Avenue Industrial Triangle will have upon the operation of that treatment plant.

Increasingly, the federal and state governments are issuing regulations requiring local sewer agencies and other liquid waste dischargers to meet discharge controls; any industry which will produce liquid waste of unusual character may be subject to one or more controls, which would be uniform throughout the Fresno Metropolitan system. The Fresno City Public Works Department will furnish the industrial developer with all essential information in this regard.

Flood Control

The basic engineering of the proposed flood control facilities has been completed. Barring minor changes which would occur because of regrading some of the larger, centrally located properties, the recently designed flood control requirements will remain firm. The generally flat terrain and proposed land use of the district dictates that there are no alternatives to providing the level of flood control service recommended. Until such time as the phasing schedule recommended below can be completed, it should also be borne in mind that some properties might have to furnish temporary on-site drainage facilities.

Phase I

Acquire Drainage Basin LL and perform preliminary work preparatory to installation of drain lines and excavation.

Phase II

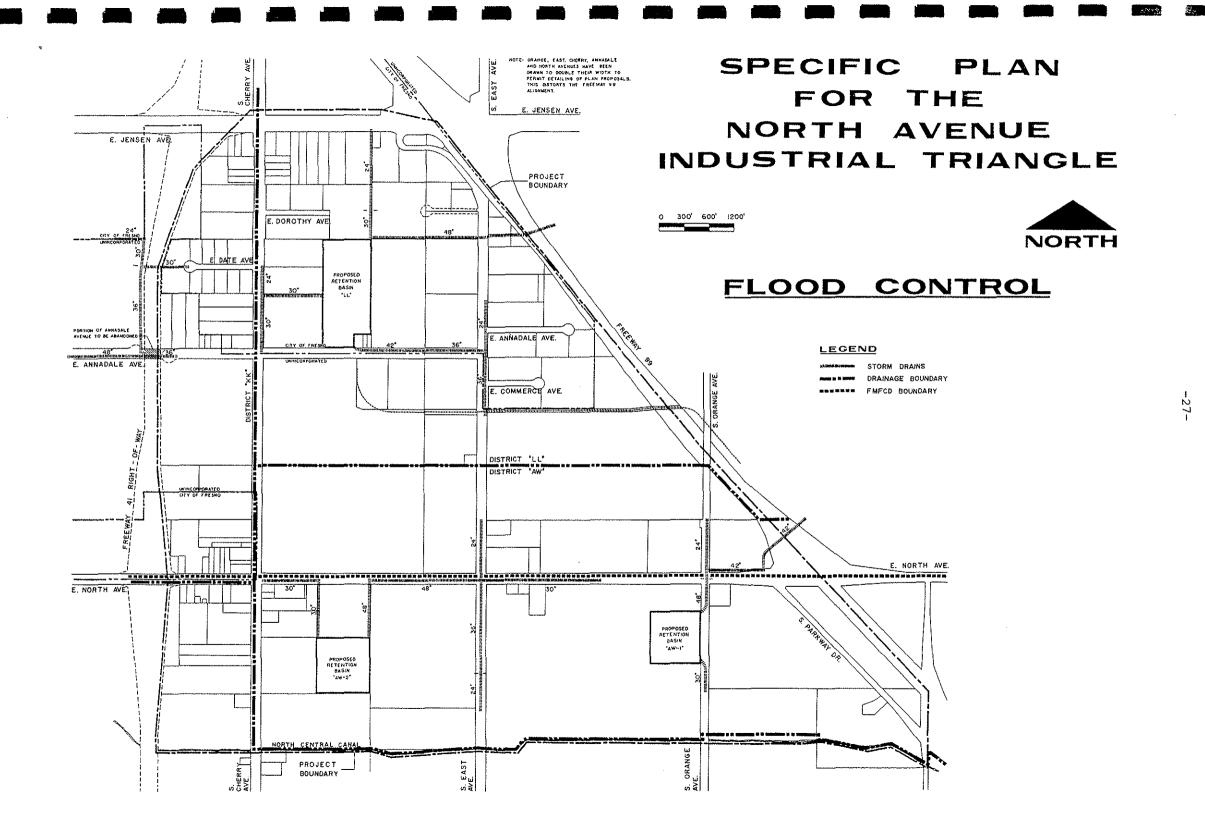
Excavation of Drainage Basin LL and installation of storm drain lines throughout District LL. Installation of curbs and gutters on west side of Cherry Avenue to facilitate surface drainage flow for District KK. Installation of storm drain line on Annadale Avenue to be coordinated with development of Drainage Basin KK, west of the North Avenue Industrial Triangle. On an interim basis, where needed, provide temporary on-site drainage facilities where development occurs prior to extension of flood control storm drain lines.

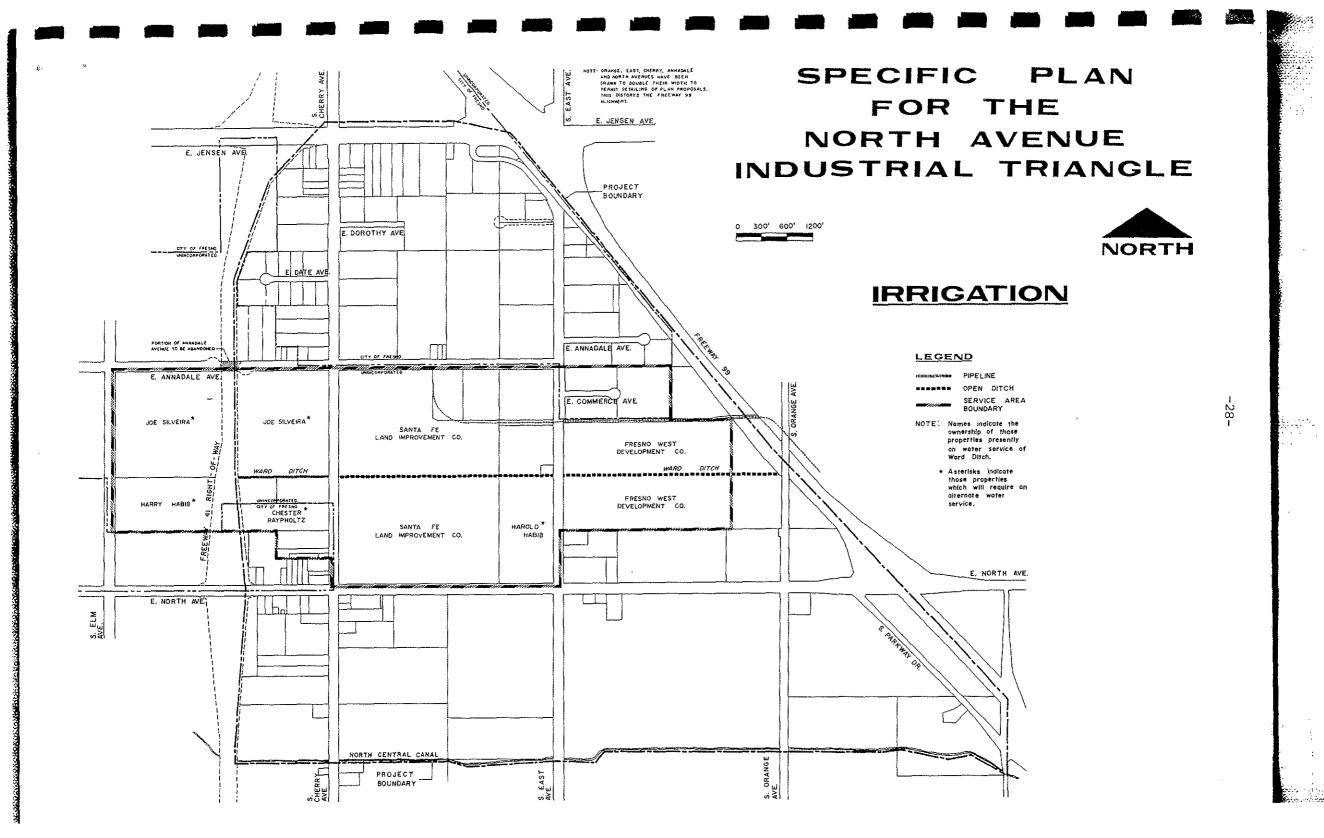
Phase III

Acquire and excavate Drainage Basins AW-1 and AW-2, and install storm drain lines. Eliminate temporary on-site drainage facilities in Districts KK, LL, and AW.

Irrigation

Delivery of irrigation water, via the Ward Ditch, must be maintained until such time as the agricultural lands receiving this service discontinue their agricultural use. In order to subdivide those properties most susceptible to short-term industrial development, the developers must bear the expense of pipelining this ditch to assure continued delivery of this water. This represents the construction of an expensive, permanent facility to serve a use which will ultimately be phased out. In this situation, there





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is an opportunity for the developers to participate with the city in a joint solution on a cost sharing basis which will serve both public and private interests. Towards this, two alternative solutions are recommended, either of which could be applied.

Phase I

Alternative A

Through a mutual funding program, construct a city water pumping station which, as a secondary function to providing water service to the district, will provide delivery of irrigation water at the presently scheduled delivery rate allowed irrigation uses.

Alternative B

Through a mutually funded program construct wells on the affected agricultural properties which will provide equal water deliveries in exchange for discontinuance of Ward Ditch service.

PROTECTION SERVICES ELEMENT

Part of the recommendations covered in the protective services element deal with the installation of physical facilities and with those services the city can make available to the industrialist on an optional basis.

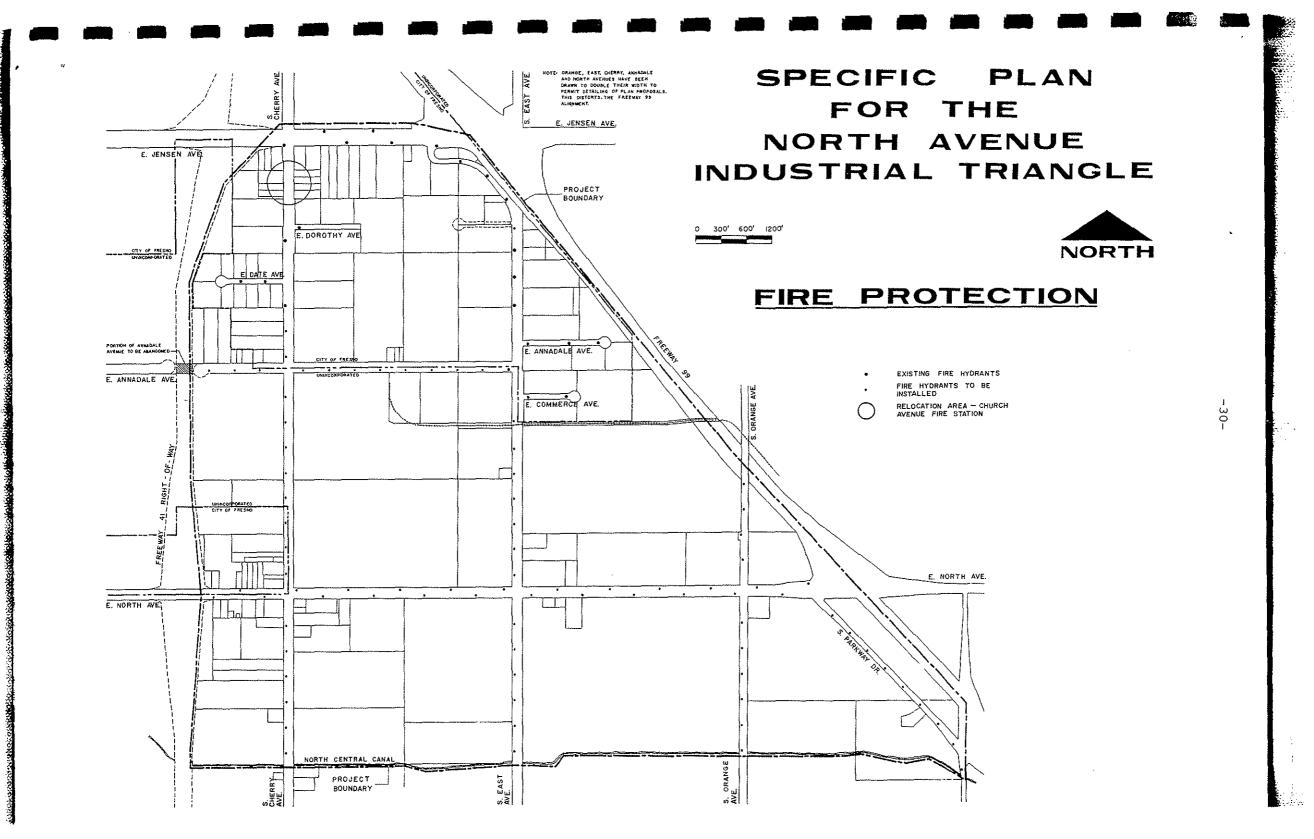
Fire Protection

It is recommended in this specific plan, in conformance with the Planned Variations Neighborhood 1, West Fresno Preliminary Plan, that the Church Avenue fire station be relocated to a site on Cherry Avenue, somewhat more than 300 feet south of the intersection of Jensen and Cherry Avenues. The station should be designed to hold two fire companies to permit expansion of fire protection services when industrial growth in the North Avenue Industrial Triangle warrants it.

In conformance with the proposals being formulated by the Fire Control Systems Task Force appointed by the Mayor, it is recommended that the North Avenue Industrial Triangle be designated as a sprinkler district in which all buildings, permanent structures, and fire hazardous open air storage will ultimately be equipped with automatic sprinkler systems. Until such a program was adopted on a citywide basis, this would be a voluntary program in which the city staff would analyze existing facilities or building plans for new facilities to assist the developer with the installation of such a system. The benefits which would result from this would be a substantial savings in insurance premiums for the industrialist and the development of a higher level of fire protective service at reduced costs for the City of Fresno.

Phase I

Acquire the Church Avenue replacement station site.



Phase II

Construct the replacement station site and initially operate the station with the existing manpower and equipment from the Church Avenue station. Institute on a voluntary basis the designation of the North Avenue Industrial Triangle as a sprinkler district. When industrial demand warrants, equip and man a second company at the Cherry Avenue Station.

Police Protection

The full range of police services will be made available in a conventional manner immediately as lands are annexed to the City of Fresno. Additionally, it is a recommendation of this specific plan that the North Avenue Industrial Triangle be designated as a police protective district, with participation by property owners and industrial developers to be on a voluntary basis. Under this designation, the owners of existing facilities may have their properties examined by police personnel to learn what methods or procedures should be followed to make their properties safer from vandalism and burglary attempts. The same service may be obtained at the time the industrial developer submits his building plans for staff review.

Phase II

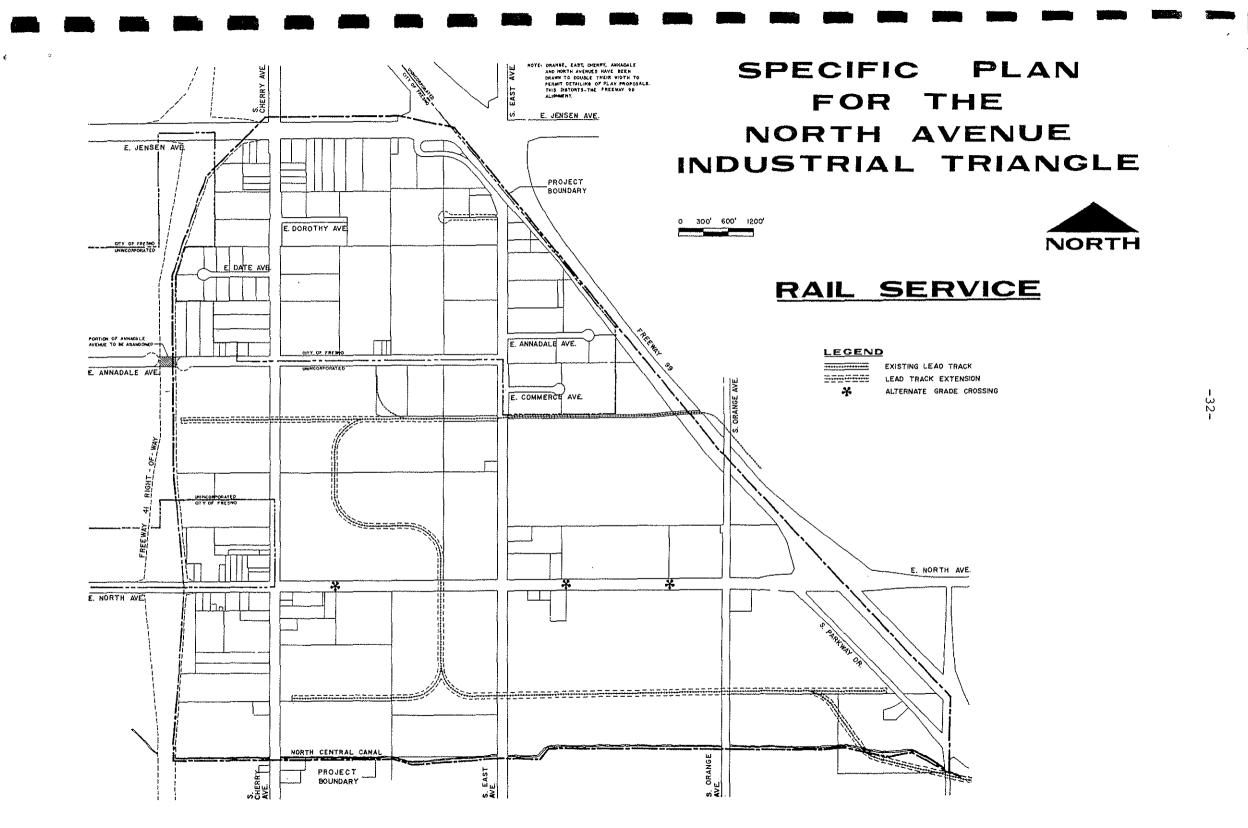
Institute on a voluntary basis the designation of the North Avenue Industrial Triangle as a police protective district.

RAIL SERVICE

A basic objective of this specific plan is to assure the highest level of transportation service possible within the district. To accomplish this, the City of Fresno will assist the Santa Fe Railway in extending its lead track throughout the district, but with the stipulation that the extension of this private facility is to be at the expense and scheduling of the railroad.

The primary concern of this specific plan is directed to the crossing of North Avenue by the lead track. Because of the potential traffic flows on this street, only one grade crossing on North Avenue can be permitted within the North Avenue Industrial Triangle. However, a number of equally good one-eighth mile crossing points exist within the district. For the purpose of representing this crossing on the specific plan map, the location adjoining the property owned by the Santa Fe Railway is shown, but with the understanding that those locations designated by an asterisk would be allowed as substitutes.

The one-eighth mile crossing points, as a general rule, will also be required on the collector streets. The location of the lead track in the industrial reserve area south of North Avenue represents a schematic location only. The basic purpose is to indicate approximately how the lead track loop may be interconnected with the Santa Fe Railway mainline east of Cedar Avenue. When the final design of this lead track is being determined, the Santa Fe Railway and affected governmental agencies will have to collaborate extensively in determining the precise crossing points.



PHASE I: CAPITAL IMPROVEMENT PROGRAM NORTH AVENUE INDUSTRIAL TRIANGLE

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	PROJECT COST	REIMBURS- ABLES	ULTIMATE NET COST
FLOOD CONTROL - DISTRICT LL DRAINAGE BASIN	\$175,000	\$122,250	\$ 52,750
Acquire 18-acre site and install minor piping on Annadale and East Avenues.			
WATER SERVICE	131,200	65,600	65,600
Extension of existing service on Cherry and East Avenues to North Avenue; interconnection of North Avenue service with Elm Avenue; installation of 36 fire_hydrant risers less hydrants.			
SEWER SERVICE	45,000	45,000	-0
Installation of sewers on Annadale Avenue, from East Avenue to east boundary of Freeway 41.			၊ ယ ယ
STREET LIGHTING	45,000	0	45,000
Install street lights on south side of Jensen Avenue, and underground exist- ing electrical service.			
Balance of existing developed area to be covered by P.G. & E. installation at no installation charge.			
FIRE PROTECTIVE SERVICE	40,000	40,000	-0-
Acquire fire station replacement site for Church Avenue Station.			
IRRIGATION SERVICE	52,000	26,000	26,000
Correct problem of Ward Ditch through substitution of alternate irrigation water supply through jointly funded program.			
	\$488,200	\$298,850	\$189 350

\$488,200 \$298,850 \$189,350

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PHASING SCHEDULE

PHASE I: PUBLIC EFFORT

Phase I deals with the public expenditures the City of Fresno and the Fresno Metropolitan Flood Control District will make to install public facilities and to provide public services within the North Avenue Industrial Triangle.

Land Use Element

- Rezone those properties within the City of Fresno zoned other than M-3 to M-3, by City-initiated applications.

Circulation Element

- Establish procedures for City Traffic Engineer review of access development for North Avenue.
- Conduct analysis of Orange Avenue Official Plan Line (OPL #72) and prepare new plan lines if warranted.
- Install street lights at existing intersections and at existing industrial developments.
- Implement revised street standards adopted in the Specific Plan.

Public Facilities Element

Water Service

- Extend existing service on Cherry Avenue to North Avenue.
- Extend existing service on East Avenue to North Avenue.
- Extend service on North Avenue to interconnect the Cherry and East Avenues water lines with the balance of the city's water system at Elm Avenue.

Sewer Service

- Install sewer on Annadale Avenue between East Avenue and the Freeway 41 alignment.

Flood Control

- Acquire Drainage Basin LL.
- Perform preliminary work preparatory to installation of major drain lines and excavation.

Irrigation

- Alternative A

Construct a city water pumping station to provide, as a secondary function, substitute irrigation water at present delivery schedules.

- Alternative B

Construct wells on affected agricultural properties in exchange for discontinuance of Ward Ditch service.

Protective Services Element

Fire Protection

- Acquire Church Avenue replacement station site.

PHASE II: COMBINED PUBLIC AND PRIVATE EFFORT

Phase II deals with the private expenditures the industrial developer and/or subdivider will make in order to develop his property, plus those additional public expenditures which the City will need to make to maintain public safety or to assist industrial growth in the North Avenue Industrial Triangle.

Circulation Element

- Construct Jensen Avenue median islands.
- Construct Jensen Avenue access road.
- Widen Orange Avenue.
- Widen East Avenue.
- Widen Cherry Avenue.
- Develop new local streets through subdivision activity.
- Expand street lighting system.
- Install traffic signals, as warranted.
- Install sidewalks.

Public Facilities Element

Water Service Extensions as Needed:

- Extend service on Annadale Avenue.
- Extend service on Dorothy Avenue.
- Extend service on North Avenue east of East Avenue.
- Extend service on Orange Avenue.
- Provide service to new subdivisions.
- Install city water pump stations.

Sewer Service Extensions as Needed:

- Extend service on Orange Avenue.
- Extend service on Dorothy Avenue.

Flood Control:

- Excavate Drainage Basin LL.
- Install storm drain lines throughout District LL.
- Install curbs and gutters on west side of Cherry Avenue for surface drainage flow to District KK.
- Install storm drain line on Annadale Avenue in coordination with development of Drainage Basin KK.
- Provide temporary on-site drainage facilities if and when needed.

Protective Services Element

Fire Protection

- Construct Cherry Avenue Station.
- Institute the North Avenue Industrial Triangle sprinkler district.
- Equip and man a second company at the Cherry Avenue station.

Police Protection

- Institute the North Avenue Industrial Triangle police protective district.

PHASE III: FUTURE ACTIONS

Phase III deals with preplanning the installation of necessary facilities upon such time as the unincorporated portions of the North Avenue Industrial Triangle are annexed to the City and developed.

Land Use Element

- Rezone those properties annexed to the City of Fresno zoned other than M-3 to M-3.

Circulation Element

- Construct Freeway 41.
- Widen North Avenue.
- Improve Orange Avenue south of North Avenue.
- Improve East Avenue south of North Avenue.
- Improve Cherry Avenue south of North Avenue.
- Improve Parkway Drive.
- Install street lights upon annexation of properties south of North Avenue.

Public Facilities Element

Water Service

- Extend water service south of North Avenue as properties are annexed, or as industrial demand warrants.
- Interconnect extended water services with balance of city water system.

Sewer Service

- Construct a 10-inch parallel sewer for existing residential service along side the North Avenue 60-inch trunk line.
- Extend sewer service south of North Avenue as properties are annexed, or as industrial demand warrants.

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Flood Control

- Acquire and excavate Drainage Basins AW-1 and AW-2.
- Install drain lines in District AW.
- Eliminate temporary on-site drainage facilities in Districts KK, LL, and AW.

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