

City of Houston



Lee P. Brown, Mayor

Comprehensive Drainage Plan

City of Houston



Lee P. Brown, Mayor

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Comprehensive Drainage Plan

September 1999

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in association with
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Earth Tech
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Patricia D. Knudson and Associates
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September 30, 1999

The Honorable Mayor and City Council
City of Houston
City Hall
Houston, Texas 77002

Ladies and Gentlemen:

The accompanying report presents the *City of Houston Comprehensive Storm Drainage Plan*. The purpose of the *Comprehensive Storm Drainage Plan* is to provide the City of Houston (City) with sufficient information on the storm sewer systems to allow development of a Capital Improvement Plan (CIP). This report summarizes the procedures and findings of the engineering efforts to define the requirements of the CIP. The City is also being provided with an interactive Geographic Information System (GIS) that accompanies this report and includes all of the information contained in the engineering analysis.

The *Comprehensive Storm Drainage Plan* identifies the location and extent of existing storm sewer drainage inadequacies, and proposes drainage modifications for those systems. As a planning tool developed to identify and size proposed modifications, the GIS reflects existing and proposed storm sewer systems located within the study area. In conjunction with the GIS, a storm sewer analysis program was developed for the *Comprehensive Storm Drainage Plan* to analyze existing storm sewer systems and to size proposed modifications. Probable construction costs were also calculated and provided for each component of the plan.

Section I of the report presents a project summary, including a more detailed discussion of the study area, design criteria used to evaluate storm sewer systems, a description of the GIS and of the storm sewer analysis program developed for this project, and the total probable construction costs calculated for the proposed modifications.

The Study Area addressed in the CIP includes drainage systems consisting of existing storm sewers, roadside ditches, and a combination of the two, located within selected areas in the City of Houston corporate limits (City Limits). Project information is organized according to Harris County Flood Control District (HCFCD) major channel watershed boundaries and designations. The drainage systems included in the CIP are located in the following watersheds.

- Brays Bayou
- Buffalo Bayou
- Greens Bayou
- Hunting Bayou
- Ship Channel
- Sims Bayou
- White Oak Bayou

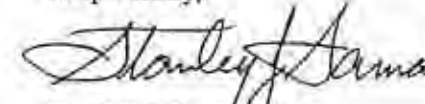
To determine whether a storm sewer system required modification or improvement, several factors were considered. The factors include compliance with the City's storm sewer design and drainage criteria, historical flooding, accessibility of major thoroughfares during and after rain events, and land use patterns.

To evaluate storm sewer systems using the GIS and to size proposed modifications, a storm sewer analysis program (Analysis Program) was developed specifically for this project. The Analysis Program uses the Rational Method to determine peak discharges, and calculates the hydraulic gradient for existing and proposed storm sewer systems in the Study Area. In addition, the Analysis Program indicates the approximate size a storm sewer system must be to meet current City design criteria. After proposed modifications were determined, probable construction costs were calculated for each proposed improvement. The proposed storm sewer modifications represent one possible solution. Other solutions should be evaluated during the preliminary engineering phase of a CIP project, once field surveys and other background data have been collected and evaluated.

The GIS data set must continue to be updated in order that newly completed storm sewer projects can be reflected. Over time, this will allow the updated data set to reflect the existing constructed storm system on a common datum.

We appreciate this opportunity to be of service to the City, and gratefully acknowledge the cooperation and support that City officials have given us throughout the entire study period.

Respectfully,


Stanley J. Sarman, P.E.
Senior Project Manager




Rebecca G. Olive, P.E.
Principal


Alan J. Potok, P.E.
Vice President

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City of Houston



Comprehensive Drainage Plan



TurnerCollie & Braden Inc.
Engineers • Planners • Project Managers

SECTION I - SUMMARY

A. PURPOSE OF PROJECT

The purpose of the Comprehensive Storm Drainage Plan (CSDP) project is to provide the City of Houston with sufficient information on its storm sewer systems so that the City of Houston Department of Public Works and Engineering (City) can identify and plan future capital expenditures for storm sewers within the City. The City currently operates and maintains approximately 2,400 miles of storm sewers. Many of these systems are in need of replacement or do not adequately convey runoff from frequent rainfall events. As a result, the City recognizes the need to develop information required to manage these systems. Management of the systems requires a plan that contains information on the location and extent of drainage inadequacies, a criteria on which to base system improvements, the cost to implement the improvements, a plan to finance the improvements, and a method to prioritize the improvements. As a part of the first phase of the Comprehensive Storm Drainage Plan, issues concerning storm drainage criteria and floodplain management were evaluated and reviewed. Results from the first phase were presented in a report, entitled *Report on Drainage Criteria*, dated October 1994.

The purpose of this phase of the CSDP project is to prepare a Capital Improvement Plan (CIP) for the City to use in planning future capital expenditures to address the needs of its storm sewer systems. The CIP identifies inadequate systems, proposes improvements, presents probable costs associated with the proposed improvements, and assigns a relative priority to each improvement. This is accomplished through the use of the criteria developed as a result of the first phase and through the use of a Geographic Information System and Storm Sewer Analysis Program developed in this phase.

This report summarizes the findings of the engineering effort performed to develop the CIP. The probable cost to design and construct all improvements proposed in the CIP would be slightly more than \$2.3 billion. These proposed improvements consist of upgrading existing storm sewer systems to meet City of Houston drainage criteria, and do not include new sewers required to serve undeveloped areas. The City has been provided with an interactive Geographic Information System accompanying this report that includes all of the information contained in the engineering analysis.

B. AUTHORIZATION

Authorization for the City of Houston Comprehensive Storm Drainage Plan is covered in the terms of an Agreement between the City of Houston and Turner Collie & Braden Inc. (TC&B), dated January 12, 1994, and amended in December 1997.

C. STUDY AREA

The Study Area addressed in the CIP includes drainage systems consisting of existing storm sewers, roadside ditches, and a combination of the two, located within selected areas in the City of Houston corporate limits (City Limits). Project information is organized according to Harris County Flood Control District (HCFCD) major channel watershed boundaries and designations. The drainage systems included in the CIP are located in the following watersheds.

- Brays Bayou
- Buffalo Bayou
- Greens Bayou
- Hunting Bayou
- Ship Channel
- Sims Bayou
- White Oak Bayou

The following should be noted concerning the project study area.

1. Data for the storm sewer systems located in the Ship Channel watershed were combined with the Hunting Bayou watershed data. This was due to the small number of systems located within the Ship Channel watershed and the City.
2. Drainage systems were not evaluated in the CIP for the following areas:
 - **Bush Intercontinental Airport and Hobby Airport** - The drainage systems located at the airports are maintained by the City of Houston Department of Aviation, not by the Department of Public Works and Engineering.
 - **Clear Creek and Vince Bayou Watersheds** - The drainage systems in those watersheds were not included in the authorization for this contract. The systems in these watersheds may be evaluated in the future.
 - **Armand Bayou Watershed** - The drainage systems in this watershed are maintained by the Clear Lake City Water Authority, not by the City of Houston.
 - **Kingwood Area** - The Kingwood area is located in the San Jacinto River watershed, including Lake Houston and its tributaries. When this project started in 1994, the Kingwood area was not within the City Limits. Since then, Kingwood has been annexed by the City of Houston. A drainage survey was conducted for the Kingwood area, but the data has not been incorporated into the GIS. The drainage systems for the Kingwood area are planned for evaluation at a later date.
3. Three additional areas within the study area were not evaluated in this plan because more detailed drainage studies were being conducted concurrently for those areas. These other studies proposed drainage improvements consisting of new storm sewer systems and channel modifications. A description of these three areas and studies conducted are as follow:
 - **Frostwood Subdivision and Adjacent Areas** - The Frostwood Subdivision is located in the Buffalo Bayou watershed in an area near the intersection of Gessner Drive and Memorial Drive. A study conducted by TC&B included a preliminary investigation of the subdivision to investigate periodic flooding and proposed alternatives to mitigate the flooding. Results from the investigation were presented in a letter report addressed to Gary N. Oradat, City of Houston Storm Water Division, *Re: Preliminary Investigation of Frostwood Subdivision and Adjacent Areas*, dated April 22, 1998. The Frostwood area has been identified in this CIP as Outfall Systems W0286, W0288, and W0389. For the Frostwood area, proposed alternatives from the letter report should be considered.

- **Eureka Railroad Yard** - The Eureka Railroad Yard is generally located west of T.C. Jester Road and north of the Eureka Ditch, along Toledo Road, and in the White Oak Bayou watershed. A preliminary drainage investigation was conducted by TC&B and results presented in a letter report addressed to Gary N. Oradat, City of Houston Storm Water Division, *Re: Preliminary Drainage Investigation of the Eureka Ditch*, dated November 18, 1997. The Eureka Railroad Yard area has been identified in this CIP as Outfall System E5010, and proposed alternatives from the letter report should be considered.
- **Storm Sewers in the Central Business District (Austin and Louisiana Street Systems)** - Two hydraulic projects were conducted for storm sewers systems located in the eastern half of the Central Business District (downtown) and Midtown. These downtown storm sewer systems are located in the Buffalo Bayou watershed. One of the projects, conducted by TC&B, analyzed the storm sewer system located along Austin Street. The Austin Street storm sewer system consists of a drainage area of approximately 900 acres for an area generally bounded by Main Street on the west, U.S. 59 on the south, St. Emanuel on the east, and Buffalo Bayou on the north. Results for the Austin Street analysis were presented in a report, *Storm Sewers in the Central Business District, Preliminary Engineering Report*, dated March 1998. The Austin Street storm sewer system drainage area has been identified in this CIP as Outfall System W0635. In addition, another project, conducted by Rust Lichliter/Jameson, analyzed storm sewer systems located in the downtown area. This analysis proposed storm sewer modifications for the existing system located along Louisiana Street between Buffalo Bayou and Lamar Street. Results for the Rust project were presented in a report, *Final Engineering Report, Downtown Storm Sewer Analysis*, dated May 1996. The Louisiana Street system has been identified in this CIP as Outfall Systems W0649, W0650, W0652, W0653, W0654, W0683, W0684, and W0685.
- 4. Based on review of digital ortho photographs, there were some areas within the studied watersheds where curb and gutter streets appear to exist, but there was no record of existing storm sewer systems within the project's storm sewer information. There is a possibility that a storm sewer system could have been constructed after the storm sewer information was originally obtained for this project or that plans were not available. For these areas, an assumption was made that there is probably an existing storm sewer system. Since existing data was not available, the system was not analyzed, and a system was not proposed.

An overall plan view of the watersheds evaluated is presented on *Exhibit 1, Project Location Map*.

B. PROJECT SUMMARY

Procedures used to develop the CIP are discussed in detail in various sections and appendices of this report. The following is a summary of these procedures and results.

Criteria

To determine whether a storm sewer system required modification or improvement, several factors were considered. The factors include compliance with the City's storm sewer design and drainage criteria, historical flooding, accessibility of major thoroughfares during and after rain events, and land use patterns. The following is a summary of the information considered to determine a systems selection for improvement.

- Storm sewers will convey runoff from the 2-year storm event with the corresponding hydraulic gradient calculated to be not higher than a maximum of 2 feet below the manhole rim elevation.

- Storm sewer systems that drain or cross streets classified as major thoroughfares will convey the 5-year storm event flows.
- Information on historical flooding within the City of Houston was obtained from three sources. The sources were the City of Houston's Right-of-Way Maintenance Department, the Federal Emergency Management Agency (FEMA), and results from a drainage survey specifically conducted for this CIP project.
- Watershed development conditions as of 1992.

Geographic Information System

As a tool to determine proposed CIP modifications, a Geographic Information System (GIS) was developed to reflect existing and proposed storm sewer systems and other drainage-related features located within the studied watersheds. This GIS included storm sewer systems that were constructed or modified prior to 1994. The GIS was designed to be used with PC ARC/INFO and ArcView computer programs. In addition, the GIS was reconfigured for use with a storm sewer analysis program written specifically for the GIS. The data sources used to develop the existing storm sewer systems GIS were the City of Houston Planning Department data (Synercom computer format) and the City's Geographic Information Management System (GIMS). Storm sewer construction plans obtained from City's files and from the Texas Department of Transportation (TxDOT) supplemented the GIS data.

Part of the GIS coverages (files) used for the development of the CIP were:

- Storm Sewer Pipes
- Storm Sewer Manholes
- Drainage Areas
- Land Use Categories
- Flooding Complaints
- Drainage Survey Results
- Floodplain Boundaries
- Street Patterns
- Drainage Ditch and Detention Basin Alignments
- Digital Ortho Photographs

The following should be noted concerning the GIS:

- Some storm sewer pipes are missing attributes, such as pipe diameters and flowline elevation, due to lack of data. This data was missing in the original sources used to develop the GIS.
- Inlets, and pipes leading from inlets (inlet leads), are not included.
- Some pipe segment flow line elevations are based on different datum adjustments.

Storm Sewer Analysis Program

To evaluate storm sewer systems using the GIS and to size proposed modifications, a storm sewer analysis program (Analysis Program) was developed specifically for this project. The Analysis Program uses the Rational Method to determine peak discharges, and calculates the hydraulic gradient for existing and proposed storm sewer systems in the Study Area. In addition, the Analysis Program indicates the approximate size a

storm sewer system must be to meet current City design criteria. After proposed modifications were determined, probable construction costs were calculated for each proposed improvement.

Capital Improvement Plan

Using the above-referenced criteria, GIS, and Analysis Program, proposed modifications to the storm sewer systems in the Study Area were determined. Probable construction costs associated with the proposed improvements were determined based on unit cost information obtained from previous storm sewer projects constructed in the City. Unit costs include the following:

- Removal of existing storm sewer pipe and pavement
- Placement of new pipe, manholes, and inlets
- Replacement of pavement
- Dewatering
- Trench safety
- Traffic control
- Engineering and contingency

The rates do not include any cost allowance for major utility relocations, complete pavement replacement, or acquisition of additional rights-of-way. A category and group classification was developed to help prioritize proposed modifications. Storm sewer systems that were determined to be inadequate for the 2-year storm event, and for which flooding complaints had been reported for any storm event, were placed in the highest category. The following category system is used in the CIP.

- Category 1 Category for existing storm sewer systems that have been determined to be inadequate, based on the computer analysis program results and flooding complaints that have been reported within the systems drainage boundary.
- Category 2 Category for converting existing open-ditch systems (non-storm sewer areas) to storm sewer systems where previous flooding complaints have been reported. Proposed storm sewer systems for this category type address the main trunk system requirements only.
- Category 3 Category for existing storm sewer systems that have been determined to be inadequate and flooding complaints *have not* been reported within the systems drainage boundary.
- Category 4 Category for converting existing open-ditch systems (non-storm sewer areas) to storm sewer systems where previous flooding complaints *have not* been reported. Proposed storm sewer systems for this category type address the main trunk system requirements only.
- Category 5 Category for areas currently considered as undeveloped and having no defined drainage system. For this category type, drainage areas and main (trunk) sewer systems were determined. It is expected that these areas will be developed by others in the future.
- Category A Category for existing storm sewer systems that have been determined to be adequate. These systems may or may not have reported flooding complaints.

Within each category, each storm system was further grouped to reflect the type of flooding complaint. Systems for which both structure *and* street flooding were reported were placed in the highest group in the highest category.

- Group 1 Systems that have reported structure and street-related flooding complaints.
- Group 2 Systems that have reported structure flooding complaints only.
- Group 3 Systems that have reported street flooding complaints only.
- Group 4 Systems that have no reported flooding complaints.

The percentage of land-use types within each storm sewer system drainage area was determined, as another means to group costs for proposed modifications. The percentage of land-use type was determined using the Land Use classifications and address information obtained from the City's Planning Department. The addresses were for each lot located within the City of Houston.

Probable cost by individual storm sewer system is presented in *Tables 2 through 10* for each watershed, sorted by design, storm, and group classification. The total probable costs for all categories for each watershed are summarized by group as follows:

PROBABLE COST SUMMARY FOR CATEGORIES 1 THROUGH 4

	Brays Bayou	Buffalo Bayou	Greens Bayou	Hunting Bayou	Sims Bayou	White Oak Bayou	Grand Total
Probable Storm Sewer Cost to Meet Design Criteria							
Group 1	\$76,514,300	\$123,297,300	\$129,097,200	\$13,936,700	\$188,970,600	\$247,964,600	\$779,780,700
Group 2	\$169,200	\$93,540,100	\$1,141,500	\$13,038,500	\$7,334,400	\$51,042,000	\$166,265,700
Group 3	\$82,777,100	\$30,892,000	\$50,326,600	\$8,062,500	\$74,543,100	\$98,487,400	\$345,088,700
Group 4	\$27,928,500	\$151,701,100	\$115,159,900	\$71,377,200	\$100,579,200	\$98,262,300	\$565,008,200
TOTAL	\$187,389,100	\$399,430,500	\$295,725,200	\$106,414,900	\$371,427,300	\$495,756,300	\$1,856,143,300
Additional Probable Cost for Storm Sewers Associated with Major Thoroughfares							
Group 1	\$10,310,600	\$84,513,800	\$16,395,900	\$2,033,000	\$21,210,200	\$58,484,200	\$192,947,700
Group 2	\$0	\$42,494,400	\$207,400	\$3,333,700	\$881,900	\$29,965,700	\$76,883,100
Group 3	\$13,837,900	\$26,765,900	\$7,446,100	\$343,100	\$6,805,800	\$12,277,100	\$67,475,900
Group 4	\$5,003,000	\$56,014,000	\$16,643,600	\$9,737,100	\$10,164,700	\$13,840,500	\$111,402,900
TOTAL	\$29,151,500	\$209,788,100	\$40,693,000	\$15,446,900	\$39,062,600	\$114,567,500	\$448,709,600
GRAND TOTAL	\$216,540,600	\$609,218,600	\$336,418,200	\$121,861,800	\$410,489,900	\$610,323,800	\$2,304,852,900

The CIP proposed modifications are for conceptual designs only, and do not include sufficient required details for final construction. Prior to final design of the proposed improvements, a more detailed analysis will need to be conducted by future design engineers or consultants to verify conditions used for the CIP.

E. PROJECT TEAM

An engineering consultant team led by TC&B assisted the City of Houston in developing this CIP document. The participants in the consultant team, and their roles, include:

- **Turner Collie & Braden Inc.** - Overall project management, development of the storm sewer GIS for all of the watersheds, development of the storm sewer analysis program, and development of CIP for the Brays, Hunting, and Sims bayou watersheds
- **Businessmart, Inc.** - Development of the GIS for all of the watersheds
- **Earth Tech (formerly known as Rust Environment & Infrastructure)** - Development of the GIS for the Brays, Buffalo, and Greens bayou watersheds. Developed CIP for systems in the Buffalo and Greens bayou watersheds
- **Klotz Associates, Inc.** - Development of the GIS and CIP for the White Oak watershed
- **Patricia D. Knudson and Associates** - Development of the GIS
- **Ratnala & Bahl, Inc.** - Development of the CIP for the Sims and Brays Bayou watersheds and field reconnaissance site visits
- **Sunland Engineering Company** - Development of the GIS for all of the watersheds

F. USE OF REPORT

Proposed improvements are summarized and shown on the enclosed tables, exhibits, and facet system maps. The summaries of proposed improvement and cost tables are sorted by watershed. The facet system maps present the following in plan view:

- Existing storm sewer alignment and pipe size
- Proposed pipe size modification for existing systems
- Proposed storm sewer alignment and pipe size for new systems
- Existing and proposed storm sewer system drainage area boundary and outfall identification number
- Approximate location of flooding complaints obtained from the City of Houston files, Drainage Survey, and FEMA's files for repetitive insurance claims
- Alignment of major drainage channels, ditches, and detention basins
- Street patterns
- Aerial photographs

A detailed facet map index and the watershed boundaries for each watershed are presented on *Exhibits 2 through 7*. An overall system map index is included on *Exhibit 8, System Map Sheet Index*, and a legend on *Exhibit 9, Sheet Map Legend*.

Detailed information concerning proposed CIP improvements, including new pipe size changes proposed for existing and new storm sewer systems, can also be obtained by using the storm sewer GIS specifically developed for this project.

DISCLAIMER

The data used to prepare maps, exhibits, tables, and analyses for this project was derived from various sources. TC&B provides no warranty and does not accept any responsibility for data used for purposes other than those intended by this report. Any liability or risk associated with such use shall be the responsibility of said user.

SECTION II – BACKGROUND CONSIDERATIONS

Various design criteria and other considerations were used to identify and size proposed drainage modifications for inclusion in the capital improvement plans. These criteria are consistent with those described in the City of Houston's *Design Manual for Wastewater Collection Systems, Water Lines, Storm Drainage, and Street Paving (Design Manual)*, dated September 1996. In addition to the *Design Manual*, other issues were considered in the identification of proposed projects to be included in the CIP. A discussion of the *Design Manual* and a description of these other considerations follows.

A. DRAINAGE CRITERIA

As part of the first phase of the *Comprehensive Storm Drainage Plan*, issues concerning storm drainage criteria and floodplain management in the City of Houston were evaluated and reviewed. Results from this first phase were presented in a report entitled *City of Houston Comprehensive Drainage Plan Report on Drainage Criteria (Drainage Criteria Report)*, dated October 1994. The *Drainage Criteria Report* addressed the following:

- An overview of flooding and its causes in the Houston region, including the historical basis for storm drainage, the spatial relation between flood incidence and floodplain, and the relationship between land subsidence and flooding.
- Drainage design criteria, and a discussion of the roles of various agencies, including the City and Harris County Flood Control District (HCFCD), in the implementation and enforcement of those criteria. Drainage design criteria that were reviewed included standards for drainage system design, drainage plans and relevant land development permit review procedures, and agency roles and responsibilities.
- The significance of floodplain management and current floodplain management practices and regulations of the primary local entities, including the City, HCFCD, Federal Emergency Management Agency (FEMA), the U.S. Army Corps of Engineers, and other communities.
- Recommendations concerning storm drainage, detention basins, and floodplain management, including modification of the City's storm sewer criteria to accommodate the 5-year design frequency storm; development of performance standards to simplify criteria or to allow flexibility in complex situations, defined specific detention storage-area relationship; and goals the City should establish for floodplain management within the City and its extraterritorial jurisdiction (ETJ).

As part of the review process in developing the *Drainage Criteria Report*, two committees, each referred to as a Technical Advisory Committee (TAC), were formed. The TACs consisted of representatives from the engineering and development communities, and staff from local governmental agencies, including the City's Public Works Department and HCFCD. One committee addressed issues concerning drainage criteria, and the other addressed issues concerning platting and planning of drainage facilities. The *Drainage Criteria Report* was not revised to reflect the TACs' review comments, but their comments were considered in the 1996 update of the *Design Manual*, which was used in the development of proposed CIP drainage modifications.

While the TACs were conducting their reviews of the *Drainage Criteria Report*, the *Design Manual* was being revised by the City. At the request of City staff, the TACs were asked to review Chapters 1, 4, and 5 of the

Design Manual so that the TACs' recommendations and concerns would be addressed and incorporated into the revised *Design Manual*. These chapters pertain to drainage requirements, platting procedures, and easements for drainage facilities. The TACs reviewed the *Design Manual* and made recommendations, some of which were incorporated into the revised *Design Manual*, dated September 1996. The *Design Manual* is currently in effect, and includes guidelines and criteria requirements to be used in the planning and design of storm sewer drainage facilities in the City and its ETJ.

B. BASIS FOR DETERMINING IMPROVEMENTS

The proposed CIP drainage modifications (improvements) were made by identifying the storm sewer systems that were inadequate. Several factors were considered in determining the inadequacy of these systems. Such factors include design criteria in the City's *Design Manual*, historical flooding, accessibility of major thoroughfares, and land-use patterns. The following is a description of each factor.

1. Design Criteria

The *Design Manual* states that storm sewer systems will be sized to convey runoff from the 2-year storm event, and that the hydraulic gradient should be below the gutter line. For development of the CIP modifications, the 2-year storm event criteria are also used. For this project, storm sewer data included pipe size, flowline elevation, and manhole rim elevation, but there was no information on gutter elevations. Since the elevation of the gutter line is not known, the manhole rim elevation is the benchmark for the hydraulic gradient. For this project, the criterion is that the calculated hydraulic gradient should not be more than a maximum of 2 feet below the manhole rim elevation. The rim elevation is assumed to be about the same as the natural ground elevation.

2. Historical Flooding

Information on historical flooding within the City of Houston was obtained from three sources. The sources were the City Maintenance and Right-of-Way Division, FEMA, and a drainage survey specifically conducted for the *Comprehensive Storm Drainage Plan*. A description of the type of information obtained from each source follows:

- **City -** Flooding information was obtained from the City's Right-of-Way Maintenance Division, by conducting an inventory of its maintenance file records and information from an existing City database. Information included the location (street address), date, type (street, structure, ditch, etc.), and cause of the flooding incident. The depth of flooding was not included in the City information. Information concerning any actions conducted by City staff to correct the cause of flooding was also obtained. The original source of the City's information was citizens calling the Maintenance Department to report a flooding incident.
- **Federal Emergency Management Agency -** The National Flood Insurance Program provides protection for property owners against flood-related losses by providing flood insurance. Records of insurance claims filed by policy holders are kept by FEMA. For this project a digital file was obtained through the City from FEMA. This contained insurance claims filed on or before 1995, and filed more than once (repetitive) for the same address. The records included the street address of the claim and the date of the flooding incident.
- **Drainage Survey -** A drainage questionnaire was sent to each single-family residence that receives a water bill from the City of Houston. The questionnaire was mailed with the July 1996 monthly water bills.

to City residences. The questionnaire was also sent to residents in the Kingwood area during October 1998. Approximately 51,600 completed questionnaires were returned to the City. A copy of the questionnaire used for the Kingwood area is included as *Figure 1*.

At the time this report was being printed, the above-referenced historical flooding data, except for about 2,600 from the Kingwood area, was incorporated into a flooding complaint database to be used with the storm sewer GIS. The flooding complaint data was approximately located, based on a linear interpolation of address ranges.

3. Accessibility of Major Thoroughfares

The City's drainage system is designed to incorporate its storm sewers, roadside ditches, and streets to convey flow. For storm sewer systems sized for a 2-year storm, runoff from a storm that exceeds the 2-year storm will be carried in the streets. Therefore, the possibility exists that street flooding will occur. To allow for better accessibility for motorists, especially for emergency vehicles during storm events, additional criteria were proposed for storm sewer systems either crossing or draining major thoroughfares. Major thoroughfares are those streets located in the City that have been classified by the City's Planning Department as meeting thoroughfare requirements, including lane width, number of lanes, etc. Systems draining major thoroughfares will be sized to carry the 5-year storm event.

4. Land Use

Proposed CIP drainage improvements were identified and sized using land-use conditions from 1992. The land-use data used for the CIP was developed as part of the City's National Pollutant Discharge Elimination System (NPDES) program. The land-use data consists of general land uses categorized by 14 land-use types, including single-family, multi-family, commercial, industrial, public/institutional, park, undeveloped, agricultural, rangeland, forest, water, wetland, barren, and transportation/utilities. Detailed information concerning land-use types is presented in *Section IV* of this report.

FIGURE 1 DRAINAGE SURVEY FORM FOR THE KINGWOOD AREA

The City of Houston Department of Public Works and Engineering is attempting to assess the adequacy of its storm sewer system in the Kingwood area. You can assist us by completing this form and returning it within the next ten (10) days to the address shown on the reverse side. Your response is imperative as this is a survey just for the Kingwood area and not for the entire city of Houston.

DO NOT INCLUDE WITH YOUR WATER BILL.

Address: _____

Subdivision Name: _____

How long have you lived at your current address? _____ years

Do you live in the regulatory flood plain? _____ yes _____ no _____ not sure

Do you have flood insurance? _____ yes _____ no

Does your street experience flooding? _____ rarely
 _____ 1-2 times per year
 _____ 3-5 times per year
 _____ greater than 5 times per year

Has your street been impassable due to flooding? _____ yes _____ no

Has your house ever flooded? _____ yes _____ no

If so, how many times? _____

Have you had to contact city maintenance to correct a drainage problem? _____ yes _____ no

Was the problem corrected? _____ yes _____ no

Did you experience a flooding problem after the correction? _____ yes _____ no

Because your assistance is important, we thank you for your response.

Jerry King, P.E.
 Director
 Department of Public Works and Engineering
 City of Houston
 For Questions please contact the:
 Customer Response Center at Phone No. 713-754-0600

ENCUESTA SOBRE DRENAJE DE ALCANTARILLADOS PARA LOS RESIDENTES DE KINGWOOD

De la Ciudad de Houston el Departamento de Obras Publicas e Ingenieria esta tratando de asesorar el sistema de drenaje pluvial mas adecuado. Usted puede ayudarnos en completar este formulario y regresarlo dentro de los próximos diez (10) días a la dirección al otro lado de esta página. Este estudio fue especialmente hecho para conocer mas mejor las conducciones de drenaje en Kingwood y no de lo demas la ciudad de Houston, por eso es imperativo que recibimos su respuesta a este estudio.

NO INCLUYA ESTA FORMA CON SU PAGO DEL AGUA.

Dirección: _____

Nombre de la Colonia: _____

¿Cuántos años ha vivido en este domicilio? _____ Años

¿Vive en el plano de inundación regulatorio? _____ Sí _____ No _____ No Estoy Seguro(a)

¿Tiene usted seguro contra inundaciones? _____ Sí _____ No

¿Se inunda su calle? _____ Rara Vez
 _____ 1-2 Veces por Año
 _____ 3-5 Veces por Año
 _____ Mas de 5 Veces por Año

¿Ha sido su calle intrensitable a causa de inundación? _____ Sí _____ No

¿Alguna vez se ha inundado su casa? _____ Sí _____ No

¿Si es así, cuantas veces? _____

¿Ha hecho contacto con mantenimiento de la ciudad para corregir problemas de drenaje de alcantarillados? _____ Sí _____ No

¿Fue su problema corregido? _____ Sí _____ No

¿Ha experimentado problemas con inundación otra vez después del trabajo hecho por la ciudad? _____ Sí _____ No

Su asistencia es importante, le damos las gracias por sus respuestas.



SECTION III - GEOGRAPHIC INFORMATION SYSTEM

A Geographic Information System was developed for the City of Houston's *Comprehensive Storm Drainage Plan* project. The GIS was developed to reflect storm sewer systems and other drainage-related features located as of 1994 within the studied watersheds. For some isolated areas, in particular systems located in the Hunting Bayou Watershed, systems constructed after 1994 are reflected in the GIS. The GIS was designed to be used with PC ARC/INFO and ArcView computer programs developed by Environmental Systems Research Institute, Inc. (ESRI).

Detailed descriptions of the GIS coverages and their related database, including attributes, data types, source of data, and descriptions, are found in the *User's Manual for City of Houston Storm Sewer GIS and Analysis Program (User's Manual)*, dated January 1999 and prepared by TC&B. These descriptions are also located in *Appendix A, Procedures to Generate Geographic Information System*.

A. GIS COVERAGES

Detailed descriptions of the GIS coverages and their related database are found in the *User's Manual*. A summary of the GIS coverages used for development of the CIP follows:

1. Storm Sewer Pipes

A line coverage (file) was developed to include information for all existing storm sewer pipe segments. The line coverage was developed based on either a coverage previously developed for the City or on information obtained as part of this project. A line coverage reflects items that can be shown as a line, such as storm sewer pipes, floodplains, etc. A pipe segment is defined as a storm sewer pipe having a manhole (node) located at each end of the pipe, having one pipe diameter, and a flowline slope that does not change. In some areas where a series of pipes is connected by manholes, and all have the same pipe diameter and flowline slope, only one pipe segment is entered into the GIS instead of all the pipes having the same characteristics. As a result, some manholes are not entered into the GIS. Some of the storm sewer pipe coverage attributes include pipe diameter for existing and proposed pipes, construction material type, upstream and downstream flowline elevations, and pipe identification number.

Each storm sewer pipe system outfall is assigned a unique system outfall identification (ID) number. The system outfall ID number consists of a letter followed by a four-digit number. Depending on which watershed the storm sewer system is located in, the system outfall ID letter designated is consistent with the letter used by HCFCD to designate major watersheds in Harris County, except for the Ship Channel watershed, which has the same ID number as the Hunting Bayou watershed. System outfall ID letters and numbers for each watershed are as follows:

<u>Watershed</u>	<u>System Outfall ID Number</u>	<u>HCFCD Watershed Letter Designation</u>
Brays Bayou	D0001	D
Buffalo Bayou	W0001	W
Greens Bayou	P0001	P
Hunting Bayou	H0001	H
Ship Channel	H0002	H
Sims Bayou	C0001	C
White Oak Bayou	E0001	E

2. Storm Sewer Manholes

A point coverage was developed to include data for manholes (nodes) located in the storm sewer system. As with the storm sewer pipe coverage, the source for the manhole coverage was developed using either a coverage previously developed for the City or information obtained as part of this project. A point coverage reflects items that can be shown as points, such as manholes. As explained in the storm sewer pipe coverage, not all manholes have been included, since some of the manholes were eliminated when several pipe segments were entered as one. Manhole attributes include rim and flowline elevation, manhole type, and system ID number.

3. Drainage Areas

The drainage area coverage is a polygon coverage developed to reflect drainage areas for the storm sewer systems. A polygon coverage reflects items that can be shown as a closed shape, such as drainage areas. As described in the *User's Manual*, this coverage also contains the system ID number. Drainage areas were delineated using topographic maps, generated as part of the City's Monumentation and Mapping Program, and existing street patterns.

4. Land-Use Categories

The land-use coverage reflects the different land-use categories within the City of Houston in or about 1992. The land-use coverage contains two formats, a Vector format, which is more defined and displayed at a scale of 1:20,000 or less, and a Raster format, which is more of an approximation that is displayed at a scale of 1:20,000 or greater. This coverage is used in conjunction with the Analysis Program to determine stormwater runoff for each storm sewer system.

5. Flooding Complaints and Repetitive Claims

As described in *Section II* of this report, three sources were used to identify previous reported flooding. The flood complaint coverage presents data from two of the sources, which includes records obtained from the City's Right-of-Way Maintenance Department and from FEMA's files for repetitive insurance claims which were obtained through the City. This data was then entered into a database and previous reported flooding coverage developed. The location of the flooding complaint data was approximately located based on a linear interpolation of address ranges.

6. Drainage Survey Results

As part of this project, a drainage survey questionnaire was sent out with the City's water bills in July 1996 to collect information regarding flooding. The drainage survey questionnaire was also sent to residents in the Kingwood Area during October 1998. More than 51,600 questionnaires were returned by the public to the City for evaluation. At the time this report was being printed, all of the results except for the Kingwood area were entered into a database table, and a coverage was built. The flooding complaint data was approximately located, based on a linear interpolation of address ranges. As described in *Section II*, the coverage includes information such as street location, whether the street has experienced flooding, whether the house has ever flooded, and whether the problem has been corrected.

7. Floodplain Boundaries

The floodplain coverage includes floodplain and floodway boundaries as defined by FEMA and shown on the effective Flood Insurance Rate Maps (FIRMs) for 1996. This coverage includes the boundaries for the floodway, 100- and 500-year floodplains, and base flood elevations.

8. Street Patterns

The street coverage includes streets, major highways, and railroads located in the City of Houston. Sources for the street coverage included information from TIGER 94 files, developed by the U.S. Census Bureau, and from TxDOT.

9. Drainage Ditches and Detention Basin Alignments

The drainage ditch coverage includes the alignment of major drainage channels, ditches, and detention basins located in the City of Houston. This coverage was developed using information obtained from TxDOT and from HCPCD. The drainage ditch coverage does not include all major channels, roadside ditches, and detention basins. Some of the drainage ditch alignments were modified to match apparent location as shown on the digital ortho photographs.

10. Digital Ortho Photographs

The Digital Ortho Photographs coverage includes digital aerial photos of the City of Houston. The digital photos reflect conditions in the City as of 1994, and were developed as part of the Greater Houston Wastewater Program.

SECTION IV - STORM SEWER ANALYSIS PROGRAM

To evaluate storm sewer systems using the existing GIS, a storm sewer analysis program was developed. The storm sewer analysis program (Analysis Program) was developed to evaluate existing and proposed storm sewer systems, using data from either the GIS (ARC/INFO and ArcView formats), or data that was entered in a dBase III format. Results from the Analysis Program were used to determine the hydraulic adequacy of each storm sewer system. If improvements were indicated, the Analysis Program results would include the approximate parameters for improvements to result in a system meeting the design criteria.

A. DESIGN METHODOLOGY

The Analysis Program considers storm sewer system characteristics (pipe size, flowline elevations, etc.), watershed and subwatershed conditions (drainage areas, impervious cover, etc.), various rainfall frequencies, and the tailwater condition at the outfall of the system. The Analysis Program computes a peak discharge and hydraulic gradients for storm sewer systems flowing full or partially full.

I. Rational Method

The program uses the Rational Method to compute peak discharges and evaluates storm sewer systems for a given rainfall frequency. The Rational Method equation is written as:

$$Q = \Sigma(CA)I$$

Where:

- Q = Peak discharge at an analysis point (cubic feet/second, cfs)
- C = Watershed coefficient related to the impervious area in the watershed
- A = Drainage area (acres)
- I = Average intensity of rainfall (inches/hour)
- Σ (CA) = Summation of watershed coefficient times area for all drainage areas upstream of the analysis point

The watershed coefficient *C* is determined by relating *C* to the percentage of impervious area within the watershed drainage area. The equation for this relationship is written as:

$$C = 0.6(Ia) + 0.2$$

where *Ia* is the percentage of impervious cover. The Analysis Program combines the drainage areas contributing to a storm sewer system and computes a composite impervious factor based on drainage area and land-use type. The program then converts the percent of impervious cover to a watershed coefficient *C*. The following table lists the assumed percent impervious cover and *C* value for each of the land-use types.

Category (Code87)	Land-Use Description	Ia %	C
1	Single-Family	41.7	0.45
2	Commercial	100	0.80
3	Multi-Family	87.5	0.725
4	Industrial	83.3	0.70
5	Public/Institutional	83.3	0.70
6	Park Green Space	0	0.2
7	Undeveloped	0	0.2
12	Agricultural	0	0.2
13	Rangeland	0	0.2
14	Forest	0	0.2
15	Water	100	1.0
16	Wetland	0	0.2
17	Barren	0	0.2
18	Transportations/Utilities	90	0.74
20	Street	90	0.74

In the computation of peak runoff, the rainfall intensity is a function of the time of concentration (TC). The initial TC at the upstream manholes is given by the equation:

$$TC \text{ (minutes)} = 10A^{0.1761} + 15$$

This equation computes the initial time it takes for the runoff to reach the inlet. After reaching the inlet, the time of concentration is increased by the travel time in the conduit, as determined by Manning's equation velocities. The rainfall intensity, a function of the time of concentration, is given by the Steel Equation:

$$I = \frac{b}{(d + TC)^c}$$

Where:

- I = Rainfall intensity (inches/hour)
- b, d, c = Numeric constants dependent on rainfall frequency

<i>Rainfall Frequency</i>	<i>b</i>	<i>d</i>	<i>e</i>
2-year	75.01	16.2	0.8315
3-year	77.27	17.1	0.8075
5-year	84.14	17.8	0.7881
10-year	93.53	18.9	0.7742
25-year	115.9	21.2	0.7808
300-year	125.4	21.8	0.7500

Where:

K_{ent} = Entrance loss coefficient

K_{ex} = Exit loss coefficient

V_1 = Flow velocity upstream of manhole (ft/sec)

V_2 = Flow velocity downstream of manhole (ft/sec)

g = Gravitational constant: 32.2 (ft/sec²)

TC = Time of concentration (minutes)

Hydraulic gradients are computed using Manning's equation, written as:

$$S_f = \left(\frac{Qn}{1.49 AR^{2/3}} \right)^2$$

Where:

S = Energy slope (ft/ft)

Q = Runoff (cfs)

n = Manning's roughness coefficient (dimensionless)

A = Area of flow (sq ft)

R = Hydraulic radius (Area/[Wetted Perimeter]) (ft)

The Analysis Program defaults to Manning's roughness coefficients based on the sewer pipe construction material type, as entered in the input data.

For City of Houston storm sewer design criteria, minor losses through manholes are not required to be considered in sizing storm sewer pipe systems. Even though minor losses are not to be considered, the Analysis Program does have the capability to consider minor losses when analyzing storm sewer systems. Minor losses through manholes can be considered in the Analysis Program with the use of the equation written as:

$$\frac{(K_{ent}V_1^2 + K_{ex}V_2^2)}{2g}$$

B. PROGRAM APPLICATION

1. Analysis

The Analysis Program will execute with or without support of ARC/INFO and ArcView. In most cases, the program user will be running the program using data that is supported by ArcView. In some cases, however, a storm sewer system may not be in the storm sewer GIS, but will need to be modeled. In this case, the physical parameters of the system can be input into a dBase III-format database table, and the system can be run as a stand-alone application directly from Windows version 3.1 and 95. The significant difference between these two approaches is the way system data is represented in the database tables.

Beyond this major distinction, the user-input forms and calculations are the same. The capability exists to run either a single system or any number of systems simultaneously. The user has the ability to choose the starting tailwater elevation, choose the design frequency, alter the time of concentration to the inlets, and alter the roughness values used.

Details of how to run the Analysis Program and a discussion of analysis options can be found in Section V of the report prepared by TC&B, *User's Manual For City of Houston Storm Sewer GIS and Analysis Program*, dated January 1999.

2. Hydraulic Calculations

As discussed previously, the Rational Method is used for calculation of peak flows for the analysis. The Analysis Program calculates the peak flow and hydraulic grade line elevation at each point in the system, based on system configuration and user-input parameters. Once the user selects the outfall system or systems to analyze and begins the analysis, the calculations are performed automatically according to the following procedures:

1. The Analysis Program compiles data from the drainage area, pipe, and manhole databases for each system outfall number.
2. Pipe connectivity is established according to pipe identifiers, and a level and order is assigned to each pipe. Drainage areas are assigned to the proper manholes.
3. Rational method calculations begin at the most hydraulically distant manhole, and proceed downstream according to the connectivity established.
4. The hydraulic grade line calculations start at the outfall and proceed upstream according to the level and order of the pipes. Friction losses are calculated using Manning's equation, and minor losses, if requested by the user, are added at each manhole.
5. Upon completion of the calculations, ArcView updates appropriate fields in the GIS data, including pipe flow capacity and hydraulic grade elevation, with the results to allow them to be identified within ArcView. In this situation, for systems where results have been previously calculated, new calculated values are overwritten in the database each time an analysis is made. Fields in the database that do not contain calculated values, such as pipe diameter and flow line elevation, are not overwritten in the database when an analysis is made.

3. Program Constraints

The Analysis Program can represent a branched network, but cannot represent looped or interconnected systems, reverse flow, or multiple outfalls from a single system. In special cases such as these, the system can either be separated into multiple systems or analyzed with specialized software. In cases where systems flood, the Analysis Program only indicates that the hydraulic grade line is above the manhole rim elevation. It does not determine the depth of ponding.

There are some pipe segments where storm sewer elevations (flow line and rim) were based on different datum adjustment. This problem can sometimes result with flow line elevations for a downstream segment to be higher than the elevations for the upstream pipe segments. When this occurs, the hydraulic gradient calculations may indicate that the storm sewer system is being flooded, or that levels are above the manhole rim elevation.

The Analysis Program does not evaluate pipe segments that have been classified as inlet leads, nor does it determine the capacity of inlets.

4. Profiles

Profiles can be both displayed on screen and sent to the printer. The profile program uses the GIS database tables to draw profiles of storm sewer pipes, hydraulic grade line elevations, and manhole rim elevations. The user selects a starting point within ArcView, and the profile is drawn from that point to the outfall. Street crossings are shown above the profile plot. Details of the profile program are presented in Section V of the *User's Manual*.

5. Probable Construction Costs

Probable construction costs to modify storm sewer pipe sizes can be calculated from within the ArcView environment. An ArcView script (internal program) calculates costs based on cost information obtained from bid tabs. The unit costs used by the ArcView script were developed using City of Houston *Bid Tabs* taken from ten storm sewer projects constructed during 1994 and 1998. The probable construction cost is calculated for each pipe where proposed size (NEWSIZE) is greater than the existing size, based on pipe diameter and length of the sewer segment proposed to be modified. The program can calculate costs for any number of outfalls within a watershed division (e.g., Buffalo North). Additional discussion concerning probable construction cost is found in Section V of this report.

APPENDIX D

FIELD RECONNAISSANCE

Results from the storm sewer analysis indicated that some storm sewer systems were adequate relative to present City of Houston storm drainage criteria, but also had reported flooding complaints within the drainage area. To help determine possible causes for the reported flooding in these adequate systems, a field reconnaissance task was conducted on the systems having reported structure and street-related flooding complaints (categorized as Group 1). As part of the field reconnaissance tasks, field maps were generated using data from the storm sewer GIS, including storm sewer alignment, pipe diameters, drainage area boundaries, locations of the reported flooding, and streets. For each system targeted for field reconnaissance, the following tasks were performed.

- Identified signs of silt or other types of obstructions located in the storm sewer system at selected points. Selected points included the outfall (receiving stream), mid-point, and upper reach of the drainage system.
- When applicable, determined the approximate capacity of the storm sewer inlet in the vicinity where the flooding complaint was reported.
- Determined whether the system configuration was consistent with that shown in the GIS.
- Took photographs of conditions at various points in the system.

The field reconnaissance was conducted for the storm sewer systems located in the Buffalo Bayou, Greens Bayou, Hunting Bayou, Sims Bayou, and White Oak Bayou watersheds, and compiled into five reports. For each of the following, storm sewer outfalls were studied.

Report	Storm Sewer Outfalls
Buffalo Bayou Volume 1	W0001, W0009, W0015, W0021, W0030, W0032, W0056, W0058, W0076, W0077, W0079, W0107, W0108, W0109, W0111, W0126, W0146, W0148, W0172, W0192, W0194, W0199, W0208
Buffalo Bayou Volume 2	W0226, W0228, W0229, W0230, W0235, W0250, W0256, W0263, W0284, W0323, W0366, W0370, W0374, W0394, W0398, W0418, W0419, W0431, W0529, W0548, W0584, W0597, W0708
Greens Bayou Volume 1	P0006, P0007, P0012, P0033, P0035, P0044, P0047, P0051, P0052, P0063, P0066, P0067, P0071, P0072
Greens Bayou Volume 2	P0076, P0083, P0084, P0085, P0086, P0092, P0095, P0096, P0097, P0100, P0102, P0142

Hunting Bayou	H0020, H0024, H0030, H0078, H0101, H0104, H0112, H0116, H0126, H0127, H0129, H0130, H0136
Sims Bayou Volume 1	C0004, C0024, C0025, C0036, C0042, C0048, C0050, C0055, C0065, C0066, C0071, C0073, C0074, C0075, C0077, C0078, C0079, C0123, C0137, C0148, C0162, C0246, C0251, C253, C0254
Sims Bayou Volume 2	C0257, C0264, C0271, C0311, C0357, C0368, C0376, C0409, C0410, C0433, C0466, C0482, C0510, C0511, C0516, C0517, C0522, C0526, C0544, C0548, C0550, C0552, C0554, C0559, C0757
White Oak Bayou	E0749, E0750, E0751, E0757, E0903, E0910, E0911, E0912, E0914, E0922

Based on the findings from the field reconnaissance, the following conditions were found existing in a few locations and contribute to the flooding, even though the Analysis Program indicated an adequate system.

1. Storm Sewer Outfall/Receiving Stream Confluence
 - a. Flooding may be related to riverine flooding from the receiving stream.
 - b. The receiving streams were silted or had heavy vegetation.
2. Roadside Ditch
 - a. Where flooding occurred in areas that were primarily drained with roadside ditches, some of the ditches were found to be silted.
 - b. Culverts crossing driveways were silted or possibly undersized.
3. Storm Sewer System
 - a. Some manholes were found to contain large amounts of debris.
 - b. The storm sewer system shown in the GIS was not the same as that existing in the field, including differences in drainage area boundaries or pipe sizes.
4. Existing paved grades caused the runoff to pond, and did not encourage sheet flow.

SECTION V - CAPITAL IMPROVEMENT PLAN

A. PURPOSE OF THE CAPITAL IMPROVEMENT PLAN

The purpose of the CIP is to give the City a tool to plan future capital improvement expenditures for storm sewers within the City. To do this, each CIP identifies the general characteristics of proposed drainage modifications or improvements required for drainage systems that are currently considered to be inadequate relative to present City of Houston storm drainage design criteria. The drainage system consists of existing storm sewers, roadside ditches, and a combination of the two. In addition, this CIP includes general drainage requirements for areas where no defined drainage system exists. According to City of Houston design criteria, as presented in the previously referenced *Design Manual* dated September 1996, storm sewers should be designed for the 2-year rainfall event. To allow better accessibility for motorists, including emergency vehicles, additional CIP improvements are proposed for storm sewer systems that cross or drain major thoroughfares. The CIP improvements associated with systems draining major thoroughfares were designed for the 5-year storm.

The CIP proposes modifications for conceptual designs only, and does not include sufficient required details for final construction. Prior to final design of the proposed improvements, a more detailed analysis will need to be conducted by future design engineers or consultants to verify conditions used for the CIP.

B. PROPOSED CIP

1. CIP Development Procedures

To determine proposed CIP requirements, storm sewer systems were analyzed using the Analysis Program and the storm sewer GIS developed specifically for this project. Proposed CIP requirements were determined for storm sewer systems located within the City of Houston and in the Brays, Buffalo, Greens, Hunting, Ship Channel, Sims, and White Oak bayou watersheds. This includes areas within Harris and Fort Bend counties. The general boundaries of each watershed are shown on *Exhibits 2 through 7*. The Analysis Program is described in *Section IV* and *Appendix B* of this report. A summary of storm sewer analysis results for each existing storm sewer system analyzed is presented in *Appendix C*. Detailed information concerning the GIS and Analysis Program is also found in the previously referenced *User's Manual*. Modifications proposed in the CIP for each watershed identify the general improvements that will result in a system meeting current design criteria. More specific detailed information on existing conditions and future analysis will be needed prior to final design and construction of proposed improvements.

2. Existing Storm Sewer System CIP

As previously referenced, proposed storm sewer modifications for existing storm sewer systems were determined using the 2-year storm event, and a 5-year storm event for systems draining or crossing major thoroughfares. Proposed storm sewer modifications also considered the following:

- Modifications of existing storm sewers would consist of increasing pipe diameters.
- Replacement of existing storm sewers with smaller pipe diameters would not be proposed.

- Proposed storm sewer type would consist of reinforced concrete pipe or boxes.
- Wherever possible, invert elevations and alignments for existing storm sewers would be used for proposed storm sewer systems.
- The computed hydraulic gradient (HG) should not be more than a maximum of 2 feet below the manhole rim elevation or natural ground elevation. If the computed HG elevation is more than 2 feet, a system should be proposed to replace the undersized pipes.
- For pipe diameters greater than 108 inches, box culverts of similar hydraulic capacity were considered.

Due to lack of information concerning inlets and inlet leads, proposed CIP modifications do not include either the evaluation of inlets or modification to existing inlets.

3. New System CIP

For developed areas that are currently drained by roadside ditches, a storm sewer system (major trunk lines) was proposed to replace existing roadside ditch systems. In addition to the previously mentioned criteria for CIP improvements, the following factors were also considered for the roadside ditch areas:

- The proposed storm sewers would consist of only the main (trunk) sewer system.
- Proposed storm sewer system alignments would follow existing streets and roadside ditch patterns wherever possible.
- The maximum gutter run of 500 feet was considered when determining the alignments of proposed storm sewer systems.

Based on reviewing of digital ortho photographs, there were some areas within the studied watersheds where curb and gutter streets appear to exist, but no record of existing storm sewer systems were within the project's storm sewer information. There is a possibility that a storm sewer system could have been constructed after the storm sewer information was originally obtained for this project, or that plans were not available. For these areas, an assumption was made that there probably is an existing storm sewer system. Since existing data was not available, the system was not analyzed and a system was not proposed.

For areas that are currently undeveloped and do not have an existing drainage systems, proposed modifications for undeveloped areas considered the following:

- An assumption was made that future development of the area would be conducted by private developers, and that developers would use their own proposed land plans, street alignments, and drainage systems.
- The purpose of evaluating these systems was to determine generally what drainage improvements would be required to serve the site.
- Proposed modifications for these areas consisted of only main (trunk) sewer systems.

4. System Maps

The CIP identifies general characteristics of improvements for most of the storm sewer systems located throughout the City. Schematic layouts proposed are shown on plan view on the system maps generated as part of this report. The system maps use the City’s facet indexing/numbering system. Included on the system maps are the following:

- Existing storm sewer system alignment and size
- System identification number
- System drainage area boundary
- Proposed storm sewer system alignment and size
- Existing drainage ditches and detention basins
- Approximate location of flooding complaints
- Digital ortho photographs

In addition to the system maps, proposed CIP modifications can be obtained by using the storm sewer GIS, since calculated analysis data is written back to the GIS and proposed pipe diameters were entered into the database.

C. CAPITAL IMPROVEMENT PROGRAM COST

1. Unit Probable Cost Rates

Probable costs associated with storm sewers included in the CIP were determined using unit cost rates as presented on *Table 1*. The unit cost rates were developed using City of Houston *Bid Tabs* taken from ten storm sewer projects constructed during 1994 and 1998. The cost rates for the various pipe diameters from the ten projects were averaged to the nearest ten dollars. The sewer pipe diameters in the *Bid Tabs* ranged from 24 to 102 inches. The unit cost rates are given in linear feet for each pipe diameter. The costs for the pipe diameters greater than 108 inches were extrapolated from the bid tabs.

The unit probable cost rates for proposed storm sewer system modifications include the following:

- Removal of existing sewer pipe and pavement
- Storm sewer pipe
- Manholes

- Inlets
- Replacement of pavement
- Dewatering
- Trench safety
- Traffic control
- Engineering and contingency costs (20 percent)

Costs for proposed storm sewers do not reflect the following:

- The relocation of existing utilities due to construction of new storm sewers
- The acquisition of additional right-of-way that may be required

2. Category and Group Classifications

A category and group classification was developed to help prioritize proposed CIP modifications in order to distinguish between systems that need to be modified relative to not meeting design criteria or in consideration of previously reported flooding records. At the conclusion of the analysis of all of the storm sewer systems, the systems were categorized and grouped by incorporating the drainage system types and flooding complaint information. The following represents the category and group system used in the CIP, for which six category classification types were developed, and includes a description of each category classification type.

- | | |
|------------|--|
| Category 1 | Existing storm sewer systems that have been determined to be inadequate and where flooding complaints have been reported within drainage boundaries |
| Category 2 | Converting existing open-ditch systems (non-storm sewer areas) to storm sewer systems where previous flooding complaints have been reported
Proposed storm sewer systems for this category type address the main trunk system requirements only. |
| Category 3 | Existing storm sewer systems that have been determined to be inadequate and where flooding complaints <i>have not</i> been reported |
| Category 4 | Converting existing open-ditch systems (non-storm sewer areas) to storm sewer systems where previous flooding complaints <i>have not</i> been reported
Proposed storm sewer systems for this category type address the main trunk system requirements only. |
| Category 5 | Areas currently considered to be undeveloped and having no defined drainage system
For this category type, drainage areas and main (trunk) sewer systems were determined. An assumption was made that these areas would be developed by private developers in the future. |

The purpose of evaluating Category 5 areas was to determine generally what drainage improvements would be required.

Category A Existing storm sewer systems that have been determined to be adequate. These systems may or may not have reported flooding complaints.

For each category type, except for Category A, costs for proposed improvements were determined. To help further group the costs required for proposed improvements, the following *Group Cost Classifications* were developed for each category. The *Group Cost Classifications* were determined by overlaying the flooding complaint data with the storm sewer data, and then completing a query.

- Group 1** Systems that have reported structure and street-related flooding complaints
- Group 2** Systems that have reported structure flooding complaints only
- Group 3** Systems that have reported street flooding complaints only
- Group 4** Systems that have no reported flooding complaints. Group 4 cost types will be applicable for Categories 3 and 4 only

As another means to group the proposed modifications, the percentage of land-use types within each storm sewer system drainage area was determined, using the previously referenced land-use GIS and data obtained from the City’s Planning Department. The Planning Department data included an address for each lot located in the City of Houston. The land-use database file was overlaid with the address information, resulting in a land use type being assigned to each address. The number of addresses within each drainage system was then determined. Results of determining the number of addresses within each system can indicate the approximate number of land-use types, such as single-family units, that could be affected by improvements proposed within the system.

It was assumed that costs for Category 5 areas would be developed and funded by others in the future, thus requiring no City funds for proposed drainage improvements.

3. Proposed CIP Costs

The costs for proposed improvements were determined using the previously described category and group classifications. For each watershed, individual cost tables that summarized CIP-related costs were developed. The following is a description of the cost table types developed for each watershed.

Table 2 Summary of Proposed CIP Improvements. For each watershed, this table includes system identification numbers, 2-year costs, additional cost for 5-year costs (2-year plus 5-year additional cost), group classification, and category classification. In addition, the City Council district and facet number the system is located in is also included on this table. This table was sorted by watershed and system identification number.

Table 3 2-Year Costs – Group 1. This table summarizes 2-year costs for each system that was classified in Group 1. The table was sorted by costs, and includes a cost per address and the percentage of the system classified as single-family.

Table 4 2-Year Cost – Group 2. This table was formatted similarly to *Table 3*, except that the 2-year costs classified in Group 2 were summarized.

Table 5 2-Year Cost – Group 3. This table was formatted similarly to *Table 3*, except that the 2-year costs classified in Group 3 were summarized.

Table 6 2-Year Cost – Group 4. This table was formatted similarly to *Table 3*, except that the 2-year costs classified in Group 4 were summarized.

Table 7 5-Year Cost – Group 1. This table summarizes 5-year costs for each system classified in Group 1. The table was sorted by costs, and includes the facet number and City Council district where the system is located.

Table 8 5-Year Cost – Group 2. This table was formatted similarly to *Table 7*, except that 5-year costs classified in Group 2 were summarized.

Table 9 5-Year Cost – Group 3. This table was formatted similarly to *Table 7*, except that 5-year costs classified in Group 3 were summarized.

Table 10 5-Year Cost – Group 4. This table was formatted similarly to *Table 7*, except that 5-year costs classified in Group 4 were summarized.

As a means to present cost for each watershed, the table number includes the table type and the letter designation used by HCFCD for each watershed. For instance, *Table 3D* presents 2-Year Cost – Group 1, located in the Brays Bayou watershed.

D. CAPITAL INVESTMENT PLAN FINANCING ALTERNATIVES

This analysis of financing alternatives for the proposed storm sewer CIP considered grants or fees from external sources, internal City of Houston revenue sources, or possibly some combination of the two.

1. External Funding Alternatives

External funding sources considered both federal or state agency grants and developer-generated impact fee revenue.

2. Federal or State Grants

The U.S. Department of Health and Human Services maintains a Catalog of Federal Domestic Assistance, including a listing of funding assistance programs available for flood prevention and control. Most of the listed drainage-related assistance programs are for either emergency situations or for specific structural projects. These assistance programs are mainly administered through FEMA or the U.S. Army Corps of Engineers. The proposed storm sewer CIP improvements do not meet the necessary standards to be eligible for these assistance programs.

The U.S. Environmental Protection Agency (EPA) provides potential funding through the Clean Water State Revolving Fund (CWSRF) for water quality improvement projects. As part of the CWSRF program,

At the state level, the Texas Water Development Board (TWDB) provides loans to political subdivisions for structural and nonstructural flood control projects and for development of floodplain management plans. As stated in the Texas Administrative Code, Chapter 363, Financial Assistance Programs (effective date November 5, 1997), structural flood control is defined as:

"...construction of storm water detention basins, enlargement of stream channels, modification or reconstruction of bridges, control of coastal erosion, or beach nourishment...."

but not storm sewers.

Nonstructural flood control is defined as:

"...measures such as acquisition of floodplain land for use as open space, acquisition and removal of buildings located in a floodplain, relocation of residents of buildings removed from a floodplain, or flood warning systems."

Again, the program does not include storm sewers.

3. Impact Fees

Impact fee regulations are described in the Local Government Code, Chapter 395, Financing Capital Improvements Required by New Development in Municipalities, Counties, and Certain Other Local Governments (Chapter 395), effective September 1, 1997. The definition for impact fees, stated in Section 395.001.B4, is as follows:

"Impact fees means a charge or assessment imposed by political subdivision against new development in order to generate revenue for funding or recouping the costs of capital improvements or facility expansions necessitated by and attributable to the new development."

In addition, as stated in Section 395.013:

"Impact fees may not be adopted or used to pay for...

repair, operation, or maintenance of existing or new capital improvements or facility expansions;

upgrading, updating, expanding, or replacing existing capital improvements to serve existing development in order to meet stricter safety, efficiency, environmental, or regulatory standards;

upgrading, updating, expanding, or replacing existing capital improvements to provide better service to existing development..."

In fact, this leaves only improvements to serve property not currently developed. As noted earlier, it has been assumed that the cost of those elements of the proposed drainage CIP associated with undeveloped property (Category 5) will be funded by outside sources (the future developers of the property) and, therefore, have not

been included in the city's CIP funding requirements. These appear to be the only portion of the CIP that would qualify for funding with impact fees.

4. Internal Funding Alternatives

For purposes of this analysis, most of the City of Houston's internal funding alternatives can be divided into two categories: the city's General Fund and its Enterprise funds. In either category, two general types of financing are used: "pay-as-you-go" and debt financing. While most of the city's operating and maintenance (O&M) expenses are financed on the pay-as-you-go method, nearly all of the City of Houston's CIP is financed through the use of long-term debt.

5. General Fund

General Fund revenues are used for general city operations. The city currently finances all storm sewer O&M expenses out of General Fund revenues. During fiscal year 1998 (ended June 30, 1998), \$1,118 million in revenues were placed into the city's General Fund. Most of these revenues (82 percent) were generated from taxes. The remainder came primarily from charges for services such as ambulance, parking, and services to the various city Enterprise funds. Just over half of the tax revenues came from property (ad valorem) taxes. Sales taxes accounted for another 31 percent, with most of the remainder coming from franchise taxes and industrial assessments. The city has little control over the level of sales tax revenues it receives: Revenues are a set percentage of the total state sales taxes collected within the city.

In addition to O&M expenses, the city's annual tax revenues support long-term debt obligations, which in FY 1998 totaled \$1,716 million, used primarily to fund the city's various capital projects. In FY 1998, \$157 million was allocated to the General Capital Projects Fund. Approximately \$12 million of this was allocated to the General Fund CIP for sanitation and storm sewer.

Financing any significant portion of this new, proposed storm sewer CIP through the General Fund would require the issuance of additional long-term general obligation debt. Additional debt would, in turn, almost certainly require an increase in the city's property taxes. The City of Houston's 1998 property tax rate currently stands at \$0.665 per \$100 of assessed property valuation. Of this, \$0.48 is for operations and \$0.185 is for debt-service. The Texas Constitution limits the ad valorem tax rate to \$2.50 per \$100 of valuation, and, while the Houston City Charter limits the operating portion of the tax rate to \$0.50, this does not apply to that portion of the tax rate used to service long-term debt. There is a state statutory limit on total tax supported debt to a maximum of 10 percent of the total assessed valuation of city property (including exempt property). Based on the 1998 assessment, this sets a total debt limit of \$7.7 billion, giving a debt margin available of \$5.8 billion for additional tax-based debt.

6. Funding Requirements

In order to give some broad indication of the probable impact of financing various portions of the proposed storm sewer CIP with tax-supported bonds, the following financing assumptions have been used:

- The CIP will be constructed over a 20-year period, with construction costs spread equally over the 20 years.

The Act also states that "drainage charges" need to be provided by the governing body of the municipality by ordinance with an established schedule of fees. Tracts of land that may be exempted include property owned by the state, county, municipality, school district, or religious organizations.

While this type of financing by municipalities in Texas is currently being used mainly to finance the NPDES program, municipalities in other states have expanded the concept to encompass a complete storm water drainage utility operating in way quite similar to The City of Houston's Water and Sewer System Utility. The Municipal Drainage Utility Systems Act referenced above clearly permits the formation of such a utility by Texas municipalities.

8. Billing Alternatives For Enterprise Fund Financing

To illustrate the effect of using this concept to finance the proposed storm water CIP, the same debt financing assumptions used above to illustrate General Fund financing are again considered. The difference lies in the method of billing and, therefore, in the relative incidence of payment. The Municipal Drainage Utility Systems Act clearly prohibits use of property value (ad valorem) as a billing method; however, the number of water meters and property parcel characteristics are two examples specifically mentioned in the Act as acceptable billing parameters. Both parameters are being used by other municipalities, in Texas and elsewhere, to fund storm water utilities.

Billing Through Water Meter Accounts

From the City of Houston's perspective, the use of water meters has the advantage of allowing use of the existing Water/Sewer Utility's billing system. There are two potential drawbacks to this parameter. 1) Not all Houston property is served by the City's Water/Sewer Utility. Those properties not being served by the Water/Sewer System Utility would require some other billing method. 2) The relationship between water meters and drainage benefit is somewhat nebulous.

Some effort can be made to weight the water utility accounts to reflect property size by using meter size as a weight factor. For example, meters 1" or less in size would form a base (residential) account, and larger meters would be weighted by relative size (e.g., 6" meters would pay six times the base amount). In addition, while there are about 540,000 properties listed on the City tax roles, there are only about 410,000 water meter accounts. It is assumed, therefore, that only 75 percent (410/540) of the cost of the CIP will be billed to the water accounts. The remainder will need to be billed directly. Using the same debt-service requirements assumed earlier for the two CIP funding alternatives, the monthly fee for the base water account would be as follows:

Alternative 1:		Water Account Portion	Monthly Fee
		Of Annual Debt-service (\$millions)	(\$ per base residential account)
	Year 1	3.3	0.61
	Year 20	65.1	12.15
	Year 30	65.1	12.15
	Year 49	3.3	0.61

Alternative 2:

Year 1	6.2	1.16
Year 20	124.8	23.30
Year 30	124.8	23.30
Year 49	6.2	1.16

This still leaves 25 percent of the cost to be billed to those properties that do not receive service from the City's Water Utility. Presumably, these property owners would need to be billed directly.

Direct Billing By Land Use

If direct billing is used, property characteristics can be developed which more accurately reflect both the benefits and costs associated with implementing a storm sewer CIP. Parcel size, land use, and size of impervious surface are among the parameters used in this regard. In billing property owners directly, the possibility of using the property tax billing system appears viable (to send as separate bills, not as part of tax bill). A direct billing system of this type could be used for those properties not receiving water service, or it could be used as an alternative to billing through the water utility and applied to all properties in the City.

While development of detailed billing parameter of this type is beyond the scope of this analysis, a simplified parameter can be used to illustrate the order-of-magnitude impact of the debt-service totals assumed earlier when all accounts are billed directly as storm drainage utility charges. This simplified illustration uses the total acreage devoted to various land uses to allocate the annual debt-service charges. These allocated costs are then distributed to the accounts within each land use (from the County Appraisal District records) to determine an annual cost for each account in that land use category. The results of this exercise, using the two cost alternatives assumed earlier, produce minimum annual payments (during the first and last year of the 50-year debt cycle), and maximum annual payments (during years 20 through 30) are as follows.

Alternative 1:	Minimum Fee (Annual \$)	Maximum Fee (Annual \$)
Land Use		
Single-Family	4.04	80.80
Multi-Family	2.58	51.58
Commercial	14.45	289.09
Industrial	39.21	784.16
Institutional	27.01	540.16
Transportation/Utilities	117.72	2354.47
Parks	245.78	4915.66
Undeveloped	11.81	236.21
Agricultural/Forest	380.08	7601.61
Average All Properties	7.92	158.45

Alternative 2:	Minimum Fee	Maximum Fee
<u>Land Use</u>	<u>(Annual \$)</u>	<u>(Annual \$)</u>
Single-family	7.45	154.91
Multi-family	4.94	98.89
Commercial	27.71	554.21
Industrial	75.17	1503.3
Institutional	51.78	1035.53
Transportation/Utilities	225.69	4513.72
Parks	471.19	9423.72
Undeveloped	22.64	452.83
Agricultural/Forest	728.64	14572.90
Average All Properties	15.19	303.77

Several factors should be considered in evaluating these data. First, on the assumption that these billings would be sent out along with the annual tax bills, these are annual fees, in contrast to the monthly fees shown earlier as billing based on water meters. Thus, the maximum fee for a residential user under Assumption 1 above would be about \$6.73 when considered on a monthly basis, as compared to \$12.15 if billed based on water meters. Second, and more important, all illustrations given herein are based on very simplified assumptions and, considering the total sums of money involved, should be refined by more detailed rate design procedures before being considered for actual application. For example, land uses shown above are all considered equal contributors to storm drainage costs on a per-acre basis. In fact, land used for parks and agricultural purposes have little or no impervious surfaces and, therefore, probably should not be considered equal contributors to developed properties. If land designated as "parks" and "agricultural/forest" were eliminated for the cost equation, the maximum residential fee under Alternative 1 would increase from \$80.80 to \$93.47, and under Alternative 2, the increase would go from \$154.91 to \$179.19.

Conclusions

While the foregoing is a brief and very simplified discussion of financing alternatives for the proposed storm sewer CIP, several general conclusions can be drawn.

1. The only practical way to finance the cost of the storm water CIP program is with long-term debt. The scheduling and duration of this debt will have a significant impact on the level of payments required to service the debt.
2. The cost of servicing the debt will need to be borne by the people of Houston.
3. There appear to be at least three feasible ways to distribute the debt-service costs that meet current legal requirements and to provide some measure of a test of "fair and equitable." These include additional ad valorem taxes; fees added to the current Water and Sewer Utility bills; and separate billing through a newly formed Storm Water Utility enterprise fund.

4. While each of these alternatives has some advantages, given the long-term nature for the CIP development and the sizable capital costs involved, the formation of a new Storm Water Utility appears to provide the best long-term solution.

E. FIELD RECONNAISSANCE

Results from the storm sewer analysis indicated that some of the storm sewer systems were adequate relative to present City of Houston storm drainage criteria, but also had reported flooding complaints within the drainage area. To determine possible causes for the reported flooding in these type of systems, a series of field reconnaissance tasks was performed by Ratnala & Bahl Inc. The tasks were separated into five reports: Buffalo Bayou, Greens Bayou, Hunting Bayou, Sims Bayou, and White Oak Bayou Watersheds. More information concerning these studies may be found in *Appendix D*.

APPENDIX A1

BRAYS BAYOU WATERSHED GIS

A detailed description of the storm sewer Geographic Information System (GIS) and related database is found in the *User's Manual for City of Houston Storm Sewer GIS and Analysis Program (User's Manual)*, dated January 1999. The following is a description of specific data concerning the development of the storm sewer GIS for the Brays Bayou watershed.

A. SOURCE OF DATA

As discussed in *Section 1* of this report, two sources of the storm sewer GIS base files were used in this study, the GIMS and Synercom coverages. At the time the GIS was being developed for the Brays Bayou watershed, the GIMS data had not been completed. A decision was made to use the Synercom data to begin the Brays Bayou GIS.

1. Data Verification

The original Synercom storm sewer data was verified to determine whether the GIS reflected the most current storm sewer systems in the Brays Bayou watershed. The verification process included the following steps.

- a. Using the City's Storm Sewer Block Maps (Block Maps), a City-assigned project number for each storm sewer system within the Brays Bayou watershed was identified. The project number is used as a filing system for record/construction drawings kept at the City's file room. For each project number identified, the record/construction drawings were then pulled at the City's file room, and copies made of the drawings.
- b. The storm sewer drawings were then used to verify the data included in the Synercom storm sewer files. The verification process included comparing storm sewer information shown on the drawings with plots generated to represent the information included in the Synercom files. The plots were generated using the City's facet map grid system. During this verification process, storm sewer pipe diameters, rim elevations, and upstream and downstream elevations were compared. If differences were found, the information shown on the drawings was then transferred to the facet map plots and entered into a database. During the verification, information concerning inlets and leads was neglected. For areas where flowline and pipe diameters for an entire system were missing, the areas were flagged to be investigated at a later date.
- c. Using Texas Department of Transportation (TxDOT) drawings, storm sewer systems located on major highways were also verified. The verification process was similar to the process used with the City's drawings.
- d. As part of the data verification between the storm sewer block maps and the original Synercom data, new storm sewer systems were also identified. These new identified systems were entered into the GIS using procedures discussed in the *User's Manual*.
- e. Data concerning inlets and inlet leads was not verified.

B. DRAINAGE AREA DELINEATION

1. Drainage Areas for Existing Storm Sewer Systems

The existing storm sewer system's drainage areas used for the analysis were divided into 2 levels. The first level was called *SYSTEM*. *SYSTEM* was comprised of the total drainage area for each unique storm sewer system in the watershed. The drainage areas range in size from 1 acre to more than 400 acres, depending on the size of the storm sewer system. The general storm sewer layout, in conjunction with topographic maps generated as part of the city's Monumentation and Mapping Program, was used to delineate the drainage areas.

The second level of drainage areas was called *DRAIN*, which was a subset of *SYSTEM*. *DRAIN* was created by subdividing the drainage areas in *SYSTEM* into smaller areas using drainage divides between storm sewer tributaries and the main storm sewer system. Each resulting drainage area was then subdivided further using the following rule of thumb: Every pipe size in the system needed to have at least one drainage area, meaning every time a pipe changed size, another drainage area was divided. If one pipe size in a system traversed a long distance, the drainage areas were subdivided into smaller areas. For the Analysis Program to accurately model the existing storm sewer system, at least one manhole needed to be located in each sub drainage area in *DRAIN*.

2. Drainage Areas for Undeveloped Areas

As part of the CIP, all areas that did not have an existing storm sewer system or were considered to be undeveloped were investigated. Since no existing storm sewer exists in these areas, proposed drainage areas were drawn and proposed storm sewers were designed and placed in these areas. With these proposed systems in mind, the *SYSTEM* and *DRAIN* were modified with the same criteria used for existing storm sewer systems.

The *SYSTEMs* and *DRAINs* were digitized in MicroStation. The different lines were placed on different levels that allow the plotting of the *SYSTEM* and *DRAIN* in different colors or line weights to make decisions easily during the QA/QC portion of the study. With the data editing and the drainage areas completed, all of the information was compiled into the required GIS format.

C. GEOGRAPHIC INFORMATION SYSTEM EDITING

The GIS editing portion of the project consisted of several phases, including cleaning and assigning outfall identification numbers to the systems. Since the storm sewer GIS contained a large amount of data, and as a means of managing the data, the watershed was split in half. The two halves were labeled Brays North and Brays South. Splitting the watershed into halves allowed two people to work on the watershed at the same time.

1. Importing

After the data verification previously discussed was completed, the new database was imported into Arc/Info coverages. The newly create storm sewer GIS now included storm sewer systems as shown on the City's block maps.

2. Cleaning

In order for the Analysis Program to be used with the new storm sewer GIS, proper topology had to be created for the GIS coverages. This required the data to be *cleaned*, making sure that the pipes snapped together at manholes.

Several types of problems were found: pipes that did not properly snap together, pipes that didn't flow in the proper direction, and pipes segments that had no manholes at their intersection. Pipes that did not properly meet at a manhole were corrected by adjusting the ending manholes of the pipes so that they snapped or met at the same point as the manhole. Pipes that showed the wrong direction of flow were flipped so that there starting point, or FNODE, became the ending point, or TNODE, and vice versa. The most significant problem was the intersection of pipes at a point where there was no manhole. The solution for this problem was to either add a manhole between the segments or to merge the segments together into one pipe. Construction drawings and engineering judgement were used to make these corrections.

Changes also were made to insure a consistent nomenclature for the material of each pipe that the Analysis Program could use. The database field names and format were also updated to be consistent with fields required by the Analysis Program.

The following items should be noted in regard to the verified existing storm sewer system GIS coverages.

- a. Some of the GIS attributes for the various watersheds currently contain a zero (0) in the database. These were entered as the original database was developed, when the information for that attribute was not verified with existing construction drawings, or when the data was not available. During the verification process, an attempt was made to locate these construction drawings and to determine the missing attribute in the database. Many of the construction drawings either were not found or were illegible. For the development of the CIP, no further attempt was made to obtain missing additional storm sewer data. Due to the missing data, some of these storm sewer systems could not be analyzed or considered in the CIP at this time.
- b. Many storm sewer systems were either constructed on different datum adjustments, or an elevation for the construction benchmark was assumed. In these cases, no datum was used during the construction. No effort was made to adjust elevations to one common datum for the entire GIS system for each watershed.

3. Assigning Outfalls

As a means of documenting each storm sewer system, each system was assigned a unique outfall identification number. The Harris County Flood Control designation for the Brays Bayou watershed is "D," which was placed in front of each identification number.

The numbering of the outfalls and all of the pipes with the HCFCD identification was completed with a program written and run in Arc/Info. After an outfall was picked manually, the outfall ID was assigned to it. The underlying storm sewer system was then selected and the same outfall ID was assigned to each of the pipes and manholes.

A second program in Arc/Info was developed to link each sub drainage area in DRAIN to a specific manhole

for the subarea. This process selected a manhole in the sub drainage area and captured it's user-id, STMMH-ID, and outfall ID attributes and assigned them to the associated sub drainage area. A quality assurance check was completed with ArcView to determine if the sub drainage areas were associated with the correct manhole.

Once this setup was completed, the drainage areas in *DRAIN* were intersected with a coverage of the City's land use. The resulting coverage was called *DAREAS*. Because *DAREAS* included all of the attributes from *DRAIN* and the land use coverage, *DAREAS* allowed the Analysis Program to determine the total area by land use category for each sub drainage area and to link it to a specific manhole, pipe and storm sewer system.

D. PRELIMINARY ANALYSIS

The first step of preliminary analysis was to run the Analysis Program (in batch-mode) for all of the outfalls on the Brays Bayou watershed. The Analysis Program batch-mode allows for more than one system to be submitted and analyzed at one time. The results of the preliminary analysis indicated that a large percentage of the storm sewer systems ran successfully. The second step of the preliminary analysis was to run the Analysis Program (in the single-mode) on each individual non-executable storm sewer system. The output from running this process showed three common error messages: (1) To and From Node (TNODE and FNODE), (2) Split System, and (3) Multiple Outlets. The storm sewer systems that did not run were edited using PC ArcEdit. These problems were corrected by one or several of the following ArcEdit Techniques:

1. Flip Arrows to correct the direction of the system.
2. Correct the TNODE and FNODE numbers in the manhole and pipe databases to be consistent.
3. Disconnect all loops in the system. (The Analysis Program will not run if there are any parallel or looped pipes.)
4. Modify TYPELINE in the pipe coverage so that only one 'outfall' is assigned per system.
5. Correct the TYPELINE for a specific pipe in the storm system. For systems that had large amounts of missing data in their respective databases, assumptions had to be made to run the systems using the Analysis Program. The project team discussed the use of assumptions for the Brays Bayou watershed. Assumptions were not to be made on those systems that had large amounts of missing information. If a system had only one pipe that had missing information, the pipe size was assumed by taking either the upstream or the downstream size.

When it was verified that the system GIS could be used with the Analysis Program, the quality assurance task was completed.

APPENDIX A2

BUFFALO BAYOU WATERSHED GIS

A detailed description of the storm sewer Geographic Information System (GIS) and related database is found in the *User's Manual for City of Houston Storm Sewer GIS and Analysis Program (User's Manual)*, dated January 1999. The following is a description of specific data concerning the development of the storm sewer GIS for the Buffalo Bayou watershed.

A. SOURCE OF DATA

As discussed in *Section I* of this report, there were two sources of the storm sewer GIS base files used in this study, the GIMS and Synercom coverages. For the Buffalo Bayou watershed, the GIMS coverages were more up-to-date relative to the Synercom coverages; therefore, the GIMS coverages were used for the Buffalo Bayou watershed. The GIMS coverages were assumed to be complete and correct. *Complete* was defined as accounting for all storm sewers in the ground. *Correct* was defined as having all physical information (e.g. flowline, size, rim elevation, etc.) accurate; therefore, the information did not need to be verified. In addition to the GIMS coverages, additional storm sewer systems that were constructed after the GIMS data was created were added into the GIS.

Prior to receiving the GIMS files, the Synercom files had been compared with storm sewer record/construction drawings. As an additional check, the GIMS data was compared with the checked Synercom files to determine if any existing storm sewer system exists but were not shown on the GIMS data. If new systems were found, they were added to the storm sewer GIS.

B. DRAINAGE AREA DELINEATION

1. Drainage Areas for Existing Storm Sewer Systems

The existing storm sewer system's drainage areas used for the analysis were divided into 2 levels. The first level was called *SYSTEM*. *SYSTEM* was comprised of the total drainage area for each unique storm sewer system in the watershed. The drainage areas range in size from 1 acre to more than 400 acres, depending on the size of the storm sewer system. The general storm sewer layout, in conjunction with topographic maps generated as part of the city's Monumentation and Mapping Program, was used to delineate the drainage areas.

The second level of drainage areas was called *DRAIN*, which was a subset of *SYSTEM*. *DRAIN* was created by subdividing the drainage areas in *SYSTEM* into smaller areas using drainage divides between storm sewer tributaries and the main storm sewer system. Each resulting drainage area was then subdivided further using the following rule of thumb: Every pipe size in the system needed to have at least one drainage area, meaning every time a pipe changed size, another drainage area was divided. If one pipe size in a system traversed a long distance, the drainage areas were subdivided into smaller areas. For the Analysis Program to accurately model the existing storm sewer system, at least one manhole needed to be located in each sub drainage area in *DRAIN*.

2. Drainage Areas for Undeveloped Areas

As part of the CIP, all areas that did not have an existing storm sewer system or were considered to be undeveloped were investigated. Since no existing storm sewer exists in these areas, proposed drainage areas were drawn and proposed storm sewers were designed and placed in these areas. With these proposed systems in mind, the *SYSTEM* and *DRAIN* were modified with the same criteria used for existing storm sewer systems.

The *SYSTEMs* and *DRAINs* were digitized in MicroStation. The different lines were placed on different levels that allow the plotting of the *SYSTEM* and *DRAIN* in different colors or line weights to make decisions easily during the QA/QC portion of the study. With the data editing and the drainage areas completed, all of the information was compiled into the required GIS format.

C. GEOGRAPHIC INFORMATION SYSTEM EDITING

The GIS editing portion of the project consisted of several phases, including cleaning and assigning outfall identification numbers to the systems. Since the storm sewer GIS contained a large amount of data, and as a means of managing the data, the watershed was split in half. The two halves were labeled Brays North and Brays South. Splitting the watershed into halves allowed two people to work on the watershed at the same time.

1. Cleaning

In order for the Analysis Program to be used with the new storm sewer GIS, proper topology had to be created for the GIS coverages. This required the data to be *cleaned*, making sure that the pipes snapped together at manholes.

Several types of problems were found: pipes that did not properly snap together, pipes that didn't flow in the proper direction, and pipes segments that had no manholes at their intersection. Pipes that did not properly meet at a manhole were corrected by adjusting the ending manholes of the pipes so that they snapped or met at the same point as the manhole. Pipes that showed the wrong direction of flow were flipped so that their starting point, or FNODE, became the ending point, or TNODE, and vice versa. The most significant problem was the intersection of pipes at a point where there was no manhole. The solution for this problem was to either add a manhole between the segments or to merge the segments together into one pipe. Construction drawings and engineering judgement were used to make these corrections.

Changes also were made to insure a consistent nomenclature for the material of each pipe that the Analysis Program could use. The database field names and format were also updated to be consistent with fields required by the Analysis Program.

The following items should be noted in regard to the verified existing storm sewer system GIS coverages.

- a. Some of the GIS attributes for the various watersheds currently contain a zero (0) in the database. These were entered as the original database was developed, when the information for that attribute was not verified with existing construction drawings, or when the data was not available. During the verification process, an attempt was made to locate these construction drawings and to determine the missing attribute in the database. Many of the construction drawings either were not found or were illegible. For the development of the CIP, no further attempt was made to obtain missing additional storm sewer data.

Due to the missing data, some of these storm sewer systems could not be analyzed or considered in the CIP at this time.

- b. Many storm sewer systems were either constructed on different datum adjustments, or an elevation for the construction benchmark was assumed. In these cases, no datum was used during the construction. No effort was made to adjust elevations to one common datum for the entire GIS system for each watershed.

2. Assigning Outfalls

As a means of documenting each storm sewer system, each system was assigned a unique outfall identification number. The Harris County Flood Control designation for the Brays Bayou watershed is "D," which was placed in front of each identification number.

The numbering of the outfalls and all of the pipes with the HCFCF identification was completed with a program written and run in Arc/Info. After an outfall was picked manually, the outfall ID was assigned to it. The underlying storm sewer system was then selected and the same outfall ID was assigned to each of the pipes and manholes.

A second program in Arc/Info was developed to link each sub drainage area in DRAIN to a specific manhole for the subarea. This process selected a manhole in the sub drainage area and captured it's user-id, STMMH-ID, and outfall ID attributes and assigned them to the associated sub drainage area. A quality assurance check was completed with ArcView to determine if the sub drainage areas were associated with the correct manhole.

Once this setup was completed, the drainage areas in DRAIN were intersected with a coverage of the City's land use. The resulting coverage was called DAREAS. Because DAREAS included all of the attributes from DRAIN and the land use coverage, DAREAS allowed the Analysis Program to determine the total area by land use category for each sub drainage area and to link it to a specific manhole, pipe and storm sewer system.

D. PRELIMINARY ANALYSIS

The first step of preliminary analysis was to run the Analysis Program (in batch-mode) for all of the outfalls on the Brays Bayou watershed. The Analysis Program batch-mode allows for more than one system to be submitted and analyzed at one time. The results of the preliminary analysis indicated that a large percentage of the storm sewer systems ran successfully. The second step of the preliminary analysis was to run the Analysis Program (in the single-mode) on each individual non-executable storm sewer system. The output from running this process showed three common error messages: (1) To and From Node (TNODE and FNODE), (2) Split System, and (3) Multiple Outlets. The storm sewer systems that did not run were edited using PC ArcEdit. These problems were corrected by one or several of the following ArcEdit Techniques:

1. Flip Arrows to correct the direction of the system.
2. Correct the TNODE and FNODE numbers in the manhole and pipe databases to be consistent.
3. Disconnect all loops in the system. (The Analysis Program will not run if there are any parallel or looped pipes.)

4. Modify TYPELINE in the pipe coverage so that only one 'outfall' is assigned per system.
5. Correct the TYPELINE for a specific pipe in the storm system. For systems that had large amounts of missing data in their respective databases, assumptions had to be made to run the systems using the Analysis Program. The project team discussed the use of assumptions for the Brays Bayou watershed. Assumptions were not to be made on those systems that had large amounts of missing information. If a system had only one pipe that had missing information, the pipe size was assumed by taking either the upstream or the downstream size.

When it was verified that the system GIS could be used with the Analysis Program, the quality assurance task was completed.

APPENDIX A3

GREENS BAYOU WATERSHED GIS

A detailed description of the storm sewer Geographic Information System (GIS) and related database is found in the *User's Manual for City of Houston Storm Sewer GIS and Analysis Program (User's Manual)*, dated January 1999. The following is a description of specific data concerning the development of the storm sewer GIS for the Greens Bayou watershed.

A. SOURCE OF DATA

As discussed in *Section I* of the main section of this report, there were two sources of the storm sewer GIS base files used in this study, the GIMS and Synercom coverages. For the Greens Bayou watershed, the GIMS coverages were more up-to-date relative to the Synercom coverages; therefore, the GIMS coverages were used for the Greens Bayou watershed. The GIMS coverages were assumed to be complete and correct. Complete is defined as accounting for all of the storm sewers in the ground. Correct is defined as all of the physical information (i.e. flowline, size, rim elevation, etc.) was accurate; therefore, the information did not need to be verified. In addition to the GIMS coverages, additional storm sewer systems that were constructed after the GIMS data was created were added into the GIS.

B. DRAINAGE AREA DELINEATION

1. Drainage Areas for Existing Storm Sewer Systems

The existing storm sewer system's drainage areas used for the analysis were divided into 2 levels. The first level was called *SYSTEM*. *SYSTEM* was comprised of the total drainage area for each unique storm sewer system in the watershed. The drainage areas range in size from 1 acre to more than 400 acres, depending on the size of the storm sewer system. The general storm sewer layout, in conjunction with topographic maps generated as part of the city's Monumentation and Mapping Program, was used to delineate the drainage areas.

The second level of drainage areas was called *DRAIN*, which was a subset of *SYSTEM*. *DRAIN* was created by subdividing the drainage areas in *SYSTEM* into smaller areas using drainage divides between storm sewer tributaries and the main storm sewer system. Each resulting drainage area was then subdivided further using the following rule of thumb: Every pipe size in the system needed to have at least one drainage area, meaning every time a pipe changed size, another drainage area was divided. If one pipe size in a system traversed a long distance, the drainage areas were subdivided into smaller areas. For the Analysis Program to accurately model the existing storm sewer system, at least one manhole needed to be located in each sub drainage area in *DRAIN*.

2. Drainage Areas for Undeveloped Areas

As part of the CIP, all areas that did not have an existing storm sewer system or were considered to be undeveloped were investigated. Since no existing storm sewer exists in these areas, proposed drainage areas were drawn and proposed storm sewers were designed and placed in these areas. With these proposed systems in mind, the *SYSTEM* and *DRAIN* were modified with the same criteria used for existing storm sewer systems.

The *SYSTEMs* and *DRAINs* were digitized in MicroStation. The different lines were placed on different levels that allow the plotting of the *SYSTEM* and *DRAIN* in different colors or line weights to make decisions easily

during the QA/QC portion of the study. With the data editing and the drainage areas completed, all of the information was compiled into the required GIS format.

C. GEOGRAPHIC INFORMATION SYSTEM EDITING

The GIS editing portion of the project consisted of several phases, including cleaning and assigning outfall identification numbers to the systems. Since the storm sewer GIS contained a large amount of data, and as a means of managing the data, the watershed was split in half. The two halves were labeled Brays North and Brays South. Splitting the watershed into halves allowed two people to work on the watershed at the same time.

1. Cleaning

In order for the Analysis Program to be used with the new storm sewer GIS, proper topology had to be created for the GIS coverages. This required the data to be *cleaned*, making sure that the pipes snapped together at manholes.

Several types of problems were found: pipes that did not properly snap together, pipes that didn't flow in the proper direction, and pipes segments that had no manholes at their intersection. Pipes that did not properly meet at a manhole were corrected by adjusting the ending manholes of the pipes so that they snapped or met at the same point as the manhole. Pipes that showed the wrong direction of flow were flipped so that their starting point, or FNODE, became the ending point, or TNODE, and vice versa. The most significant problem was the intersection of pipes at a point where there was no manhole. The solution for this problem was to either add a manhole between the segments or to merge the segments together into one pipe. Construction drawings and engineering judgement were used to make these corrections.

Changes also were made to insure a consistent nomenclature for the material of each pipe that the Analysis Program could use. The database field names and format were also updated to be consistent with fields required by the Analysis Program.

The following items should be noted in regard to the verified existing storm sewer system GIS coverages.

- a. Some of the GIS attributes for the various watersheds currently contain a zero (0) in the database. These were entered as the original database was developed, when the information for that attribute was not verified with existing construction drawings, or when the data was not available. During the verification process, an attempt was made to locate these construction drawings and to determine the missing attribute in the database. Many of the construction drawings either were not found or were illegible. For the development of the CIP, no further attempt was made to obtain missing additional storm sewer data. Due to the missing data, some of these storm sewer systems could not be analyzed or considered in the CIP at this time.
- b. Many storm sewer systems were either constructed on different datum adjustments, or an elevation for the construction benchmark was assumed. In these cases, no datum was used during the construction. No effort was made to adjust elevations to one common datum for the entire GIS system for each watershed.

2. Assigning Outfalls

As a means of documenting each storm sewer system, each system was assigned a unique outfall identification number. The Harris County Flood Control designation for the Brays Bayou watershed is "D," which was placed in front of each identification number.

The numbering of the outfalls and all of the pipes with the HCFCD identification was completed with a program written and run in Arc/Info. After an outfall was picked manually, the outfall ID was assigned to it. The underlying storm sewer system was then selected and the same outfall ID was assigned to each of the pipes and manholes.

A second program in Arc/Info was developed to link each sub drainage area in *DRAIN* to a specific manhole for the subarea. This process selected a manhole in the sub drainage area and captured its user-id, *STMMH-ID*, and outfall ID attributes and assigned them to the associated sub drainage area. A quality assurance check was completed with ArcView to determine if the sub drainage areas were associated with the correct manhole.

Once this setup was completed, the drainage areas in *DRAIN* were intersected with a coverage of the City's land use. The resulting coverage was called *DAREAS*. Because *DAREAS* included all of the attributes from *DRAIN* and the land use coverage, *DAREAS* allowed the Analysis Program to determine the total area by land use category for each sub drainage area and to link it to a specific manhole, pipe and storm sewer system.

D. PRELIMINARY ANALYSIS

The first step of preliminary analysis was to run the Analysis Program (in batch-mode) for all of the outfalls on the Brays Bayou watershed. The Analysis Program batch-mode allows for more than one system to be submitted and analyzed at one time. The results of the preliminary analysis indicated that a large percentage of the storm sewer systems ran successfully. The second step of the preliminary analysis was to run the Analysis Program (in the single-mode) on each individual non-executable storm sewer system. The output from running this process showed three common error messages: (1) To and From Node (TNODE and FNODE), (2) Split System, and (3) Multiple Outlets. The storm sewer systems that did not run were edited using PC ArcEdit. These problems were corrected by one or several of the following ArcEdit Techniques:

1. Flip Arrows to correct the direction of the system.
2. Correct the TNODE and FNODE numbers in the manhole and pipe databases to be consistent.
3. Disconnect all loops in the system. (The Analysis Program will not run if there are any parallel or looped pipes.)
4. Modify TYPELINE in the pipe coverage so that only one 'outfall' is assigned per system.
5. Correct the TYPELINE for a specific pipe in the storm system. For systems that had large amounts of missing data in their respective databases, assumptions had to be made to run the systems using the Analysis Program. The project team discussed the use of assumptions for the Brays Bayou watershed. Assumptions were not to be made on those systems that had large amounts of missing information. If a system had only one pipe that had missing information, the pipe size was assumed by taking either the upstream or the downstream size.

When it was verified that the system GIS could be used with the Analysis Program, the quality assurance task was completed.

APPENDIX A4

HUNTING BAYOU AND SHIP CHANNEL WATERSHEDS GIS

A detailed description of the storm sewer Geographic Information System (GIS) and related database is found in the *User's Manual for City of Houston Storm Sewer GIS and Analysis Program (User's Manual)*, dated January 1999. The following is a description of specific data concerning the development of the storm sewer GIS for the Hunting Bayou and Ship Channel Watersheds.

A. SOURCE OF DATA

As discussed in *Section I* of the main section of this report, there were two sources of the storm sewer GIS base files used in this study, the GIMS and Synercom coverages. For the Hunting Bayou and Ship Channel Watersheds, the GIMS coverages were more up-to-date relative to the Synercom coverages; therefore, the GIMS coverages were used for the Hunting Bayou and Ship Channel Watersheds. The GIMS coverages were assumed to be complete and correct. Complete is defined as accounting for all of the storm sewers in the ground. Correct is defined as all of the physical information (i.e. flowline, size, rim elevation, ect.) was accurate; therefore, the information did not need to be verified. In addition to the GIMS coverages, additional storm sewer systems that were constructed after the GIMS data was created were added into the GIS.

B. DRAINAGE AREA DELINEATION

1. Drainage Areas for Existing Storm Sewer Systems

The existing storm sewer system's drainage areas used for the analysis were divided into 2 levels. The first level was called *SYSTEM*. *SYSTEM* was comprised of the total drainage area for each unique storm sewer system in the watershed. The drainage areas range in size from 1 acre to more than 400 acres, depending on the size of the storm sewer system. The general storm sewer layout, in conjunction with topographic maps generated as part of the city's Monumentation and Mapping Program, was used to delineate the drainage areas.

The second level of drainage areas was called *DRAIN*, which was a subset of *SYSTEM*. *DRAIN* was created by subdividing the drainage areas in *SYSTEM* into smaller areas using drainage divides between storm sewer tributaries and the main storm sewer system. Each resulting drainage area was then subdivided further using the following rule of thumb: Every pipe size in the system needed to have at least one drainage area, meaning every time a pipe changed size, another drainage area was divided. If one pipe size in a system traversed a long distance, the drainage areas were subdivided into smaller areas. For the Analysis Program to accurately model the existing storm sewer system, at least one manhole needed to be located in each sub drainage area in *DRAIN*.

2. Drainage Areas for Undeveloped Areas

As part of the CIP, all areas that did not have an existing storm sewer system or were considered to be undeveloped were investigated. Since no existing storm sewer exists in these areas, proposed drainage areas were drawn and proposed storm sewers were designed and placed in these areas. With these proposed systems in mind, the *SYSTEM* and *DRAIN* were modified with the same criteria used for existing storm sewer systems.

The *SYSTEMs* and *DRAINS* were digitized in MicroStation. The different lines were placed on different levels that allow the plotting of the *SYSTEM* and *DRAIN* in different colors or line weights to make decisions easily

during the QA/QC portion of the study. With the data editing and the drainage areas completed, all of the information was compiled into the required GIS format.

C. GEOGRAPHIC INFORMATION SYSTEM EDITING

The GIS editing portion of the project consisted of several phases, including cleaning and assigning outfall identification numbers to the systems. Since the storm sewer GIS contained a large amount of data, and as a means of managing the data, the watershed was split in half. The two halves were labeled Brays North and Brays South. Splitting the watershed into halves allowed two people to work on the watershed at the same time.

1. Cleaning

In order for the Analysis Program to be used with the new storm sewer GIS, proper topology had to be created for the GIS coverages. This required the data to be cleaned, making sure that the pipes snapped together at manholes.

Several types of problems were found: pipes that did not properly snap together, pipes that didn't flow in the proper direction, and pipes segments that had no manholes at their intersection. Pipes that did not properly meet at a manhole were corrected by adjusting the ending manholes of the pipes so that they snapped or met at the same point as the manhole. Pipes that showed the wrong direction of flow were flipped so that their starting point, or FNODE, became the ending point, or TNODE, and vice versa. The most significant problem was the intersection of pipes at a point where there was no manhole. The solution for this problem was to either add a manhole between the segments or to merge the segments together into one pipe. Construction drawings and engineering judgement were used to make these corrections.

Changes also were made to insure a consistent nomenclature for the material of each pipe that the Analysis Program could use. The database field names and format were also updated to be consistent with fields required by the Analysis Program.

The following items should be noted in regard to the verified existing storm sewer system GIS coverages.

- a. Some of the GIS attributes for the various watersheds currently contain a zero (0) in the database. These were entered as the original database was developed, when the information for that attribute was not verified with existing construction drawings, or when the data was not available. During the verification process, an attempt was made to locate these construction drawings and to determine the missing attribute in the database. Many of the construction drawings either were not found or were illegible. For the development of the CIP, no further attempt was made to obtain missing additional storm sewer data. Due to the missing data, some of these storm sewer systems could not be analyzed or considered in the CIP at this time.
- b. Many storm sewer systems were either constructed on different datum adjustments, or an elevation for the construction benchmark was assumed. In these cases, no datum was used during the construction. No effort was made to adjust elevations to one common datum for the entire GIS system for each watershed.

2. Assigning Outfalls

As a means of documenting each storm sewer system, each system was assigned a unique outfall identification number. The Harris County Flood Control designation for the Brays Bayou watershed is "D," which was placed in front of each identification number.

The numbering of the outfalls and all of the pipes with the HCFCD identification was completed with a program written and run in Arc/Info. After an outfall was picked manually, the outfall ID was assigned to it. The underlying storm sewer system was then selected and the same outfall ID was assigned to each of the pipes and manholes.

A second program in Arc/Info was developed to link each sub drainage area in DRAIN to a specific manhole for the subarea. This process selected a manhole in the sub drainage area and captured it's user-id, STMMH-ID, and outfall ID attributes and assigned them to the associated sub drainage area. A quality assurance check was completed with ArcView to determine if the sub drainage areas were associated with the correct manhole.

Once this setup was completed, the drainage areas in *DRAIN* were intersected with a coverage of the City's land use. The resulting coverage was called *DAREAS*. Because *DAREAS* included all of the attributes from *DRAIN* and the land use coverage, *DAREAS* allowed the Analysis Program to determine the total area by land use category for each sub drainage area and to link it to a specific manhole, pipe and storm sewer system.

D. PRELIMINARY ANALYSIS

The first step of preliminary analysis was to run the Analysis Program (in batch-mode) for all of the outfalls on the Brays Bayou watershed. The Analysis Program batch-mode allows for more than one system to be submitted and analyzed at one time. The results of the preliminary analysis indicated that a large percentage of the storm sewer systems ran successfully. The second step of the preliminary analysis was to run the Analysis Program (in the single-mode) on each individual non-executable storm sewer system. The output from running this process showed three common error messages: (1) To and From Node (TNODE and FNODE), (2) Split System, and (3) Multiple Outlets. The storm sewer systems that did not run were edited using PC ArcEdit. These problems were corrected by one or several of the following ArcEdit Techniques:

1. Flip Arrows to correct the direction of the system.
2. Correct the TNODE and FNODE numbers in the manhole and pipe databases to be consistent.
3. Disconnect all loops in the system. (The Analysis Program will not run if there are any parallel or looped pipes.)
4. Modify TYPELINE in the pipe coverage so that only one 'outfall' is assigned per system.
5. Correct the TYPELINE for a specific pipe in the storm system. For systems that had large amounts of missing data in their respective databases, assumptions had to be made to run the systems using the Analysis Program. The project team discussed the use of assumptions for the Brays Bayou watershed. Assumptions were not to be made on those systems that had large amounts of missing information. If a system had only one pipe that had missing information, the pipe size was assumed by taking either the upstream or the downstream size.

When it was verified that the system GIS could be used with the Analysis Program, the quality assurance task was completed.

APPENDIX A5

SIMS BAYOU WATERSHED GIS

A detailed description of the storm sewer Geographic Information System (GIS) and related database is found in the *User's Manual for City of Houston Storm Sewer GIS and Analysis Program (User's Manual)*, dated January 1999. The following is a description of specific data concerning the development of the storm sewer GIS for the Sims Bayou watershed.

A. SOURCE OF DATA

As discussed in *Section I* of this report, two sources of the storm sewer GIS base files were used in this study, the GIMS and Synercom coverages. At the time the GIS was being developed for the Sims Bayou watershed, the GIMS data had not been completed. A decision was made to use the Synercom data to begin the Sims Bayou GIS.

1. Data Verification

The original Synercom storm sewer data was verified to determine whether the GIS reflected the most current storm sewer systems in the Sims Bayou watershed. The verification process included the following steps.

- a. Using the City's Storm Sewer Block Maps (Block Maps), a City-assigned project number for each storm sewer system within the Sims Bayou watershed was identified. The project number is used as a filing system for record/construction drawings kept at the City's file room. For each project number identified, the record/construction drawings were then pulled at the City's file room, and copies made of the drawings.
- b. The storm sewer drawings were then used to verify the data included in the Synercom storm sewer files. The verification process included comparing storm sewer information shown on the drawings with plots generated to represent the information included in the Synercom files. The plots were generated using the City's facet map grid system. During this verification process, storm sewer pipe diameters, rim elevations, and upstream and downstream elevations were compared. If differences were found, the information shown on the drawings was then transferred to the facet map plots and entered into a database. During the verification, information concerning inlets and leads was neglected. For areas where flowline and pipe diameters for an entire system were missing, the areas were flagged to be investigated at a later date.
- c. Using Texas Department of Transportation (TxDOT) drawings, storm sewer systems located on major highways were also verified. The verification process was similar to the process used with the City's drawings.
- d. As part of the data verification between the storm sewer block maps and the original Synercom data, new storm sewer systems were also identified. These new identified systems were entered into the GIS using procedures discussed in the *User's Manual*.
- e. Data concerning inlets and inlet leads was not verified.

B. DRAINAGE AREA DELINEATION

1. Drainage Areas for Existing Storm Sewer Systems

The existing storm sewer system's drainage areas used for the analysis were divided into 2 levels. The first level was called *SYSTEM*. *SYSTEM* was comprised of the total drainage area for each unique storm sewer system in the watershed. The drainage areas range in size from 1 acre to more than 400 acres, depending on the size of the storm sewer system. The general storm sewer layout, in conjunction with topographic maps generated as part of the city's Monumentation and Mapping Program, was used to delineate the drainage areas.

The second level of drainage areas was called *DRAIN*, which was a subset of *SYSTEM*. *DRAIN* was created by subdividing the drainage areas in *SYSTEM* into smaller areas using drainage divides between storm sewer tributaries and the main storm sewer system. Each resulting drainage area was then subdivided further using the following rule of thumb: Every pipe size in the system needed to have at least one drainage area, meaning every time a pipe changed size, another drainage area was divided. If one pipe size in a system traversed a long distance, the drainage areas were subdivided into smaller areas. For the Analysis Program to accurately model the existing storm sewer system, at least one manhole needed to be located in each sub drainage area in *DRAIN*.

2. Drainage Areas for Undeveloped Areas

As part of the CIP, all areas that did not have an existing storm sewer system or were considered to be undeveloped were investigated. Since no existing storm sewer exists in these areas, proposed drainage areas were drawn and proposed storm sewers were designed and placed in these areas. With these proposed systems in mind, the *SYSTEM* and *DRAIN* were modified with the same criteria used for existing storm sewer systems.

The *SYSTEMs* and *DRAINs* were digitized in MicroStation. The different lines were placed on different levels that allow the plotting of the *SYSTEM* and *DRAIN* in different colors or line weights to make decisions easily during the QA/QC portion of the study. With the data editing and the drainage areas completed, all of the information was compiled into the required GIS format.

C. GEOGRAPHIC INFORMATION SYSTEM EDITING

The GIS editing portion of the project consisted of several phases, including cleaning and assigning outfall identification numbers to the systems. Since the storm sewer GIS contained a large amount of data, and as a means of managing the data, the watershed was split in half. The two halves were labeled Brays North and Brays South. Splitting the watershed into halves allowed two people to work on the watershed at the same time.

1. Cleaning

In order for the Analysis Program to be used with the new storm sewer GIS, proper topology had to be created for the GIS coverages. This required the data to be *cleaned*, making sure that the pipes snapped together at manholes.

Several types of problems were found: pipes that did not properly snap together, pipes that didn't flow in the proper direction, and pipes segments that had no manholes at their intersection. Pipes that did not properly meet at a manhole were corrected by adjusting the ending manholes of the pipes so that they snapped or met at the same point as the manhole. Pipes that showed the wrong direction of flow were flipped so that there starting point, or FNODE, became the ending point, or TNODE, and vice versa. The most significant problem was the intersection of pipes at a point where there was no manhole. The solution for this problem was to either add a manhole between the segments or to merge the segments together into one pipe. Construction drawings and engineering judgement were used to make these corrections.

Changes also were made to insure a consistent nomenclature for the material of each pipe that the Analysis Program could use. The database field names and format were also updated to be consistent with fields required by the Analysis Program.

The following items should be noted in regard to the verified existing storm sewer system GIS coverages.

- a. Some of the GIS attributes for the various watersheds currently contain a zero (0) in the database. These were entered as the original database was developed, when the information for that attribute was not verified with existing construction drawings, or when the data was not available. During the verification process, an attempt was made to locate these construction drawings and to determine the missing attribute in the database. Many of the construction drawings either were not found or were illegible. For the development of the CIP, no further attempt was made to obtain missing additional storm sewer data. Due to the missing data, some of these storm sewer systems could not be analyzed or considered in the CIP at this time.
- b. Many storm sewer systems were either constructed on different datum adjustments, or an elevation for the construction benchmark was assumed. In these cases, no datum was used during the construction. No effort was made to adjust elevations to one common datum for the entire GIS system for each watershed.

2. Assigning Outfalls

As a means of documenting each storm sewer system, each system was assigned a unique outfall identification number. The Harris County Flood Control designation for the Brays Bayou watershed is "D," which was placed in front of each identification number.

The numbering of the outfalls and all of the pipes with the HCFCD identification was completed with a program written and run in Arc/Info. After an outfall was picked manually, the outfall ID was assigned to it. The underlying storm sewer system was then selected and the same outfall ID was assigned to each of the pipes and manholes.

A second program in Arc/Info was developed to link each sub drainage area in DRAIN to a specific manhole for the subarea. This process selected a manhole in the sub drainage area and captured it's user-id, STMMH-ID, and outfall ID attributes and assigned them to the associated sub drainage area. A quality assurance check was completed with ArcView to determine if the sub drainage areas were associated with the correct manhole.

Once this setup was completed, the drainage areas in *DRAIN* were intersected with a coverage of the City's land use. The resulting coverage was called *DAREAS*. Because *DAREAS* included all of the attributes from *DRAIN* and the land use coverage, *DAREAS* allowed the Analysis Program to determine the total area by land use category for each sub drainage area and to link it to a specific manhole, pipe and storm sewer system.

D. PRELIMINARY ANALYSIS

The first step of preliminary analysis was to run the Analysis Program (in batch-mode) for all of the outfalls on the Brays Bayou watershed. The Analysis Program batch-mode allows for more than one system to be submitted and analyzed at one time. The results of the preliminary analysis indicated that a large percentage of the storm sewer systems ran successfully. The second step of the preliminary analysis was to run the Analysis Program (in the single-mode) on each individual non-executable storm sewer system. The output from running this process showed three common error messages: (1) To and From Node (TNODE and FNODE), (2) Split System, and (3) Multiple Outlets. The storm sewer systems that did not run were edited using PC ArcEdit. These problems were corrected by one or several of the following ArcEdit Techniques:

1. Flip Arrows to correct the direction of the system.
2. Correct the TNODE and FNODE numbers in the manhole and pipe databases to be consistent.
3. Disconnect all loops in the system. (The Analysis Program will not run if there are any parallel or looped pipes.)
4. Modify TYPELINE in the pipe coverage so that only one 'outfall' is assigned per system.
5. Correct the TYPELINE for a specific pipe in the storm system. For systems that had large amounts of missing data in their respective databases, assumptions had to be made to run the systems using the Analysis Program. The project team discussed the use of assumptions for the Brays Bayou watershed. Assumptions were not to be made on those systems that had large amounts of missing information. If a system had only one pipe that had missing information, the pipe size was assumed by taking either the upstream or the downstream size.

When it was verified that the system GIS could be used with the Analysis Program, the quality assurance task was completed.

APPENDIX A6

WHITE OAK BAYOU WATERSHED GIS

A detailed description of the storm sewer Geographic Information System (GIS) and related database is found in the *User's Manual for City of Houston Storm Sewer GIS and Analysis Program (User's Manual)*, dated January 1999. The following is a description of specific data concerning the development of the storm sewer GIS for the White Oak Bayou watershed.

A. SOURCE OF DATA

As discussed in *Section I* of this report, there were two sources of the storm sewer GIS base files used in this study, the GIMS and Synercom coverages. For the White Oak Bayou watershed, the GIMS coverages were more up-to-date relative to the Synercom coverages; therefore, the GIMS coverages were used for the White Oak Bayou watershed. The GIMS coverages were assumed to be complete and correct. *Complete* was defined as accounting for all storm sewers in the ground. *Correct* was defined as having all physical information (i.e. flowline, size, rim elevation, etc.) accurate; therefore, the information did not need to be verified. In addition to the GIMS coverages, additional storm sewer systems that were constructed after the GIMS data was created were added into the GIS.

Prior to receiving the GIMS files, the Synercom files had been compared with storm sewer record/construction drawings. As an additional check, the GIMS data was compared with the checked Synercom files to determine if any existing storm sewer system exists but were not shown on the GIMS data. If new systems were found, they were added to the storm sewer GIS.

B. DRAINAGE AREA DELINEATION

1. Drainage Areas for Existing Storm Sewer Systems

The existing storm sewer system's drainage areas used for the analysis were divided into 2 levels. The first level was called *SYSTEM*. *SYSTEM* was comprised of the total drainage area for each unique storm sewer system in the watershed. The drainage areas range in size from 1 acre to more than 400 acres, depending on the size of the storm sewer system. The general storm sewer layout, in conjunction with topographic maps generated as part of the city's Monumentation and Mapping Program, was used to delineate the drainage areas.

The second level of drainage areas was called *DRAIN*, which was a subset of *SYSTEM*. *DRAIN* was created by subdividing the drainage areas in *SYSTEM* into smaller areas using drainage divides between storm sewer tributaries and the main storm sewer system. Each resulting drainage area was then subdivided further using the following rule of thumb: Every pipe size in the system needed to have at least one drainage area, meaning every time a pipe changed size, another drainage area was divided. If one pipe size in a system traversed a long distance, the drainage areas were subdivided into smaller areas. For the Analysis Program to accurately model the existing storm sewer system, at least one manhole needed to be located in each sub drainage area in *DRAIN*.

2. Drainage Areas for Undeveloped Areas

As part of the CIP, all areas that did not have an existing storm sewer system or were considered to be undeveloped were investigated. Since no existing storm sewer exists in these areas, proposed drainage areas were drawn and proposed storm sewers were designed and placed in these areas. With these proposed systems in mind, the *SYSTEM* and *DRAIN* were modified with the same criteria used for existing storm sewer systems.

The *SYSTEMs* and *DRAINs* were digitized in MicroStation. The different lines were placed on different levels that allow the plotting of the *SYSTEM* and *DRAIN* in different colors or line weights to make decisions easily during the QA/QC portion of the study. With the data editing and the drainage areas completed, all of the information was compiled into the required GIS format.

C. GEOGRAPHIC INFORMATION SYSTEM EDITING

The GIS editing portion of the project consisted of several phases, including cleaning and assigning outfall identification numbers to the systems. Since the storm sewer GIS contained a large amount of data, and as a means of managing the data, the watershed was split in half. The two halves were labeled Brays North and Brays South. Splitting the watershed into halves allowed two people to work on the watershed at the same time.

1. Cleaning

In order for the Analysis Program to be used with the new storm sewer GIS, proper topology had to be created for the GIS coverages. This required the data to be *cleaned*, making sure that the pipes snapped together at manholes.

Several types of problems were found: pipes that did not properly snap together, pipes that didn't flow in the proper direction, and pipes segments that had no manholes at their intersection. Pipes that did not properly meet at a manhole were corrected by adjusting the ending manholes of the pipes so that they snapped or met at the same point as the manhole. Pipes that showed the wrong direction of flow were flipped so that their starting point, or FNODE, became the ending point, or TNODE, and vice versa. The most significant problem was the intersection of pipes at a point where there was no manhole. The solution for this problem was to either add a manhole between the segments or to merge the segments together into one pipe. Construction drawings and engineering judgement were used to make these corrections.

Changes also were made to insure a consistent nomenclature for the material of each pipe that the Analysis Program could use. The database field names and format were also updated to be consistent with fields required by the Analysis Program.

The following items should be noted in regard to the verified existing storm sewer system GIS coverages.

- a. Some of the GIS attributes for the various watersheds currently contain a zero (0) in the database. These were entered as the original database was developed, when the information for that attribute was not verified with existing construction drawings, or when the data was not available. During the verification process, an attempt was made to locate these construction drawings and to determine the missing attribute in the database. Many of the construction drawings either were not found or were illegible. For the development of the CIP, no further attempt was made to obtain missing additional storm sewer data.

Due to the missing data, some of these storm sewer systems could not be analyzed or considered in the CIP at this time.

- b. Many storm sewer systems were either constructed on different datum adjustments, or an elevation for the construction benchmark was assumed. In these cases, no datum was used during the construction. No effort was made to adjust elevations to one common datum for the entire GIS system for each watershed.

2. Assigning Outfalls

As a means of documenting each storm sewer system, each system was assigned a unique outfall identification number. The Harris County Flood Control designation for the Brays Bayou watershed is "D," which was placed in front of each identification number.

The numbering of the outfalls and all of the pipes with the HCFCD identification was completed with a program written and run in Arc/Info. After an outfall was picked manually, the outfall ID was assigned to it. The underlying storm sewer system was then selected and the same outfall ID was assigned to each of the pipes and manholes.

A second program in Arc/Info was developed to link each sub drainage area in DRAIN to a specific manhole for the subarea. This process selected a manhole in the sub drainage area and captured its user-id, STMMH-ID, and outfall ID attributes and assigned them to the associated sub drainage area. A quality assurance check was completed with ArcView to determine if the sub drainage areas were associated with the correct manhole.

Once this setup was completed, the drainage areas in DRAIN were intersected with a coverage of the City's land use. The resulting coverage was called DAREAS. Because DAREAS included all of the attributes from DRAIN and the land use coverage, DAREAS allowed the Analysis Program to determine the total area by land use category for each sub drainage area and to link it to a specific manhole, pipe and storm sewer system.

D. PRELIMINARY ANALYSIS

The first step of preliminary analysis was to run the Analysis Program (in batch-mode) for all of the outfalls on the Brays Bayou watershed. The Analysis Program batch-mode allows for more than one system to be submitted and analyzed at one time. The results of the preliminary analysis indicated that a large percentage of the storm sewer systems ran successfully. The second step of the preliminary analysis was to run the Analysis Program (in the single-mode) on each individual non-executable storm sewer system. The output from running this process showed three common error messages: (1) To and From Node (TNODE and FNODE), (2) Split System, and (3) Multiple Outlets. The storm sewer systems that did not run were edited using PC ArcEdit. These problems were corrected by one or several of the following ArcEdit Techniques:

1. Flip Arrows to correct the direction of the system.
2. Correct the TNODE and FNODE numbers in the manhole and pipe databases to be consistent.
3. Disconnect all loops in the system. (The Analysis Program will not run if there are any parallel or looped pipes.)

4. Modify TYPELINE in the pipe coverage so that only one 'outfall' is assigned per system.
5. Correct the TYPELINE for a specific pipe in the storm system. For systems that had large amounts of missing data in their respective databases, assumptions had to be made to run the systems using the Analysis Program. The project team discussed the use of assumptions for the Brays Bayou watershed. Assumptions were not to be made on those systems that had large amounts of missing information. If a system had only one pipe that had missing information, the pipe size was assumed by taking either the upstream or the downstream size.

When it was verified that the system GIS could be used with the Analysis Program, the quality assurance task was completed.

APPENDIX B

PROCEDURES TO DEVELOP THE CAPITAL IMPROVEMENT PLAN

As part of the City of Houston Comprehensive Storm Drainage Plan project, a Capital Improvement Plan (CIP) is developed for certain areas within the City of Houston corporate limits. In order to obtain a uniform final product, procedures were written to guide the development of the CIP. Some of these procedures (guidelines) were modified depending on unique situations encountered within each watershed being analyzed.

A. CAPITAL IMPROVEMENT PLAN DESCRIPTION

The CIP is used to identify proposed drainage modifications (improvements) required for drainage systems determined to be inadequate. An inadequate drainage system is better defined in *Section C, Analysis of Storm Sewer Systems* portion of this *Appendix*.

As part of the development of the CIP, the following were considered:

- 1. Does the drainage system consist of storm sewers, or roadside ditches, or a combination of these, or does it have no defined drainage system, such as for large-tract undeveloped areas?
- 2. Have previous flooding complaints been reported to have occurred within the drainage system's drainage boundary? A flooding complaint is classified as flooding information obtained from the City's Right-of-Way Maintenance Division, from the Federal Emergency Management Agency (FEMA) repetitive flooding data, or through a drainage survey conducted for the City of Houston.

Category Classification

By incorporating the drainage system types and flooding complaint information, six category classification types were developed. These are described below.

- Category 1 Existing storm sewer systems that have been determined to be inadequate and where flooding complaints have been reported within drainage boundaries.
- Category 2 Existing open-ditch systems (non-storm sewer areas) where previous flooding complaints have been reported, to be converted to storm sewer systems. Proposed storm sewer systems for this category type address the main trunk system requirements only.
- Category 3 Existing storm sewer systems that have been determined to be inadequate and where flooding complaints *have not* been reported.
- Category 4 Existing open ditch systems (non-storm sewer areas) where previous flooding complaints *have not* been reported, to be converted to storm sewer systems. Proposed storm sewer systems for this category type will address the main trunk system requirements only.

- Category 5 Areas currently considered to be undeveloped and having no defined drainage system. For this category type, drainage areas and main (trunk) sewer systems will be determined. These areas will be assumed to be developed by private developers in the future. The purpose of evaluating Category 5 areas is to determine generally what drainage improvements would be required.
- Category A Existing storm sewer systems that have been determined to be adequate. These systems may or may not have reported flooding complaints.

Group Cost Classification

For each category type, except for Category A, cost for proposed improvements were determined. The following Group cost classifications were developed.

- Group 1 Systems that have reported structure and street-related flooding complaints.
- Group 2 Systems that have reported structure flooding complaints only.
- Group 3 Systems that have reported street flooding complaints only.
- Group 4 Systems that have no reported flooding complaints. Group 4 cost types will be applicable for Category 3 and 4 only.

It was assumed that Category 5 areas will be developed and funded by private developers in the future; therefore, no City funds as required for proposed drainage improvements. Since improvements are not required for Category A systems, no City funds are required.

General

The following should be noted concerning proposed CIP requirements.

- 1. Design criteria used for proposed improvements are described in detail in other sections of this document.
- 2. The CIP proposed modifications are for conceptual designs only and do not include sufficient details required for final construction.
- 3. Prior to final design of the proposed improvements, a more detailed analysis will need to be conducted by future design engineers or by consultants to verify conditions used for the CIP.

B. GEOGRAPHIC INFORMATION SYSTEM

Prior to development of the CIP, a storm sewer Geographic Information System (GIS) should have been created for the drainage system being analyzed. The GIS includes ARC/INFO coverages of the existing storm sewer systems, and watershed and sub-watershed boundaries. A more detailed description of the GIS coverages and related database is found in the manual entitled *User's Manual for City of Houston Storm Sewer GIS and Analysis Program*, dated January 1999.

The following should be noted concerning the GIS:

1. Some of the GIS attributes currently contain a zero (0) entered into the database. When the original database was developed, a zero was entered because these GIS attributes were not verified with existing record drawings and the data was not available. The record drawings, referenced on the City of Houston Block maps, were either not found or were illegible. For the development of the CIP for the six watersheds, no further attempt was made to obtain missing additional storm sewer data. Due to the missing data, some of these storm sewer systems were not analyzed.

For those systems with missing data, if enough information is available, the system was modified and analyzed. If the system was still missing too much information, the system was not analyzed.

2. Elevations were not adjusted to one common datum.
3. Some systems may have invert elevations increasing (greater than 1 foot) from upstream to downstream in the system. This could be a result of system data being obtained from two different drawing sets, or systems with a common manhole, or where different datum's were used. The Profile option found in the Analysis Program could be used to verify invert elevations.

C. ANALYSIS OF STORM SEWER SYSTEMS

Storm sewer systems were analyzed using the Storm Sewer Analysis Program (Analysis Program) developed specifically for this project. The Analysis Program executes in the Arc/View environment using a special project file developed for each watershed. Prior to using the Analysis Program, the database must be created correctly or the program will not execute for the system being analyzed.

The following guidelines were used during the analysis of storm sewer systems:

General

1. The Analysis Program can be executed using either the single- or batch-mode functions.
2. The starting tailwater elevation should be equal to the top of pipe at the outfall.
3. Minor losses through manholes were not considered or used in the analysis, since the City of Houston drainage criteria currently does not require these losses to be considered.

4. If the Analysis Program does not execute, the database requires some sort of modification. Comments found in the Analysis Program output results (DBF file created when the program is executed) will usually help to isolate the location and type of problem.
5. If a system is missing data and, as a result, the Analysis Program will not run, the system was not analyzed.

Analysis

The City of Houston criteria indicate storm sewer will be designed for the 2-year rainfall event, with flows determined using the Rational Method. In addition, if a storm sewer system drains a street classified as a major thoroughfare, the system should be evaluated using the 5-year rainfall event.

The following criteria was used during the Analysis to determine proposed drainage modifications:

1. Proposed storm sewers (size, length, etc.) were determined based on Analysis Program results (*SizeTry*), and modified based on specific characteristics of the location and system.
2. Prior to executing the Analysis Program for proposed storm sewer designs, the following items should be considered:
 - a. Proposed pipe diameters were entered into the AAT.DBF under *NewSize1* and *NewSize2* using a tool button.
 - b. If a size is not entered under *NewSize1* and *NewSize2*, the program will default to the existing pipe *Size1* and *Size2*.
 - c. When the Analysis Program is executed, the Update Storm Sewers feature should be selected.
 - d. The Analysis Program can be executed using either the single- or batch-mode function.
3. Proposed storm sewers should consider the following:
 - a. Proposed modifications for existing storm sewers will consist of increasing pipe diameters. Replacement of existing storm sewer with a smaller pipe diameters will not be proposed.
 - b. Proposed storm sewer types will consist of reinforced concrete pipe or boxes.
 - c. Wherever possible, invert elevations and alignments for existing storm sewers will be used for proposed storm sewer systems.
 - d. The computed hydraulic gradient (H.G.) should not be more than a maximum of 2 feet below the manhole rim elevation or natural ground elevation. If the computed H.G. elevation exceeds two feet, a system should be proposed to replace the undersized pipes.
4. A site visit was conducted to Group I systems to verify flooding complaints conditions. A listing of the types of flooding complaints was obtained prior to the site visit.

5. Proposed storm sewer and open channel systems, as shown in the report entitled *Comprehensive Study of Drainage for Metropolitan Houston* (Blue Books), were used as a guide to develop the database for these lines.
6. A 300-foot-wide buffer strip was used to determine drainage areas for storm sewer systems draining major thoroughfares.

D. ANALYSIS OF ROADSIDE DITCH SYSTEMS

For developed areas that currently are drained with roadside ditches, a storm sewer system (major trunk lines) was proposed to replace existing roadside ditch. In addition to criteria described in *Section C, Analysis of Storm Sewer Systems*, the following was also considered:

1. Drainage Areas
 - a. Minimum size of the area will be determined on a case-by-case basis.
 - b. Drainage areas as shown in the Blue Books could be used as a guide.
2. Storm Sewer Systems
 - a. The alignment of existing streets and ditches was considered when determining the alignment of proposed storm sewers.
 - b. The maximum gutter run of 500 feet was considered when determining the alignment of proposed storm sewer systems.
 - c. The proposed storm sewers will consist of only the main (trunk) sewer system.
 - d. Rim elevations are the same as natural ground, and the flowline elevations (at the upstream end) should be approximately 6 to 7 feet below natural ground.
 - e. New systems should be digitized and entered as part of the GIS.
3. Pipe diameters for proposed storm sewer systems replacing roadside ditches were determined using either the Analysis Program or a curve based on the relationship between pipe diameter (inches) and drainage area (acres). A copy of the curve is attached as part of this document.

E. ANALYSIS OF AREAS WITH NO DEFINED DRAINAGE SYSTEMS

For areas that are currently undeveloped and do not have a defined drainage system, an assumption was made that future development of the area would be conducted by private developers. Future development will consist of new land plans, street alignments, and drainage systems. The purpose of evaluating these systems was to determine generally what drainage improvements would be required to serve the site. For this project, the following tasks were conducted:

1. Drainage areas and major storm sewer alignments were determined.
2. Criteria described in other sections of this document (pipe size based on the Pipe Diameter/Drainage Area Curve) were used.

F. CAPITAL IMPROVEMENT PLAN COSTS

System outfalls from Groups 1, 2, 3, and 4 were determined by overlaying the complaint data with the storm sewer data, and then completing a query. The information was placed in a new field in the database.

The costs to construct proposed modifications were determined using the following:

Proposed Storm Sewer Systems

1. Cost used for proposed storm sewers are presented in *Table 1, Storm Sewer Unit Costs*, found in the main section of this report.
2. Unit cost rates were developed using bid tabs taken from City of Houston storm sewer projects constructed during 1994 and 1998.
3. Unit cost rates are given in linear feet for different pipe diameters.
4. Unit cost rates reflect the following:
 - a. Excavation to remove existing pipe and pavement
 - b. Storm sewer pipe
 - c. Manholes
 - d. Inlets
 - e. Replacement of pavement
 - f. Trench safety
 - g. Traffic control
 - h. Engineering and contingency

Cost for proposed storm sewers and open channels *do not* reflect the following:

1. Cost for relocation of existing utilities due to construction of new storm sewers.
2. Cost for acquisition of additional right-of-way that may be required.

APPENDIX C

As a part of the City of Houston Comprehensive Drainage Plan project, a Capital Improvement Program (CIP) was developed. The CIP proposed drainage modifications required for the existing storm sewer system to be adequate using the current City of Houston design criteria. As a supplement to the Comprehensive Drainage Plan, a detailed set of tables containing the findings of all the existing storm sewer systems were compiled and presented in a report, CIP System Status Summary Tables.

The system status summary tables are similar to those presented in the City of Houston Comprehensive Drainage Plan. However, the status summary tables contain information not presented in the Comprehensive Drainage Plan that was used in developing the CIP, including:

- GIS file location of the system within the watershed
- Two-year modifications required
- Five-year modification required
- Comments
- 1995 house flooding
- 1995 streets impassable
- FEMA repetitive losses

- General comments, such as whether a storm sewer system has flowline elevation datum uncertainties or missing flowline elevations, or whether the system is located in the 100-year floodplain
- Total number of drainage surveys reporting house and street flooding, and FEMA repetitive-flood claims reported within the system drainage area
- Group and category classification
- CIP 2-year and 5-year costs

CIP SYSTEM STATUS SUMMARY TABLES

Analysis Results for each of the watersheds are presented in the following appendices:

Appendix	Watershed
C1	Brays Bayou
C2	Buffalo Bayou
C3	Greens Bayou
C4	Hunting Bayou and Ship Channel
C5	Sims Bayou
C6	White Oak Bayou

Results include the following information for each existing system.

- Storm sewer system identification number
- GIS file location of the system within the watershed, such as whether it is located in the northern or southern portion of the watershed
- Results from the 2-year storm analysis, including whether the system was determined to be adequate, what modifications were required, or whether the system was not analyzed due to lack of information
- Indication that the system does or does not drain through a major thoroughfare
- Results from the 5-year analysis; if modifications were required, the system requires a 5-year analysis due to draining a major thoroughfare.

TABLE GLOSSARY

2-Year Analysis Status

- Inadequate – Storm sewer analysis program results indicate system is not adequate.
- Adequate – Storm sewer analysis program results indicate system is adequate.
- Cannot Analyze – System could not be analyzed with the storm sewer analysis program due to lack of information.

2-Year CIP Cost – Probable cost to meet 2-year design criteria

Additional for 5-Year – Additional cost for major thoroughfares criteria (5-year storm)

Group

- Group 1 Systems that have reported structure and street-related flooding complaints.
- Group 2 Systems that have reported structure flooding complaints only.
- Group 3 Systems that have reported street flooding complaints only.
- Group 4 Systems that have no reported flooding complaints. Group 4 costs types will be applicable for categories 3 and 4 only.

Category

- Category 1 Existing storm sewer systems that have been determined to be inadequate and where flooding complaints have been reported within drainage boundaries.
- Category 2 Converting existing open-ditch systems (non-storm sewer areas) to storm sewer systems where previous flooding complaints have been reported. Proposed storm sewer systems for this category type address the main trunk system requirements only.
- Category 3 Existing storm sewer systems that have been determined to be inadequate and where flooding complaints *have not* been reported.
- Category 4 Converting existing open-ditch systems (non-storm sewer areas) to storm sewer systems where previous flooding complaints *have not* been reported. Proposed storm sewer systems for this category type address the main trunk system requirements only.
- Category 5 Areas currently considered to be undeveloped and having no defined drainage system. For this category type, drainage areas and main (trunk) sewer systems were determined.
- Category A Existing storm sewer systems that have been determined to be adequate. These systems may or may not have reported flooding complaints.

Category C.N.A. – System that could not be analyzed due to lack of storm sewer information.

City Council District – City Council district within which storm sewer system is located.

Facet Number – Facet (system map) number sheet on which storm sewer system is located.

Number of Addresses – Total number of addresses that are located in storm sewer study drainage boundary.

Cost Per Address – 2-year CIP cost divided by number of addresses.

Percent of System Single Family – Percent of storm sewer system drainage area classified as a *Single-family land-use type*.

TABLE 1 – STORM SEWER UNIT COST RATES

Pipe Diameter (in)	Unit Cost Rate (\$/ln ft)	Equivalent Box Size (ft x ft)
24	\$240	
30	\$260	
36	\$290	
42	\$340	
48	\$370	
54	\$450	
60	\$480	
66	\$520	
72	\$550	
78	\$590	
84	\$620	
90	\$720	
96	\$760	8 x 7
102	\$810	
108	\$820	
114	\$890	
120	\$930	10 x 9
126	\$1,060	10 x 9
132	\$1,110	10 x 10
138	\$1,150	10 x 10
144	\$1,190	8 x 7 & 8 x 7
150	\$1,350	8 x 7 & 8 x 8
156	\$1,400	8 x 8 & 8 x 8
162	\$1,450	10 x 9 & 8 x 7
168	\$1,490	10 x 9 & 8 x 8
174	\$1,540	10 x 10 & 8 x 8
180	\$1,590	10 x 9 & 10 x 9
186	\$1,640	10 x 10 & 10 x 9
192	\$1,680	10 x 10 & 10 x 10
198	\$1,730	10 x 10 & 8 x 7 & 8 x 7
204	\$1,780	10 x 9 & 10 x 9 & 8 x 7
210	\$1,820	10 x 10 & 10 x 9 & 8 x 7
216	\$1,870	10 x 10 & 10 x 10 & 8 x 7
222	\$1,920	See Note 1
228	\$1,970	See Note 1
234	\$2,010	See Note 1
240	\$2,060	See Note 1
246	\$2,110	See Note 1
252	\$2,150	See Note 1
258	\$2,200	See Note 1

Pipe Diameter (in)	Unit Cost Rate (\$/ln ft)	Equivalent Box Size (ft x ft)
264	\$2,250	See Note 1
270	\$2,300	See Note 1
276	\$2,340	See Note 1
282	\$2,390	See Note 1
288	\$2,440	See Note 1
Unit Cost Rates were developed based on City of Houston Bid Tabs for storm sewer projects constructed during 1994 and 1998.		
Unit Cost Rates include the following:		
Removal of existing pipe and pavement		
Storm sewer pipe		
Manholes		
Inlets		
Replacement of pavement		
Dewatering		
Trench safety		
Traffic control		
Engineering and contingency (20 percent)		
Unit Cost Rates do not include the following:		
Relocation of existing utilities		
Acquisition of additional right-of-way		

Notes

1. Equivalent box sizes for pipe diameters 222 inches or greater were not determined. It may be more cost-effective to propose an open channel instead of a box.

**TABLE 2D
BRAYS BAYOU SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5 Year Storm Cost	Group	2 Year Category	City Council District	Facet Number
Sorted by Outfall System ID								
D0001	Inadequate	\$215,600	\$335,000	\$550,600	3	I	I	5655
D0002	Adequate	\$0	\$0	\$0	4	A	I	5656
D0003	Adequate	\$0	\$146,800	\$146,800	4	A	I	5656
D0004	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	I	5656
D0007	Inadequate	\$561,400	\$0	\$561,400	4	3	I	5656
D0009	Adequate	\$0	\$0	\$0	4	A	I	5656
D0010	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	I	5656
D0011	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	I	5556
D0012	Adequate	\$0	\$0	\$0	4	A	I	5556
D0013	Adequate	\$0	\$0	\$0	4	A	I	5556
D0014	Inadequate	\$390,200	\$8,000	\$398,200	4	3	I	5556
D0015	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	I	5556
D0016	Adequate	\$0	\$0	\$0	1	A	I	5556
D0017	Inadequate	\$118,500	\$0	\$118,500	4	3	I	5556
D0018	Adequate	\$0	\$0	\$0	4	A	I	5556
D0019	Adequate	\$0	\$0	\$0	3	A	I	5556
D0020	Inadequate	\$240,800	\$0	\$240,800	4	3	I	5556
D0021	Inadequate	\$2,181,100	\$0	\$2,181,100	1	1	I	5555
D0022	Inadequate	\$1,054,100	\$257,800	\$1,311,900	3	1	I	5556
D0023	Adequate	\$0	\$0	\$0	4	A	I	5556
D0024	Inadequate	\$464,000	\$0	\$464,000	4	3	I	5556
D0025	Adequate	\$0	\$0	\$0	1	A	I	5555, 5556
D0026	Inadequate	\$213,000	\$0	\$213,000	1	1	I	5555
D0027	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	I	5556
D0029	Inadequate	\$135,400	\$0	\$135,400	3	1	I	5556
D0030	Inadequate	\$29,900	\$2,600	\$32,500	4	3	I	5556
D0031	Inadequate	\$63,800	\$0	\$63,800	4	3	I	5556
D0032	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	I	5556
D0033	Inadequate	\$154,300	\$0	\$154,300	4	3	I	5556
D0035	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	I	5556
D0036	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	I	5556
D0037	Inadequate	\$3,600,100	\$753,500	\$4,353,600	1	1	I	5556
D0038	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	I	5456, 5556

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
D0039	Inadequate	\$481,000	\$231,200	\$712,200	4	3	I	5555
D0040	Did Not Analyze	\$0	\$0	\$0	4	C.N.A.	I	5555
D0042	Adequate	\$0	\$0	\$0	3	A	I	5555
D0044	Adequate	\$0	\$0	\$0	4	A	I	5555
D0045	Inadequate	\$174,500	\$0	\$174,500	4	3	I	5555
D0046	Inadequate	\$1,950,300	\$0	\$1,950,300	3	1	I	5555
D0047	Inadequate	\$119,900	\$0	\$119,900	3	1	I	5555
D0048	Inadequate	\$313,200	\$0	\$313,200	4	3	I	5555
D0049	Inadequate	\$466,100	\$0	\$466,100	3	1	I	5555
D0050	Adequate	\$0	\$0	\$0	3	A	I	5555
D0051	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	D	5455
D0052	Adequate	\$0	\$630,200	\$630,200	4	A	D	5455
D0053	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	D	5455
D0054	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	D	5455
D0056	Inadequate	\$975,400	\$107,800	\$1,083,200	1	1	D	5455
D0057	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	D	5455
D0058	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	D	5455
D0059	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	D	5455
D0061	Adequate	\$0	\$0	\$0	4	A	D	5455
D0062	Adequate	\$0	\$0	\$0	4	A	D	5455
D0065	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	D	5455
D0066	Adequate	\$0	\$0	\$0	4	A	D	5455
D0067	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	D	5455
D0068	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	D	5455
D0069	Inadequate	\$1,360,600	\$0	\$1,360,600	3	1	D	5455
D0072	Inadequate	\$5,596,000	\$0	\$5,596,000	1	1	D	5455
D0074	Cannot Analyze	\$0	\$0	\$0	2	C.N.A.	D	5455
D0075	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	D	5454, 5455
D0076	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	D	5354
D0077	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	D	5354

**TABLE 2D
BRAYS BAYOU SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
D0078	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	D	5355
D0079	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	D	5355, 5356
D0080	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	D	5355, 5356
D0081	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	D	5354
D0082	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	D	5355
D0083	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	C	5356
D0084	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	D	5355
D0085	Inadequate	\$720,100	\$44,800	\$764,900	4	A	D	5355
D0086	Inadequate	\$219,700	\$0	\$219,700	4	3	D	5355
D0087	Inadequate	\$1,147,600	\$0	\$1,147,600	4	3	D	5355
D0088	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	D	5355
D0089	Adequate	\$0	\$0	\$0	4	A	D	5355
D0090	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	D	5355
D0091	Inadequate	\$474,800	\$251,600	\$726,400	4	3	D	5355
D0092	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	C	5256, 5356
D0093	Inadequate	\$1,060,100	\$70,600	\$1,130,700	3	1	D	5355
D0094	Adequate	\$0	\$0	\$0	4	A	D	5355
D0095	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	D	5355
D0096	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	D	5355
D0097	Inadequate	\$805,000	\$279,100	\$1,084,100	3	1	C	5355
D0098	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	D	5354
D0099	Adequate	\$0	\$0	\$0	4	A	D	5355
D0100	Adequate	\$0	\$503,600	\$503,600	4	A	D	5354
D0101	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	C	5254
D0104	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	C	5255
D0105	Adequate	\$0	\$0	\$0	4	A	C	5254
D0106	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5254

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
D0107	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	C	5255
D0108	Inadequate	\$14,749,200	\$3,637,200	\$18,386,400	3	1	C	5254, 5354
D0109	Adequate	\$0	\$0	\$0	4	A	C	5254
D0110	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5254
D0111	Adequate	\$0	\$0	\$0	3	A	C	5254
D0112	Adequate	\$0	\$0	\$0	3	A	C	5254
D0113	Inadequate	\$2,355,200	\$197,400	\$2,552,600	1	1	C	5254
D0114	Inadequate	\$625,000	\$0	\$625,000	4	3	C	5255
D0115	Adequate	\$0	\$0	\$0	3	A	C	5254
D0116	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	C	5254
D0117	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	C	5254
D0118	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	C	5254
D0119	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	C	5254
D0122	Inadequate	\$432,000	\$0	\$432,000	3	1	C	5254
D0124	Inadequate	\$1,103,200	\$0	\$1,103,200	3	1	C	5254
D0125	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	C	5254
D0127	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5254
D0128	Inadequate	\$27,500	\$0	\$27,500	3	1	C	5254
D0129	Inadequate	\$245,800	\$0	\$245,800	1	1	C	5255
D0132	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	C	5255
D0134	Inadequate	\$399,200	\$516,900	\$916,100	1	1	C	5254
D0135	Inadequate	\$194,800	\$0	\$194,800	1	1	C	5254
D0136	Adequate	\$0	\$0	\$0	1	A	C	5254
D0137	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	C	5253, 5254
D0139	Inadequate	\$98,800	\$0	\$98,800	3	1	C	5254
D0140	Inadequate	\$133,100	\$0	\$133,100	1	1	C	5254
D0141	Adequate	\$0	\$0	\$0	3	A	C	5254
D0142	Inadequate	\$48,800	\$0	\$48,800	3	1	C	5254
D0143	Cannot Analyze	\$0	\$0	\$0	2	C.N.A.	C	5254
D0144	Inadequate	\$317,300	\$0	\$317,300	3	1	C	5255
D0145	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	C	5255

**TABLE 2D
BRAYS BAYOU SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
D0146	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	C	5255
D0149	Inadequate	\$188,200	\$0	\$188,200	3	1	C	5254
D0151	Adequate	\$0	\$0	\$0	3	A	C	5254
D0152	Inadequate	\$349,900	\$0	\$349,900	1	1	C	5254
D0153	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	C	5254
D0154	Adequate	\$0	\$0	\$0	3	A	C	5254
D0155	Inadequate	\$273,200	\$12,300	\$285,500	1	1	C	5254
D0156	Adequate	\$0	\$0	\$0	4	A	C	5254
D0157	Inadequate	\$644,600	\$0	\$644,600	3	1	C	5254
D0158	Inadequate	\$248,100	\$21,900	\$270,000	4	3	C	5154
D0159	Adequate	\$0	\$0	\$0	1	A	C	5254
D0160	Adequate	\$0	\$0	\$0	4	A	C	5254
D0161	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	C	5254
D0162	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	C	5253
D0163	Adequate	\$0	\$0	\$0	3	A	C	5253
D0164	Cannot Analyze	\$0	\$0	\$0	2	C.N.A.	C	5154
D0166	Adequate	\$0	\$0	\$0	4	A	C	5254
D0167	Adequate	\$0	\$0	\$0	1	A	C	5254
D0169	Adequate	\$0	\$0	\$0	4	A	C	5154
D0170	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5154
D0172	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	C	5154
D0173	Adequate	\$0	\$0	\$0	1	A	C	5253
D0174	Adequate	\$0	\$0	\$0	1	A	C	5253
D0175	Inadequate	\$133,000	\$0	\$133,000	1	1	C	5253
D0176	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5153
D0177	Adequate	\$0	\$0	\$0	1	A	C	5253
D0178	Adequate	\$0	\$0	\$0	1	A	C	5153
D0179	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	C	5153
D0180	Inadequate	\$4,006,100	\$413,100	\$4,419,200	1	1	C	5253
D0181	Adequate	\$0	\$0	\$0	4	A	C	5153
D0182	Inadequate	\$35,300	\$0	\$35,300	3	1	C	5253
D0183	Inadequate	\$39,200	\$0	\$39,200	4	3	C	5253
D0184	Adequate	\$0	\$0	\$0	4	A	C	5153
D0185	Adequate	\$0	\$0	\$0	4	A	C	5153
D0188	Adequate	\$2,757,600	\$289,600	\$3,047,200	1	1	C	5153

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
D0189	Inadequate	\$2,722,600	\$0	\$2,722,600	1	1	C	5153
D0190	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	C	5154
D0192	Inadequate	\$1,092,700	\$268,700	\$1,361,400	1	1	C	5153
D0193	Adequate	\$0	\$0	\$0	4	A	C	5154
D0194	Adequate	\$0	\$0	\$0	4	A	C	5154
D0195	Inadequate	\$549,300	\$163,200	\$712,500	3	1	C	5154
D0196	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	C	5154
D0197	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5154
D0198	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	C	5154
D0199	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5154
D0200	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	C	5154
D0201	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	C	5154
D0202	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	C	5154
D0203	Adequate	\$0	\$0	\$0	3	A	C	5154
D0204	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	C	5154
D0205	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	C	5154
D0206	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5154
D0207	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	C	5154
D0208	Inadequate	\$372,900	\$0	\$372,900	1	1	C	5154
D0211	Adequate	\$0	\$0	\$0	3	A	C	5154
D0212	Inadequate	\$742,700	\$19,100	\$761,800	1	1	C	5153
D0213	Inadequate	\$35,700	\$0	\$35,700	4	3	C	5154
D0214	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5154
D0215	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	C	5154
D0216	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	C	5153
D0217	Adequate	\$0	\$0	\$0	1	A	C	5154
D0218	Adequate	\$0	\$0	\$0	1	A	C	5153
D0219	Adequate	\$0	\$0	\$0	1	A	C	5153
D0220	Inadequate	\$2,140,400	\$258,700	\$2,399,100	1	1	C	5153

**TABLE 2D
BRAYS BAYOU SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
D0221	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	C	5153
D0223	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5153
D0224	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	C	5153
D0225	Adequate	\$0	\$0	\$0	3	A	C	5153
D0226	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	C	5153
D0227	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5153
D0228	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	C	5153
D0229	Inadequate	\$134,700	\$0	\$134,700	1	I	C	5153
D0230	Adequate	\$0	\$0	\$0	1	A	C	5153
D0231	Adequate	\$0	\$0	\$0	4	A	C	5153
D0232	Adequate	\$0	\$0	\$0	4	A	C	5153
D0233	Adequate	\$0	\$0	\$0	4	A	C	5153
D0234	Adequate	\$0	\$0	\$0	i	A	C	5153
D0235	Adequate	\$0	\$0	\$0	4	A	C	5153
D0237	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5153
D0239	Adequate	\$0	\$0	\$0	4	A	C	5153
D0240	Inadequate	\$800,500	\$0	\$800,500	4	3	C	5152
D0241	Inadequate	\$173,200	\$20,000	\$193,200	1	1	C	5152
D0242	Adequate	\$0	\$0	\$0	4	A	C	5152
D0243	Inadequate	\$76,600	\$0	\$76,600	3	1	C	5152
D0244	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5152
D0245	Adequate	\$0	\$0	\$0	4	A	C	5152
D0246	Adequate	\$0	\$0	\$0	3	A	C	5152
D0247	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5153
D0248	Adequate	\$0	\$0	\$0	1	A	C	5152
D0249	Inadequate	\$269,300	\$0	\$269,300	3	1	C	5153
D0250	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	C	5153
D0251	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5153
D0252	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5153
D0253	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5153
D0255	Inadequate	\$468,600	\$0	\$468,600	3	1	C	5153

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
D0256	Adequate	\$0	\$0	\$0	3	A	C	5153
D0257	Adequate	\$0	\$0	\$0	3	A	C	5153
D0258	Adequate	\$0	\$0	\$0	4	A	C	5153
D0259	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5153
D0260	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	C	5153
D0261	Adequate	\$0	\$0	\$0	3	A	C	5153
D0262	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5153
D0263	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5153
D0264	Adequate	\$0	\$0	\$0	3	A	C	5153
D0265	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5153
D0266	Adequate	\$0	\$0	\$0	3	A	C	5153
D0267	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5153
D0268	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	C	5153
D0269	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	C	5153
D0270	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	C	5153
D0271	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	C	5153
D0272	Adequate	\$0	\$0	\$0	3	A	C	5153
D0273	Adequate	\$0	\$0	\$0	3	A	C	5153
D0275	Adequate	\$0	\$0	\$0	3	A	C	5153
D0276	Adequate	\$0	\$0	\$0	3	A	C	5153
D0277	Adequate	\$0	\$0	\$0	1	A	C	5153
D0278	Adequate	\$0	\$0	\$0	1	A	C	5153
D0279	Adequate	\$0	\$0	\$0	4	A	C	5153
D0280	Adequate	\$0	\$0	\$0	3	A	C	5153
D0281	Adequate	\$0	\$0	\$0	3	A	C	5153
D0282	Adequate	\$0	\$0	\$0	3	A	C	5153
D0283	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	C	5153
D0284	Adequate	\$0	\$0	\$0	1	A	C	5153
D0285	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5153
D0286	Adequate	\$0	\$0	\$0	3	A	C	5153
D0287	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	C	5153

**TABLE 2D
BRAYS BAYOU SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
D0288	Adequate	\$0	\$0	\$0	1	A	C	5153
D0289	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5153
D0290	Inadequate	\$258,100	\$34,800	\$292,900	1	I	C	5153
D0291	Adequate	\$0	\$0	\$0	1	A	C	5154
D0292	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5154
D0294	Adequate	\$0	\$0	\$0	4	A	C	5153
D0296	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5153
D0300	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5154
D0301	Inadequate	\$29,400	\$0	\$29,400	4	3	C	5154
D0302	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	C	5154
D0303	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5154
D0304	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	C	5154
D0305	Inadequate	\$11,800	\$0	\$11,800	3	I	C	5154
D0306	Inadequate	\$624,300	\$0	\$624,300	1	I	C	5154
D0307	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5154
D0308	Inadequate	\$586,900	\$0	\$586,900	1	I	C	5154
D0311	Inadequate	\$588,500	\$208,800	\$797,300	3	I	C	5154
D0312	Adequate	\$0	\$0	\$0	4	A	C	5154
D0313	Adequate	\$0	\$0	\$0	3	A	C	5154
D0314	Adequate	\$0	\$0	\$0	3	A	C	5154
D0315	Inadequate	\$475,800	\$0	\$475,800	3	I	C	5154
D0316	Inadequate	\$201,800	\$10,000	\$211,800	1	I	C	5154
D0317	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	C	5154
D0318	Adequate	\$0	\$0	\$0	3	A	C	5154
D0319	Inadequate	\$147,000	\$0	\$147,000	3	I	C	5154
D0320	Inadequate	\$1,307,300	\$105,800	\$1,413,100	1	I	C	5153
D0321	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5154
D0322	Adequate	\$0	\$0	\$0	4	A	C	5153
D0323	Inadequate	\$968,100	\$112,500	\$1,080,600	1	I	C	5153
D0325	Inadequate	\$144,600	\$0	\$144,600	1	I	C	5153
D0326	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	C	5154
D0335	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	F	5155

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
D0336	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	C	5153
D0338	Inadequate	\$2,734,100	\$224,100	\$2,958,200	1	I	C	5153
D0339	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5153
D0340	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	C	5153
D0341	Inadequate	\$700,700	\$15,200	\$715,900	3	I	C	5154
D0342	Adequate	\$0	\$0	\$0	4	A	C	5153
D0343	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5153
D0347	Inadequate	\$246,800	\$0	\$246,800	4	3	C	5153
D0348	Inadequate	\$497,900	\$1,401,800	\$1,899,700	3	I	C	5053
D0351	Inadequate	\$132,800	\$0	\$132,800	3	I	C	5154
D0352	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	F	5054
D0354	Adequate	\$0	\$0	\$0	1	A	F	5154
D0357	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5154
D0358	Inadequate	\$1,084,500	\$87,500	\$1,172,000	3	I	C	5154
D0359	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	F	5154
D0360	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	F	5154
D0361	Adequate	\$0	\$0	\$0	3	A	C	5154
D0362	Inadequate	\$345,400	\$0	\$345,400	3	I	C	5154
D0363	Inadequate	\$1,263,000	\$171,100	\$1,434,100	3	I	F	5154
D0364	Adequate	\$0	\$251,800	\$251,800	3	A	C	5154
D0365	Inadequate	\$582,500	\$60,500	\$643,000	3	I	C	5154
D0366	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	F	5054
D0367	Inadequate	\$1,395,800	\$0	\$1,395,800	1	I	F	5054
D0369	Inadequate	\$1,622,500	\$0	\$1,622,500	3	I	C	5053
D0370	Inadequate	\$397,600	\$0	\$397,600	3	I	C	5053
D0371	Adequate	\$0	\$0	\$0	3	A	C	5153
D0373	Adequate	\$0	\$0	\$0	1	A	C	5153
D0374	Adequate	\$0	\$0	\$0	3	A	C	5153
D0375	Adequate	\$0	\$0	\$0	3	A	C	5153
D0376	Adequate	\$0	\$0	\$0	4	A	C	5153
D0377	Adequate	\$0	\$0	\$0	3	A	C	5153
D0378	Adequate	\$0	\$0	\$0	3	A	C	5153
D0379	Adequate	\$0	\$0	\$0	4	A	C	5153
D0380	Adequate	\$0	\$0	\$0	1	A	C	5153
D0381	Adequate	\$0	\$527,600	\$527,600	3	A	C	5153

**TABLE 2D
BRAYS BAYOU SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
D0382	Inadequate	\$1,298,900	\$156,800	\$1,455,700	3	I	C	5153
D0383	Adequate	\$0	\$0	\$0	3	A	C	5153
D0384	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	C	5153
D0385	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	C	5152
D0386	Adequate	\$0	\$0	\$0	1	A	C	5152
D0387	Inadequate	\$765,600	\$0	\$765,600	1	I	C	5152
D0388	Inadequate	\$285,900	\$531,900	\$817,800	1	I	C	5152
D0389	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	C	5152
D0390	Inadequate	\$359,900	\$0	\$359,900	3	I	C	5152
D0391	Adequate	\$0	\$0	\$0	1	A	C	5152
D0392	Adequate	\$0	\$0	\$0	1	A	C	5152
D0393	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5152
D0394	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5152
D0395	Adequate	\$0	\$0	\$0	1	A	C	5152
D0396	Adequate	\$0	\$0	\$0	1	A	C	5152
D0397	Adequate	\$0	\$0	\$0	1	A	C	5152
D0398	Inadequate	\$126,600	\$126,500	\$253,100	1	I	C	5152
D0399	Adequate	\$0	\$89,900	\$89,900	3	A	C	5152
D0400	Adequate	\$0	\$0	\$0	4	A	C	5152
D0401	Adequate	\$0	\$0	\$0	4	A	C	5152
D0402	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	C	5152
D0403	Adequate	\$0	\$0	\$0	4	A	C	5052
D0404	Adequate	\$0	\$0	\$0	2	A	C	5052
D0405	Adequate	\$0	\$0	\$0	3	A	C	5052
D0407	Adequate	\$0	\$0	\$0	1	A	C	5052
D0408	Adequate	\$0	\$0	\$0	4	A	C	5052
D0409	Adequate	\$0	\$0	\$0	3	A	C	5052
D0410	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5052
D0411	Adequate	\$0	\$0	\$0	4	A	C	5052
D0412	Adequate	\$0	\$0	\$0	4	A	C	5052
D0413	Adequate	\$0	\$0	\$0	4	A	C	5053
D0414	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	C	5152
D0415	Inadequate	\$47,100	\$0	\$47,100	1	I	C	5053
D0416	Inadequate	\$291,200	\$25,700	\$316,900	4	I	C	5053
D0417	Inadequate	\$233,800	\$0	\$233,800	3	I	C	5053
D0418	Adequate	\$0	\$0	\$0	4	A	C	5053

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
D0419	Inadequate	\$215,000	\$0	\$215,000	3	I	C	5053
D0420	Inadequate	\$689,100	\$0	\$689,100	3	I	C	5053
D0421	Adequate	\$0	\$0	\$0	3	A	C	5153
D0422	Adequate	\$0	\$0	\$0	3	A	C	5153
D0423	Inadequate	\$731,400	\$0	\$731,400	1	I	C	5053
D0424	Inadequate	\$717,200	\$0	\$717,200	1	I	F	5054
D0425	Inadequate	\$1,067,200	\$234,400	\$1,301,600	1	I	F	5054
D0426	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	F	5054
D0427	Inadequate	\$41,600	\$0	\$41,600	4	I	F	5054
D0428	Inadequate	\$1,796,100	\$0	\$1,796,100	1	I	C, F	5054
D0430	Adequate	\$0	\$0	\$0	4	A	F	5054
D0431	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	F	5054
D0432	Inadequate	\$464,500	\$0	\$464,500	1	I	F	5054
D0434	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	F	5054
D0436	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	5054
D0437	Adequate	\$0	\$1,196,500	\$1,196,500	3	A	C, F	5054
D0438	Inadequate	\$169,200	\$0	\$169,200	2	I	F	5053
D0440	Adequate	\$0	\$0	\$0	1	A	C, F	5054
D0441	Adequate	\$0	\$0	\$0	4	A	C, F	5053
D0443	Adequate	\$0	\$0	\$0	4	A	F	5053
D0444	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5053
D0445	Adequate	\$0	\$0	\$0	1	A	C	5053
D0446	Inadequate	\$959,800	\$0	\$959,800	3	I	C	5053
D0447	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5053
D0448	Adequate	\$0	\$0	\$0	3	A	F	5053
D0449	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5053
D0450	Adequate	\$0	\$0	\$0	4	A	C	5053
D0451	Adequate	\$0	\$0	\$0	4	A	C	5053
D0452	Adequate	\$0	\$0	\$0	4	A	C	5053
D0456	Inadequate	\$767,600	\$0	\$767,600	4	I	C	5053
D0457	Inadequate	\$107,700	\$0	\$107,700	4	I	C	5053
D0458	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5053
D0459	Inadequate	\$138,800	\$0	\$138,800	4	I	C	5053
D0460	Adequate	\$0	\$1,332,900	\$1,332,900	1	A	C	5052
D0461	Adequate	\$0	\$0	\$0	4	A	C	5052
D0462	Adequate	\$0	\$0	\$0	1	A	C	5052

**TABLE 2D
BRAYS BAYOU SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
D0463	Adequate	\$0	\$0	\$0	4	A	C	5052
D0464	Adequate	\$0	\$0	\$0	4	A	C	5052
D0465	Inadequate	\$296,000	\$0	\$296,000	1	1	C	5052
D0466	Adequate	\$0	\$0	\$0	4	A	C	5052
D0467	Inadequate	\$709,300	\$0	\$709,300	4	3	C	5052
D0468	Adequate	\$0	\$0	\$0	4	A	C	5052
D0469	Adequate	\$0	\$0	\$0	4	A	C	5052
D0470	Adequate	\$0	\$0	\$0	4	A	C	5052
D0471	Adequate	\$0	\$0	\$0	4	A	C	5052
D0472	Adequate	\$0	\$0	\$0	4	A	C	5052
D0473	Inadequate	\$340,700	\$679,700	\$1,020,400	3	1	C	5052
D0474	Adequate	\$0	\$0	\$0	2	A	C	5052
D0475	Adequate	\$0	\$0	\$0	4	A	C	5052
D0476	Adequate	\$0	\$0	\$0	4	A	C	5052
D0477	Adequate	\$0	\$0	\$0	3	A	C	5052
D0478	Inadequate	\$225,500	\$0	\$225,500	1	1	C	5052
D0479	Inadequate	\$523,200	\$0	\$523,200	1	1	C	5052
D0480	Adequate	\$0	\$0	\$0	4	A	C	5052
D0481	Adequate	\$0	\$0	\$0	3	A	C	5052
D0482	Adequate	\$0	\$0	\$0	4	A	C	5052
D0483	Adequate	\$0	\$0	\$0	3	A	C	5052
D0484	Adequate	\$0	\$0	\$0	1	A	C	5053
D0485	Inadequate	\$2,566,000	\$264,500	\$2,830,500	3	1	C	5053
D0486	Inadequate	\$302,500	\$0	\$302,500	4	3	C	5053
D0487	Inadequate	\$208,000	\$148,900	\$356,900	4	3	C	5053
D0488	Inadequate	\$368,500	\$0	\$368,500	4	3	C	5053
D0489	Adequate	\$0	\$0	\$0	1	A	C	5053
D0490	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5053
D0491	Inadequate	\$444,900	\$119,200	\$564,100	3	1	C	5053
D0492	Adequate	\$0	\$383,000	\$383,000	3	A	C	5053
D0493	Inadequate	\$780,100	\$0	\$780,100	3	1	C	5053
D0494	Adequate	\$0	\$0	\$0	4	A	C	5053
D0495	Adequate	\$0	\$0	\$0	3	A	C	5053
D0496	Adequate	\$0	\$0	\$0	1	A	C	5053
D0497	Adequate	\$0	\$0	\$0	3	A	C	5053
D0498	Adequate	\$0	\$0	\$0	4	A	C	5053
D0499	Inadequate	\$172,700	\$0	\$172,700	4	3	C	5052
D0500	Adequate	\$0	\$0	\$0	4	A	C	5052
D0501	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	C	5052
D0502	Adequate	\$0	\$0	\$0	1	A	C	5052
D0503	Inadequate	\$864,400	\$194,000	\$1,058,400	1	1	C	5052

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
D0504	Inadequate	\$273,300	\$0	\$273,300	3	1	C	5052
D0506	Adequate	\$0	\$0	\$0	4	A	C	5052
D0507	Adequate	\$0	\$0	\$0	1	A	C	5052
D0508	Adequate	\$0	\$0	\$0	4	A	C	5052
D0509	Adequate	\$0	\$0	\$0	4	A	C	5052
D0511	Inadequate	\$573,300	\$0	\$573,300	4	3	F	5155
D0514	Inadequate	\$1,883,900	\$0	\$1,883,900	3	1	F	5055
D0515	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	F	5055
D0516	Inadequate	\$95,700	\$0	\$95,700	3	1	F	5054
D0517	Inadequate	\$106,200	\$0	\$106,200	3	1	F	5054
D0518	Inadequate	\$2,337,800	\$419,300	\$2,757,100	1	1	F	5054
D0519	Inadequate	\$198,600	\$0	\$198,600	1	1	F	5054
D0520	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	F	5054
D0521	Adequate	\$0	\$0	\$0	3	A	F	5055
D0524	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	5055
D0526	Inadequate	\$1,511,300	\$0	\$1,511,300	3	1	F	5055
D0530	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	5055
D0531	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	5055
D0532	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	5055
D0533	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	5055
D0534	Inadequate	\$1,638,800	\$0	\$1,638,800	3	1	F	5055
D0535	Inadequate	\$101,000	\$0	\$101,000	4	3	C, F	5055
D0536	Inadequate	\$637,800	\$0	\$637,800	4	3	C, F	5055
D0537	Inadequate	\$350,100	\$0	\$350,100	3	1	C, F	5055
D0538	Adequate	\$0	\$0	\$0	4	A	C	5055
D0539	Adequate	\$0	\$0	\$0	4	A	C, F	5055
D0540	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	C, F	5055
D0541	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	5055
D0547	Adequate	\$0	\$0	\$0	3	A	F	5054
D0548	Inadequate	\$1,676,300	\$142,000	\$1,818,300	3	1	F	5054
D0549	Adequate	\$0	\$782,300	\$782,300	1	A	F	5055
D0550	Inadequate	\$33,600	\$0	\$33,600	3	1	F	5054
D0551	Inadequate	\$449,800	\$0	\$449,800	3	1	F	5054
D0552	Adequate	\$0	\$0	\$0	4	A	F	5055
D0553	Inadequate	\$138,800	\$0	\$138,800	3	1	F	5055

**TABLE 2D
BRAYS BAYOU SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
D0554	Adequate	\$0	\$10,500	\$10,500	4	A	F	5055
D0555	Adequate	\$0	\$0	\$0	4	A	F	5055
D0556	Inadequate	\$10,100	\$1,200	\$11,300	4	3	F	5055
D0557	Inadequate	\$11,800	\$1,400	\$13,200	4	3	F	5055
D0558	Inadequate	\$1,002,000	\$0	\$1,002,000	4	3	F	5055
D0559	Inadequate	\$1,826,300	\$1,000	\$1,827,300	4	3	F	5055
D0561	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	F	5055
D0562	Adequate	\$0	\$0	\$0	3	A	F	5055
D0563	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	F	5055
D0564	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	F	5055
D0568	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	4955
D0569	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	4955
D0570	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	4955
D0572	Adequate	\$0	\$0	\$0	4	A	F	4955
D0573	Inadequate	\$594,400	\$234,300	\$828,700	3	1	F	4955
D0574	Adequate	\$0	\$0	\$0	1	A	F	4955
D0575	Inadequate	\$38,600	\$0	\$38,600	3	1	F	4955
D0576	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	F	4955
D0577	Inadequate	\$170,100	\$186,500	\$356,600	3	1	F	4955
D0578	Inadequate	\$1,404,000	\$0	\$1,404,000	3	1	F	5054
D0579	Inadequate	\$247,600	\$322,000	\$569,600	3	1	F	4954
D0580	Inadequate	\$338,100	\$0	\$338,100	3	1	F	4954
D0581	Inadequate	\$615,200	\$0	\$615,200	3	1	F	4954
D0582	Inadequate	\$109,400	\$0	\$109,400	4	3	F	4954
D0583	Inadequate	\$530,400	\$0	\$530,400	3	1	F	4954
D0584	Inadequate	\$187,300	\$0	\$187,300	4	3	F	4954
D0585	Inadequate	\$299,500	\$0	\$299,500	3	1	F	4954
D0586	Inadequate	\$354,900	\$0	\$354,900	4	3	F	4954
D0587	Adequate	\$0	\$0	\$0	4	A	F	4954
D0588	Adequate	\$0	\$0	\$0	3	A	F	4954
D0591	Adequate	\$0	\$0	\$0	4	A	F	4954
D0592	Inadequate	\$123,400	\$0	\$123,400	3	1	F	4954
D0593	Adequate	\$0	\$0	\$0	4	A	F	4954
D0594	Adequate	\$0	\$0	\$0	4	A	F	4954
D0595	Inadequate	\$754,000	\$0	\$754,000	3	1	F	4954
D0596	Inadequate	\$310,800	\$11,100	\$321,900	4	3	F	4954
D0597	Inadequate	\$507,100	\$0	\$507,100	4	3	F	4954

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
D0599	Adequate	\$0	\$0	\$0	4	A	F	4954
D0600	Inadequate	\$738,800	\$0	\$738,800	3	1	F	4954
D0601	Inadequate	\$201,600	\$0	\$201,600	3	1	F	4954
D0602	Inadequate	\$930,600	\$0	\$930,600	1	1	F	5054
D0603	Inadequate	\$303,900	\$165,200	\$469,100	3	1	F	4954
D0605	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	F	4954
D0606	Adequate	\$0	\$0	\$0	3	A	F	5054
D0607	Adequate	\$0	\$0	\$0	3	A	F	4954
D0608	Adequate	\$0	\$0	\$0	4	A	F	4954
D0610	Adequate	\$0	\$0	\$0	4	A	F	5053
D0611	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	F	5054
D0612	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	5053
D0613	Adequate	\$0	\$0	\$0	3	A	C, F	5054
D0614	Adequate	\$0	\$0	\$0	1	A	F	5054
D0615	Adequate	\$0	\$0	\$0	1	A	F	5053
D0616	Adequate	\$0	\$0	\$0	1	A	F	5054
D0617	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	4953
D0619	Adequate	\$0	\$0	\$0	4	A	F	4953
D0620	Adequate	\$0	\$0	\$0	4	A	C	5053
D0621	Inadequate	\$1,177,200	\$0	\$1,177,200	3	1	C	5053
D0622	Adequate	\$0	\$367,300	\$367,300	4	A	C	5053
D0623	Adequate	\$0	\$0	\$0	4	A	C, F	5053
D0624	Adequate	\$0	\$0	\$0	4	A	C	5053
D0625	Inadequate	\$987,400	\$0	\$987,400	4	3	C	5053
D0626	Adequate	\$0	\$0	\$0	3	A	C	4953
D0627	Adequate	\$0	\$0	\$0	1	A	C	4953
D0628	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	4953
D0629	Adequate	\$0	\$0	\$0	1	A	C	4953
D0630	Inadequate	\$913,500	\$0	\$913,500	3	1	C	5053
D0631	Inadequate	\$148,300	\$0	\$148,300	1	1	C	4953
D0632	Inadequate	\$1,773,400	\$0	\$1,773,400	3	1	C	4953
D0633	Adequate	\$0	\$539,300	\$539,300	4	A	C	4953
D0634	Adequate	\$0	\$0	\$0	4	A	C	5053
D0635	Adequate	\$0	\$0	\$0	4	A	C	5053
D0636	Adequate	\$0	\$0	\$0	4	A	C	5053
D0637	Adequate	\$0	\$0	\$0	4	A	C	5053
D0638	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	C	4952
D0639	Adequate	\$0	\$0	\$0	3	A	C	5052

**TABLE 2D
BRAYS BAYOU SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
D0640	Adequate	\$0	\$0	\$0	4	A	C	5052
D0641	Adequate	\$0	\$0	\$0	4	A	C	5052
D0642	Inadequate	\$1,060,700	\$0	\$1,060,700	3	I	C	5052
D0643	Inadequate	\$1,433,600	\$251,900	\$1,685,500	1	I	C	4952
D0644	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	C	4952
D0645	Inadequate	\$664,300	\$0	\$664,300	3	I	C	4952
D0646	Inadequate	\$329,700	\$0	\$329,700	3	I	C	4952
D0647	Adequate	\$0	\$0	\$0	4	A	C, F	4952
D0648	Adequate	\$0	\$0	\$0	4	A	C, F	4952
D0649	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	4953
D0650	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	4953
D0651	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	4953
D0652	Inadequate	\$113,100	\$0	\$113,100	4	I	F	4954
D0653	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	4954
D0654	Adequate	\$0	\$0	\$0	4	A	F	4954
D0655	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	4953
D0656	Adequate	\$0	\$0	\$0	3	A	F	4953
D0657	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	4952
D0659	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	4953
D0660	Inadequate	\$1,142,400	\$88,400	\$1,230,800	1	I	F	4952
D0661	Adequate	\$0	\$0	\$0	1	A	F	4953
D0662	Adequate	\$0	\$0	\$0	3	A	F	4953
D0663	Inadequate	\$1,229,900	\$0	\$1,229,900	1	I	F	4952
D0664	Adequate	\$0	\$0	\$0	4	A	F	4853
D0665	Adequate	\$0	\$0	\$0	4	A	F	4853
D0666	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	F	4853
D0667	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	F	4953
D0668	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	F	4953
D0669	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	F	4953
D0670	Adequate	\$0	\$0	\$0	1	A	F	4954
D0671	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	4953

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
D0672	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	4953
D0673	Adequate	\$0	\$0	\$0	4	A	F	4954
D0675	Adequate	\$0	\$0	\$0	4	A	F	4954
D0677	Adequate	\$0	\$600,800	\$600,800	4	A	F	4954
D0678	Inadequate	\$641,500	\$0	\$641,500	3	I	F	4954
D0680	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	4954
D0682	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	4955
D0683	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	4955
D0684	Inadequate	\$1,642,100	\$399,300	\$2,041,400	3	I	F	4955
D0685	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	4955
D0686	Adequate	\$0	\$0	\$0	4	A	F	4955
D0687	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	F	4955
D0688	Cannot Analyze	\$0	\$0	\$0	2	C.N.A.	F	4955
D0690	Adequate	\$0	\$0	\$0	4	A	F	4954
D0691	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	4953
D0692	Adequate	\$0	\$0	\$0	4	A	F	4954
D0693	Adequate	\$0	\$0	\$0	3	A	F	4954
D0694	Adequate	\$0	\$0	\$0	3	A	F	4954
D0696	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	F	4954
D0697	Inadequate	\$69,200	\$0	\$69,200	3	I	F	4854
D0698	Inadequate	\$511,400	\$0	\$511,400	3	I	F	4854
D0699	Adequate	\$0	\$0	\$0	1	A	F	4855
D0700	Adequate	\$0	\$0	\$0	3	A	F	4855
D0701	Inadequate	\$226,200	\$0	\$226,200	1	I	F	4855
D0702	Adequate	\$0	\$0	\$0	3	A	F	4855
D0703	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	4855
D0704	Adequate	\$0	\$0	\$0	4	A	F	4855
D0705	Inadequate	\$33,000	\$0	\$33,000	4	I	F	4855
D0706	Inadequate	\$153,300	\$0	\$153,300	3	I	F	4855
D0707	Adequate	\$0	\$0	\$0	4	A	F	4855
D0711	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	F	4853
D0713	Inadequate	\$329,800	\$99,100	\$428,900	3	I	F	4853
D0714	Adequate	\$0	\$0	\$0	3	A	F	4853

**TABLE 2D
BRAYS BAYOU SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
D0715	Adequate	\$0	\$0	\$0	3	A	F	4853
D0716	Inadequate	\$20,000	\$0	\$20,000	4	3	F	4853
D0717	Adequate	\$0	\$0	\$0	4	A	F	4853
D0718	Inadequate	\$643,700	\$216,100	\$859,800	1	I	F	4853
D0719	Adequate	\$0	\$0	\$0	4	A	F	4853
D0720	Adequate	\$0	\$0	\$0	3	A	F	4853
D0721	Adequate	\$0	\$0	\$0	3	A	F	4853
D0722	Adequate	\$0	\$0	\$0	4	A	F	4853
D0723	Adequate	\$0	\$0	\$0	4	A	F	4853
D0724	Adequate	\$0	\$0	\$0	4	A	F	4853
D0725	Inadequate	\$1,852,700	\$213,100	\$2,065,800	3	I	F	4853
D0726	Adequate	\$0	\$0	\$0	3	A	F	4853
D0727	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	F	4853
D0728	Adequate	\$0	\$0	\$0	4	A	F	4854
D0729	Cannot Analyze	\$0	\$0	\$0	N/A	C.N.A.	F	4853
D0731	Inadequate	\$135,800	\$0	\$135,800	4	3	F	4854
D0732	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	4854
D0733	Adequate	\$0	\$0	\$0	3	A	F	4854
D0734	Inadequate	\$729,900	\$204,100	\$934,000	3	I	F	4854
D0735	Inadequate	\$1,273,800	\$141,600	\$1,415,400	1	I	F	4854
D0736	Inadequate	\$615,400	\$0	\$615,400	1	I	F	4854
D0737	Adequate	\$0	\$0	\$0	4	A	F	4855
D0738	Adequate	\$0	\$0	\$0	4	A	F	4855
D0739	Adequate	\$0	\$0	\$0	4	A	F, G	4854
D0740	Inadequate	\$1,165,400	\$0	\$1,165,400	4	3	F	4854
D0741	Inadequate	\$316,600	\$0	\$316,600	4	3	F	4854
D0742	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	4854
D0743	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	F	4854
D0744	Inadequate	\$261,300	\$0	\$261,300	3	I	F	4854
D0745	Adequate	\$0	\$0	\$0	3	A	F	4854
D0748	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	F	4853
D0749	Adequate	\$0	\$0	\$0	4	A	F	4853
D0750	Adequate	\$0	\$0	\$0	3	A	F	4853
D0751	Adequate	\$0	\$0	\$0	3	A	F	4853
D0752	Adequate	\$0	\$0	\$0	4	A	F	4853
D0753	Inadequate	\$1,412,100	\$0	\$1,412,100	1	I	F	4853
D0754	Adequate	\$0	\$0	\$0	4	A	F	4853
D0755	Inadequate	\$2,926,100	\$0	\$2,926,100	3	I	F	4853

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
D0756	Adequate	\$0	\$372,900	\$372,900	1	A	F	4853
D0757	Adequate	\$0	\$0	\$0	1	A	F	4853
D0758	Adequate	\$0	\$0	\$0	4	A	F	4853
D0759	Adequate	\$0	\$0	\$0	3	A	F	4853
D0760	Adequate	\$0	\$0	\$0	3	A	F	4853
D0761	Inadequate	\$479,200	\$0	\$479,200	1	I	F	4853
D0762	Adequate	\$0	\$0	\$0	4	A	F	4853
D0763	Adequate	\$0	\$0	\$0	4	A	F	4853
D0764	Inadequate	\$231,500	\$0	\$231,500	3	I	F	4853
D0765	Adequate	\$0	\$0	\$0	1	A	F	4853
D0766	Adequate	\$0	\$0	\$0	4	A	F	4853
D0767	Adequate	\$0	\$0	\$0	4	A	F	4854
D0768	Adequate	\$0	\$0	\$0	4	A	F	4854
D0770	Adequate	\$0	\$0	\$0	1	A	F	4854
D0772	Adequate	\$0	\$0	\$0	3	A	F	4854
D0773	Adequate	\$0	\$0	\$0	3	A	F	4854
D0774	Adequate	\$0	\$0	\$0	3	A	F	4854
D0775	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	4854
D0778	Adequate	\$0	\$0	\$0	4	A	F	4854
D0779	Inadequate	\$938,900	\$0	\$938,900	4	3	F	4854
D0780	Adequate	\$0	\$0	\$0	4	A	F	4854
D0781	Inadequate	\$475,400	\$0	\$475,400	3	I	F	4854
D0782	Adequate	\$0	\$0	\$0	3	A	F	4854
D0783	Adequate	\$0	\$0	\$0	4	A	F	4854
D0784	Adequate	\$0	\$0	\$0	4	A	F	4854
D0785	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	F	4854
D0786	Adequate	\$0	\$0	\$0	4	A	G	4855
D0787	Inadequate	\$547,000	\$0	\$547,000	4	3	F	4855
D0788	Adequate	\$0	\$0	\$0	4	A	F, G	4854
D0789	Adequate	\$0	\$0	\$0	4	A	F	4855
D0790	Adequate	\$0	\$0	\$0	1	A	F	4855
D0791	Adequate	\$0	\$0	\$0	4	A	F	4855
D0792	Adequate	\$0	\$0	\$0	4	A	F	4855
D0793	Adequate	\$0	\$0	\$0	4	A	F	4855
D0794	Adequate	\$0	\$0	\$0	3	A	F	4855
D0795	Adequate	\$0	\$0	\$0	4	A	F	4855
D0796	Adequate	\$0	\$0	\$0	4	A	F	4855
D0797	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	F	4855
D0798	Adequate	\$0	\$0	\$0	4	A	G	4855
D0799	Inadequate	\$285,800	\$0	\$285,800	3	I	G	4855

**TABLE 2D
BRAYS BAYOU SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
D0800	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	F	4854
D0801	Inadequate	\$513,500	\$0	\$513,500	1	I	F	4854
D0803	Adequate	\$0	\$0	\$0	1	A	F	4854
D0804	Inadequate	\$163,600	\$0	\$163,600	1	I	F	4854
D0805	Adequate	\$0	\$0	\$0	1	A	G	4855
D0806	Adequate	\$0	\$0	\$0	3	A	G	4855
D0807	Inadequate	\$393,200	\$382,700	\$775,900	1	I	G	4856
D0808	Adequate	\$0	\$0	\$0	3	A	G	4855
D0809	Inadequate	\$21,400	\$0	\$21,400	4	3	G	4855
D0810	Inadequate	\$324,900	\$14,000	\$338,900	3	I	G	4855
D0811	Adequate	\$0	\$0	\$0	4	A	G	4855
D0812	Adequate	\$0	\$0	\$0	3	A	G	4855
D0813	Adequate	\$0	\$0	\$0	4	A	G	4855
D0814	Adequate	\$0	\$0	\$0	1	A	G	4855
D0815	Adequate	\$0	\$0	\$0	1	A	G	4856
D0816	Adequate	\$0	\$0	\$0	1	A	G	4856
D0817	Adequate	\$0	\$0	\$0	3	A	G	4856
D0818	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	G	4856
D0819	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	G	4756
D0820	Adequate	\$0	\$0	\$0	3	A	G	4856
D0822	Adequate	\$0	\$0	\$0	3	A	G	4756
D0823	Inadequate	\$653,600	\$0	\$653,600	1	I	G	4756
D0824	Adequate	\$0	\$0	\$0	1	A	G	4756
D0825	Adequate	\$0	\$0	\$0	1	A	G	4756
D0826	Adequate	\$0	\$0	\$0	1	A	G	4756
D0827	Adequate	\$0	\$0	\$0	3	A	D	5453
D0828	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	D	5454
D0829	Adequate	\$0	\$0	\$0	1	A	D	5454
D0830	Inadequate	\$687,900	\$907,100	\$1,595,000	3	I	D	5455
D0831	Inadequate	\$288,300	\$0	\$288,300	1	I	D	5455
D0832	Adequate	\$0	\$0	\$0	4	A	D	5455
D0833	Inadequate	\$345,000	\$0	\$345,000	3	I	D	5455
D0834	Adequate	\$0	\$0	\$0	1	A	D	5454
D0835	Adequate	\$0	\$0	\$0	4	A	D	5454
D0836	Adequate	\$0	\$0	\$0	3	A	D	5454
D0837	Adequate	\$0	\$0	\$0	4	A	D	5454
D0839	Inadequate	\$979,200	\$66,500	\$1,045,700	3	I	D	5454
D0840	Inadequate	\$3,581,200	\$385,700	\$3,966,900	1	I	D	5454
D0841	Adequate	\$0	\$0	\$0	4	A	D	5454

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
D0842	Adequate	\$0	\$0	\$0	3	A	D	5454
D0843	Adequate	\$0	\$0	\$0	4	A	D	5454
D0844	Adequate	\$0	\$0	\$0	4	A	D	5454
D0845	Adequate	\$0	\$0	\$0	4	A	D	5454
D0846	Adequate	\$0	\$0	\$0	4	A	D	5454
D0847	Adequate	\$0	\$0	\$0	3	A	D	5454
D0848	Adequate	\$0	\$0	\$0	3	A	D	5454
D0849	Inadequate	\$1,227,700	\$81,700	\$1,309,400	3	I	D	5455
D0850	Inadequate	\$404,700	\$0	\$404,700	4	3	D	5455
D0851	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	C	5255
D0852	Adequate	\$0	\$0	\$0	4	A	C	5053
D0853	Adequate	\$0	\$0	\$0	1	A	F	5054
D0857	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	C	5255
D0859	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5355
D0860	Inadequate	\$46,000	\$0	\$46,000	3	I	J	5556
D0861	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	J	5556
D0862	Cannot Analyze	\$0	\$0	\$0	2	C.N.A.	C	5153
D0863	Adequate	\$0	\$0	\$0	1	A	C	5153
D0864	Inadequate	\$32,300	\$0	\$32,300	1	I	C	5153
D0865	Inadequate	\$51,300	\$0	\$51,300	1	I	C	5153
D0866	Adequate	\$0	\$0	\$0	1	A	C	5153
D0869	Inadequate	\$195,500	\$69,100	\$264,600	3	I	F	4952
D0871	Adequate	\$0	\$0	\$0	4	A	F	4952
D0874	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	5054
D0875	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	D	5356
D0876	Inadequate	\$5,872,000	\$970,300	\$6,842,300	1	I	J	5456
D0880	Inadequate	\$690,200	\$0	\$690,200	4	3	J	5556
D0881	Inadequate	\$751,500	\$0	\$751,500	3	I	J	5556
D0882	Adequate	\$0	\$0	\$0	1	A	I	5556
D0883	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	I	5555
D0887	Adequate	\$0	\$0	\$0	1	A	J	5456
D0888	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	D	5454
D0889	Inadequate	\$200,200	\$0	\$200,200	3	I	D	5354
D0890	Adequate	\$0	\$0	\$0	4	A	D	5354
D0891	Inadequate	\$951,700	\$0	\$951,700	4	3	D	5354

**TABLE 2D
BRAYS BAYOU SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
D0892	Inadequate	\$503,700	\$0	\$503,700	4	3	D	5354
D0893	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5254
D0894	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	F	5054
D0896	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	I	5556
D0898	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	D, E	5454
D0899	Inadequate	\$1,492,600	\$185,600	\$1,678,200	1	I	F	4854
D0900	Adequate	\$0	\$0	\$0	4	A	C	5052
D0901	Inadequate	\$148,000	\$0	\$148,000	4	3	F	4855
D0902	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	4854
D0903	Inadequate	\$167,900	\$11,600	\$179,500	3	I	I	5556
D0904	Inadequate	\$236,800	\$0	\$236,800	3	I	I	5556
D0905	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	I	5556
D0906	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	I	5555
D0907	Inadequate	\$462,400	\$45,900	\$508,300	3	I	D	5435
D0912	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5255
D0914	Inadequate	\$1,120,200	\$120,400	\$1,240,600	3	I	F	5055
D0915	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	4954
D0916	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	4954
D0917	Inadequate	\$671,300	\$58,900	\$730,200	1	I	F	4854
D0919	Adequate	\$0	\$0	\$0	1	A	G	4756
D0920	Adequate	\$0	\$0	\$0	4	A	G	4756
D0921	Inadequate	\$276,700	\$0	\$276,700	4	3	G	4756
D0922	Adequate	\$0	\$0	\$0	4	A	G	4756
D0923	Adequate	\$0	\$0	\$0	4	A	G	4756
D0924	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	G	4756
D0925	Inadequate	\$309,400	\$0	\$309,400	3	I	G	4756
D0926	Adequate	\$0	\$0	\$0	4	A	G	4756
D0927	Adequate	\$0	\$0	\$0	4	A	G	4756
D0928	Adequate	\$0	\$0	\$0	4	A	G	4756
D0931	Adequate	\$0	\$0	\$0	4	A	C	4952
D0932	Inadequate	\$605,100	\$0	\$605,100	4	3	F	4952
D0933	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	C	5153

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
D0934	Adequate	\$0	\$0	\$0	4	A	C	5253
D0936	Inadequate	\$145,900	\$0	\$145,900	4	3	C	5254
D0937	Inadequate	\$1,045,500	\$72,300	\$1,117,800	3	I	C	5254
D0950	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	I	5456
D0951	Adequate	\$0	\$0	\$0	1	A	I	5556
D0952	Inadequate	\$637,400	\$0	\$637,400	3	I	I	5556
D0953	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	I	5456
D1300	Adequate	\$0	\$0	\$0	4	A	C	5052
D1301	Inadequate	\$105,700	\$0	\$105,700	4	3	D	5354
D1303	Inadequate	\$562,000	\$0	\$562,000	4	3	D	5455
D1349	Adequate	\$0	\$0	\$0	4	A	C	5052
D1351	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	D	5354
D1353	Inadequate	\$251,900	\$89,300	\$341,200	1	I	C	5254
D1360	Adequate	\$0	\$0	\$0	4	A	C	5052
D1362	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	C	5153
D1363	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	C	5153
D1365	Adequate	\$0	\$0	\$0	1	A	C	5153
D1366	Adequate	\$0	\$0	\$0	4	A	C	5052
D1370	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	4953
D1380	Inadequate	\$570,500	\$176,800	\$747,300	3	I	F	4954
D1381	Inadequate	\$940,400	\$0	\$940,400	3	I	F	5054
D1391	Inadequate	\$164,500	\$0	\$164,500	3	I	G	4756
D1393	Adequate	\$0	\$0	\$0	4	A	G	4955
D2035	Adequate	\$0	\$0	\$0	3	A	I	5555
D2039	Adequate	\$0	\$0	\$0	4	A	I	5655
D5000	Adequate	\$0	\$0	\$0	4	A	G	4856
D5001	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	G	4956
D5002	Inadequate	\$112,200	\$19,400	\$131,600	4	3	G	4955
D5003	Adequate	\$0	\$0	\$0	4	A	G	4956
D5004	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	G	4956
D5005	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	G	4956
D5006	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	G	4956
D5007	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	G	4956

**TABLE 2D
BRAYS BAYOU SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
D5008	Adequate	\$0	\$0	\$0	4	A	G	4955
D5009	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	G	4955
D5010	Adequate	\$0	\$0	\$0	4	A	G	4955
D5011	Inadequate	\$317,300	\$0	\$317,300	1	I	I	5556
D5015	Adequate	\$0	\$0	\$0	4	A	C	5254
D5017	Inadequate	\$40,200	\$0	\$40,200	1	I	C	5253
D5020	Adequate	\$0	\$0	\$0	3	A	C	5253
D5021	Adequate	\$0	\$0	\$0	3	A	C	5153
D5022	Adequate	\$0	\$0	\$0	4	A	C	5153
D5034	Adequate	\$0	\$0	\$0	4	A	F	5053
D5035	Adequate	\$0	\$0	\$0	4	A	F	4954
D5036	Adequate	\$0	\$0	\$0	4	A	F	4855
D5037	Adequate	\$0	\$0	\$0	4	A	F	4854
D5038	Inadequate	\$14,600	\$0	\$14,600	3	I	G	4855
D5039	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	C	5254
D5040	Adequate	\$0	\$0	\$0	3	A	I	5556
D5043	Adequate	\$0	\$0	\$0	4	A	G	4855
D5044	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	D	5355
D5046	Adequate	\$0	\$0	\$0	1	A	C	5152
D5053	Adequate	\$0	\$0	\$0	3	A	F	4954
D5061	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	C	5254
D5063	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	5055
D6011	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	I	5555
D6012	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	I	5555
D6013	Adequate	\$0	\$0	\$0	1	A	I	5554
D6015	Adequate	\$0	\$0	\$0	1	A	I	5555
D6020	Adequate	\$0	\$0	\$0	3	A	C	5254
D6022	Adequate	\$0	\$0	\$0	4	A	C	5254
D6023	Adequate	\$0	\$0	\$0	1	A	C	5254
D6029	Adequate	\$0	\$0	\$0	1	A	C	5153
D6038	Adequate	\$0	\$0	\$0	2	A	F	4952
D6047	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	D	5455
D6049	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	D	5259
D6052	Adequate	\$0	\$0	\$0	4	A	C	5153

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
D6053	Proposed System	\$954,000	\$0	\$954,000	N/A	S	F	4953
D6054	Proposed System	\$520,000	\$0	\$520,000	N/A	S	F	4953
D6055	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	4853
D7001	Adequate	\$0	\$0	\$0	4	A	I	5555
D7005	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	I	5456
D7006	Adequate	\$0	\$0	\$0	4	A	I	5456
D7008	Adequate	\$0	\$0	\$0	1	A	I	5555
D7011	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	I	5456
D7012	Adequate	\$0	\$0	\$0	4	A	I	5456
D7014	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	D	5455
D7015	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	D	5355
D7016	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	G	4756
D7018	Adequate	\$0	\$0	\$0	4	A	G	4755
D7019	Adequate	\$0	\$0	\$0	4	A	G	4855
D7021	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	5054
D7022	Adequate	\$0	\$0	\$0	3	A	F	5055
D7026	Adequate	\$0	\$0	\$0	4	A	D	5355
D7028	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5154
D7029	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	C	5154
D7030	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	C	5154
D7031	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	C	5255
D7034	Cannot Analyze	\$0	\$0	\$0	2	C.N.A.	C	5255
D7036	Adequate	\$0	\$153,900	\$153,900	4	A	C	5153
D7037	Inadequate	\$555,000	\$0	\$555,000	1	I	C	5054
D7038	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	F	5055
D7039	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	4854
D7040	Adequate	\$0	\$0	\$0	4	A	G	4856
D7041	Adequate	\$0	\$0	\$0	4	A	F	4854

**TABLE 2D
BRAYS BAYOU SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
D7043	Adequate	\$0	\$0	\$0	3	A	F	4854
D7044	Inadequate	\$300,600	\$1,070,200	\$1,370,800	4	3	F	4955
D7045	Inadequate	\$910,400	\$256,400	\$1,166,800	4	3	F	4955
D7047	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	4954
D7048	Adequate	\$0	\$0	\$0	4	A	F	4954
D7052	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	4954
D7053	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	G	4955
D7054	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	G	4955
D7055	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	4955
D7060	Adequate	\$0	\$0	\$0	3	A	C	5354
D7066	Adequate	\$0	\$0	\$0	4	A	G	4755
D8001	Proposed System	\$457,600	\$0	\$457,600	1	1	I	4755
D8002	Proposed System	\$217,600	\$0	\$217,600	N/A	5	I	5556
D8005	Not Proposed	\$0	\$0	\$0	3	C.N.A.	G	4755
D8008	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	5055
D8010	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	D	5355
D8011	Adequate	\$0	\$0	\$0	4	A	C	5254
D8012	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	5054
D8013	Proposed System	\$813,500	\$124,200	\$937,700	N/A	5	F	4953
D8014	Proposed System	\$883,900	\$0	\$883,900	N/A	5	F	4953
D8016	Proposed System	\$536,600	\$0	\$536,600	N/A	5	F	4854
D8017	Proposed System	\$895,500	\$100,500	\$996,000	N/A	5	F	4854
D8018	Proposed System	\$388,800	\$33,200	\$422,000	N/A	5	F	4855
D8020	Proposed System	\$1,003,300	\$75,000	\$1,078,300	3	1	F	4855
D8021	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	F	4854

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
D8022	Not Proposed	\$0	\$0	\$0	4	C.N.A.	G	4855
D8023	Adequate	\$0	\$0	\$0	4	A	G	4855
D8024	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	F	4854
D8027	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	F	4854
D8028	Proposed System	\$351,500	\$0	\$351,500	N/A	5	F	4954
D8029	Proposed System	\$194,600	\$0	\$194,600	N/A	5	F	4854
D8030	Proposed System	\$238,000	\$0	\$238,000	N/A	5	F	4855
D8031	Proposed System	\$185,000	\$31,900	\$216,900	3	1	F	4855
D8032	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	F	4954
D8033	Proposed System	\$268,800	\$0	\$268,800	N/A	5	F	4954
D8036	Proposed System	\$661,800	\$0	\$661,800	N/A	5	F	4954
D8038	Not Proposed	\$0	\$0	\$0	N/A	C.N.A.	F	4955
D8039	Not Proposed	\$0	\$0	\$0	N/A	C.N.A.	F	4955
D8042	Proposed System	\$1,904,800	\$0	\$1,904,800	4	4	F, G	4855
D8043	Not Proposed	\$0	\$0	\$0	4	C.N.A.	F	4855
D9001	Adequate	\$0	\$0	\$0	4	A	C	5052
D9002	Adequate	\$0	\$0	\$0	4	A	C	5052
D9003	Adequate	\$0	\$0	\$0	2	A	D	5455
D9019	Inadequate	\$829,600	\$0	\$829,600	4	3	D	5353
D9023	Proposed System	\$2,082,800	\$349,900	\$2,432,700	N/A	5	C	5154
D9025	Proposed System	\$849,600	\$0	\$849,600	N/A	5	C	5253
D9026	Proposed System	\$381,200	\$25,400	\$406,600	N/A	5	C	5253
D9027	Proposed System	\$164,200	\$0	\$164,200	1	1	C	5253
D9028	Proposed System	\$849,600	\$0	\$849,600	N/A	5	C	5152

**TABLE 3D
2-YEAR COST, GROUP 1
BRAYS BAYOU**

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
Sorted by 2-Year CIP Cost							
D0864	\$32,300	I	41	\$788	100%	C	5153
D5017	\$40,200	I	76	\$529	100%	C	5253
D0415	\$47,100	I	43	\$1,095	100%	C	5053
D0865	\$51,300	I	64	\$802	100%	C	5153
D0398	\$126,600	I	108	\$1,172	100%	C	5152
D0175	\$133,000	I	18	\$7,389	100%	C	5253
D0140	\$133,100	I	32	\$4,159	100%	C	5254
D0229	\$134,700	I	86	\$1,566	100%	C	5153
D0325	\$144,600	I	282	\$513	99%	C	5153
D0631	\$148,300	I	80	\$1,854	100%	C	4953
D0804	\$163,600	I	123	\$1,330	4%	F	4854
D9027	\$164,200	I	99	\$1,659	51%	C	5253
D0241	\$173,200	I	77	\$2,249	96%	C	5152
D0135	\$194,800	I	114	\$1,709	100%	C	5254
D0519	\$198,600	I	84	\$2,364	100%	F	5054
D0316	\$201,800	I	50	\$4,036	100%	C	5154
D0026	\$213,000	I	49	\$4,347	69%	I	5555
D0478	\$225,500	I	99	\$2,278	72%	C	5052
D0701	\$226,200	I	363	\$623	66%	F	4855
D0129	\$245,800	I	60	\$4,097	100%	C	5255
D1353	\$251,900	I	116	\$2,172	99%	C	5254
D0290	\$258,100	I	52	\$4,963	100%	C	5153
D0155	\$273,200	I	32	\$8,538	94%	C	5254
D0388	\$285,900	I	202	\$1,415	99%	C	5152
D0831	\$288,300	I	78	\$3,696	91%	D	5455
D0465	\$296,000	I	130	\$2,277	68%	C	5052
D5011	\$317,300	I	94	\$3,376	100%	I	5556
D0152	\$349,900	I	98	\$3,570	100%	C	5254
D0208	\$372,900	I	101	\$3,692	98%	C	5154
D0807	\$393,200	I	320	\$1,229	50%	G	4856
D0134	\$399,200	I	339	\$1,178	89%	C	5254
D8001	\$457,600	I	105	\$4,358	99%	I	4755
D0432	\$464,500	I	245	\$1,896	22%	F	5054
D0761	\$479,200	I	173	\$2,770	100%	F	4853
D0801	\$513,500	I	206	\$2,493	30%	F	4854
D0479	\$523,200	I	72	\$7,267	99%	C	5052
D7037	\$555,000	I	152	\$3,651	80%	C	5054
D0308	\$586,900	I	73	\$8,040	100%	C	5154
D0736	\$615,400	I	181	\$3,400	96%	F	4854

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
D0306	\$624,300	I	101	\$6,181	73%	C	5154
D0718	\$643,700	I	112	\$5,747	85%	F	4853
D0823	\$653,600	I	210	\$3,112	98%	G	4756
D0917	\$671,300	I	111	\$6,048	98%	F	4854
D0424	\$717,200	I	308	\$2,329	81%	F	5054
D0085	\$720,100	I	4	\$180,025	81%	D	5355
D0423	\$731,400	I	81	\$9,030	74%	C	5053
D0212	\$742,700	I	132	\$5,627	99%	C	5153
D0387	\$765,600	I	236	\$3,244	100%	C	5152
D0503	\$864,400	I	193	\$4,479	97%	C	5052
D0602	\$930,600	I	276	\$3,372	100%	F	5054
D0323	\$968,300	I	133	\$7,280	99%	C	5153
D0056	\$975,400	I	205	\$4,758	100%	D	5455
D0425	\$1,067,200	I	271	\$3,938	100%	F	5054
D0192	\$1,092,700	I	95	\$11,502	99%	C	5153
D0660	\$1,142,400	I	206	\$5,546	92%	F	4952
D0663	\$1,229,900	I	321	\$3,831	99%	F	4952
D0735	\$1,273,800	I	186	\$6,848	92%	F	4854
D0382	\$1,298,900	I	241	\$5,390	100%	C	5153
D0320	\$1,307,300	I	244	\$5,358	98%	C	5153
D0367	\$1,395,800	I	458	\$3,048	99%	F	5054
D0753	\$1,412,100	I	252	\$5,604	96%	F	4853
D0643	\$1,433,600	I	216	\$6,637	100%	C	4952
D0899	\$1,492,600	I	296	\$5,043	63%	F	4854
D0428	\$1,796,100	I	387	\$4,641	82%	C, F	5054
D0220	\$2,140,400	I	293	\$7,305	96%	C	5153
D0021	\$2,181,100	I	584	\$3,735	83%	I	5555
D0518	\$2,337,800	I	507	\$4,611	99%	F	5054
D0113	\$2,355,200	I	483	\$4,876	99%	C	5254
D0189	\$2,722,600	I	519	\$5,246	100%	C	5153
D0338	\$2,734,100	I	413	\$6,620	99%	C	5153
D0168	\$2,757,600	I	461	\$5,982	100%	C	5153
D0840	\$3,581,200	I	680	\$5,266	87%	D	5454
D0037	\$3,600,100	I	444	\$8,108	81%	I	5556
D0180	\$4,006,100	I	462	\$8,671	91%	C	5253
D0072	\$5,596,000	I	1,375	\$4,070	83%	D	5455
D0876	\$5,872,000	I	3,815	\$1,539	91%	I	5456
TOTAL	\$76,514,300						

**TABLE 2D
BRAYS BAYOU SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
D9031	Proposed System	\$4,143,400	\$303,100	\$4,446,500	N/A	5	C	5153
D9036	Proposed System	\$2,462,000	\$0	\$2,462,000	N/A	5	C	5052
D9037	Cannot Analyze	\$0	\$0	\$0	I	C.N.A.	C, D	4952
D9040	Proposed System	\$1,879,600	\$0	\$1,879,600	N/A	5	F	4854
D9041	Not Proposed	\$0	\$0	\$0	N/A	5	I	5556
D9042	Proposed System	\$2,213,800	\$0	\$2,213,800	N/A	5	D	5554
D9043	Proposed System	\$2,141,900	\$0	\$2,141,900	N/A	5	C	5152
D9044	Proposed System	\$2,319,100	\$0	\$2,319,100	N/A	5	C	5152
D9045	Proposed System	\$2,313,800	\$0	\$2,313,800	N/A	5	C	5253
D9046	Proposed System	\$2,141,900	\$0	\$2,141,900	N/A	5	C	5253
D9052	Adequate	\$0	\$0	\$0	I	A	C	5255
D9056	Inadequate	\$430,100	\$0	\$430,100	4	3	F	4854
D9057	Adequate	\$0	\$0	\$0	4	A	C	5055
D9058	Adequate	\$0	\$0	\$0	4	A	F	4854
D9060	Not Proposed	\$0	\$0	\$0	3	C.N.A.	F	4855
D9061	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	D	5455
D9064	Adequate	\$0	\$0	\$0	3	A	C	5154
D9075	Adequate	\$0	\$0	\$0	1	A	G	4756
D9076	Adequate	\$0	\$0	\$0	4	A	G	4856
D9077	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	D	5355
D9078	Adequate	\$0	\$0	\$0	1	A	C	5153
D9080	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	I	5555
TOTAL		\$218,922,000	\$30,087,800	\$249,009,800				

TABLE 4D
2-YEAR COST – GROUP 2
BRAYS BAYOU

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
Sorted by 2-Year CIP Cost							
D0438	\$169,200	1	123	\$1,376	0%	F	5053
Total	\$169,200						
Sorted by Cost per Address							
D0438	\$169,200	1	123	\$1,376	0%	F	5053
Total	\$169,200						

**TABLE 3D
2-YEAR COST, GROUP 1
BRAYS BAYOU**

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
Sorted by Cost per Address							
D0325	\$144,600	I	282	\$513	99%	C	5153
D5017	\$40,200	I	76	\$529	100%	C	5253
D0701	\$226,200	I	363	\$623	66%	F	4855
D0864	\$32,300	I	41	\$788	100%	C	5153
D0865	\$51,300	I	64	\$802	100%	C	5153
D0415	\$47,100	I	43	\$1,095	100%	C	5053
D0398	\$126,600	I	108	\$1,172	100%	C	5152
D0134	\$399,200	I	339	\$1,178	89%	C	5254
D0807	\$393,200	I	320	\$1,229	50%	G	4856
D0804	\$163,600	I	123	\$1,330	4%	F	4854
D0388	\$285,900	I	202	\$1,415	99%	C	5152
D0876	\$5,872,000	I	3,815	\$1,539	91%	I	5456
D0229	\$134,700	I	86	\$1,566	100%	C	5153
D9027	\$164,200	I	99	\$1,659	51%	C	5253
D0135	\$194,800	I	114	\$1,709	100%	C	5254
D0631	\$148,300	I	80	\$1,854	100%	C	4953
D0432	\$464,300	I	245	\$1,896	22%	F	5054
D1353	\$251,900	I	116	\$2,172	99%	C	5254
D0241	\$173,200	I	77	\$2,249	96%	C	5152
D0465	\$296,000	I	130	\$2,277	68%	C	5052
D0478	\$225,500	I	99	\$2,278	72%	C	5052
D0424	\$717,200	I	308	\$2,329	81%	F	5054
D0519	\$198,600	I	84	\$2,364	100%	F	5054
D0801	\$513,500	I	206	\$2,493	30%	F	4854
D0761	\$479,200	I	173	\$2,770	100%	F	4853
D0367	\$1,395,800	I	458	\$3,048	99%	F	5054
D0823	\$653,600	I	210	\$3,112	98%	G	4756
D0387	\$765,600	I	236	\$3,244	100%	C	5152
D0602	\$930,600	I	276	\$3,372	100%	F	5054
D5011	\$317,300	I	94	\$3,376	100%	I	5556
D0736	\$615,400	I	181	\$3,400	96%	F	4854
D0152	\$349,900	I	98	\$3,570	100%	C	5254
D7037	\$555,000	I	152	\$3,651	80%	C	5054
D0208	\$372,900	I	101	\$3,692	98%	C	5154
D0831	\$288,300	I	78	\$3,696	91%	D	5455
D0021	\$2,181,100	I	584	\$3,735	83%	I	5555
D0663	\$1,229,900	I	321	\$3,831	99%	F	4952
D0425	\$1,067,200	I	271	\$3,938	100%	F	5054
D0316	\$201,800	I	50	\$4,036	100%	C	5154

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
D0072	\$5,596,000	I	1,375	\$4,070	83%	D	5455
D0129	\$245,800	I	60	\$4,097	100%	C	5255
D0140	\$133,100	I	32	\$4,159	100%	C	5254
D0026	\$213,000	I	49	\$4,347	69%	I	5555
D8001	\$457,600	I	105	\$4,358	99%	I	4755
D0503	\$864,400	I	193	\$4,479	97%	C	5052
D0518	\$2,337,800	I	507	\$4,611	99%	F	5054
D0428	\$1,796,100	I	387	\$4,641	82%	C, F	5054
D0056	\$975,400	I	205	\$4,758	100%	D	5455
D0113	\$2,355,200	I	483	\$4,876	99%	C	5254
D0290	\$258,100	I	52	\$4,963	100%	C	5153
D0899	\$1,492,600	I	296	\$5,043	63%	F	4854
D0189	\$2,722,600	I	519	\$5,246	100%	C	5153
D0840	\$3,581,200	I	680	\$5,266	87%	D	5454
D0320	\$1,307,300	I	244	\$5,358	98%	C	5153
D0382	\$1,298,900	I	241	\$5,390	100%	C	5153
D0660	\$1,142,400	I	206	\$5,546	92%	F	4952
D0753	\$1,412,100	I	252	\$5,604	96%	F	4853
D0212	\$742,700	I	132	\$5,627	99%	C	5153
D0718	\$643,700	I	112	\$5,747	85%	F	4853
D0188	\$2,757,600	I	461	\$5,982	100%	C	5153
D0917	\$671,300	I	111	\$6,048	98%	F	4854
D0306	\$624,300	I	101	\$6,181	73%	C	5154
D0338	\$2,734,100	I	413	\$6,620	99%	C	5153
D0643	\$1,433,600	I	216	\$6,637	100%	C	4952
D0735	\$1,273,800	I	186	\$6,848	92%	F	4854
D0479	\$523,200	I	72	\$7,267	99%	C	5052
D0323	\$968,300	I	133	\$7,280	99%	C	5153
D0220	\$2,140,400	I	293	\$7,305	96%	C	5153
D0175	\$133,000	I	18	\$7,389	100%	C	5253
D0308	\$586,900	I	73	\$8,040	100%	C	5154
D0037	\$3,600,100	I	444	\$8,108	81%	I	5556
D0155	\$273,200	I	32	\$8,538	94%	C	5254
D0180	\$4,006,100	I	462	\$8,671	91%	C	5253
D0423	\$731,400	I	81	\$9,030	74%	C	5053
D0192	\$1,092,700	I	95	\$11,502	99%	C	5153
D0085	\$720,100	I	4	\$180,025	81%	D	5355
TOTAL	\$76,514,300						

TABLE 5D
2-YEAR COST – GROUP 3
BRAYS BAYOU

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
D0600	\$738,800	1	234	\$3,157	96%	F	4954
D0881	\$751,500	1	186	\$4,040	78%	I	5556
D0595	\$754,000	1	189	\$3,989	100%	F	4954
D0493	\$780,100	1	154	\$5,066	59%	C	5053
D0097	\$805,000	1	141	\$5,709	77%	C	5355
D0630	\$913,500	1	205	\$4,456	72%	C	5053
D1381	\$940,400	1	156	\$6,028	94%	F	5054
D0446	\$959,800	1	25	\$38,392	96%	C	5053
D0839	\$979,200	1	214	\$4,576	97%	D	5454
D8020	\$1,003,300	1	83	\$12,088	72%	F	4855
D0937	\$1,045,500	1	413	\$2,531	0%	C	5254
D0022	\$1,054,100	1	172	\$6,128	86%	I	5556
D0093	\$1,060,100	1	44	\$24,093	86%	D	5355
D0642	\$1,060,700	1	143	\$7,417	97%	C	5052
D0358	\$1,084,500	1	181	\$5,992	99%	C	5154
D0124	\$1,103,200	1	206	\$5,355	100%	C	5254
D0914	\$1,120,200	1	138	\$8,117	49%	F	5055
D0621	\$1,177,200	1	608	\$1,936	8%	C	5053
D0849	\$1,227,700	1	87	\$14,111	77%	D	5455
D0363	\$1,263,000	1	115	\$10,983	89%	F	5154
D0069	\$1,360,600	1	123	\$11,062	99%	D	5455
D0578	\$1,404,000	1	248	\$5,661	98%	F	5054
D0526	\$1,511,300	1	247	\$6,119	0%	F	5055
D0369	\$1,622,500	1	224	\$7,243	99%	C	5053
D0534	\$1,638,800	1	488	\$3,358	0%	F	5055
D0684	\$1,642,100	1	124	\$13,243	90%	F	4955
D0548	\$1,676,300	1	252	\$6,652	100%	F	5054
D0632	\$1,773,400	1	230	\$7,710	100%	C	4953
D0725	\$1,852,700	1	267	\$6,939	97%	F	4853
D0514	\$1,883,900	1	394	\$4,781	0%	F	5055
D0046	\$1,950,300	1	307	\$6,353	82%	I	5555
D0485	\$2,566,000	1	173	\$14,832	40%	C	5053
D0755	\$2,926,100	1	477	\$6,134	85%	F	4853
D0108	\$14,749,200	1	227	\$64,974	0%	C	5254, 5354
TOTAL	\$82,777,100						
Sorted by Cost per Address							
D0860	\$46,000	1	217	\$212	99%	I	5556

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
D5038	\$14,600	1	22	\$664	100%	G	4855
D0128	\$27,500	1	36	\$764	97%	C	5254
D0305	\$11,800	1	15	\$787	100%	C	5154
D0047	\$119,900	1	133	\$902	94%	I	5555
D0575	\$38,600	1	40	\$965	100%	F	4955
D0697	\$69,200	1	65	\$1,065	100%	F	4854
D0473	\$340,700	1	279	\$1,221	48%	C	5052
D0029	\$135,400	1	108	\$1,254	54%	I	5556
D0904	\$236,800	1	186	\$1,273	98%	I	5556
D0491	\$444,900	1	347	\$1,282	93%	C	5053
D0592	\$123,400	1	96	\$1,285	88%	F	4954
D0579	\$247,600	1	188	\$1,317	91%	F	4954
D0553	\$138,800	1	104	\$1,335	100%	F	5055
D0182	\$35,300	1	25	\$1,412	100%	C	5253
D0678	\$641,500	1	425	\$1,509	34%	F	4954
D0142	\$48,800	1	32	\$1,525	100%	C	5254
D0889	\$200,200	1	131	\$1,528	82%	D	5354
D0869	\$195,500	1	117	\$1,671	99%	F	4952
D0149	\$188,200	1	111	\$1,695	95%	C	5254
D0833	\$345,000	1	188	\$1,835	100%	D	5455
D0550	\$33,600	1	18	\$1,867	100%	F	5054
D0621	\$1,177,200	1	608	\$1,936	8%	C	5053
D0348	\$497,900	1	248	\$2,008	99%	C	5053
D0744	\$261,300	1	128	\$2,041	98%	F	4854
D0243	\$76,600	1	37	\$2,070	73%	C	5152
D0049	\$466,100	1	224	\$2,081	95%	I	5555
D0144	\$317,300	1	152	\$2,088	93%	C	5255
D0419	\$215,000	1	94	\$2,287	100%	C	5053
D0603	\$303,900	1	128	\$2,374	93%	F	4954
D0830	\$687,900	1	289	\$2,380	96%	D	5455
D0417	\$233,800	1	96	\$2,435	100%	C	5053
D0516	\$95,700	1	39	\$2,454	100%	F	5054
D0249	\$269,300	1	108	\$2,494	100%	C	5153
D0706	\$153,300	1	61	\$2,513	100%	F	4855
D0504	\$273,300	1	108	\$2,531	96%	C	5052
D0937	\$1,045,500	1	413	\$2,531	0%	C	5254
D0351	\$132,800	1	52	\$2,554	98%	C	5154
D0713	\$329,800	1	129	\$2,557	5%	F	4853
D0585	\$299,500	1	116	\$2,582	100%	F	4954

TABLE 5D
2-YEAR COST – GROUP 3
BRAYS BAYOU

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
Sorted by 2-Year CIP Cost							
D0305	\$11,800	I	15	\$787	100%	C	5154
D5038	\$14,600	I	22	\$664	100%	G	4855
D0128	\$27,500	I	36	\$764	97%	C	5254
D0550	\$33,600	I	18	\$1,867	100%	F	5054
D0182	\$35,300	I	25	\$1,412	100%	C	5253
D0575	\$38,600	I	40	\$965	100%	F	4955
D0860	\$46,000	I	217	\$212	99%	I	5556
D0142	\$48,800	I	32	\$1,525	100%	C	5254
D0697	\$69,200	I	65	\$1,065	100%	F	4854
D0243	\$76,600	I	37	\$2,070	73%	C	5152
D0516	\$95,700	I	39	\$2,454	100%	F	5054
D0139	\$98,800	I	36	\$2,744	100%	C	5254
D0517	\$106,200	I	39	\$2,723	100%	F	5054
D0047	\$119,900	I	133	\$902	94%	I	5555
D0592	\$123,400	I	96	\$1,285	88%	F	4954
D0351	\$132,800	I	52	\$2,554	98%	C	5154
D0029	\$135,400	I	108	\$1,254	54%	I	5556
D0553	\$138,800	I	104	\$1,335	100%	F	5055
D0319	\$147,000	I	6	\$24,500	0%	C	5154
D0706	\$153,300	I	61	\$2,513	100%	F	4855
D1391	\$164,500	I	60	\$2,742	100%	G	4756
D0903	\$167,900	I	50	\$3,358	68%	I	5556
D0577	\$170,100	I	13	\$13,085	31%	F	4955
D8031	\$185,000	I	10	\$18,500	0%	F	4855
D0149	\$188,200	I	111	\$1,695	95%	C	5254
D0869	\$195,500	I	117	\$1,671	99%	F	4952
D0889	\$200,200	I	131	\$1,528	82%	D	5354
D0601	\$201,600	I	60	\$3,360	97%	F	4954
D0419	\$215,000	I	94	\$2,287	100%	C	5053
D0001	\$215,600	I	30	\$7,187	17%	I	5655
D0764	\$231,500	I	85	\$2,724	100%	F	4853
D0417	\$233,800	I	96	\$2,435	100%	C	5053
D0904	\$236,800	I	186	\$1,273	98%	I	5556
D0579	\$247,600	I	188	\$1,317	91%	F	4954
D0744	\$261,300	I	128	\$2,041	98%	F	4854
D0249	\$269,300	I	108	\$2,494	100%	C	5153
D0504	\$273,300	I	108	\$2,531	96%	C	5052
D0799	\$285,800	I	10	\$28,580	0%	G	4855

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
D0585	\$299,500	I	116	\$2,582	100%	F	4954
D0603	\$303,900	I	128	\$2,374	93%	F	4954
D0925	\$309,400	I	55	\$5,625	98%	G	4756
D0144	\$317,300	I	152	\$2,088	93%	C	5255
D0810	\$324,900	I	31	\$10,481	100%	G	4855
D0646	\$329,700	I	72	\$4,579	99%	C	4952
D0713	\$329,800	I	129	\$2,557	5%	F	4853
D0580	\$338,100	I	116	\$2,915	100%	F	4954
D0473	\$340,700	I	279	\$1,221	48%	C	5052
D0833	\$345,000	I	188	\$1,835	100%	D	5455
D0362	\$345,400	I	86	\$4,016	94%	C	5154
D0537	\$350,100	I	40	\$8,753	0%	C, F	5055
D0390	\$359,900	I	101	\$3,563	100%	C	5152
D0370	\$397,600	I	125	\$3,181	100%	C	5053
D0122	\$432,000	I	102	\$4,235	100%	C	5254
D0491	\$444,900	I	347	\$1,282	93%	C	5053
D0551	\$449,800	I	103	\$4,367	99%	F	5054
D0907	\$462,400	I	115	\$4,021	90%	D	5435
D0049	\$466,100	I	224	\$2,081	95%	I	5555
D0255	\$468,600	I	106	\$4,421	100%	C	5153
D0781	\$475,400	I	107	\$4,443	77%	F	4854
D0315	\$475,800	I	50	\$9,516	92%	C	5154
D0348	\$497,900	I	248	\$2,008	99%	C	5053
D0698	\$511,400	I	150	\$3,409	100%	F	4854
D0583	\$530,400	I	135	\$3,929	100%	F	4954
D0195	\$549,300	I	6	\$91,550	0%	C	5154
D1380	\$570,500	I	182	\$3,135	91%	F	4954
D0365	\$582,500	I	130	\$4,481	65%	C	5154
D0311	\$588,500	I	99	\$5,944	100%	C	5154
D0573	\$594,400	I	32	\$18,575	66%	F	4955
D0581	\$615,200	I	176	\$3,495	100%	F	4954
D0952	\$637,400	I	134	\$4,757	95%	I	5556
D0678	\$641,500	I	425	\$1,509	34%	F	4954
D0157	\$644,600	I	8	\$80,575	0%	C	5254
D0645	\$664,300	I	136	\$4,885	96%	C	4952
D0830	\$687,900	I	289	\$2,380	96%	D	5455
D0420	\$689,100	I	133	\$5,181	95%	C	5053
D0341	\$700,700	I	132	\$5,308	99%	C	5154
D0734	\$729,900	I	118	\$6,186	97%	F	4854

TABLE 6D
2-YEAR COST – GROUP 4
BRAYS BAYOU

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
Sorted by 2-Year CIP Cost							
D0556	\$10,100	3	2	\$5,050	0%	F	5055
D0557	\$11,800	3	5	\$2,360	0%	F	5055
D0716	\$20,000	3	54	\$370	74%	F	4853
D0809	\$21,400	3	21	\$1,019	100%	G	4855
D0301	\$29,400	3	45	\$653	100%	C	5154
D0030	\$29,900	3	10	\$2,990	50%	I	5556
D0705	\$33,000	3	3	\$11,000	0%	F	4855
D0213	\$35,700	3	6	\$5,950	100%	C	5154
D0183	\$39,200	3	4	\$9,800	0%	C	5253
D0427	\$41,600	3	28	\$1,486	61%	F	5054
D0031	\$63,800	3	20	\$3,190	45%	I	5556
D0535	\$101,000	3	3	\$33,667	0%	C, F	5055
D1301	\$105,700	3	243	\$435	0%	D	5354
D0457	\$107,700	3	2	\$53,850	0%	C	5053
D0582	\$109,400	3	35	\$3,126	100%	F	4954
D5002	\$112,200	3	1	\$112,200	0%	G	4955
D0652	\$113,100	3	5	\$22,620	0%	F	4954
D0017	\$118,500	3	113	\$1,049	100%	I	5556
D0731	\$135,800	3	5	\$27,160	40%	F	4854
D0459	\$138,800	3	1	\$138,800	0%	C	5053
D0936	\$145,900	3	225	\$648	0%	C	5254
D0901	\$148,000	3	9	\$16,444	56%	F	4855
D0033	\$154,300	3	23	\$6,709	87%	I	5556
D0499	\$172,700	3	76	\$2,272	50%	C	5052
D0045	\$174,500	3	10	\$17,450	50%	I	5555
D0584	\$187,300	3	28	\$6,689	96%	F	4954
D0487	\$208,000	3	3	\$69,333	0%	C	5053
D0086	\$219,700	3	1	\$219,700	0%	D	5355
D0020	\$240,800	3	54	\$4,459	98%	I	5556
D0347	\$246,800	3	61	\$4,046	0%	C	5153
D0158	\$248,100	3	11	\$22,555	0%	C	5154
D0921	\$276,700	3	279	\$992	0%	G	4756
D0416	\$291,200	3	2	\$145,600	0%	C	5053
D7044	\$300,600	3	17	\$17,682	0%	F	4955
D0486	\$302,500	3	4	\$75,625	0%	C	5053
D0596	\$310,800	3	134	\$2,319	0%	F	4954
D0048	\$313,200	3	53	\$5,909	72%	I	5555
D0741	\$316,600	3	163	\$1,942	0%	F	4854

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
D0586	\$354,900	3	103	\$3,446	0%	F	4954
D0488	\$368,500	3	6	\$61,417	0%	C	5053
D0014	\$390,200	3	5	\$78,040	20%	I	5556
D0850	\$404,700	3	19	\$21,300	0%	D	5455
D9056	\$430,100	3	423	\$1,017	4%	F	4854
D0024	\$464,000	3	93	\$4,989	69%	I	5556
D0091	\$474,800	3	5	\$94,960	0%	D	5355
D0039	\$481,000	3	51	\$9,431	41%	I	5555
D0892	\$503,700	3	8	\$62,963	0%	D	5354
D0597	\$507,100	3	21	\$24,148	33%	F	4954
D0787	\$547,000	3	12	\$45,583	0%	F	4855
D0007	\$561,400	3	221	\$2,540	57%	I	5656
D1303	\$562,000	3	17	\$33,059	24%	D	5455
D0511	\$573,300	3	7	\$81,900	0%	F	5155
D0932	\$605,100	3	11	\$55,009	18%	F	4952
D0114	\$625,000	3	97	\$6,443	2%	C	5255
D0536	\$637,800	3	327	\$1,950	0%	C, F	5055
D0880	\$690,200	3	83	\$8,316	49%	I	5556
D0467	\$709,300	3	345	\$2,056	0%	C	5052
D0456	\$767,600	3	240	\$3,198	0%	C	5053
D0240	\$800,500	3	155	\$5,165	60%	C	5152
D7045	\$910,400	3	11	\$82,764	0%	F	4955
D0779	\$938,900	3	110	\$8,535	36%	F	4854
D0891	\$951,700	3	13	\$73,208	0%	D	5354
D0625	\$987,400	3	99	\$9,974	0%	C	5053
D0558	\$1,002,000	3	264	\$3,795	4%	F	5055
D0087	\$1,147,600	3	6	\$191,267	0%	D	5355
D0740	\$1,165,400	3	161	\$7,239	2%	F	4854
D0559	\$1,826,300	3	69	\$26,468	0%	F	5055
D8042	\$1,904,800	3	50	\$38,096	39%	F, G	4855
TOTAL	\$27,928,500						
Sorted by Cost per Address							
D0716	\$20,000	3	54	\$370	74%	F	4853
D1301	\$105,700	3	243	\$435	0%	D	5354
D0936	\$145,900	3	225	\$648	0%	C	5254
D0301	\$29,400	3	45	\$653	100%	C	5154
D0921	\$276,700	3	279	\$992	0%	G	4756
D9056	\$430,100	3	423	\$1,017	4%	F	4854

TABLE 5D
2-YEAR COST – GROUP 3
BRAYS BAYOU

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
D0517	\$106,200	I	39	\$2,723	100%	F	5054
D0764	\$231,500	I	85	\$2,724	100%	F	4853
D1391	\$164,500	I	60	\$2,742	100%	G	4756
D0139	\$98,800	I	36	\$2,744	100%	C	5254
D0580	\$338,100	I	116	\$2,915	100%	F	4954
D1380	\$570,500	I	182	\$3,135	91%	F	4954
D0600	\$738,800	I	234	\$3,157	96%	F	4954
D0370	\$397,600	I	125	\$3,181	100%	C	5053
D0903	\$167,900	I	50	\$3,358	68%	I	5556
D0534	\$1,638,800	I	488	\$3,358	0%	F	5055
D0601	\$201,600	I	60	\$3,360	97%	F	4954
D0698	\$511,400	I	150	\$3,409	100%	F	4854
D0581	\$615,200	I	176	\$3,495	100%	F	4954
D0390	\$359,900	I	101	\$3,563	100%	C	5152
D0583	\$530,400	I	135	\$3,929	100%	F	4954
D0595	\$754,000	I	189	\$3,989	100%	F	4954
D0362	\$345,400	I	86	\$4,016	94%	C	5154
D0907	\$462,400	I	115	\$4,021	90%	D	5435
D0881	\$751,500	I	186	\$4,040	78%	I	5556
D0122	\$432,000	I	102	\$4,235	100%	C	5254
D0551	\$449,800	I	103	\$4,367	99%	F	5054
D0255	\$468,600	I	106	\$4,421	100%	C	5153
D0781	\$475,400	I	107	\$4,443	77%	F	4854
D0630	\$913,500	I	205	\$4,456	72%	C	5053
D0365	\$582,500	I	130	\$4,481	65%	C	5154
D0839	\$979,200	I	214	\$4,576	97%	D	5454
D0646	\$329,700	I	72	\$4,579	99%	C	4952
D0952	\$637,400	I	134	\$4,757	95%	I	5556
D0514	\$1,883,900	I	394	\$4,781	0%	F	5055
D0645	\$664,300	I	136	\$4,885	96%	C	4952
D0493	\$780,100	I	154	\$5,066	59%	C	5053
D0420	\$689,100	I	133	\$5,181	95%	C	5053
D0341	\$700,700	I	132	\$5,308	99%	C	5154
D0124	\$1,103,200	I	206	\$5,355	100%	C	5254
D0925	\$309,400	I	55	\$5,625	98%	G	4756
D0578	\$1,404,000	I	248	\$5,661	98%	F	5054
D0097	\$805,000	I	141	\$5,709	77%	C	5355
D0311	\$588,500	I	99	\$5,944	100%	C	5154
D0358	\$1,084,500	I	181	\$5,992	99%	C	5154

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
D1381	\$940,400	I	156	\$6,028	94%	F	5054
D0526	\$1,511,300	I	247	\$6,119	0%	F	5055
D0022	\$1,054,100	I	172	\$6,128	86%	I	5556
D0755	\$2,926,100	I	477	\$6,134	85%	F	4853
D0734	\$729,900	I	118	\$6,186	97%	F	4854
D0046	\$1,950,300	I	307	\$6,353	82%	I	5555
D0548	\$1,676,300	I	252	\$6,652	100%	F	5054
D0725	\$1,852,700	I	267	\$6,939	97%	F	4853
D0001	\$215,600	I	30	\$7,187	17%	I	5655
D0369	\$1,622,500	I	224	\$7,243	99%	C	5053
D0642	\$1,060,700	I	143	\$7,417	97%	C	5052
D0632	\$1,773,400	I	230	\$7,710	100%	C	4953
D0914	\$1,120,200	I	138	\$8,117	49%	F	5055
D0537	\$350,100	I	40	\$8,753	0%	C, F	5055
D0315	\$475,800	I	50	\$9,516	92%	C	5154
D0810	\$324,900	I	31	\$10,481	100%	G	4855
D0363	\$1,263,000	I	115	\$10,983	89%	F	5154
D0069	\$1,360,600	I	123	\$11,062	99%	D	5455
D8020	\$1,003,300	I	83	\$12,088	72%	F	4855
D0577	\$170,100	I	13	\$13,085	31%	F	4955
D0684	\$1,642,100	I	124	\$13,243	90%	F	4955
D0849	\$1,227,700	I	87	\$14,111	77%	D	5455
D0485	\$2,566,000	I	173	\$14,832	40%	C	5053
D8031	\$185,000	I	10	\$18,500	0%	F	4855
D0573	\$594,400	I	32	\$18,575	66%	F	4955
D0093	\$1,060,100	I	44	\$24,093	86%	D	5355
D0319	\$147,000	I	6	\$24,500	0%	C	5154
D0799	\$285,800	I	10	\$28,580	0%	G	4855
D0446	\$959,800	I	25	\$38,392	96%	C	5053
D0108	\$14,749,200	I	227	\$64,974	0%	C	5254, 5354
D0157	\$644,600	I	8	\$80,575	0%	C	5254
D0195	\$549,300	I	6	\$91,550	0%	C	5154
TOTAL	\$82,777,100						

**TABLE 7D
5-YEAR COST – GROUP 1
BRAYS BAYOU**

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
Sorted by Additional for 5-Year Storm						
D0316	\$201,800	\$211,800	\$10,000	1	C	5154
D0155	\$273,200	\$285,500	\$12,300	1	C	5254
D0212	\$742,700	\$761,800	\$19,100	1	C	5153
D0241	\$173,200	\$193,200	\$20,000	1	C	5152
D0290	\$258,100	\$292,900	\$34,800	1	C	5153
D0085	\$720,100	\$764,900	\$44,800	1	D	5355
D0917	\$671,300	\$730,200	\$58,900	1	F	4854
D0660	\$1,142,400	\$1,230,800	\$88,400	1	F	4952
D1353	\$251,900	\$341,200	\$89,300	1	C	5254
D0320	\$1,307,300	\$1,413,100	\$105,800	1	C	5153
D0056	\$975,400	\$1,083,200	\$107,800	1	D	5455
D0323	\$968,300	\$1,080,800	\$112,500	1	C	5153
D0398	\$126,600	\$253,100	\$126,500	1	C	5152
D0735	\$1,273,800	\$1,415,400	\$141,600	1	F	4854
D0382	\$1,298,900	\$1,455,700	\$156,800	1	C	5153
D0899	\$1,492,600	\$1,678,200	\$185,600	1	F	4854
D0503	\$864,400	\$1,058,400	\$194,000	1	C	5052
D0113	\$2,355,200	\$2,552,600	\$197,400	1	C	5254
D0718	\$643,700	\$859,800	\$216,100	1	F	4853
D0338	\$2,734,100	\$2,958,200	\$224,100	1	C	5153
D0425	\$1,067,200	\$1,301,600	\$234,400	1	F	5054
D0643	\$1,433,600	\$1,685,500	\$251,900	1	C	4952
D0220	\$2,140,400	\$2,399,100	\$258,700	1	C	5153
D0192	\$1,092,700	\$1,361,400	\$268,700	1	C	5153
D0188	\$2,757,600	\$3,047,200	\$289,600	1	C	5153
D0756	\$0	\$372,900	\$372,900	A	F	4853
D0807	\$393,200	\$775,900	\$382,700	1	G	4856
D0840	\$3,581,200	\$3,966,900	\$385,700	1	D	5454
D0180	\$4,006,100	\$4,419,200	\$413,100	1	C	5253
D0518	\$2,337,800	\$2,757,100	\$419,300	1	F	5054
D0134	\$399,200	\$916,100	\$516,900	1	C	5254
D0388	\$285,900	\$817,800	\$531,900	1	C	5152
D0037	\$3,600,100	\$4,353,600	\$753,500	1	I	5556
D0549	\$0	\$782,300	\$782,300	A	F	5055
D0876	\$5,872,000	\$6,842,300	\$970,300	1	I	5456
D0460	\$0	\$1,332,900	\$1,332,900	A	C	5052
TOTAL	\$47,442,000	\$57,752,600	\$10,310,600			

TABLE 6D
2-YEAR COST – GROUP 4
BRAYS BAYOU

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
D0809	\$21,400	3	21	\$1,019	100%	G	4855
D0017	\$118,500	3	113	\$1,049	100%	I	5556
D0427	\$41,600	3	28	\$1,486	61%	F	5054
D0741	\$316,600	3	163	\$1,942	0%	F	4854
D0536	\$637,800	3	327	\$1,950	0%	C, F	5055
D0467	\$709,300	3	345	\$2,056	0%	C	5052
D0499	\$172,700	3	76	\$2,272	50%	C	5052
D0596	\$310,800	3	134	\$2,319	0%	F	4954
D0557	\$11,800	3	5	\$2,360	0%	F	5055
D0007	\$561,400	3	221	\$2,540	57%	I	5656
D0030	\$29,900	3	10	\$2,990	50%	I	5556
D0582	\$109,400	3	35	\$3,126	100%	F	4954
D0031	\$63,800	3	20	\$3,190	45%	I	5556
D0456	\$767,600	3	240	\$3,198	0%	C	5053
D0586	\$354,900	3	103	\$3,446	0%	F	4954
D0558	\$1,002,000	3	264	\$3,795	4%	F	5055
D0347	\$246,800	3	61	\$4,046	0%	C	5153
D0020	\$240,800	3	54	\$4,459	98%	I	5556
D0024	\$464,000	3	93	\$4,989	69%	I	5556
D0556	\$10,100	3	2	\$5,050	0%	F	5055
D0240	\$800,500	3	155	\$5,165	60%	C	5152
D0048	\$313,200	3	53	\$5,909	72%	I	5555
D0213	\$35,700	3	6	\$5,950	100%	C	5154
D0114	\$625,000	3	97	\$6,443	2%	C	5255
D0584	\$187,300	3	28	\$6,689	96%	F	4954
D0033	\$154,300	3	23	\$6,709	87%	I	5556
D0740	\$1,165,400	3	161	\$7,239	2%	F	4854
D0880	\$690,200	3	83	\$8,316	49%	I	5556
D0779	\$938,900	3	110	\$8,535	36%	F	4854
D0039	\$481,000	3	51	\$9,431	41%	I	5555
D0183	\$39,200	3	4	\$9,800	0%	C	5253
D0625	\$987,400	3	99	\$9,974	0%	C	5053
D0705	\$33,000	3	3	\$11,000	0%	F	4855
D0901	\$148,000	3	9	\$16,444	56%	F	4855
D0045	\$174,500	3	10	\$17,450	50%	I	5555
D7044	\$300,600	3	17	\$17,682	0%	F	4955
D0850	\$404,700	3	19	\$21,300	0%	D	5455
D0158	\$248,100	3	11	\$22,555	0%	C	5154
D0652	\$113,100	3	5	\$22,620	0%	F	4954

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
D0597	\$507,100	3	21	\$24,148	33%	F	4954
D0559	\$1,826,300	3	69	\$26,468	0%	F	5055
D0731	\$135,800	3	5	\$27,160	40%	F	4854
D1303	\$562,000	3	17	\$33,059	24%	D	5455
D0535	\$101,000	3	3	\$33,667	0%	C, F	5055
D8042	\$1,904,800	3	50	\$38,096	39%	F, G	4855
D0787	\$547,000	3	12	\$45,583	0%	F	4855
D0457	\$107,700	3	2	\$53,850	0%	C	5053
D0932	\$605,100	3	11	\$55,009	18%	F	4952
D0488	\$368,500	3	6	\$61,417	0%	C	5053
D0892	\$503,700	3	8	\$62,963	0%	D	5354
D0487	\$208,000	3	3	\$69,333	0%	C	5053
D0891	\$951,700	3	13	\$73,208	0%	D	5354
D0486	\$302,500	3	4	\$75,625	0%	C	5053
D0014	\$390,200	3	5	\$78,040	20%	I	5556
D0511	\$573,300	3	7	\$81,900	0%	F	5155
D7045	\$910,400	3	11	\$82,764	0%	F	4955
D0091	\$474,800	3	5	\$94,960	0%	D	5355
D5002	\$112,200	3	1	\$112,200	0%	G	4955
D0459	\$138,800	3	1	\$138,800	0%	C	5053
D0416	\$291,200	3	2	\$145,600	0%	C	5053
D0087	\$1,147,600	3	6	\$191,267	0%	D	5355
D0086	\$219,700	3	1	\$219,700	0%	D	5355
TOTAL	\$27,928,500						

TABLE 10D
5-YEAR COST, GROUP 4
BRAYS BAYOU

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
Sorted by Additional for 5-Year Storm						
D0559	\$1,826,300	\$1,827,300	\$1,000	3	F	5055
D0556	\$10,100	\$11,300	\$1,200	3	F	5055
D0557	\$11,800	\$13,200	\$1,400	3	F	5055
D0030	\$29,900	\$32,500	\$2,600	3	I	5556
D0014	\$390,200	\$398,200	\$8,000	3	I	5556
D0554	\$0	\$10,500	\$10,500	A	F	5055
D0596	\$310,800	\$321,900	\$11,100	3	F	4954
D5002	\$112,200	\$131,600	\$19,400	3	G	4955
D0158	\$248,100	\$270,000	\$21,900	3	C	5154
D0416	\$291,200	\$316,900	\$25,700	3	C	5053
D0003	\$0	\$146,800	\$146,800	A	I	5656
D0487	\$208,000	\$356,900	\$148,900	3	C	5053
D7036	\$0	\$153,900	\$153,900	A	C	5153
D0039	\$481,000	\$712,200	\$231,200	3	I	5555
D0091	\$474,800	\$726,400	\$251,600	3	D	5355
D7045	\$910,400	\$1,166,800	\$256,400	3	F	4955
D0622	\$0	\$367,300	\$367,300	A	C	5053
D0100	\$0	\$503,600	\$503,600	A	D	5354
D0633	\$0	\$539,300	\$539,300	A	C	4953
D0677	\$0	\$600,800	\$600,800	A	F	4954
D0052	\$0	\$630,200	\$630,200	A	D	5455
D7044	\$300,600	\$1,370,800	\$1,070,200	3	F	4955
TOTAL	\$5,605,400	\$10,608,400	\$5,003,000			

TABLE 8D
5-YEAR COST, GROUP 2
BRAYS BAYOU

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
No 5-Year, Group 2 Systems.						

TABLE 9D
5-YEAR COST, GROUP 3
BRAYS BAYOU

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
Sorted by Additional for 5-Year Storm						
D0903	\$167,900	\$179,500	\$11,600	I	I	5556
D0810	\$324,900	\$338,900	\$14,000	I	G	4855
D0341	\$700,700	\$715,900	\$15,200	I	C	5154
D0831	\$185,000	\$216,900	\$31,900	I	F	4855
D0907	\$462,400	\$508,300	\$45,900	I	D	5455
D0365	\$582,500	\$643,000	\$60,500	I	C	5154
D0839	\$979,200	\$1,045,700	\$66,500	I	D	5454
D0869	\$195,500	\$264,600	\$69,100	I	F	4952
D0093	\$1,060,100	\$1,130,700	\$70,600	I	D	5355
D0937	\$1,045,500	\$1,117,800	\$72,300	I	C	5254
D0820	\$1,003,300	\$1,078,300	\$75,000	I	F	4855
D0849	\$1,777,700	\$1,309,400	\$81,700	I	D	5455
D0358	\$1,084,500	\$1,172,000	\$87,500	I	C	5154
D0399	\$0	\$89,900	\$89,900	A	C	5152
D0713	\$329,800	\$428,900	\$99,100	I	F	4853
D0491	\$444,900	\$564,100	\$119,200	I	C	5053
D0914	\$1,120,200	\$1,240,600	\$120,400	I	F	5055
D0548	\$1,676,300	\$1,818,300	\$142,000	I	F	5054
D0195	\$549,300	\$712,500	\$163,200	I	C	5154
D0603	\$303,900	\$469,100	\$165,200	I	F	4954
D0363	\$1,763,000	\$1,434,100	\$171,100	I	F	5154
D1380	\$570,500	\$747,300	\$176,800	I	F	4954
D0577	\$170,100	\$356,600	\$186,500	I	F	4955
D0734	\$729,200	\$934,000	\$204,100	I	F	4854
D0311	\$588,500	\$797,300	\$208,800	I	C	5154
D0725	\$1,852,700	\$2,065,800	\$213,100	I	F	4853
D0573	\$594,400	\$828,700	\$234,300	I	F	4955
D0364	\$0	\$251,800	\$251,800	A	C	5154
D0022	\$1,054,100	\$1,311,900	\$257,800	I	I	5556
D0485	\$2,566,000	\$2,830,500	\$264,500	I	C	5053
D0097	\$805,000	\$1,084,100	\$279,100	I	C	5355
D0579	\$247,600	\$569,600	\$322,000	I	F	4954
D0001	\$215,600	\$550,600	\$335,000	I	I	5655
D0492	\$0	\$383,000	\$383,000	A	C	5053
D0684	\$1,647,100	\$2,041,400	\$399,300	I	F	4955
D0381	\$0	\$527,600	\$527,600	A	C	5153
D0473	\$540,700	\$1,020,400	\$679,700	I	C	5052
D0830	\$687,900	\$1,395,000	\$907,100	I	D	5455
D0437	\$0	\$1,196,500	\$1,196,500	A	C, F	5054
D0348	\$897,900	\$1,809,700	\$1,401,800	I	C	5053
D0108	\$14,749,200	\$18,386,400	\$3,637,200	I	C	5254, 5354
TOTAL	\$42,018,800	\$55,856,700	\$13,837,900			

TABLE GLOSSARY

2-Year Analysis Status

- Inadequate – Storm sewer analysis program results indicate system is not adequate.
- Adequate – Storm sewer analysis program results indicate system is adequate.
- Cannot Analyze – System could not be analyzed with the storm sewer analysis program due to lack of information.

2-Year CIP Cost – Probable cost to meet 2-year design criteria

Additional for 5-Year – Additional cost for major thoroughfares criteria (5-year storm)

Group

- Group 1 Systems that have reported structure and street-related flooding complaints.
- Group 2 Systems that have reported structure flooding complaints only.
- Group 3 Systems that have reported street flooding complaints only.
- Group 4 Systems that have no reported flooding complaints. Group 4 costs types will be applicable for categories 3 and 4 only.

Category

- Category 1 Existing storm sewer systems that have been determined to be inadequate and where flooding complaints have been reported within drainage boundaries.
- Category 2 Converting existing open-ditch systems (non-storm sewer areas) to storm sewer systems where previous flooding complaints have been reported. Proposed storm sewer systems for this category type address the main trunk system requirements only.
- Category 3 Existing storm sewer systems that have been determined to be inadequate and where flooding complaints *have not* been reported.
- Category 4 Converting existing open-ditch systems (non-storm sewer areas) to storm sewer systems where previous flooding complaints *have not* been reported. Proposed storm sewer systems for this category type address the main trunk system requirements only.
- Category 5 Areas currently considered to be undeveloped and having no defined drainage system. For this category type, drainage areas and main (trunk) sewer systems were determined.
- Category A Existing storm sewer systems that have been determined to be adequate. These systems may or may not have reported flooding complaints.

Category C.N.A. – System that could not be analyzed due to lack of storm sewer information.

City Council District – City Council district within which storm sewer system is located.

Facet Number – Facet (system map) number sheet on which storm sewer system is located.

Number of Addresses – Total number of addresses that are located in storm sewer study drainage boundary.

Cost Per Address – 2-year CIP cost divided by number of addresses.

Percent of System Single Family – Percent of storm sewer system drainage area classified as a *Single-family land-use type*.

TABLE 1 – STORM SEWER UNIT COST RATES

Pipe Diameter (in)	Unit Cost Rate (\$/ln ft)	Equivalent Box Size (ft x ft)
24	\$240	
30	\$260	
36	\$290	
42	\$340	
48	\$370	
54	\$450	
60	\$480	
66	\$520	
72	\$550	
78	\$590	
84	\$620	
90	\$720	
96	\$760	8 x 7
102	\$810	
108	\$820	
114	\$890	
120	\$930	10 x 9
126	\$1,060	10 x 9
132	\$1,110	10 x 10
138	\$1,150	10 x 10
144	\$1,190	8 x 7 & 8 x 7
150	\$1,350	8 x 7 & 8 x 8
156	\$1,400	8 x 8 & 8 x 8
162	\$1,450	10 x 9 & 8 x 7
168	\$1,490	10 x 9 & 8 x 8
174	\$1,540	10 x 10 & 8 x 8
180	\$1,590	10 x 9 & 10 x 9
186	\$1,640	10 x 10 & 10 x 9
192	\$1,680	10 x 10 & 10 x 10
198	\$1,730	10 x 10 & 8 x 7 & 8 x 7
204	\$1,780	10 x 9 & 10 x 9 & 8 x 7
210	\$1,820	10 x 10 & 10 x 9 & 8 x 7
216	\$1,870	10 x 10 & 10 x 10 & 8 x 7
222	\$1,920	See Note 1
228	\$1,970	See Note 1
234	\$2,010	See Note 1
240	\$2,060	See Note 1
246	\$2,110	See Note 1
252	\$2,150	See Note 1
258	\$2,200	See Note 1

Pipe Diameter (in)	Unit Cost Rate (\$/ln ft)	Equivalent Box Size (ft x ft)
264	\$2,250	See Note 1
270	\$2,300	See Note 1
276	\$2,340	See Note 1
282	\$2,390	See Note 1
288	\$2,440	See Note 1
Unit Cost Rates were developed based on City of Houston Bid Tabs for storm sewer projects constructed during 1994 and 1998.		
Unit Cost Rates include the following:		
Removal of existing pipe and pavement		
Storm sewer pipe		
Manholes		
Inlets		
Replacement of pavement		
Dewatering		
Trench safety		
Traffic control		
Engineering and contingency (20 percent)		
Unit Cost Rates do not include the following:		
Relocation of existing utilities		
Acquisition of additional right-of-way		

Notes

1. Equivalent box sizes for pipe diameters 212 inches or greater were not determined. It may be more cost-effective to propose an open channel instead of a box.

**TABLE 2W
BUFFALO BAYOU SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
Sorted by Outfall System ID								
W0001	Adequate	\$0	\$92,900	\$92,900	1	A	G	4757
W0002	Adequate	\$0	\$0	\$0	4	A	G	4757
W0005	Inadequate	\$658,500	\$3,846,100	\$4,504,600	1	1	G	4857
W0006	Adequate	\$0	\$13,923,900	\$13,923,900	3	A	G	4856
W0007	Adequate	\$0	\$331,000	\$331,000	4	A	G	4857
W0008	Adequate	\$0	\$1,559,400	\$1,559,400	2	A	G	4857
W0009	Adequate	\$0	\$0	\$0	1	A	G	4857
W0011	Adequate	\$0	\$0	\$0	3	A	G	4857
W0012	Adequate	\$0	\$0	\$0	4	A	G	4856
W0013	Adequate	\$0	\$0	\$0	2	A	G, I	4856
W0014	Inadequate	\$2,921,200	\$22,668,100	\$25,589,300	1	1	G	4856
W0015	Adequate	\$0	\$0	\$0	1	A	G	4856
W0016	Adequate	\$0	\$0	\$0	3	A	G	4957
W0017	Adequate	\$0	\$0	\$0	3	A	G	4957
W0018	Adequate	\$0	\$0	\$0	3	A	G	4957
W0019	Adequate	\$0	\$386,500	\$386,500	2	A	G	4957
W0020	Adequate	\$0	\$0	\$0	2	A	G	4957
W0021	Adequate	\$0	\$0	\$0	1	A	G	4957
W0022	Adequate	\$0	\$203,400	\$203,400	4	A	G	4957
W0023	Adequate	\$0	\$0	\$0	4	A	G	4957
W0024	Adequate	\$0	\$0	\$0	3	A	G	4957
W0025	Adequate	\$0	\$0	\$0	3	A	G	4957
W0026	Adequate	\$0	\$0	\$0	4	A	G	4957
W0027	Adequate	\$0	\$135,900	\$135,900	3	A	G	4957
W0028	Adequate	\$0	\$0	\$0	4	A	G	4957
W0029	Adequate	\$0	\$378,500	\$378,500	4	A	G	4957
W0030	Adequate	\$0	\$773,700	\$773,700	1	A	G	4957
W0031	Adequate	\$0	\$369,800	\$369,800	4	A	G	4957
W0032	Adequate	\$0	\$1,194,200	\$1,194,200	1	A	G	4956
W0033	Adequate	\$0	\$1,379,200	\$1,379,200	2	A	G	4956
W0034	Adequate	\$0	\$0	\$0	3	A	G	4956
W0035	Adequate	\$0	\$0	\$0	4	A	G	4956
W0036	Adequate	\$0	\$194,600	\$194,600	3	A	G	4956
W0037	Adequate	\$0	\$389,400	\$389,400	3	A	G	4956
W0038	Adequate	\$0	\$183,700	\$183,700	4	A	G	4956
W0039	Adequate	\$0	\$260,400	\$260,400	3	A	G	4956
W0042	Adequate	\$0	\$0	\$0	4	A	G	4957
W0043	Adequate	\$0	\$0	\$0	3	A	G	4957
W0044	Adequate	\$0	\$661,900	\$661,900	1	A	G	4957
W0046	Adequate	\$0	\$43,400	\$43,400	3	A	G	4957
W0047	Adequate	\$0	\$1,910,700	\$1,910,700	1	A	G	4957
W0048	Adequate	\$0	\$0	\$0	3	A	G	4957

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
W0050	Adequate	\$0	\$51,700	\$51,700	4	A	G	4957
W0053	Adequate	\$0	\$0	\$0	4	A	G	4956
W0054	Adequate	\$0	\$0	\$0	3	A	G	5055
W0055	Adequate	\$0	\$0	\$0	3	A	C	5055
W0056	Adequate	\$0	\$1,928,000	\$1,928,000	1	A	C	5055
W0057	Adequate	\$0	\$408,100	\$408,100	4	A	C	5055
W0058	Adequate	\$0	\$0	\$0	1	A	G	4956
W0059	Adequate	\$0	\$0	\$0	3	A	G	5056
W0060	Adequate	\$0	\$0	\$0	3	A	G	4956
W0061	Adequate	\$0	\$213,100	\$213,100	3	A	G	4956
W0062	Adequate	\$0	\$231,000	\$231,000	3	A	G	4956
W0064	Adequate	\$0	\$0	\$0	2	A	G	4956
W0065	Adequate	\$0	\$0	\$0	4	A	G	4956
W0066	Adequate	\$0	\$224,000	\$224,000	4	A	G	4956
W0067	Adequate	\$0	\$0	\$0	4	A	G	5056
W0068	Adequate	\$0	\$0	\$0	3	A	G	5056
W0069	Adequate	\$0	\$0	\$0	4	A	G	5056
W0070	Adequate	\$0	\$0	\$0	4	A	G	5056
W0071	Adequate	\$0	\$372,600	\$372,600	3	A	G	5056
W0072	Adequate	\$0	\$0	\$0	4	A	C	5056
W0073	Adequate	\$0	\$182,000	\$182,000	4	A	C	5056
W0074	Adequate	\$0	\$0	\$0	3	A	G	5056
W0075	Adequate	\$0	\$0	\$0	3	A	G	5056
W0076	Adequate	\$0	\$0	\$0	1	A	G	5056
W0077	Adequate	\$0	\$87,100	\$87,100	1	A	G	5056
W0078	Adequate	\$0	\$0	\$0	3	A	G	5056
W0079	Adequate	\$0	\$0	\$0	1	A	G	5056
W0080	Adequate	\$0	\$0	\$0	3	A	G	5056
W0081	Adequate	\$0	\$0	\$0	3	A	G	5056
W0082	Adequate	\$0	\$0	\$0	4	A	G	5056
W0083	Adequate	\$0	\$0	\$0	4	A	G	5056
W0084	Adequate	\$0	\$0	\$0	4	A	G	5056
W0086	Adequate	\$0	\$0	\$0	4	A	C	5056
W0087	Adequate	\$0	\$0	\$0	4	A	C	5056
W0088	Adequate	\$0	\$226,500	\$226,500	4	3	C	5056
W0089	Adequate	\$0	\$7,099,900	\$7,099,900	1	1	C	5056
W0090	Adequate	\$0	\$0	\$0	4	A	G	5056
W0091	Inadequate	\$4,197,300	\$6,925,500	\$11,122,800	2	1	C	5056
W0092	Adequate	\$0	\$0	\$0	4	A	G	5056
W0093	Adequate	\$0	\$0	\$0	4	A	G	5056
W0094	Adequate	\$0	\$0	\$0	4	A	G	5056
W0095	Adequate	\$0	\$0	\$0	3	A	G	5056
W0096	Adequate	\$0	\$0	\$0	4	A	G	5056

TABLE 2W
BUFFALO BAYOU SUMMARY OF PROPOSED IMPROVEMENTS

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
W0097	Adequate	\$0	\$0	\$0	4	A	G	5056
W0098	Adequate	\$0	\$0	\$0	4	A	G	5056
W0099	Adequate	\$0	\$0	\$0	3	A	G	5056
W0100	Adequate	\$0	\$0	\$0	4	A	G	5056
W0101	Adequate	\$0	\$0	\$0	4	A	G	5056
W0103	Adequate	\$0	\$0	\$0	4	A	G	5056
W0104	Adequate	\$0	\$0	\$0	4	A	C	5056
W0105	Adequate	\$0	\$0	\$0	4	A	C	5056
W0106	Adequate	\$0	\$0	\$0	4	A	C	5056
W0107	Adequate	\$0	\$74,500	\$74,500	1	A	C	5056
W0108	Adequate	\$0	\$387,700	\$387,700	1	A	C	5056
W0109	Adequate	\$0	\$1,223,000	\$1,223,000	1	A	G	5056
W0110	Adequate	\$0	\$0	\$0	4	A	G	5056
W0111	Adequate	\$0	\$0	\$0	1	A	G	5056
W0112	Adequate	\$0	\$0	\$0	4	A	G	5056
W0113	Adequate	\$0	\$1,343,400	\$1,343,400	4	A	G	5057
W0114	Adequate	\$0	\$357,000	\$357,000	4	A	G	5057
W0115	Adequate	\$0	\$0	\$0	4	A	G	5057
W0116	Adequate	\$0	\$72,900	\$72,900	4	A	G	5057
W0117	Inadequate	\$0	\$1,949,400	\$1,949,400	1	A	C	5056
W0118	Adequate	\$0	\$64,600	\$64,600	4	A	G	5057
W0119	Adequate	\$0	\$0	\$0	4	A	G	5057
W0120	Adequate	\$0	\$117,500	\$117,500	4	A	G	5057
W0121	Adequate	\$0	\$192,500	\$192,500	4	A	G	5057
W0122	Adequate	\$0	\$0	\$0	4	A	G	5057
W0123	Adequate	\$0	\$0	\$0	4	A	G	5057
W0124	Adequate	\$0	\$0	\$0	4	A	G	5057
W0125	Adequate	\$0	\$0	\$0	4	A	G	5057
W0126	Adequate	\$0	\$0	\$0	1	A	G	5057
W0127	Adequate	\$0	\$132,900	\$132,900	4	A	G	5056
W0128	Adequate	\$0	\$213,700	\$213,700	4	A	G	5056
W0129	Adequate	\$0	\$0	\$0	4	A	G	5056
W0130	Adequate	\$0	\$0	\$0	4	A	G	5056
W0133	Inadequate	\$346,500	\$981,000	\$1,327,500	4	3	C	5056
W0134	Adequate	\$0	\$0	\$0	4	A	C	5056
W0135	Inadequate	\$393,600	\$73,200	\$466,800	4	3	C	5056
W0136	Adequate	\$0	\$0	\$0	3	A	C	5056
W0137	Adequate	\$0	\$302,500	\$302,500	4	A	C	5056
W0138	Inadequate	\$606,100	\$586,300	\$1,192,400	4	3	C	5056
W0139	Adequate	\$0	\$431,000	\$431,000	4	A	C	5056
W0141	Inadequate	\$1,401,900	\$3,137,900	\$4,539,800	3	1	C	5055
W0142	Adequate	\$0	\$0	\$0	3	A	G	4956
W0143	Adequate	\$0	\$178,000	\$178,000	4	A	G	5056

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
W0146	Adequate	\$0	\$0	\$0	1	A	G	4956
W0147	Adequate	\$0	\$1,666,900	\$1,666,900	1	A	G	4956
W0148	Adequate	\$0	\$491,500	\$491,500	1	A	G	4957
W0150	Inadequate	\$94,600	\$13,800	\$108,400	4	3	G	4758
W0151	Inadequate	\$261,200	\$56,400	\$317,600	4	3	G	4758
W0152	Inadequate	\$38,700	\$0	\$38,700	4	3	G	4757
W0153	Inadequate	\$1,168,000	\$412,400	\$1,580,400	2	1	G	4757
W0154	Inadequate	\$164,000	\$0	\$164,000	4	3	G	4757
W0155	Inadequate	\$2,431,900	\$1,872,100	\$4,304,000	4	3	G	4758
W0156	Adequate	\$0	\$0	\$0	4	A	G	4758
W0157	Inadequate	\$13,100	\$0	\$13,100	4	3	G	4758
W0158	Adequate	\$0	\$0	\$0	4	A	G	4758
W0159	Adequate	\$0	\$0	\$0	4	A	G	4758
W0160	Adequate	\$0	\$0	\$0	4	A	G	4757
W0161	Adequate	\$0	\$0	\$0	4	A	G	4757
W0163	Adequate	\$0	\$0	\$0	4	A	G	4758
W0164	Adequate	\$0	\$0	\$0	4	A	G	4758
W0165	Adequate	\$0	\$0	\$0	4	A	G	4758
W0166	Inadequate	\$0	\$0	\$0	4	A	G	4758
W0167	Adequate	\$0	\$0	\$0	4	A	G	4758
W0168	Adequate	\$0	\$0	\$0	4	A	G	4758
W0169	Inadequate	\$0	\$0	\$0	4	A	A	4758
W0170	Adequate	\$0	\$0	\$0	4	A	A	4758
W0171	Adequate	\$0	\$384,000	\$384,000	4	A	G	4758
W0172	Inadequate	\$337,700	\$112,000	\$449,700	4	3	G	4757
W0174	Inadequate	\$1,610,400	\$324,400	\$1,934,800	2	1	G	4857
W0175	Adequate	\$0	\$453,800	\$453,800	4	A	G	4758
W0176	Adequate	\$0	\$0	\$0	4	A	G	4858
W0177	Adequate	\$0	\$187,500	\$187,500	4	A	G	4858
W0178	Adequate	\$0	\$271,200	\$271,200	4	A	G	4858
W0179	Inadequate	\$40,000	\$0	\$40,000	4	3	G	4858
W0180	Inadequate	\$383,500	\$696,100	\$1,079,600	4	3	G	4858
W0181	Adequate	\$0	\$0	\$0	4	A	G	4858
W0182	Adequate	\$0	\$268,000	\$268,000	4	A	G	4858
W0183	Adequate	\$0	\$0	\$0	4	A	A	4858
W0184	Adequate	\$0	\$0	\$0	4	A	A	4858
W0185	Adequate	\$0	\$0	\$0	4	A	A	4858
W0186	Adequate	\$0	\$0	\$0	4	A	A	4858
W0192	Adequate	\$0	\$0	\$0	2	A	G	4857
W0193	Inadequate	\$513,500	\$7,500	\$521,000	4	3	G	4857
W0194	Adequate	\$0	\$1,267,800	\$1,267,800	4	A	G	4857
W0195	Inadequate	\$2,994,500	\$114,000	\$3,108,500	2	1	G	4857
W0196	Inadequate	\$341,800	\$352,100	\$693,900	2	1	G	4857

TABLE 2W
BUFFALO BAYOU SUMMARY OF PROPOSED IMPROVEMENTS

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
W0197	Inadequate	\$1,431,100	\$41,400	\$1,472,500	1	1	G	4857
W0198	Adequate	\$0	\$0	\$0	4	A	G	4857
W0199	Adequate	\$0	\$0	\$0	4	A	G	4857
W0200	Adequate	\$0	\$0	\$0	4	A	G	4857
W0201	Inadequate	\$207,100	\$0	\$207,100	2	1	G	4857
W0202	Adequate	\$0	\$0	\$0	4	A	G	4857
W0204	Adequate	\$0	\$0	\$0	4	A	G	4857
W0206	Inadequate	\$149,500	\$1,700	\$151,200	4	3	G	4857
W0208	Adequate	\$0	\$0	\$0	4	A	G	4857
W0209	Inadequate	\$8,814,800	\$0	\$8,814,800	4	3	G	4858
W0210	Inadequate	\$3,134,200	\$508,700	\$3,642,900	4	3	G	4857
W0211	Inadequate	\$144,800	\$223,100	\$367,900	4	3	G	4857
W0212	Inadequate	\$253,800	\$334,000	\$587,800	4	3	G	4857
W0213	Inadequate	\$4,190,000	\$887,400	\$5,077,400	1	1	G	4858
W0214	Inadequate	\$527,700	\$17,800	\$545,500	4	3	A	4858
W0215	Inadequate	\$524,700	\$58,000	\$582,700	4	3	A	4858
W0216	Inadequate	\$145,300	\$304,800	\$450,100	4	3	A	4858
W0217	Inadequate	\$969,400	\$170,000	\$1,139,400	4	3	A	4858
W0218	Inadequate	\$901,900	\$268,200	\$1,170,100	4	3	A	4858
W0219	Inadequate	\$893,500	\$177,300	\$1,070,800	4	3	A	4858
W0220	Inadequate	\$779,500	\$0	\$779,500	4	3	A	4858
W0221	Inadequate	\$214,500	\$0	\$214,500	4	3	A	4858
W0222	Adequate	\$0	\$0	\$0	4	A	A	4858
W0223	Inadequate	\$874,700	\$180,700	\$1,055,400	4	3	G	4857
W0224	Inadequate	\$3,932,200	\$407,000	\$4,339,200	1	1	G	4858
W0225	Inadequate	\$1,058,800	\$348,200	\$1,407,000	4	3	G	4857
W0226	Adequate	\$0	\$0	\$0	4	A	G	4957
W0227	Adequate	\$0	\$0	\$0	2	A	G	4957
W0228	Adequate	\$0	\$0	\$0	4	A	G	4957
W0229	Adequate	\$0	\$0	\$0	4	A	G	4957
W0230	Adequate	\$0	\$0	\$0	4	A	G	4957
W0231	Adequate	\$0	\$0	\$0	4	A	G	4957
W0232	Inadequate	\$54,600	\$0	\$54,600	4	3	G	4957
W0234	Adequate	\$0	\$0	\$0	4	A	G	4957
W0235	Adequate	\$0	\$0	\$0	4	A	G	4957
W0236	Adequate	\$0	\$0	\$0	4	A	G	4957
W0237	Adequate	\$0	\$0	\$0	4	A	G	4957
W0238	Inadequate	\$232,300	\$0	\$232,300	4	3	G	4957
W0239	Inadequate	\$1,064,500	\$0	\$1,064,500	4	3	G	4957
W0240	Adequate	\$0	\$0	\$0	4	A	G	4957
W0242	Adequate	\$0	\$0	\$0	4	A	G	4957
W0243	Inadequate	\$250,300	\$57,400	\$307,700	4	3	G	4957
W0244	Adequate	\$0	\$0	\$0	4	A	G	4958

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
W0245	Inadequate	\$3,115,700	\$889,300	\$4,005,000	1	1	G	4958
W0246	Inadequate	\$47,900	\$0	\$47,900	4	3	G	4958
W0247	Inadequate	\$78,800	\$0	\$78,800	4	3	G	4958
W0248	Adequate	\$0	\$0	\$0	4	A	G	4958
W0249	Adequate	\$0	\$0	\$0	4	A	G	4958
W0250	Adequate	\$0	\$0	\$0	4	A	G	4958
W0251	Adequate	\$0	\$0	\$0	4	A	G	4958
W0252	Inadequate	\$964,800	\$0	\$964,800	4	3	G	4958
W0253	Inadequate	\$506,400	\$0	\$506,400	4	3	G	4958
W0254	Adequate	\$0	\$0	\$0	4	A	G	4958
W0255	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	G	4958
W0256	Adequate	\$0	\$0	\$0	4	A	G	4958
W0257	Inadequate	\$1,716,200	\$1,571,000	\$3,287,200	4	3	G	4958
W0258	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	G	4958
W0259	Inadequate	\$743,800	\$168,900	\$912,700	4	3	G	4958
W0260	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	A	4958
W0261	Adequate	\$0	\$0	\$0	4	A	A	4958
W0263	Inadequate	\$1,812,700	\$2,402,600	\$4,215,300	2	1	G	4957
W0264	Adequate	\$0	\$0	\$0	4	A	G	4957
W0265	Inadequate	\$88,300	\$10,200	\$98,500	4	3	G	4957
W0266	Inadequate	\$166,100	\$77,500	\$243,600	4	3	G	4957
W0268	Inadequate	\$405,000	\$0	\$405,000	4	3	G	4957
W0269	Inadequate	\$543,800	\$0	\$543,800	4	3	G	4957
W0271	Inadequate	\$219,600	\$24,200	\$243,800	4	3	G	5056
W0273	Inadequate	\$180,600	\$0	\$180,600	4	3	G	5056
W0274	Inadequate	\$17,900	\$0	\$17,900	4	3	G	5057
W0277	Inadequate	\$28,100	\$0	\$28,100	4	3	G	4957
W0278	Adequate	\$0	\$0	\$0	2	A	G	4957
W0279	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	G	4957
W0280	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	G	4957
W0281	Inadequate	\$24,900	\$0	\$24,900	4	3	G	4957
W0282	Inadequate	\$659,300	\$94,900	\$754,200	4	3	G	4957
W0283	Inadequate	\$75,300	\$0	\$75,300	4	3	G	4957
W0284	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	G	4957
W0286	Cannot Analyze	\$0	\$0	\$0	2	C.N.A.	G	4958
W0287	Inadequate	\$215,600	\$0	\$215,600	4	3	G	4958
W0288	Adequate	\$0	\$0	\$0	4	A	G	4958

TABLE 2W
BUFFALO BAYOU SUMMARY OF PROPOSED IMPROVEMENTS

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
W0289	Inadequate	\$59,100	\$0	\$59,100	4	3	G	4958
W0290	Adequate	\$0	\$0	\$0	4	A	G	4958
W0291	Adequate	\$0	\$0	\$0	4	A	G	4958
W0293	Inadequate	\$206,000	\$2,765,900	\$2,971,900	4	3	G	4958
W0294	Inadequate	\$2,797,700	\$4,050,100	\$6,847,800	2	1	G	4958
W0295	Inadequate	\$108,400	\$0	\$108,400	4	3	G	4958
W0296	Inadequate	\$58,600	\$0	\$58,600	4	3	G	4958
W0297	Inadequate	\$265,900	\$23,500	\$289,400	4	3	G	4958
W0298	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	A	4958
W0299	Inadequate	\$303,700	\$55,200	\$358,900	4	3	A	4958
W0300	Adequate	\$0	\$0	\$0	4	A	A	4958
W0301	Inadequate	\$26,800	\$14,400	\$41,200	4	3	A	4959
W0302	Inadequate	\$2,332,200	\$225,300	\$2,557,500	4	3	A	4959
W0303	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	A	4959
W0304	Adequate	\$0	\$0	\$0	4	A	A	4959
W0305	Adequate	\$0	\$0	\$0	4	A	A	4959
W0306	Adequate	\$0	\$0	\$0	4	A	A	4959
W0307	Inadequate	\$126,400	\$0	\$126,400	2	1	A	4959
W0308	Adequate	\$0	\$0	\$0	4	A	A	4959
W0309	Inadequate	\$190,800	\$0	\$190,800	4	3	A	4959
W0310	Inadequate	\$780,800	\$0	\$780,800	4	3	A	4959
W0311	Adequate	\$0	\$0	\$0	4	A	A	4959
W0312	Inadequate	\$2,633,000	\$1,170,600	\$3,803,600	4	3	A	4959
W0313	Inadequate	\$112,900	\$0	\$112,900	4	3	A	4959
W0314	Inadequate	\$67,000	\$0	\$67,000	4	3	A	4959
W0315	Inadequate	\$848,300	\$0	\$848,300	4	3	A	4959
W0316	Adequate	\$0	\$0	\$0	4	A	A	4959
W0317	Adequate	\$0	\$0	\$0	4	A	A	4959
W0318	Adequate	\$0	\$0	\$0	4	A	A	4959
W0319	Inadequate	\$115,900	\$0	\$115,900	4	3	A	4959
W0320	Inadequate	\$691,100	\$0	\$691,100	4	3	A	4959
W0321	Adequate	\$0	\$0	\$0	4	A	A	4959
W0322	Inadequate	\$6,323,600	\$716,600	\$7,040,200	4	3	A	4959
W0323	Adequate	\$0	\$0	\$0	4	A	A	4959
W0324	Inadequate	\$351,900	\$18,000	\$369,900	4	3	A	4959
W0325	Inadequate	\$1,777,500	\$0	\$1,777,500	4	3	A	4959
W0327	Inadequate	\$273,700	\$0	\$273,700	4	3	A	4958
W0328	Inadequate	\$95,200	\$0	\$95,200	4	3	A	4959
W0329	Inadequate	\$485,000	\$175,100	\$660,100	4	3	A	4958
W0330	Inadequate	\$61,500	\$0	\$61,500	4	3	A	4959
W0331	Inadequate	\$159,500	\$191,800	\$351,300	4	3	A	4958

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
W0332	Inadequate	\$87,900	\$0	\$87,900	4	3	A	4959
W0333	Inadequate	\$88,200	\$0	\$88,200	4	3	A	4959
W0334	Adequate	\$0	\$0	\$0	4	A	A	4959
W0335	Inadequate	\$176,500	\$0	\$176,500	4	3	A	4959
W0336	Inadequate	\$116,700	\$0	\$116,700	4	3	A	4959
W0338	Adequate	\$0	\$0	\$0	4	A	A	5059
W0339	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	A	5059
W0340	Adequate	\$0	\$0	\$0	4	A	A	5059
W0341	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	A	5059
W0342	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	A	5059
W0343	Inadequate	\$221,000	\$0	\$221,000	2	1	A	5059
W0344	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	A	5059
W0345	Adequate	\$0	\$0	\$0	4	A	A	5059
W0346	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	A	5059
W0347	Adequate	\$0	\$0	\$0	4	A	A	5059
W0348	Adequate	\$0	\$0	\$0	4	A	A	5059
W0349	Inadequate	\$334,000	\$611,300	\$945,300	4	3	A	5058
W0350	Inadequate	\$196,500	\$0	\$196,500	4	3	A	5058
W0351	Adequate	\$0	\$0	\$0	4	A	A	5058
W0352	Inadequate	\$1,230,300	\$119,100	\$1,349,400	4	3	A	5058
W0353	Inadequate	\$1,981,200	\$235,900	\$2,217,100	4	3	A	5058
W0356	Adequate	\$0	\$0	\$0	4	A	A	5058
W0357	Inadequate	\$66,900	\$0	\$66,900	4	3	A	5059
W0358	Inadequate	\$91,800	\$0	\$91,800	4	3	A	5059
W0359	Inadequate	\$464,800	\$0	\$464,800	2	1	A	5059
W0360	Inadequate	\$35,200	\$0	\$35,200	4	3	A	5059
W0361	Adequate	\$0	\$0	\$0	4	A	A	5059
W0362	Adequate	\$0	\$0	\$0	4	A	A	5059
W0363	Inadequate	\$145,700	\$220,800	\$366,500	4	3	A	5059
W0364	Inadequate	\$977,700	\$65,900	\$1,043,600	4	3	A	5059
W0365	Inadequate	\$1,572,800	\$125,400	\$1,698,200	4	3	A	5059
W0366	Adequate	\$0	\$0	\$0	4	A	A	5059
W0367	Inadequate	\$336,800	\$26,900	\$363,700	4	3	A	5059
W0369	Inadequate	\$444,900	\$57,500	\$502,400	4	3	A	5059
W0370	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	A	5059
W0371	Adequate	\$0	\$0	\$0	4	A	A	5059
W0372	Adequate	\$0	\$0	\$0	4	A	A	5059
W0373	Adequate	\$0	\$0	\$0	4	A	A	5059

TABLE 2W
BUFFALO BAYOU SUMMARY OF PROPOSED IMPROVEMENTS

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
W0374	Adequate	\$0	\$0	\$0	4	A	A	5059
W0375	Inadequate	\$16,300	\$0	\$16,300	4	3	A	5059
W0377	Inadequate	\$131,100	\$0	\$131,100	4	3	A	5058
W0379	Inadequate	\$522,800	\$271,700	\$794,500	4	3	A	5058
W0380	Inadequate	\$388,600	\$34,300	\$422,900	4	3	A	5058
W0381	Inadequate	\$7,090,300	\$2,477,600	\$9,567,900	4	3	A	4959
W0383	Inadequate	\$108,000	\$18,600	\$126,600	4	3	A	4959
W0384	Adequate	\$0	\$0	\$0	4	A	A	4959
W0385	Inadequate	\$669,100	\$97,300	\$766,400	4	3	G	4959
W0386	Inadequate	\$1,594,200	\$0	\$1,594,200	4	3	G	4959
W0387	Inadequate	\$2,327,200	\$0	\$2,327,200	4	3	G	4959
W0389	Not Analyzed	\$0	\$0	\$0	N/A	N/A	G	4957
W0391	Inadequate	\$5,651,100	\$404,700	\$6,055,800	4	3	A	4959
W0392	Inadequate	\$6,312,900	\$786,800	\$7,099,700	2	1	A	4959
W0393	Adequate	\$0	\$0	\$0	4	A	A	4959
W0394	Adequate	\$0	\$0	\$0	4	A	G	4957
W0395	Inadequate	\$103,800	\$0	\$103,800	4	3	A	4958
W0396	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	A	4957
W0397	Inadequate	\$90,900	\$0	\$90,900	4	3	A	4959
W0398	Adequate	\$0	\$0	\$0	4	A	A	4959
W0399	Inadequate	\$67,100	\$0	\$67,100	4	3	A	4959
W0400	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	A	5059
W0401	Inadequate	\$58,100	\$0	\$58,100	4	3	A	5059
W0402	Inadequate	\$5,906,700	\$1,513,500	\$7,420,200	2	1	A	5059
W0403	Inadequate	\$25,267,900	\$4,729,800	\$29,997,700	2	1	A	5159
W0404	Inadequate	\$10,200,300	\$13,240,500	\$23,440,800	2	1	A	5159
W0407	Adequate	\$0	\$0	\$0	4	A	A	5158
W0408	Inadequate	\$56,900	\$5,000	\$61,900	4	3	A	5158
W0409	Adequate	\$0	\$0	\$0	4	A	G	5158
W0411	Adequate	\$0	\$0	\$0	4	A	G	5158
W0413	Inadequate	\$65,200	\$31,900	\$97,100	4	3	G	5158
W0414	Adequate	\$0	\$359,700	\$359,700	4	A	G	5158
W0415	Adequate	\$0	\$0	\$0	4	A	G	5158
W0416	Adequate	\$0	\$0	\$0	4	A	G	5158
W0418	Adequate	\$0	\$0	\$0	4	A	G	5158
W0419	Adequate	\$0	\$0	\$0	2	A	G	5158
W0420	Adequate	\$0	\$0	\$0	4	A	G	5158
W0421	Adequate	\$0	\$0	\$0	4	A	G	5157
W0423	Inadequate	\$2,092,900	\$392,600	\$2,485,500	4	3	G	5157
W0424	Adequate	\$0	\$0	\$0	4	A	G	5157
W0425	Adequate	\$0	\$0	\$0	4	A	G	5157

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
W0426	Adequate	\$0	\$0	\$0	4	A	G	5157
W0427	Inadequate	\$1,543,700	\$374,200	\$1,917,900	4	3	G	5158
W0428	Inadequate	\$483,700	\$0	\$483,700	4	3	G	5158
W0429	Inadequate	\$859,000	\$70,500	\$929,500	4	3	G	5158
W0430	Inadequate	\$317,300	\$0	\$317,300	4	3	G	5158
W0431	Adequate	\$0	\$0	\$0	4	A	G	5158
W0432	Adequate	\$0	\$0	\$0	4	A	G	5158
W0433	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	G	5158
W0434	Inadequate	\$355,400	\$641,000	\$996,400	4	3	G	5158
W0435	Inadequate	\$1,931,300	\$232,700	\$2,164,000	4	3	G	5258
W0436	Inadequate	\$2,660,600	\$602,400	\$3,263,000	4	3	G	5257
W0437	Adequate	\$0	\$0	\$0	4	A	G	5257
W0438	Inadequate	\$822,700	\$1,894,000	\$2,716,700	4	3	G	5257
W0439	Adequate	\$0	\$0	\$0	4	A	G	5257
W0441	Inadequate	\$167,300	\$135,400	\$302,700	4	3	G	5257
W0442	Adequate	\$0	\$0	\$0	2	A	G	5257
W0443	Inadequate	\$1,557,200	\$523,500	\$2,080,700	4	3	G	5257
W0445	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	G	5257
W0446	Adequate	\$0	\$0	\$0	2	A	G	5257
W0448	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	G	5257
W0449	Inadequate	\$1,405,000	\$1,223,200	\$2,628,200	4	3	G	5357
W0450	Inadequate	\$1,836,400	\$396,700	\$2,233,100	4	3	H	5357
W0451	Inadequate	\$1,040,100	\$156,900	\$1,197,000	4	3	H	5357
W0452	Adequate	\$0	\$0	\$0	4	A	G	5257
W0453	Adequate	\$0	\$0	\$0	4	A	H	5357
W0454	Inadequate	\$979,000	\$30,700	\$1,009,700	4	3	H	5357
W0455	Inadequate	\$54,500	\$0	\$54,500	4	3	H	5357
W0456	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	H	5357
W0457	Inadequate	\$1,042,400	\$679,600	\$1,722,000	4	3	H	5357
W0458	Adequate	\$0	\$0	\$0	4	A	H	5357
W0459	Adequate	\$0	\$0	\$0	4	A	H	5357
W0460	Inadequate	\$303,500	\$27,000	\$330,500	4	3	H	5357
W0462	Adequate	\$0	\$385,500	\$385,500	4	A	I	5357
W0463	Adequate	\$0	\$0	\$0	4	A	I	5357
W0464	Inadequate	\$512,300	\$19,900	\$532,200	4	3	I	5357
W0465	Inadequate	\$428,400	\$172,400	\$600,800	4	3	I	5357
W0466	Adequate	\$0	\$0	\$0	4	A	I	5457
W0467	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	I	5457
W0468	Adequate	\$0	\$0	\$0	4	A	I	5457

**TABLE 2W
BUFFALO BAYOU SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
W0469	Inadequate	\$2,545,500	\$1,750,100	\$4,295,600	4	3	H	5458
W0470	Adequate	\$0	\$0	\$0	4	A	H	5467
W0472	Adequate	\$0	\$0	\$0	4	A	H	5457
W0473	Adequate	\$0	\$0	\$0	4	A	H	5457
W0474	Inadequate	\$1,218,600	\$192,400	\$1,411,000	2	1	H	5457
W0475	Inadequate	\$278,600	\$0	\$278,600	4	3	B	5457
W0476	Inadequate	\$468,000	\$361,900	\$829,900	4	3	B	5457
W0477	Inadequate	\$511,900	\$273,900	\$785,800	4	3	I	5557
W0478	Inadequate	\$3,046,700	\$91,000	\$3,137,700	4	3	I	5557
W0479	Inadequate	\$15,304,400	\$3,061,800	\$18,366,200	2	1	I	5558
W0480	Inadequate	\$1,587,700	\$1,235,700	\$2,823,400	4	3	I	5558
W0481	Adequate	\$0	\$0	\$0	4	A	I	5558
W0482	Adequate	\$0	\$0	\$0	4	A	I	5558
W0483	Adequate	\$0	\$0	\$0	4	A	I	5457
W0484	Inadequate	\$8,450,400	\$3,442,000	\$11,892,400	4	3	I	5458
W0485	Inadequate	\$9,958,800	\$4,553,800	\$14,512,600	4	3	I	5458
W0486	Inadequate	\$614,700	\$0	\$614,700	4	3	H	5458
W0487	Inadequate	\$844,800	\$50,100	\$894,900	4	3	H	5457
W0488	Inadequate	\$1,101,900	\$124,800	\$1,226,700	2	1	A	5059
W0489	Inadequate	\$5,464,500	\$164,300	\$5,628,800	4	3	A	5158
W0490	Inadequate	\$164,600	\$137,800	\$302,400	4	3	H	5458
W0491	Inadequate	\$1,495,800	\$1,024,100	\$2,519,900	4	3	H	5459
W0492	Inadequate	\$1,452,100	\$116,600	\$1,568,700	2	1	I	5557
W0493	Adequate	\$0	\$0	\$0	4	A	H	5457
W0494	Inadequate	\$40,200	\$4,600	\$44,800	4	3	A	5158
W0495	Adequate	\$0	\$0	\$0	4	A	D	5357
W0498	Adequate	\$0	\$0	\$0	4	A	H	5457
W0499	Adequate	\$0	\$0	\$0	4	A	H	5457
W0500	Adequate	\$0	\$0	\$0	4	A	H	5457
W0501	Inadequate	\$82,700	\$0	\$82,700	4	3	H	5457
W0502	Adequate	\$0	\$23,600	\$23,600	4	A	B	5458
W0503	Adequate	\$0	\$0	\$0	4	A	B	5458
W0504	Adequate	\$0	\$0	\$0	4	A	B	5558
W0505	Adequate	\$0	\$0	\$0	4	A	G	5158
W0506	Adequate	\$0	\$0	\$0	4	A	G	5158
W0507	Inadequate	\$1,396,100	\$191,600	\$1,587,700	4	3	G	5158
W0512	Adequate	\$0	\$0	\$0	4	A	G	4758
W0513	Adequate	\$0	\$0	\$0	4	A	G	4758
W0514	Adequate	\$0	\$0	\$0	4	A	G	4757
W0515	Adequate	\$0	\$0	\$0	4	A	G	4757
W0516	Inadequate	\$127,200	\$0	\$127,200	4	3	G	4757
W0519	Adequate	\$0	\$120,200	\$120,200	4	3	G	4857
W0521	Adequate	\$0	\$0	\$0	4	A	A	5059

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
W0523	Inadequate	\$403,600	\$36,000	\$439,600	4	3	A	5058
W0524	Adequate	\$0	\$0	\$0	4	A	H	5357
W0526	Adequate	\$0	\$0	\$0	4	A	A	4959
W0527	Adequate	\$0	\$0	\$0	4	A	A	4959
W0529	Adequate	\$0	\$0	\$0	4	A	G	4958
W0530	Inadequate	\$1,575,700	\$379,400	\$1,955,100	2	1	H	5357
W0548	Adequate	\$0	\$0	\$0	1	A	C	5156
W0549	Inadequate	\$1,063,600	\$0	\$1,063,600	4	3	C	5156
W0550	Inadequate	\$1,091,400	\$0	\$1,091,400	4	3	C	5156
W0551	Inadequate	\$1,241,600	\$0	\$1,241,600	4	3	C	5156
W0552	Inadequate	\$1,904,700	\$771,500	\$2,676,200	3	1	C	5156
W0557	Adequate	\$0	\$0	\$0	4	A	C	5056
W0558	Inadequate	\$2,142,800	\$893,600	\$3,036,400	1	1	G	5156
W0560	Adequate	\$0	\$0	\$0	2	A	G	5056
W0561	Adequate	\$0	\$0	\$0	4	A	G	5056
W0563	Inadequate	\$16,800	\$0	\$16,800	2	1	G	5056
W0564	Inadequate	\$1,087,500	\$0	\$1,087,500	1	1	G	5056
W0566	Inadequate	\$222,900	\$0	\$222,900	1	1	G	5156
W0569	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	G	5056
W0571	Inadequate	\$769,500	\$0	\$769,500	1	1	G	5156
W0573	Inadequate	\$14,421,500	\$7,067,200	\$21,488,700	1	1	G	5156
W0574	Inadequate	\$4,084,500	\$1,119,200	\$5,203,700	1	1	G	5157
W0575	Adequate	\$0	\$0	\$0	2	A	G	5057
W0577	Adequate	\$0	\$0	\$0	4	A	G	5157
W0578	Inadequate	\$786,700	\$0	\$786,700	2	1	G	5157
W0579	Adequate	\$0	\$0	\$0	4	A	G	5157
W0580	Inadequate	\$234,300	\$0	\$234,300	3	1	G	5157
W0581	Adequate	\$0	\$0	\$0	3	A	G	5157
W0582	Inadequate	\$453,100	\$125,400	\$578,500	3	1	G	5157
W0583	Adequate	\$0	\$0	\$0	3	A	G	5157
W0584	Adequate	\$0	\$0	\$0	1	A	G	5157
W0585	Adequate	\$0	\$0	\$0	4	A	G	5157
W0587	Adequate	\$0	\$0	\$0	4	A	G	5157
W0591	Adequate	\$0	\$0	\$0	4	A	G	5157
W0593	Adequate	\$0	\$0	\$0	4	A	G	5157
W0594	Adequate	\$0	\$0	\$0	3	A	G	5157
W0595	Inadequate	\$5,505,300	\$727,400	\$6,232,700	1	1	G	5157
W0596	Inadequate	\$270,000	\$0	\$270,000	3	1	G	5157
W0597	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	G	5157
W0598	Inadequate	\$493,200	\$341,200	\$834,400	3	1	G	5157
W0600	Inadequate	\$305,000	\$69,100	\$374,100	1	1	G	5157

TABLE 2W
BUFFALO BAYOU SUMMARY OF PROPOSED IMPROVEMENTS

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
W0601	Adequate	\$0	\$0	\$0	4	A	G	5157
W0602	Inadequate	\$45,700	\$0	\$45,700	3	I	G	5157
W0603	Inadequate	\$71,600	\$0	\$71,600	3	I	G	5157
W0604	Adequate	\$0	\$0	\$0	4	A	G	5157
W0605	Adequate	\$0	\$0	\$0	4	A	G	5157
W0611	Inadequate	\$8,186,300	\$5,057,900	\$13,244,200	1	I	G	5156
W0613	Adequate	\$0	\$0	\$0	4	A	G	5157
W0614	Inadequate	\$2,842,600	\$698,000	\$3,540,600	4	3	G	5157
W0615	Adequate	\$0	\$0	\$0	4	A	G	5157
W0616	Adequate	\$0	\$0	\$0	4	A	G	5157
W0618	Inadequate	\$818,400	\$0	\$818,400	4	3	G	5157
W0619	Inadequate	\$389,200	\$0	\$389,200	4	3	G	5157
W0620	Adequate	\$0	\$0	\$0	4	A	G	5157
W0621	Adequate	\$0	\$0	\$0	4	A	G	5157
W0622	Adequate	\$0	\$0	\$0	4	A	G	5257
W0623	Adequate	\$0	\$0	\$0	4	A	G	5257
W0624	Inadequate	\$1,092,600	\$96,300	\$1,188,900	1	I	G	5156
W0625	Adequate	\$0	\$0	\$0	3	A	G	5256
W0626	Adequate	\$0	\$2,938,500	\$2,938,500	1	A	G	5156
W0627	Inadequate	\$541,500	\$1,380,300	\$1,921,800	3	I	G	5156
W0629	Adequate	\$0	\$0	\$0	4	A	C	5156
W0630	Adequate	\$0	\$0	\$0	4	A	C	5156
W0632	Adequate	\$0	\$4,278,400	\$4,278,400	1	A	G	5256
W0633	Adequate	\$0	\$603,300	\$603,300	3	A	G	5257
W0634	Adequate	\$0	\$426,500	\$426,500	4	A	G	5257
W0635	Not Analyzed	\$0	\$0	\$0	N/A	N/A	I	5457
W0636	Adequate	\$0	\$0	\$0	4	A	G	5257
W0637	Adequate	\$0	\$0	\$0	4	A	D	5357
W0638	Adequate	\$0	\$0	\$0	1	A	D	5357
W0639	Adequate	\$0	\$245,600	\$245,600	3	A	D	5357
W0640	Adequate	\$0	\$0	\$0	4	A	D	5357
W0641	Adequate	\$0	\$161,900	\$161,900	4	A	D	5357
W0642	Adequate	\$0	\$0	\$0	4	A	D	5357
W0644	Adequate	\$0	\$0	\$0	4	A	D	5357
W0645	Adequate	\$0	\$0	\$0	3	A	D	5357
W0647	Adequate	\$0	\$557,400	\$557,400	4	A	I	5357
W0648	Adequate	\$0	\$34,600	\$34,600	4	A	I	5357
W0649	Adequate	\$0	\$0	\$0	4	A	I	5457
W0650	Adequate	\$0	\$0	\$0	4	A	I	5457
W0652	Adequate	\$0	\$0	\$0	4	A	I	5457
W0653	Adequate	\$0	\$0	\$0	4	A	I	5457
W0654	Adequate	\$0	\$232,400	\$232,400	4	A	I	5457
W0656	Inadequate	\$577,900	\$2,038,400	\$2,616,300	4	3	I	5557

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
W0657	Adequate	\$0	\$0	\$0	1	A	I	5457
W0658	Adequate	\$0	\$202,300	\$202,300	4	A	I	5457
W0659	Adequate	\$0	\$480,000	\$480,000	4	A	H	5457
W0660	Adequate	\$0	\$84,000	\$84,000	4	A	H	5457
W0661	Adequate	\$0	\$162,800	\$162,800	4	A	H	5457
W0664	Adequate	\$0	\$163,100	\$163,100	4	A	H	5457
W0665	Adequate	\$0	\$0	\$0	4	A	H	5457
W0666	Adequate	\$0	\$0	\$0	3	A	H	5457
W0667	Adequate	\$0	\$724,200	\$724,200	1	A	H	5557
W0668	Adequate	\$0	\$0	\$0	4	A	H	5557
W0669	Inadequate	\$524,700	\$1,048,800	\$1,573,500	3	I	H	5557
W0670	Adequate	\$0	\$212,600	\$212,600	3	A	I	5557
W0671	Adequate	\$0	\$323,200	\$323,200	4	A	I	5557
W0672	Adequate	\$0	\$835,900	\$835,900	3	A	G	5157
W0673	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	G	5157
W0676	Inadequate	\$1,387,500	\$125,000	\$1,512,500	3	I	G	5156
W0677	Adequate	\$0	\$0	\$0	1	A	G	5257
W0678	Inadequate	\$2,542,700	\$289,900	\$2,832,600	1	I	G	5257
W0679	Inadequate	\$8,219,600	\$0	\$8,219,600	1	I	G	5257
W0680	Adequate	\$0	\$0	\$0	1	A	D	5357
W0681	Inadequate	\$895,900	\$0	\$895,900	3	I	D	5357
W0682	Inadequate	\$946,000	\$82,600	\$1,028,600	1	I	D	5357
W0683	Not Analyzed	\$0	\$0	\$0	3	N/A	I	5357
W0684	Not Analyzed	\$0	\$0	\$0	4	N/A	I	5457
W0685	Not Analyzed	\$0	\$0	\$0	4	N/A	I	5457
W0686	Inadequate	\$23,419,000	\$7,591,100	\$31,010,100	1	I	I	5357
W0688	Adequate	\$0	\$0	\$0	4	A	I	5457
W0690	Adequate	\$0	\$0	\$0	4	A	I	5356
W0692	Adequate	\$0	\$0	\$0	4	A	G	5157
W0694	Adequate	\$0	\$4,800	\$4,800	3	A	G	5157
W0695	Inadequate	\$67,300	\$0	\$67,300	3	I	C	5156
W0696	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5156
W0697	Inadequate	\$4,436,300	\$692,400	\$5,128,700	1	I	G	5156
W0698	Inadequate	\$3,350,800	\$304,900	\$3,655,700	3	I	C	5156
W0699	Inadequate	\$3,624,400	\$693,100	\$4,317,500	1	I	C	5156
W0700	Adequate	\$0	\$0	\$0	3	A	G	5057
W0701	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	C	5156
W0702	Adequate	\$0	\$0	\$0	4	A	I	5457
W0703	Inadequate	\$641,600	\$51,900	\$693,500	4	3	I	5457
W0704	Inadequate	\$952,200	\$44,800	\$997,000	1	I	H	5457

**TABLE 2W
BUFFALO BAYOU SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
W0705	Inadequate	\$4,228,300	\$1,050,400	\$5,278,700	3	I	I	5457
W0706	Inadequate	\$3,848,100	\$823,500	\$4,671,600	1	I	H	5457
W0707	Adequate	\$0	\$0	\$0	4	A	I	5557
W0708	Adequate	\$0	\$246,100	\$246,100	1	A	G	5157
W0709	Inadequate	\$1,468,300	\$120,800	\$1,589,100	3	I	G	5156
W0710	Inadequate	\$664,600	\$189,900	\$854,500	1	I	G	5256
W0711	Inadequate	\$1,048,100	\$668,000	\$1,716,100	1	I	G	5257
W0750	Adequate	\$0	\$0	\$0	4	A	A	4959
W0751	Adequate	\$0	\$0	\$0	4	A	A	4959
W0752	Adequate	\$0	\$0	\$0	4	A	A	4959
W0800	Adequate	\$0	\$0	\$0	4	A	G	5057
W0801	Adequate	\$0	\$0	\$0	4	A	I	5357
W0802	Adequate	\$0	\$0	\$0	4	A	I	5357
W0804	Inadequate	\$1,780,800	\$237,500	\$2,018,300	1	I	I	5556
W0805	Adequate	\$0	\$0	\$0	4	A	I	5557
W0806	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	G	4856
W0809	Adequate	\$0	\$0	\$0	4	A	I	5357
W0810	Adequate	\$0	\$0	\$0	4	A	I	5357
W0811	Adequate	\$0	\$0	\$0	4	A	A	5557
W1001	Proposed System	\$1,250,200	\$0	\$1,250,200	2	2	G	4857
W1002	Proposed System	\$420,100	\$0	\$420,100	3	2	A	4858
W1003	Proposed System	\$1,523,500	\$0	\$1,523,500	1	2	A	4858
W1004	Proposed System	\$514,900	\$0	\$514,900	3	2	A	4859
W1005	Proposed System	\$3,115,700	\$0	\$3,115,700	1	2	A	4859
W1006	Proposed System	\$1,407,900	\$0	\$1,407,900	3	2	A	4960
W1008	Proposed System	\$1,153,300	\$0	\$1,153,300	3	2	A	4959
W1009	Proposed System	\$269,800	\$0	\$269,800	2	2	A	5959
W1010	Proposed System	\$1,456,200	\$0	\$1,456,200	1	2	A	4959
W1011	Proposed System	\$1,330,700	\$0	\$1,330,700	1	2	A	4958
W1012	Proposed System	\$1,248,500	\$0	\$1,248,500	1	2	A	4958
W1013	Proposed System	\$590,800	\$0	\$590,800	2	2	A	4958

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
W1014	Proposed System	\$964,300	\$108,300	\$1,072,600	1	2	A	4958
W1015	Proposed System	\$1,316,700	\$0	\$1,316,700	1	2	G	4957
W1016	Proposed System	\$621,600	\$0	\$621,600	1	2	G	4957
W1017	Proposed System	\$426,900	\$0	\$426,900	1	2	G	4957
W1018	Proposed System	\$3,136,000	\$209,400	\$3,345,400	3	2	G	5059
W1019	Proposed System	\$3,460,300	\$88,000	\$3,548,300	2	2	G	5059
W1020	Proposed System	\$603,600	\$0	\$603,600	3	2	A	5059
W1021	Proposed System	\$1,394,000	\$24,900	\$1,418,900	1	2	A	5058
W1022	Proposed System	\$793,800	\$0	\$793,800	3	2	A	5059
W1023	Proposed System	\$491,700	\$0	\$491,700	3	2	A	5059
W1024	Proposed System	\$2,139,700	\$221,500	\$2,361,200	1	2	A	5159
W1025	Proposed System	\$546,400	\$118,200	\$664,600	2	2	A	5159
W1026	Proposed System	\$716,400	\$59,700	\$776,100	1	2	A	5159
W1027	Proposed System	\$1,228,200	\$135,300	\$1,363,500	2	2	A	5159
W1028	Proposed System	\$165,500	\$28,500	\$194,000	4	4	A	5159
W1029	Proposed System	\$732,900	\$101,100	\$834,000	2	2	A	5159
W1030	Proposed System	\$438,300	\$57,200	\$495,500	1	2	H	5357
W1031	Proposed System	\$305,000	\$27,000	\$332,000	3	2	B	5458
W1032	Proposed System	\$233,800	\$40,300	\$274,100	3	2	B	5458
W1033	Proposed System	\$228,800	\$39,400	\$268,200	4	4	H	5558
W1034	Proposed System	\$291,600	\$50,300	\$341,900	4	4	H	5558
W1035	Proposed System	\$3,836,200	\$466,900	\$4,303,100	4	4	G	4757
W1036	Proposed	\$333,000	\$29,400	\$362,400	4	4	G	4857

**TABLE 2W
BUFFALO BAYOU SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
	System							
W1037	Proposed System	\$345,300	\$41,100	\$386,400	3	2	G	4857
W1040	Proposed System	\$1,209,600	\$0	\$1,209,600	3	2	G	5056
W1041	Proposed System	\$910,600	\$134,400	\$1,045,000	1	2	C	5156
W1042	Proposed System	\$450,400	\$0	\$450,400	4	4	G	5157
W1043	Proposed System	\$1,011,600	\$0	\$1,011,600	3	2	G	5157
W1044	Proposed System	\$696,000	\$0	\$696,000	4	4	G	5257
W1045	Proposed System	\$1,926,600	\$175,400	\$2,102,000	3	2	I	5656
W1046	Proposed System	\$375,800	\$0	\$375,800	2	2	G	5157
W1050	Proposed System	\$2,871,500	\$208,700	\$3,080,200	N/A	5	G	5059
W1051	Proposed System	\$1,783,000	\$0	\$1,783,000	N/A	5	G	5059
W1052	Proposed System	\$282,400	\$24,800	\$307,200	N/A	5	G	5059
W1070	Proposed System	\$3,173,900	\$236,200	\$3,410,100	N/A	5	G	4757
W1071	Proposed System	\$285,100	\$0	\$285,100	N/A	5	G	4856
W1072	Proposed System	\$320,000	\$69,200	\$389,200	N/A	5	G	5056
W1073	Proposed System	\$294,900	\$63,900	\$358,800	N/A	5	G	5056
W1074	Proposed System	\$329,000	\$367,200	\$696,200	N/A	5	G	5056
W1075	Proposed System	\$279,300	\$24,600	\$303,900	N/A	5	G	5056
W1076	Proposed System	\$187,600	\$40,500	\$228,100	N/A	5	G	5056
W1077	Proposed System	\$956,800	\$55,200	\$1,012,000	N/A	5	C	5056
W1078	Proposed System	\$262,600	\$0	\$262,600	N/A	5	H	5457
W1079	Proposed System	\$317,500	\$0	\$317,500	N/A	5	H	5457
W1080	Proposed System	\$2,001,400	\$551,600	\$2,553,000	N/A	5	G	4857

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
W1081	Proposed System	\$1,734,400	\$176,300	\$1,910,700	N/A	5	A	4758
W1082	Proposed System	\$168,400	\$36,500	\$204,900	N/A	5	G	4758
W1083	Proposed System	\$2,544,700	\$101,200	\$2,645,900	N/A	5	A	4758
W1084	Proposed System	\$2,077,300	\$0	\$2,077,300	N/A	5	A	4859
W1085	Proposed System	\$534,500	\$0	\$534,500	N/A	5	A	4958
W1086	Proposed System	\$841,600	\$0	\$841,600	N/A	5	A	4960
W1087	Proposed System	\$857,000	\$0	\$857,000	N/A	5	A	4960
W1088	Proposed System	\$360,500	\$78,000	\$438,500	N/A	5	A	5059
W1089	Proposed System	\$316,100	\$27,900	\$344,000	N/A	5	A	5059
W1090	Proposed System	\$772,000	\$0	\$772,000	N/A	5	A	4960
W1091	Proposed System	\$1,792,100	\$0	\$1,792,100	N/A	5	A	4960
W1092	Proposed System	\$3,001,600	\$918,000	\$3,919,600	N/A	5	A	4960
W1093	Proposed System	\$2,102,700	\$74,700	\$2,177,400	N/A	5	A	4960
TOTAL		\$429,026,600	\$211,694,100	\$640,720,700				

**TABLE 3W 2-YEAR COST – GROUP 1
BUFFALO BAYOU**

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
Sorted by 2-Year CIP Cost							
W0010	\$145,800	1	179	\$815	100%	G	4857
W0566	\$222,900	1	57	\$3,911	93%	G	5156
W0600	\$305,000	1	296	\$1,030	9%	G	5157
W1017	\$426,900	2	31	\$13,771	100%	G	4957
W1030	\$438,300	2	97	\$4,519	100%	H	5357
W1016	\$621,600	2	49	\$12,686	100%	G	4957
W0005	\$658,500	1	659	\$999	90%	G	4857
W0710	\$664,600	1	230	\$2,890	100%	G	5256
W1026	\$716,400	2	118	\$6,071	100%	A	5159
W0571	\$769,500	1	138	\$5,576	98%	G	5156
W1041	\$910,600	2	153	\$5,952	0%	C	5156
W0682	\$946,000	1	548	\$1,726	96%	D	5357
W0704	\$952,200	1	171	\$5,568	66%	H	5457
W1014	\$964,300	2	164	\$5,880	74%	A	4958
W0711	\$1,048,100	1	418	\$2,507	100%	G	5257
W0564	\$1,087,500	1	215	\$5,058	94%	G	5056
W0624	\$1,092,600	1	33	\$33,109	0%	G	5156
W1012	\$1,248,500	2	326	\$3,830	96%	A	4958
W1015	\$1,316,700	2	72	\$18,288	100%	G	4957
W1011	\$1,330,700	2	159	\$8,369	100%	A	4958
W1021	\$1,394,000	2	118	\$11,814	90%	A	5058
W0197	\$1,431,100	1	360	\$3,975	100%	G	4857
W1010	\$1,456,200	2	195	\$7,468	100%	A	4959
W1003	\$1,523,500	2	301	\$5,061	100%	A	4858
W0804	\$1,780,800	1	991	\$1,797	88%	I	5556
W1024	\$2,139,700	2	258	\$8,293	88%	A	5159
W0558	\$2,142,800	1	363	\$5,903	72%	G	5156
W0678	\$2,542,700	1	326	\$7,800	100%	G	5257
W0014	\$2,921,200	1	3,335	\$876	69%	G	4856
W0245	\$3,115,700	1	535	\$5,824	93%	G	4958
W1005	\$3,115,700	2	249	\$12,513	95%	A	4859
W0699	\$3,624,400	1	1,297	\$2,794	33%	C	5156
W0706	\$3,848,100	1	470	\$8,187	75%	H	5457
W0224	\$3,932,200	1	572	\$6,874	91%	G	4858
W0574	\$4,084,500	1	1,365	\$2,992	23%	G	5157
W0213	\$4,190,000	1	529	\$7,921	94%	G	4858
W0697	\$4,436,300	1	1,557	\$2,849	27%	G	5156
W0595	\$5,505,300	1	665	\$8,279	74%	G	5157
W0611	\$8,186,300	1	842	\$9,722	51%	G	5156

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
W0679	\$8,219,600	1	1,706	\$4,818	87%	G	5257
W0573	\$14,421,500	1	2,807	\$5,138	20%	G	5156
W0686	\$23,419,000	1	4,103	\$5,708	50%	I	5357
TOTAL	\$123,297,300						
Sorted by Cost per Address							
W0010	\$145,800	1	179	\$815	100%	G	4857
W0014	\$2,921,200	1	3,335	\$876	69%	G	4856
W0005	\$658,500	1	659	\$999	90%	G	4857
W0600	\$305,000	1	296	\$1,030	9%	G	5157
W0682	\$946,000	1	548	\$1,726	96%	D	5357
W0804	\$1,780,800	1	991	\$1,797	88%	I	5556
W0711	\$1,048,100	1	418	\$2,507	100%	G	5257
W0699	\$3,624,400	1	1,297	\$2,794	33%	C	5156
W0697	\$4,436,300	1	1,557	\$2,849	27%	G	5156
W0710	\$664,600	1	230	\$2,890	100%	G	5256
W0574	\$4,084,500	1	1,365	\$2,992	23%	G	5157
W1012	\$1,248,500	2	326	\$3,830	96%	A	4958
W0566	\$222,900	1	57	\$3,911	93%	G	5156
W0197	\$1,431,100	1	360	\$3,975	100%	G	4857
W1030	\$438,300	2	97	\$4,519	100%	H	5357
W0679	\$8,219,600	1	1,706	\$4,818	87%	G	5257
W0564	\$1,087,500	1	215	\$5,058	94%	G	5056
W1003	\$1,523,500	2	301	\$5,061	100%	A	4858
W0573	\$14,421,500	1	2,807	\$5,138	20%	G	5156
W0704	\$952,200	1	171	\$5,568	66%	H	5457
W0571	\$769,500	1	138	\$5,576	98%	G	5156
W0686	\$23,419,000	1	4,103	\$5,708	50%	I	5357
W0245	\$3,115,700	1	535	\$5,824	93%	G	4958
W1014	\$964,300	2	164	\$5,880	74%	A	4958
W0558	\$2,142,800	1	363	\$5,903	72%	G	5156
W1041	\$910,600	2	153	\$5,952	0%	C	5156
W1026	\$716,400	2	118	\$6,071	100%	A	5159
W0224	\$3,932,200	1	572	\$6,874	91%	G	4858
W1010	\$1,456,200	2	195	\$7,468	100%	A	4959
W0678	\$2,542,700	1	326	\$7,800	100%	G	5257
W0213	\$4,190,000	1	529	\$7,921	94%	G	4858
W0706	\$3,848,100	1	470	\$8,187	75%	H	5457
W0595	\$5,505,300	1	665	\$8,279	74%	G	5157
W1024	\$2,139,700	2	258	\$8,293	88%	A	5159

TABLE 3W 2-YEAR COST – GROUP 1
BUFFALO BAYOU

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
W1011	\$1,330,700	2	159	\$8,369	100%	A	4958
W0611	\$8,186,300	1	842	\$9,722	51%	G	5156
W1021	\$1,394,000	2	118	\$11,814	90%	A	5058
W1005	\$3,115,700	2	249	\$12,513	95%	A	4859
W1016	\$621,600	2	49	\$12,686	100%	G	4957
W1017	\$426,900	2	31	\$13,771	100%	G	4957
W1015	\$1,316,700	2	72	\$18,288	100%	G	4957
W0624	\$1,092,600	1	33	\$33,109	0%	G	5156
TOTAL	\$123,297,300						

**TABLE 4W 2-YEAR COST – GROUP 2
BUFFALO BAYOU**

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
Sorted by 2-Year CIP Cost							
W0563	\$16,800	1	86	\$195	91%	G	5056
W0307	\$126,400	1	100	\$1,264	88%	A	4959
W0201	\$207,100	1	187	\$1,107	100%	G	4857
W0343	\$221,000	1	99	\$2,232	100%	A	5059
W1009	\$269,800	2	58	\$4,652	100%	A	5959
W0196	\$341,800	1	125	\$2,734	100%	G	4857
W1046	\$375,800	2	64	\$5,872	100%	G	5157
W0359	\$464,800	1	101	\$4,602	88%	A	5059
W1025	\$546,400	2	32	\$17,075	100%	A	5159
W1013	\$590,800	2	97	\$6,091	100%	A	4958
W1029	\$732,900	2	146	\$5,020	100%	A	5159
W0578	\$786,700	1	152	\$5,176	97%	G	5157
W0488	\$1,101,900	1	139	\$7,927	97%	A	5059
W0153	\$1,168,000	1	283	\$4,127	100%	G	4757
W0474	\$1,218,600	1	265	\$4,598	78%	H	5457
W1027	\$1,228,200	2	221	\$5,557	84%	A	5159
W1001	\$1,250,200	2	85	\$14,708	100%	G	4857
W0492	\$1,452,100	1	46	\$31,567	0%	I	5557
W0530	\$1,575,700	1	315	\$5,002	90%	H	5357
W0174	\$1,610,400	1	240	\$6,710	51%	G	4857
W0263	\$1,812,700	1	597	\$3,036	39%	G	4957
W0294	\$2,797,700	1	420	\$6,661	45%	G	4958
W0195	\$2,994,500	1	56	\$53,473	41%	G	4857
W1019	\$3,460,300	2	212	\$16,322	100%	G	5059
W0091	\$4,197,300	1	122	\$34,404	25%	C	5056
W0402	\$5,906,700	1	753	\$7,844	69%	A	5059
W0392	\$6,312,900	1	590	\$10,700	54%	A	4959
W0404	\$10,200,300	1	1,445	\$7,059	69%	A	5159
W0479	\$15,304,400	1	3,060	\$5,001	95%	I	5558
W0403	\$25,267,900	1	2,005	\$12,602	75%	A	5159
TOTAL	\$93,540,100						
Sorted by Cost per Address							
W0563	\$16,800	1	86	\$195	91%	G	5056
W0201	\$207,100	1	187	\$1,107	100%	G	4857
W0307	\$126,400	1	100	\$1,264	88%	A	4959
W0343	\$221,000	1	99	\$2,232	100%	A	5059
W0196	\$341,800	1	125	\$2,734	100%	G	4857

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
W0263	\$1,812,700	1	597	\$3,036	39%	G	4957
W0153	\$1,168,000	1	283	\$4,127	100%	G	4757
W0474	\$1,218,600	1	265	\$4,598	78%	H	5457
W0359	\$464,800	1	101	\$4,602	88%	A	5059
W1009	\$269,800	2	58	\$4,652	100%	A	5959
W0479	\$15,304,400	1	3,060	\$5,001	95%	I	5558
W0530	\$1,575,700	1	315	\$5,002	90%	H	5357
W1029	\$732,900	2	146	\$5,020	100%	A	5159
W0578	\$786,700	1	152	\$5,176	97%	G	5157
W1027	\$1,228,200	2	221	\$5,557	84%	A	5159
W1046	\$375,800	2	64	\$5,872	100%	G	5157
W1013	\$590,800	2	97	\$6,091	100%	A	4958
W0294	\$2,797,700	1	420	\$6,661	45%	G	4958
W0174	\$1,610,400	1	240	\$6,710	51%	G	4857
W0404	\$10,200,300	1	1,445	\$7,059	69%	A	5159
W0402	\$5,906,700	1	753	\$7,844	69%	A	5059
W0488	\$1,101,900	1	139	\$7,927	97%	A	5059
W0392	\$6,312,900	1	590	\$10,700	54%	A	4959
W0403	\$25,267,900	1	2,005	\$12,602	75%	A	5159
W1001	\$1,250,200	2	85	\$14,708	100%	G	4857
W1019	\$3,460,300	2	212	\$16,322	100%	G	5059
W1025	\$546,400	2	32	\$17,075	100%	A	5159
W0492	\$1,452,100	1	46	\$31,567	0%	I	5557
W0091	\$4,197,300	1	122	\$34,404	25%	C	5056
W0195	\$2,994,500	1	56	\$53,473	41%	G	4857
TOTAL	\$93,540,100						

**TABLE 5W 2-YEAR COST - GROUP 3
BUFFALO BAYOU**

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
Sorted by 2-Year CIP Cost							
W0602	\$45,700	1	101	\$452	23%	G	5157
W0695	\$67,300	1	86	\$783	93%	C	5156
W0603	\$71,600	1	87	\$823	74%	G	5157
W1032	\$233,800	2	65	\$3,597	100%	B	5458
W0580	\$234,300	1	47	\$4,985	100%	G	5157
W0596	\$270,000	1	50	\$5,400	100%	G	5157
W1031	\$305,000	2	107	\$2,850	100%	B	5458
W1037	\$345,300	2	127	\$2,719	0%	G	4857
W1002	\$420,100	2	125	\$3,361	99%	A	4858
W0582	\$453,100	1	133	\$3,407	100%	G	5157
W1023	\$491,700	2	66	\$7,450	67%	A	5059
W0598	\$493,200	1	266	\$1,854	33%	G	5157
W1004	\$514,900	2	76	\$6,775	100%	A	4859
W0669	\$524,700	1	30	\$17,490	0%	H	5557
W0627	\$541,500	1	272	\$1,991	46%	G	5156
W1020	\$603,600	2	75	\$8,048	100%	A	5059
W1022	\$793,800	2	192	\$4,134	85%	A	5059
W0681	\$895,900	1	272	\$3,294	94%	D	5357
W1043	\$1,011,600	2	130	\$7,782	100%	G	5157
W1008	\$1,153,300	2	245	\$4,707	97%	A	4959
W1040	\$1,209,600	2	67	\$18,054	100%	G	5056
W0676	\$1,387,500	1	355	\$3,908	0%	G	5156
W0141	\$1,401,900	1	58	\$24,171	9%	C	5055
W1006	\$1,407,900	2	205	\$6,868	98%	A	4960
W0709	\$1,468,300	1	84	\$17,480	71%	G	5156
W0552	\$1,904,700	1	101	\$18,858	3%	C	5156
W1045	\$1,926,600	2	424	\$4,544	93%	I	5656
W1018	\$3,136,000	2	13	\$241,231	100%	G	5059
W0698	\$3,350,800	1	155	\$21,618	60%	C	5156
W0705	\$4,228,300	1	533	\$7,933	61%	I	5457
TOTAL	\$30,892,000						
Sorted by Cost per Address							
W0602	\$45,700	1	101	\$452	23%	G	5157
W0695	\$67,300	1	86	\$783	93%	C	5156
W0603	\$71,600	1	87	\$823	74%	G	5157
W0598	\$493,200	1	266	\$1,854	33%	G	5157
W0627	\$541,500	1	272	\$1,991	46%	G	5156
W1037	\$345,300	2	127	\$2,719	0%	G	4857

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
W1031	\$305,000	2	107	\$2,850	100%	B	5458
W0681	\$895,900	1	272	\$3,294	94%	D	5357
W1002	\$420,100	2	125	\$3,361	99%	A	4858
W0582	\$453,100	1	133	\$3,407	100%	G	5157
W1032	\$233,800	2	65	\$3,597	100%	B	5458
W0676	\$1,387,500	1	355	\$3,908	0%	G	5156
W1022	\$793,800	2	192	\$4,134	85%	A	5059
W1045	\$1,926,600	2	424	\$4,544	93%	I	5656
W1008	\$1,153,300	2	245	\$4,707	97%	A	4959
W0580	\$234,300	1	47	\$4,985	100%	G	5157
W0596	\$270,000	1	50	\$5,400	100%	G	5157
W1004	\$514,900	2	76	\$6,775	100%	A	4859
W1006	\$1,407,900	2	205	\$6,868	98%	A	4960
W1023	\$491,700	2	66	\$7,450	67%	A	5059
W1043	\$1,011,600	2	130	\$7,782	100%	G	5157
W0705	\$4,228,300	1	533	\$7,933	61%	I	5457
W1020	\$603,600	2	75	\$8,048	100%	A	5059
W0709	\$1,468,300	1	84	\$17,480	71%	G	5156
W0669	\$524,700	1	30	\$17,490	0%	H	5557
W1040	\$1,209,600	2	67	\$18,054	100%	G	5056
W0552	\$1,904,700	1	101	\$18,858	3%	C	5156
W0698	\$3,350,800	1	155	\$21,618	60%	C	5156
W0141	\$1,401,900	1	58	\$24,171	9%	C	5055
W1018	\$3,136,000	2	13	\$241,231	100%	G	5059
TOTAL	\$30,892,000						

TABLE 6W 2-YEAR COST – GROUP 4
BUFFALO BAYOU

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
Sorted by 2-Year CIP Cost							
W0157	\$13,100	3	41	\$320	0%	G	4758
W0375	\$16,300	3	43	\$379	100%	A	5059
W0274	\$17,900	3	4	\$4,475	100%	G	5057
W0281	\$24,900	3	51	\$488	100%	G	4957
W0301	\$26,800	3	2	\$13,400	0%	A	4959
W0277	\$28,100	3	108	\$260	100%	G	4957
W0360	\$35,200	3	204	\$173	100%	A	5059
W0152	\$38,700	3	42	\$921	100%	G	4757
W0179	\$40,000	3	1	\$40,000	0%	G	4858
W0494	\$40,200	3	3	\$40,200	100%	A	5158
W0246	\$47,900	3	10	\$4,790	100%	G	4958
W0455	\$54,500	3	2	\$27,250	0%	H	5357
W0232	\$54,600	3	19	\$2,874	100%	G	4957
W0408	\$56,900	3	2	\$28,450	0%	A	5158
W0401	\$58,100	3	43	\$1,351	100%	A	5059
W0296	\$58,600	3	6	\$9,767	0%	G	4958
W0289	\$59,100	3	3	\$19,700	100%	G	4958
W0330	\$61,500	3	25	\$2,460	100%	A	4959
W0413	\$65,200	3	10	\$6,520	100%	G	5158
W0357	\$66,900	3	28	\$2,389	100%	A	5059
W0314	\$67,000	3	15	\$4,467	100%	A	4959
W0399	\$67,100	3	20	\$3,355	100%	A	4959
W0283	\$75,300	3	89	\$846	100%	G	4957
W0247	\$78,800	3	10	\$7,880	100%	G	4958
W0501	\$82,700	3	8	\$10,338	0%	H	5457
W0332	\$87,900	3	24	\$3,663	100%	A	4959
W0333	\$88,200	3	23	\$3,835	100%	A	4959
W0265	\$88,300	3	109	\$810	100%	G	4957
W0397	\$90,900	3	26	\$3,496	100%	A	4959
W0358	\$91,800	3	44	\$2,086	100%	A	5059
W0150	\$94,600	3	13	\$7,277	0%	G	4758
W0328	\$95,200	3	24	\$3,967	100%	A	4959
W0395	\$103,800	3	50	\$2,076	100%	A	4958
W0383	\$108,000	3	35	\$3,086	0%	A	4959
W0295	\$108,400	3	48	\$2,258	100%	G	4958
W0313	\$112,900	3	12	\$9,408	100%	A	4959
W0319	\$115,900	3	27	\$4,293	100%	A	4959
W0336	\$116,700	3	27	\$4,322	100%	A	4959

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
W0516	\$127,200	3	52	\$2,446	23%	G	4757
W0377	\$131,100	3	113	\$1,160	94%	A	5058
W0211	\$144,800	3	67	\$2,161	100%	G	4857
W0216	\$145,300	3	118	\$1,231	52%	A	4858
W0363	\$145,700	3	3	\$48,567	0%	A	5059
W0206	\$149,500	3	18	\$8,306	100%	G	4857
W0331	\$159,500	3	70	\$2,279	0%	A	4958
W0154	\$164,000	3	46	\$3,565	100%	G	4757
W0490	\$164,600	3	10	\$16,460	0%	H	5458
W1028	\$165,500	4	33	\$5,015	100%	A	5159
W0266	\$166,100	3	32	\$5,191	100%	G	4957
W0441	\$167,300	3	250	\$669	80%	G	5257
W0335	\$176,500	3	25	\$7,060	100%	A	4959
W0273	\$180,600	3	224	\$806	0%	G	5056
W0309	\$190,800	3	67	\$2,848	46%	A	4959
W0350	\$196,500	3	18	\$10,917	0%	A	5058
W0293	\$206,000	3	38	\$5,421	18%	G	4958
W0221	\$214,500	3	131	\$1,637	77%	A	4858
W0287	\$215,600	3	28	\$7,700	96%	G	4958
W0271	\$219,600	3	3	\$73,200	0%	G	5056
W1033	\$228,800	4	42	\$5,448	100%	H	5558
W0238	\$232,300	3	129	\$1,801	100%	G	4957
W0243	\$250,300	3	128	\$1,955	94%	G	4957
W0212	\$253,800	3	68	\$3,732	100%	G	4857
W0151	\$261,200	3	15	\$17,413	27%	G	4758
W0297	\$265,900	3	5	\$53,180	0%	G	4958
W0327	\$273,700	3	1	\$273,700	1%	A	4958
W0475	\$278,600	3	62	\$4,494	97%	B	5457
W1034	\$291,600	4	69	\$4,226	100%	H	5558
W0299	\$303,700	3	10	\$30,370	0%	A	4958
W0460	\$308,500	3	79	\$3,905	0%	H	5357
W0430	\$317,300	3	59	\$5,378	14%	G	5158
W1036	\$333,000	4	115	\$2,896	84%	G	4857
W0349	\$334,000	3	76	\$4,395	0%	A	5058
W0367	\$336,800	3	43	\$7,833	0%	A	5059
W0172	\$337,700	3	130	\$2,598	100%	G	4750
W0133	\$346,500	3	249	\$1,392	0%	C	5056
W0324	\$351,900	3	30	\$11,730	97%	A	4959
W0434	\$355,400	3	219	\$1,623	94%	G	5158

**TABLE 6W 2-YEAR COST – GROUP 4
BUFFALO BAYOU**

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
W0180	\$383,500	3	18	\$21,306	17%	G	4858
W0380	\$388,600	3	73	\$5,323	97%	A	5058
W0619	\$389,200	3	209	\$1,862	9%	G	5157
W0135	\$393,600	3	90	\$4,373	1%	C	5056
W0523	\$403,600	3	31	\$13,019	35%	A	5058
W0268	\$405,000	3	178	\$2,275	6%	G	4957
W0465	\$428,400	3	41	\$10,449	0%	I	5357
W0369	\$444,900	3	126	\$3,531	99%	A	5059
W1042	\$450,400	4	1	\$450,400	1%	G	5157
W0476	\$468,000	3	196	\$2,388	79%	B	5457
W0428	\$483,700	3	365	\$1,325	4%	G	5158
W0329	\$485,000	3	9	\$53,889	0%	A	4958
W0253	\$506,400	3	294	\$1,722	0%	G	4958
W0477	\$511,900	3	30	\$17,063	0%	I	5557
W0464	\$512,300	3	114	\$4,494	38%	I	5357
W0193	\$513,500	3	142	\$3,616	100%	G	4857
W0379	\$522,800	3	221	\$2,366	99%	A	5058
W0215	\$524,700	3	23	\$22,813	48%	A	4858
W0214	\$527,700	3	21	\$25,129	0%	A	4858
W0269	\$543,800	3	135	\$4,028	0%	G	4957
W0656	\$577,900	3	2,222	\$260	91%	I	5557
W0138	\$606,100	3	65	\$9,325	2%	C	5056
W0486	\$614,700	3	429	\$1,433	39%	H	5458
W0703	\$641,600	3	41	\$15,649	0%	I	5457
W0282	\$659,300	3	73	\$9,032	100%	G	4957
W0385	\$669,100	3	108	\$6,195	100%	G	4959
W0320	\$691,100	3	72	\$9,599	100%	A	4959
W1044	\$696,000	4	20	\$34,800	100%	G	5257
W0191	\$706,000	3	148	\$4,770	97%	G	4857
W0259	\$743,800	3	21	\$35,419	0%	G	4958
W0220	\$779,500	3	434	\$1,796	41%	A	4858
W0310	\$780,800	3	162	\$4,820	83%	A	4959
W0618	\$818,400	3	98	\$8,351	0%	G	5157
W0438	\$822,700	3	991	\$830	100%	G	5257
W0487	\$844,800	3	80	\$10,560	31%	H	5457
W0315	\$848,300	3	144	\$5,891	78%	A	4959
W0429	\$859,000	3	220	\$3,905	0%	G	5158
W0223	\$874,700	3	152	\$5,755	100%	G	4857
W0219	\$893,500	3	1	\$893,500	1%	A	4858

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
W0218	\$901,900	3	1	\$901,900	0%	A	4858
W0252	\$964,800	3	188	\$5,132	97%	G	4958
W0217	\$969,400	3	147	\$6,595	54%	A	4858
W0364	\$977,700	3	86	\$11,369	100%	A	5059
W0454	\$979,000	3	119	\$8,227	71%	H	5357
W0451	\$1,040,100	3	116	\$8,966	34%	H	5357
W0457	\$1,042,400	3	168	\$6,205	30%	H	5357
W0225	\$1,058,800	3	183	\$5,786	92%	G	4857
W0549	\$1,063,600	3	32	\$33,238	0%	C	5156
W0239	\$1,064,500	3	224	\$4,752	100%	G	4957
W0550	\$1,091,400	3	21	\$51,971	0%	C	5156
W0352	\$1,230,300	3	124	\$9,922	7%	A	5058
W0551	\$1,241,600	3	264	\$4,703	0%	C	5156
W0507	\$1,396,100	3	71	\$19,663	24%	G	5158
W0449	\$1,405,000	3	455	\$3,088	100%	G	5257
W0491	\$1,495,800	3	1	\$1,495,800	1%	H	5459
W0427	\$1,543,700	3	13	\$118,746	0%	G	5158
W0443	\$1,557,200	3	555	\$2,806	100%	G	5257
W0365	\$1,572,800	3	44	\$35,745	20%	A	5059
W0480	\$1,587,700	3	793	\$2,002	91%	I	5558
W0386	\$1,594,200	3	324	\$4,920	96%	G	4959
W0257	\$1,716,200	3	1	\$1,716,200	1%	G	4958
W0325	\$1,777,500	3	90	\$19,750	46%	A	4959
W0450	\$1,836,400	3	267	\$6,878	86%	H	5357
W0435	\$1,931,300	3	48	\$40,235	0%	G	5258
W0353	\$1,981,200	3	230	\$8,614	73%	A	5058
W0423	\$2,092,900	3	323	\$6,480	61%	G	5157
W0387	\$2,327,200	3	143	\$16,274	57%	G	4959
W0302	\$2,332,200	3	273	\$8,543	0%	A	4959
W0155	\$2,431,900	3	674	\$3,608	70%	G	4758
W0469	\$2,545,500	3	673	\$3,782	74%	H	5458
W0312	\$2,633,000	3	180	\$14,628	26%	A	4959
W0436	\$2,660,600	3	428	\$6,216	71%	G	5257
W0614	\$2,842,600	3	152	\$18,701	1%	G	5157
W0478	\$3,046,700	3	83	\$36,707	0%	I	5557
W0210	\$3,134,200	3	373	\$8,403	9%	G	4857
W1035	\$3,836,200	4	111	\$34,560	0%	G	4757
W0489	\$5,464,500	3	41	\$133,280	0%	A	5158
W0391	\$5,651,100	3	352	\$16,054	59%	A	4959

**TABLE 6W 2-YEAR COST – GROUP 4
BUFFALO BAYOU**

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
W0322	\$6,323,600	3	572	\$11,055	65%	A	4959
W0381	\$7,090,300	3	1,329	\$5,335	71%	A	4959
W0484	\$8,450,400	3	1,704	\$4,959	96%	I	5558
W0209	\$8,814,800	3	1,238	\$7,120	8%	G	4858
W0485	\$9,958,800	3	3,695	\$2,695	96%	I	5458
TOTAL	\$151,701,100						
Sorted by Cost per Address							
W0360	\$35,200	3	204	\$173	100%	A	5059
W0656	\$577,900	3	2,222	\$260	91%	I	5557
W0277	\$28,100	3	108	\$260	100%	G	4957
W0157	\$13,100	3	41	\$320	0%	G	4758
W0375	\$16,300	3	43	\$379	100%	A	5059
W0281	\$24,900	3	51	\$488	100%	G	4957
W0441	\$167,300	3	250	\$669	80%	G	5257
W0273	\$180,600	3	224	\$806	0%	G	5056
W0265	\$88,300	3	109	\$810	100%	G	4957
W0438	\$822,700	3	991	\$830	100%	G	5257
W0283	\$75,300	3	89	\$846	100%	G	4957
W0152	\$38,700	3	42	\$921	100%	G	4757
W0377	\$131,100	3	113	\$1,160	94%	A	5058
W0216	\$145,300	3	118	\$1,231	52%	A	4858
W0428	\$483,700	3	365	\$1,325	4%	G	5158
W0401	\$58,100	3	43	\$1,351	100%	A	5059
W0133	\$346,500	3	249	\$1,392	0%	C	5056
W0486	\$614,700	3	429	\$1,433	39%	H	5458
W0434	\$355,400	3	219	\$1,623	94%	G	5158
W0221	\$214,500	3	131	\$1,637	77%	A	4858
W0253	\$506,400	3	294	\$1,722	0%	G	4958
W0220	\$779,500	3	434	\$1,796	41%	A	4858
W0238	\$232,300	3	129	\$1,801	100%	G	4957
W0619	\$389,200	3	209	\$1,862	9%	G	5157
W0243	\$250,300	3	128	\$1,955	94%	G	4957
W0480	\$1,587,700	3	793	\$2,002	91%	I	5558
W0395	\$103,800	3	50	\$2,076	100%	A	4958
W0358	\$91,800	3	44	\$2,086	100%	A	5059
W0211	\$144,800	3	67	\$2,161	100%	G	4857
W0295	\$108,400	3	48	\$2,258	100%	G	4958
W0268	\$405,000	3	178	\$2,275	6%	G	4957

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
W0331	\$159,500	3	70	\$2,279	0%	A	4958
W0379	\$522,800	3	221	\$2,366	99%	A	5058
W0476	\$468,000	3	196	\$2,388	79%	B	5457
W0357	\$66,900	3	28	\$2,389	100%	A	5059
W0516	\$127,200	3	52	\$2,446	23%	G	4757
W0330	\$61,500	3	25	\$2,460	100%	A	4959
W0172	\$337,700	3	130	\$2,598	100%	G	4750
W0485	\$9,958,800	3	3,695	\$2,695	96%	I	5458
W0443	\$1,557,200	3	555	\$2,806	100%	G	5257
W0309	\$190,800	3	67	\$2,848	46%	A	4959
W0232	\$54,600	3	19	\$2,874	100%	G	4957
W1036	\$333,000	4	115	\$2,896	84%	G	4857
W0383	\$108,000	3	35	\$3,086	0%	A	4959
W0449	\$1,405,000	3	455	\$3,088	100%	G	5257
W0399	\$67,100	3	20	\$3,355	100%	A	4959
W0397	\$90,900	3	26	\$3,496	100%	A	4959
W0369	\$444,900	3	126	\$3,531	99%	A	5059
W0154	\$164,000	3	46	\$3,565	100%	G	4757
W0155	\$2,431,900	3	674	\$3,608	70%	G	4758
W0193	\$513,500	3	142	\$3,616	100%	G	4857
W0332	\$87,900	3	24	\$3,663	100%	A	4959
W0212	\$253,800	3	68	\$3,732	100%	G	4857
W0469	\$2,545,500	3	673	\$3,782	74%	H	5458
W0333	\$88,200	3	23	\$3,835	100%	A	4959
W0429	\$859,000	3	220	\$3,905	0%	G	5158
W0460	\$308,500	3	79	\$3,905	0%	H	5357
W0328	\$95,200	3	24	\$3,967	100%	A	4959
W0269	\$543,800	3	135	\$4,028	0%	G	4957
W1034	\$291,600	4	69	\$4,226	100%	H	5558
W0319	\$115,900	3	27	\$4,293	100%	A	4959
W0336	\$116,700	3	27	\$4,322	100%	A	4959
W0135	\$393,600	3	90	\$4,373	1%	C	5056
W0349	\$334,000	3	76	\$4,395	0%	A	5058
W0314	\$67,000	3	15	\$4,467	100%	A	4959
W0274	\$17,900	3	4	\$4,475	100%	G	5057
W0475	\$278,600	3	62	\$4,494	97%	B	5457
W0464	\$512,300	3	114	\$4,494	38%	I	5357
W0551	\$1,241,600	3	264	\$4,703	0%	C	5156
W0239	\$1,064,500	3	224	\$4,752	100%	G	4957

TABLE 6W 2-YEAR COST – GROUP 4
BUFFALO BAYOU

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
W0191	\$706,000	3	148	\$4,770	97%	G	4857
W0246	\$47,900	3	10	\$4,790	100%	G	4958
W0310	\$780,800	3	162	\$4,820	83%	A	4959
W0386	\$1,594,200	3	324	\$4,920	96%	G	4959
W0484	\$8,450,400	3	1,704	\$4,959	96%	I	5558
W1028	\$165,500	4	33	\$5,015	100%	A	5159
W0252	\$964,800	3	188	\$5,132	97%	G	4958
W0266	\$166,100	3	32	\$5,191	100%	G	4957
W0380	\$388,600	3	73	\$5,323	97%	A	5058
W0381	\$7,090,300	3	1,329	\$5,335	71%	A	4959
W0430	\$317,300	3	59	\$5,378	14%	G	5158
W0293	\$206,000	3	38	\$5,421	18%	G	4958
W1033	\$228,800	4	42	\$5,448	100%	H	5558
W0223	\$874,700	3	152	\$5,755	100%	G	4857
W0225	\$1,058,800	3	183	\$5,786	92%	G	4857
W0315	\$848,300	3	144	\$5,891	78%	A	4959
W0385	\$669,100	3	108	\$6,195	100%	G	4959
W0457	\$1,042,400	3	168	\$6,205	30%	H	5357
W0436	\$2,660,600	3	428	\$6,216	71%	G	5257
W0423	\$2,092,900	3	323	\$6,480	61%	G	5157
W0413	\$65,200	3	10	\$6,520	100%	G	5158
W0217	\$969,400	3	147	\$6,595	54%	A	4858
W0450	\$1,836,400	3	267	\$6,878	86%	H	5357
W0335	\$176,500	3	25	\$7,060	100%	A	4959
W0209	\$8,814,800	3	1,238	\$7,120	8%	G	4858
W0150	\$94,600	3	13	\$7,277	0%	G	4758
W0287	\$215,600	3	28	\$7,700	96%	G	4958
W0367	\$336,800	3	43	\$7,833	0%	A	5059
W0247	\$78,800	3	10	\$7,880	100%	G	4958
W0454	\$979,000	3	119	\$8,227	71%	H	5357
W0206	\$149,500	3	18	\$8,306	100%	G	4857
W0618	\$818,400	3	98	\$8,351	0%	G	5157
W0210	\$3,134,200	3	373	\$8,403	9%	G	4857
W0302	\$2,332,200	3	273	\$8,543	0%	A	4959
W0353	\$1,981,200	3	230	\$8,614	73%	A	5058
W0451	\$1,040,100	3	116	\$8,966	34%	H	5357
W0282	\$659,300	3	73	\$9,032	100%	G	4957
W0138	\$606,100	3	65	\$9,325	2%	C	5056
W0313	\$112,900	3	12	\$9,408	100%	A	4959

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
W0320	\$691,100	3	72	\$9,599	100%	A	4959
W0296	\$58,600	3	6	\$9,767	0%	G	4958
W0352	\$1,230,300	3	124	\$9,922	7%	A	5058
W0501	\$82,700	3	8	\$10,338	0%	H	5457
W0465	\$428,400	3	41	\$10,449	0%	I	5357
W0487	\$844,800	3	80	\$10,560	31%	H	5457
W0350	\$196,500	3	18	\$10,917	0%	A	5058
W0322	\$6,323,600	3	572	\$11,055	65%	A	4959
W0364	\$977,700	3	86	\$11,369	100%	A	5059
W0324	\$351,900	3	30	\$11,730	97%	A	4959
W0523	\$403,600	3	31	\$13,019	35%	A	5058
W0301	\$26,800	3	2	\$13,400	0%	A	4959
W0312	\$2,633,000	3	180	\$14,628	26%	A	4959
W0703	\$641,600	3	41	\$15,649	0%	I	5457
W0391	\$5,651,100	3	352	\$16,054	59%	A	4959
W0387	\$2,327,200	3	143	\$16,274	57%	G	4959
W0490	\$164,600	3	10	\$16,460	0%	H	5458
W0477	\$511,900	3	30	\$17,063	0%	I	5557
W0151	\$261,200	3	15	\$17,413	27%	G	4758
W0614	\$2,842,600	3	152	\$18,701	1%	G	5157
W0507	\$1,396,100	3	71	\$19,663	24%	G	5158
W0289	\$59,100	3	3	\$19,700	100%	G	4958
W0325	\$1,777,500	3	90	\$19,750	46%	A	4959
W0180	\$383,500	3	18	\$21,306	17%	G	4858
W0215	\$524,700	3	23	\$22,813	48%	A	4858
W0214	\$527,700	3	21	\$25,129	0%	A	4858
W0455	\$54,500	3	2	\$27,250	0%	H	5357
W0408	\$56,900	3	2	\$28,450	0%	A	5158
W0299	\$303,700	3	10	\$30,370	0%	A	4958
W0549	\$1,063,600	3	32	\$33,238	0%	C	5156
W1035	\$3,836,200	4	111	\$34,560	0%	G	4757
W1044	\$696,000	4	20	\$34,800	100%	G	5257
W0259	\$743,800	3	21	\$35,419	0%	G	4958
W0365	\$1,572,800	3	44	\$35,745	20%	A	5059
W0478	\$3,046,700	3	83	\$36,707	0%	I	5557
W0179	\$40,000	3	1	\$40,000	0%	G	4858
W0494	\$40,200	3	1	\$40,200	100%	A	5158
W0435	\$1,931,300	3	48	\$40,235	0%	G	5258
W0363	\$145,700	3	3	\$48,567	0%	A	5059

**TABLE 6W 2-YEAR COST – GROUP 4
BUFFALO BAYOU**

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
W0550	\$1,091,400	3	21	\$51,971	0%	C	5156
W0297	\$265,900	3	5	\$53,180	0%	G	4958
W0329	\$485,000	3	9	\$53,889	0%	A	4958
W0271	\$219,600	3	3	\$73,200	0%	G	5056
W0427	\$1,543,700	3	13	\$118,746	0%	G	5158
W0489	\$5,464,500	3	41	\$133,280	0%	A	5158
W0327	\$273,700	3	1	\$273,700	1%	A	4958
W1042	\$450,400	4	1	\$450,400	1%	G	5157
W0219	\$893,500	3	1	\$893,500	1%	A	4858
W0218	\$901,900	3	1	\$901,900	0%	A	4858
W0491	\$1,495,800	3	1	\$1,495,800	1%	H	5459
W0257	\$1,716,200	3	1	\$1,716,200	1%	G	4958
TOTAL	\$151,701,100						

**TABLE 7W 5-YEAR COST – GROUP 1
BUFFALO BAYOU**

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5 Year Storm	2-Year Category	City Council District	Facet Number
Sorted by Additional for 5-Year Storm						
W1021	\$1,394,000	\$1,418,900	\$24,900	2	A	5058
W0197	\$1,431,100	\$1,472,500	\$41,400	1	G	4857
W0704	\$952,200	\$997,000	\$44,800	1	H	5457
W1030	\$438,300	\$495,500	\$57,200	2	H	5357
W1026	\$716,400	\$776,100	\$59,700	2	A	5159
W0600	\$305,000	\$374,100	\$69,100	1	G	5157
W0107	\$0	\$74,500	\$74,500	A	C	5056
W0682	\$946,000	\$1,028,600	\$82,600	1	D	5357
W0077	\$0	\$87,100	\$87,100	A	G	5056
W0001	\$0	\$92,900	\$92,900	A	G	4757
W0624	\$1,092,600	\$1,188,900	\$96,300	1	G	5156
W1014	\$964,300	\$1,072,600	\$108,300	2	A	4958
W1041	\$910,600	\$1,045,000	\$134,400	2	C	5156
W0710	\$664,600	\$854,500	\$189,900	1	G	5256
W1024	\$2,139,700	\$2,361,200	\$221,500	2	A	5159
W0804	\$1,780,800	\$2,018,300	\$237,500	1	I	5556
W0708	\$0	\$246,100	\$246,100	A	G	5157
W0678	\$2,542,700	\$2,832,600	\$289,900	1	G	5257
W0108	\$0	\$387,700	\$387,700	A	C	5056
W0224	\$3,932,200	\$4,339,200	\$407,000	1	G	4858
W0148	\$0	\$491,500	\$491,500	A	G	4957
W0044	\$0	\$661,900	\$661,900	A	G	4957
W0711	\$1,048,100	\$1,716,100	\$668,000	1	G	5257
W0697	\$4,436,300	\$5,128,700	\$692,400	1	G	5156
W0699	\$3,624,400	\$4,317,500	\$693,100	1	C	5156
W0667	\$0	\$724,200	\$724,200	A	H	5557
W0595	\$5,505,300	\$6,232,700	\$727,400	1	G	5157
W0030	\$0	\$773,700	\$773,700	A	G	4957
W0706	\$3,848,100	\$4,671,600	\$823,500	1	H	5457
W0213	\$4,190,000	\$5,077,400	\$887,400	1	G	4858
W0558	\$2,142,800	\$3,036,400	\$893,600	1	G	5156
W0245	\$3,115,700	\$4,005,000	\$889,300	1	G	4958
W0010	\$145,800	\$1,242,200	\$1,096,400	1	G	4857
W0574	\$4,084,500	\$5,203,700	\$1,119,200	1	G	5157
W0032	\$0	\$1,194,200	\$1,194,200	A	G	4956
W0109	\$0	\$1,223,000	\$1,223,000	A	G	5056
W0147	\$0	\$1,666,900	\$1,666,900	A	G	4956
W0047	\$0	\$1,910,700	\$1,910,700	A	G	4957
W0056	\$0	\$1,928,000	\$1,928,000	A	C	5055

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5 Year Storm	2-Year Category	City Council District	Facet Number
W0117	\$0	\$1,949,400	\$1,949,400	A	C	5056
W0626	\$0	\$2,938,500	\$2,938,500	A	G	5156
W0005	\$658,500	\$4,504,600	\$3,846,100	1	G	4857
W0632	\$0	\$4,278,400	\$4,278,400	A	G	5256
W0611	\$8,186,300	\$13,244,200	\$5,057,900	1	G	5156
W0573	\$14,421,500	\$21,488,700	\$7,067,200	1	G	5156
W0089	\$0	\$7,099,900	\$7,099,900	A	C	5056
W0686	\$23,419,000	\$31,010,100	\$7,591,100	1	I	5357
W0014	\$2,921,200	\$25,589,300	\$22,668,100	1	G	4856
TOTAL	\$101,958,000	\$186,471,800	\$84,513,800			

**TABLE 8W 5-YEAR COST – GROUP 2
BUFFALO BAYOU**

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5 Year Storm	2-Year Category	City Council District	Facet Number
Sorted by Additional for 5-Year Storm						
W1019	\$3,460,300	\$3,548,300	\$88,000	2	G	5059
W1029	\$732,900	\$834,000	\$101,100	2	A	5159
W0195	\$2,994,500	\$3,108,500	\$114,000	1	G	4857
W0492	\$1,452,100	\$1,568,700	\$116,600	1	I	5557
W1025	\$546,400	\$664,600	\$118,200	2	A	5159
W0488	\$1,101,900	\$1,226,700	\$124,800	1	A	5059
W1027	\$1,228,200	\$1,363,500	\$135,300	2	A	5159
W0474	\$1,218,600	\$1,411,000	\$192,400	1	H	5457
W0174	\$1,610,400	\$1,934,800	\$324,400	1	G	4857
W0196	\$341,800	\$693,900	\$352,100	1	G	4857
W0530	\$1,575,700	\$1,955,100	\$379,400	1	H	5357
W0019	\$0	\$386,500	\$386,500	A	G	4957
W0153	\$1,168,000	\$1,580,400	\$412,400	1	G	4757
W0392	\$6,312,900	\$7,099,700	\$786,800	1	A	4959
W0033	\$0	\$1,379,200	\$1,379,200	A	G	4956
W0402	\$5,906,700	\$7,420,200	\$1,513,500	1	A	5059
W0008	\$0	\$1,559,400	\$1,559,400	A	G	4857
W0263	\$1,812,700	\$4,215,300	\$2,402,600	1	G	4957
W0479	\$13,304,400	\$18,366,200	\$3,061,800	1	I	5558
W0294	\$2,797,700	\$6,847,800	\$4,050,100	1	G	4958
W0403	\$25,267,900	\$29,997,700	\$4,729,800	1	A	5159
W0091	\$4,197,300	\$11,122,800	\$6,925,500	1	C	5056
W0404	\$10,200,300	\$23,440,800	\$13,240,500	1	A	5159
TOTAL	\$89,230,700	\$131,725,100	\$42,494,400			

**TABLE 9W 5-YEAR COST – GROUP 3
BUFFALO BAYOU**

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5 Year Storm	2-Year Category	City Council District	Facet Number
Sorted by Additional for 5-Year Storm						
W0964	\$0	\$4,800	\$4,800	A	G	5157
W1031	\$305,000	\$332,000	\$27,000	2	B	5458
W1032	\$233,800	\$274,100	\$40,300	2	B	5458
W1037	\$345,300	\$386,400	\$41,100	2	G	4857
W0046	\$0	\$43,400	\$43,400	A	G	4957
W0709	\$1,468,300	\$1,589,100	\$120,800	1	G	5156
W0676	\$1,387,500	\$1,512,500	\$125,000	1	G	5156
W0582	\$453,100	\$578,500	\$125,400	1	G	5157
W0027	\$0	\$135,900	\$135,900	A	G	4957
W1045	\$1,926,600	\$2,102,000	\$175,400	2	I	5656
W1018	\$3,136,000	\$3,345,400	\$209,400	2	G	5059
W0670	\$0	\$212,600	\$212,600	A	I	5557
W0061	\$0	\$213,100	\$213,100	A	G	4956
W0062	\$0	\$231,000	\$231,000	A	G	4956
W0639	\$0	\$245,600	\$245,600	A	D	5357
W0039	\$0	\$260,400	\$260,400	A	G	4956
W0698	\$3,350,800	\$3,655,700	\$304,900	1	C	5156
W0598	\$493,200	\$834,400	\$341,200	1	G	5157
W0071	\$0	\$372,600	\$372,600	A	G	5056
W0037	\$0	\$389,400	\$389,400	A	G	4956
W0036	\$0	\$394,600	\$394,600	A	G	4956
W0633	\$0	\$603,300	\$603,300	A	G	5257
W0552	\$1,904,700	\$2,676,200	\$771,500	1	C	5156
W0672	\$0	\$835,900	\$835,900	A	G	5157
W0669	\$524,700	\$1,573,500	\$1,048,800	1	H	5557
W0705	\$4,228,300	\$5,278,700	\$1,050,400	1	I	5457
W0627	\$541,500	\$1,921,800	\$1,380,300	1	G	5156
W0141	\$1,401,900	\$4,539,800	\$3,137,900	1	C	5055
W0006	\$0	\$13,923,900	\$13,923,900	A	G	4856
TOTAL	\$21,700,700	\$48,466,600	\$26,765,900			

TABLE 10W 5-YEAR COST – GROUP 4
BUFFALO BAYOU

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5 Year Storm	2-Year Category	City Council District	Facet Number
Sorted by Additional for 5-Year Storm						
W0206	\$149,500	\$151,200	\$1,700	3	G	4857
W0494	\$40,200	\$44,800	\$4,600	3	A	5158
W0408	\$56,900	\$61,900	\$5,000	3	A	5158
W0193	\$513,500	\$521,000	\$7,500	3	G	4857
W0265	\$88,300	\$98,500	\$10,200	3	G	4957
W0150	\$94,600	\$108,400	\$13,800	3	G	4758
W0301	\$26,800	\$41,200	\$14,400	3	A	4959
W0214	\$527,700	\$545,500	\$17,800	3	A	4858
W0324	\$351,900	\$369,900	\$18,000	3	A	4959
W0383	\$108,000	\$126,600	\$18,600	3	A	4959
W0464	\$512,300	\$532,200	\$19,900	3	I	5357
W0297	\$265,900	\$289,400	\$23,500	3	G	4958
W0502	\$0	\$23,600	\$23,600	A	B	5458
W0271	\$219,600	\$243,800	\$24,200	3	G	5056
W0367	\$336,800	\$363,700	\$26,900	3	A	5059
W0460	\$308,500	\$335,500	\$27,000	3	H	5357
W1028	\$165,500	\$194,000	\$28,500	4	A	5159
W1036	\$333,000	\$362,400	\$29,400	4	G	4857
W0454	\$979,000	\$1,009,700	\$30,700	3	H	5357
W0413	\$65,200	\$97,100	\$31,900	3	G	5158
W0380	\$388,600	\$422,900	\$34,300	3	A	5058
W0648	\$0	\$34,600	\$34,600	A	I	5357
W0523	\$403,600	\$439,600	\$36,000	3	A	5058
W1033	\$228,800	\$268,200	\$39,400	4	H	5558
W0487	\$844,800	\$894,900	\$50,100	3	H	5457
W1034	\$291,600	\$341,900	\$50,300	4	H	5558
W0050	\$0	\$51,700	\$51,700	A	G	4957
W0703	\$641,600	\$693,500	\$51,900	3	I	5457
W0191	\$706,000	\$758,100	\$52,100	3	G	4857
W0299	\$303,700	\$358,900	\$55,200	3	A	4958
W0151	\$261,200	\$317,600	\$56,400	3	G	4758
W0243	\$250,300	\$307,700	\$57,400	3	G	4957
W0369	\$444,900	\$502,400	\$57,500	3	A	5059
W0215	\$524,700	\$582,700	\$58,000	3	A	4858
W0118	\$0	\$64,600	\$64,600	A	G	5057
W0364	\$977,700	\$1,043,600	\$65,900	3	A	5059
W0429	\$859,000	\$929,500	\$70,500	3	G	5158
W0116	\$0	\$72,900	\$72,900	A	G	5057
W0135	\$393,600	\$466,800	\$73,200	3	C	5056
W0266	\$166,100	\$243,600	\$77,500	3	G	4957

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5 Year Storm	2-Year Category	City Council District	Facet Number
W0660	\$0	\$84,000	\$84,000	A	H	5457
W0478	\$3,046,700	\$3,137,700	\$91,000	3	I	5557
W0282	\$659,300	\$754,200	\$94,900	3	G	4957
W0385	\$669,100	\$766,400	\$97,300	3	G	4959
W0172	\$337,700	\$449,700	\$112,000	3	G	4750
W0120	\$0	\$117,500	\$117,500	A	G	5057
W0352	\$1,230,300	\$1,349,400	\$119,100	3	A	5058
W0519	\$0	\$120,200	\$120,200	A	G	4857
W0365	\$1,572,800	\$1,698,200	\$125,400	3	A	5059
W0127	\$0	\$132,900	\$132,900	A	G	5056
W0441	\$167,300	\$302,700	\$135,400	3	G	5257
W0490	\$164,600	\$302,400	\$137,800	3	H	5458
W0451	\$1,040,100	\$1,197,000	\$156,900	3	H	5357
W0641	\$0	\$161,900	\$161,900	A	D	5357
W0661	\$0	\$162,800	\$162,800	A	H	5457
W0664	\$0	\$163,100	\$163,100	A	H	5457
W0489	\$5,464,500	\$5,628,800	\$164,300	3	A	5158
W0259	\$743,800	\$912,700	\$168,900	3	G	4958
W0217	\$969,400	\$1,139,400	\$170,000	3	A	4858
W0465	\$428,400	\$600,800	\$172,400	3	I	5357
W0329	\$485,000	\$660,100	\$175,100	3	A	4958
W0219	\$893,500	\$1,070,800	\$177,300	3	A	4858
W0143	\$0	\$178,000	\$178,000	A	G	5056
W0223	\$874,700	\$1,055,400	\$180,700	3	G	4857
W0073	\$0	\$182,000	\$182,000	A	C	5056
W0038	\$0	\$183,700	\$183,700	A	G	4956
W0177	\$0	\$187,500	\$187,500	A	G	4858
W0507	\$1,396,100	\$1,587,700	\$191,600	3	G	5158
W0331	\$159,500	\$351,300	\$191,800	3	A	4958
W0121	\$0	\$192,500	\$192,500	A	G	5057
W0658	\$0	\$202,300	\$202,300	A	I	5457
W0022	\$0	\$203,400	\$203,400	A	G	4957
W0128	\$0	\$213,700	\$213,700	A	G	5056
W0363	\$145,700	\$366,500	\$220,800	3	A	5059
W0211	\$144,800	\$367,900	\$223,100	3	G	4857
W0066	\$0	\$224,000	\$224,000	A	G	4956
W0302	\$2,332,200	\$2,557,500	\$225,300	3	A	4959
W0088	\$0	\$226,500	\$226,500	A	C	5056
W0654	\$0	\$232,400	\$232,400	A	I	5457
W0435	\$1,931,300	\$2,164,000	\$232,700	3	G	5258
W0353	\$1,981,200	\$2,217,100	\$235,900	3	A	5058

**TABLE 10W 5-YEAR COST – GROUP 4
BUFFALO BAYOU**

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5 Year Storm	2-Year Category	City Council District	Facet Number
W0182	\$0	\$268,000	\$268,000	A	G	4858
W0218	\$901,900	\$1,170,100	\$268,200	3	A	4858
W0178	\$0	\$271,200	\$271,200	A	G	4858
W0379	\$522,800	\$794,500	\$271,700	3	A	5058
W0477	\$511,900	\$785,800	\$273,900	3	I	5557
W0137	\$0	\$302,500	\$302,500	A	C	5056
W0216	\$145,300	\$450,100	\$304,800	3	A	4858
W0671	\$0	\$323,200	\$323,200	A	I	5557
W0007	\$0	\$331,000	\$331,000	A	G	4857
W0212	\$253,800	\$587,800	\$334,000	3	G	4857
W0225	\$1,058,800	\$1,407,000	\$348,200	3	G	4857
W0114	\$0	\$357,000	\$357,000	A	G	5057
W0414	\$0	\$359,700	\$359,700	A	G	5158
W0476	\$468,000	\$829,900	\$361,900	3	B	5457
W0031	\$0	\$369,800	\$369,800	A	G	4957
W0427	\$1,543,700	\$1,917,900	\$374,200	3	G	5158
W0029	\$0	\$378,500	\$378,500	A	G	4957
W0171	\$0	\$384,000	\$384,000	A	G	4758
W0462	\$0	\$385,500	\$385,500	A	I	5357
W0423	\$2,092,900	\$2,485,500	\$392,600	3	G	5157
W0450	\$1,836,400	\$2,233,100	\$396,700	3	H	5357
W0391	\$5,651,100	\$6,055,800	\$404,700	3	A	4959
W0057	\$0	\$408,100	\$408,100	A	C	5055
W0634	\$0	\$426,500	\$426,500	A	G	5257
W0139	\$0	\$431,000	\$431,000	A	C	5056
W0175	\$0	\$453,800	\$453,800	A	G	4758
W1035	\$3,836,200	\$4,303,100	\$466,900	4	G	4757
W0659	\$0	\$480,000	\$480,000	A	H	5457
W0210	\$3,134,200	\$3,642,900	\$508,700	3	G	4857
W0443	\$1,557,200	\$2,080,700	\$523,500	3	G	5257
W0647	\$0	\$557,400	\$557,400	A	I	5357
W0138	\$606,100	\$1,192,400	\$586,300	3	C	5056
W0436	\$2,660,600	\$3,263,000	\$602,400	3	G	5257
W0349	\$334,000	\$945,300	\$611,300	3	A	5058
W0434	\$355,400	\$996,400	\$641,000	3	G	5158
W0457	\$1,042,400	\$1,722,000	\$679,600	3	H	5357
W0180	\$383,500	\$1,079,600	\$696,100	3	G	4858
W0614	\$2,842,600	\$3,540,600	\$698,000	3	G	5157
W0322	\$6,323,600	\$7,040,200	\$716,600	3	A	4959
W0133	\$346,500	\$1,327,500	\$981,000	3	C	5056
W0491	\$1,495,800	\$2,519,900	\$1,024,100	3	H	5459

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5 Year Storm	2-Year Category	City Council District	Facet Number
W0312	\$2,633,000	\$3,803,600	\$1,170,600	3	A	4959
W0449	\$1,405,000	\$2,628,200	\$1,223,200	3	G	5257
W0480	\$1,587,700	\$2,823,400	\$1,235,700	3	I	5558
W0194	\$0	\$1,267,800	\$1,267,800	A	G	4857
W0113	\$0	\$1,343,400	\$1,343,400	A	G	5057
W0257	\$1,716,200	\$3,287,200	\$1,571,000	3	G	4958
W0469	\$2,545,500	\$4,295,600	\$1,750,100	3	H	5458
W0155	\$2,431,900	\$4,304,000	\$1,872,100	3	G	4758
W0438	\$822,700	\$2,716,700	\$1,894,000	3	G	5257
W0656	\$577,900	\$2,616,300	\$2,038,400	3	I	5557
W0381	\$7,090,300	\$9,567,900	\$2,477,600	3	A	4959
W0293	\$206,000	\$2,971,900	\$2,765,900	3	G	4958
W0484	\$8,450,400	\$11,892,400	\$3,442,000	3	I	5558
W0485	\$9,958,800	\$14,512,600	\$4,553,800	3	I	5458
TOTAL	\$118,997,500	\$175,011,500	\$56,014,000			

TABLE GLOSSARY

2-Year Analysis Status

- Inadequate – Storm sewer analysis program results indicate system is not adequate.
- Adequate – Storm sewer analysis program results indicate system is adequate.
- Cannot Analyze – System could not be analyzed with the storm sewer analysis program due to lack of information.

2-Year CIP Cost -- Probable cost to meet 2-year design criteria

Additional for 5-Year – Additional cost for major thoroughfares criteria (5-year storm)

Group	
Group 1	Systems that have reported structure and street-related flooding complaints.
Group 2	Systems that have reported structure flooding complaints only.
Group 3	Systems that have reported street flooding complaints only.
Group 4	Systems that have no reported flooding complaints. Group 4 costs types will be applicable for categories 3 and 4 only.
Category	
Category 1	Existing storm sewer systems that have been determined to be inadequate and where flooding complaints have been reported within drainage boundaries.
Category 2	Converting existing open-ditch systems (non-storm sewer areas) to storm sewer systems where previous flooding complaints have been reported. Proposed storm sewer systems for this category type address the main trunk system requirements only.
Category 3	Existing storm sewer systems that have been determined to be inadequate and where flooding complaints <i>have not</i> been reported.
Category 4	Converting existing open-ditch systems (non-storm sewer areas) to storm sewer systems where previous flooding complaints <i>have not</i> been reported. Proposed storm sewer systems for this category type address the main trunk system requirements only.
Category 5	Areas currently considered to be undeveloped and having no defined drainage system. For this category type, drainage areas and main (trunk) sewer systems were determined.
Category A	Existing storm sewer systems that have been determined to be adequate. These systems may or may not have reported flooding complaints.
Category C.N.A. – System that could not be analyzed due to lack of storm sewer information.	
City Council District – City Council district within which storm sewer system is located.	
Facet Number – Facet (system map) number sheet on which storm sewer system is located.	
Number of Addresses – Total number of addresses that are located in storm sewer study drainage boundary.	
Cost Per Address – 2-year CIP cost divided by number of addresses.	
Percent of System Single Family -- Percent of storm sewer system drainage area classified as a <i>Single-family land-use type</i> .	

TABLE 1 – STORM SEWER UNIT COST RATES

Pipe Diameter (in)	Unit Cost Rate (\$/ln ft)	Equivalent Box Size (ft x ft)
24	\$240	
30	\$260	
36	\$290	
42	\$340	
48	\$370	
54	\$450	
60	\$480	
66	\$520	
72	\$550	
78	\$590	
84	\$620	
90	\$720	
96	\$760	8 x 7
102	\$810	
108	\$820	
114	\$890	
120	\$930	10 x 9
126	\$1,060	10 x 9
132	\$1,110	10 x 10
138	\$1,150	10 x 10
144	\$1,190	8 x 7 & 8 x 7
150	\$1,350	8 x 7 & 8 x 8
156	\$1,400	8 x 8 & 8 x 8
162	\$1,450	10 x 9 & 8 x 7
168	\$1,490	10 x 9 & 8 x 8
174	\$1,540	10 x 10 & 8 x 8
180	\$1,590	10 x 9 & 10 x 9
186	\$1,640	10 x 10 & 10 x 9
192	\$1,680	10 x 10 & 10 x 10
198	\$1,730	10 x 10 & 8 x 7 & 8 x 7
204	\$1,780	10 x 9 & 10 x 9 & 8 x 7
210	\$1,820	10 x 10 & 10 x 9 & 8 x 7
216	\$1,870	10 x 10 & 10 x 10 & 8 x 7
222	\$1,920	See Note 1
228	\$1,970	See Note 1
234	\$2,010	See Note 1
240	\$2,060	See Note 1
246	\$2,110	See Note 1
252	\$2,150	See Note 1
258	\$2,200	See Note 1

Pipe Diameter (in)	Unit Cost Rate (\$/ln ft)	Equivalent Box Size (ft x ft)
264	\$2,250	See Note 1
270	\$2,300	See Note 1
276	\$2,340	See Note 1
282	\$2,390	See Note 1
288	\$2,440	See Note 1
Unit Cost Rates were developed based on City of Houston Bid Tabs for storm sewer projects constructed during 1994 and 1998.		
Unit Cost Rates include the following:		
Removal of existing pipe and pavement		
Storm sewer pipe		
Manholes		
Inlets		
Replacement of pavement		
Dewatering		
Trench safety		
Traffic control		
Engineering and contingency (20 percent)		
Unit Cost Rates do not include the following:		
Relocation of existing utilities		
Acquisition of additional right-of-way		

Notes

1. Equivalent box sizes for pipe diameters 222 inches or greater were not determined. It may be more cost-effective to propose an open channel instead of a box.

**TABLE 2P
GREENS BAYOU SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
Sorted by Outfall System ID								
P0001	Inadequate	\$741,800	\$813,600	\$1,555,400	4	3	I	5858
P0002	Inadequate	\$13,300	\$0	\$13,300	4	3	I	5858
P0003	Adequate	\$0	\$121,500	\$121,500	4	A	B	5858
P0004	Adequate	\$0	\$168,300	\$168,300	4	4	B	5858
P0005	Inadequate	\$92,300	\$97,300	\$189,600	4	3	B	5858
P0006	Inadequate	\$894,200	\$256,600	\$1,150,800	4	3	B	5858
P0007	Inadequate	\$1,503,000	\$146,200	\$1,649,200	4	3	B	5859
P0008	Adequate	\$0	\$0	\$0	4	A	B	5858
P0009	Adequate	\$0	\$0	\$0	4	4	I	5758
P0010	Adequate	\$0	\$0	\$0	4	4	I	5758
P0011	Inadequate	\$65,100	\$0	\$65,100	4	3	B	5858
P0012	Inadequate	\$62,900	\$1,200	\$64,100	4	3	I	5758
P0013	Adequate	\$0	\$0	\$0	4	4	I	5758
P0014	Inadequate	\$41,300	\$5,100	\$46,400	4	3	B	5858
P0015	Adequate	\$0	\$0	\$0	4	4	B	5758
P0016	Adequate	\$0	\$0	\$0	4	4	B	5758
P0017	Adequate	\$0	\$0	\$0	4	4	B	5758
P0018	Adequate	\$0	\$0	\$0	4	4	B	5758
P0019	Inadequate	\$93,100	\$7,600	\$100,900	4	3	B	5858
P0020	Adequate	\$0	\$0	\$0	4	4	B	5858
P0021	Inadequate	\$15,700	\$1,400	\$17,100	4	3	B	5858
P0022	Adequate	\$0	\$0	\$0	4	4	B	5858
P0023	Inadequate	\$12,500	\$1,000	\$13,500	4	3	B	5858
P0024	Adequate	\$0	\$0	\$0	1	A	I	5759
P0025	Inadequate	\$46,800	\$0	\$46,800	4	3	I	5760
P0026	Inadequate	\$119,200	\$21,600	\$140,800	4	3	I	5660
P0027	Adequate	\$0	\$0	\$0	4	A	I	5660
P0028	Adequate	\$0	\$0	\$0	4	A	I	5660
P0029	Adequate	\$0	\$0	\$0	4	A	I	5660
P0030	Adequate	\$0	\$0	\$0	4	A	I	5660
P0031	Inadequate	\$785,300	\$83,700	\$869,000	4	3	I	5660
P0032	Inadequate	\$824,100	\$259,100	\$1,083,200	4	3	I	5660
P0033	Inadequate	\$625,000	\$53,100	\$678,100	1	I	B	5660
P0034	Adequate	\$0	\$0	\$0	3	A	B	5759
P0035	Inadequate	\$4,248,100	\$483,900	\$4,732,000	1	I	B	5560
P0036	Inadequate	\$1,665,400	\$303,100	\$1,968,500	3	1	I	5661
P0037	Inadequate	\$67,100	\$0	\$67,100	3	I	I	5661
P0038	Inadequate	\$126,400	\$0	\$126,400	3	I	I	5661
P0039	Adequate	\$0	\$0	\$0	4	4	I	5661
P0040	Cannot Analyze	\$0	\$0	\$0	4	4	B	5661

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
P0041	Adequate	\$0	\$0	\$0	3	A	I	5661
P0042	Inadequate	\$866,100	\$0	\$866,100	3	I	I	5661
P0043	Adequate	\$0	\$0	\$0	3	A	I	5661
P0044	Inadequate	\$1,074,500	\$54,200	\$1,128,700	1	I	I	5661
P0045	Adequate	\$0	\$0	\$0	4	4	I	5661
P0046	Adequate	\$0	\$0	\$0	3	A	I	5661
P0047	Adequate	\$0	\$0	\$0	1	A	I	5661
P0048	Adequate	\$0	\$0	\$0	1	A	I	5661
P0049	Adequate	\$0	\$0	\$0	3	A	I	5661
P0050	Adequate	\$0	\$0	\$0	3	A	I	5661
P0051	Adequate	\$0	\$0	\$0	1	A	B	5661
P0052	Adequate	\$0	\$0	\$0	1	A	B	5661
P0053	Inadequate	\$3,595,900	\$443,700	\$4,039,600	1	1	B	5661
P0054	Adequate	\$0	\$0	\$0	3	A	B	5661
P0055	Inadequate	\$1,075,800	\$236,800	\$1,312,600	3	1	B	5661
P0056	Inadequate	\$1,081,100	\$65,500	\$1,146,600	3	1	B	5661
P0057	Adequate	\$0	\$0	\$0	4	4	B	5661
P0058	Inadequate	\$751,400	\$64,600	\$816,000	4	3	B	5661
P0059	Inadequate	\$209,400	\$15,100	\$224,500	4	3	B	5661
P0060	Inadequate	\$209,400	\$0	\$209,400	4	3	B	5661
P0061	Inadequate	\$22,500	\$96,700	\$119,200	N/A	5	B	5662
P0062	Adequate	\$0	\$197,000	\$197,000	4	4	B	5662
P0063	Inadequate	\$433,300	\$48,500	\$481,800	4	3	B	5662
P0064	Adequate	\$0	\$0	\$0	N/A	5	B	5661
P0065	Inadequate	\$508,200	\$63,500	\$571,700	3	1	B	5661
P0066	Inadequate	\$272,300	\$92,200	\$364,500	1	1	B	5561
P0067	Inadequate	\$492,200	\$1,500	\$493,700	1	1	B	5661
P0068	Adequate	\$0	\$0	\$0	4	4	B	5561
P0069	Inadequate	\$136,300	\$0	\$136,300	3	1	B	5661
P0070	Adequate	\$0	\$80,000	\$80,000	4	4	B	5561
P0071	Adequate	\$0	\$65,700	\$65,700	1	A	B	5561
P0072	Inadequate	\$55,500	\$256,100	\$311,600	1	1	B	5561
P0073	Inadequate	\$429,100	\$24,100	\$453,200	3	1	B	5561
P0074	Inadequate	\$1,054,300	\$64,900	\$1,119,200	3	1	B	5561
P0075	Inadequate	\$372,800	\$0	\$372,800	3	1	B	5561
P0076	Inadequate	\$1,549,400	\$121,200	\$1,670,600	1	1	B	5561
P0077	Inadequate	\$220,700	\$4,100	\$224,800	4	3	B	5561
P0078	Adequate	\$0	\$0	\$0	4	A	B	5561
P0079	Adequate	\$0	\$0	\$0	3	A	B	5561
P0080	Inadequate	\$352,400	\$13,900	\$366,300	3	1	B	5561
P0081	Inadequate	\$103,100	\$308,100	\$411,200	3	1	B	5561
P0082	Inadequate	\$1,102,500	\$111,200	\$1,213,700	3	1	B	5562

**TABLE 2P
GREENS BAYOU SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
P0083	Inadequate	\$967,500	\$133,000	\$1,100,500	1	1	B	5562
P0084	Adequate	\$0	\$0	\$0	1	A	B	5561
P0085	Adequate	\$0	\$0	\$0	1	A	B	5561
P0086	Inadequate	\$1,352,100	\$332,700	\$1,684,800	1	1	B	5561
P0087	Inadequate	\$241,100	\$6,300	\$247,400	4	3	B	5562
P0088	Adequate	\$0	\$0	\$0	4	A	B	5562
P0089	Inadequate	\$1,069,100	\$125,200	\$1,194,300	4	3	B	5563
P0090	Adequate	\$0	\$0	\$0	4	4	B	5562
P0091	Inadequate	\$769,600	\$73,600	\$843,200	4	3	B	5562
P0092	Inadequate	\$694,900	\$119,900	\$814,800	1	1	H	5461
P0093	Inadequate	\$384,200	\$35,700	\$419,900	1	1	H	5461
P0094	Adequate	\$0	\$0	\$0	4	4	H	5461
P0095	Inadequate	\$8,257,500	\$1,499,200	\$9,756,700	1	1	H	5461
P0096	Inadequate	\$10,161,100	\$1,451,300	\$11,612,400	1	1	H	5461
P0097	Inadequate	\$7,002,300	\$2,098,000	\$9,100,300	1	1	H	5461
P0098	Adequate	\$0	\$0	\$0	3	A	B	5461
P0100	Inadequate	\$220,500	\$34,500	\$255,000	1	1	H	5462
P0101	Adequate	\$0	\$0	\$0	4	A	B	5462
P0102	Inadequate	\$705,100	\$81,100	\$786,200	1	1	B	5462
P0103	Inadequate	\$2,210,100	\$198,200	\$2,408,300	1	1	B	5464
P0104	Inadequate	\$725,400	\$290,400	\$1,015,800	4	3	B	5465
P0105	Adequate	\$0	\$0	\$0	4	A	B	5465
P0106	Adequate	\$0	\$0	\$0	4	A	B	5465
P0107	Adequate	\$0	\$0	\$0	4	A	B	5565
P0109	Adequate	\$0	\$0	\$0	4	A	B	5565
P0110	Adequate	\$0	\$0	\$0	N/A	5	B	5565
P0111	Adequate	\$0	\$0	\$0	N/A	5	B	5565
P0112	Adequate	\$0	\$0	\$0	N/A	5	B	5565
P0113	Adequate	\$0	\$0	\$0	N/A	5	B	5565
P0114	Adequate	\$0	\$0	\$0	4	A	B	5565
P0116	Inadequate	\$65,300	\$14,100	\$79,400	4	3	B	5565
P0117	Adequate	\$0	\$0	\$0	N/A	5	B	5565
P0119	Inadequate	\$528,700	\$221,800	\$750,500	4	3	B	5565
P0120	Adequate	\$0	\$0	\$0	4	A	B	5262
P0121	Adequate	\$0	\$0	\$0	4	A	B	5262
P0122	Adequate	\$0	\$0	\$0	4	A	B	5262
P0123	Adequate	\$0	\$0	\$0	4	A	B	5262
P0125	Inadequate	\$50,000	\$0	\$50,000	4	3	B	5262
P0126	Inadequate	\$392,000	\$22,100	\$414,100	4	3	B	5262
P0127	Inadequate	\$255,700	\$11,400	\$267,100	4	3	B	5262
P0129	Inadequate	\$5,500	\$0	\$5,500	4	3	B	5262
P0130	Inadequate	\$4,900	\$0	\$4,900	4	3	B	5262

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
P0131	Inadequate	\$482,100	\$151,200	\$633,300	4	3	B	5262
P0132	Inadequate	\$67,800	\$0	\$67,800	4	3	B	5262
P0133	Adequate	\$0	\$0	\$0	4	A	B	5262
P0134	Inadequate	\$1,057,900	\$544,400	\$1,602,300	4	3	B	5262
P0135	Adequate	\$0	\$0	\$0	4	A	B	5262
P0136	Inadequate	\$1,898,500	\$66,600	\$1,965,100	4	3	B	5263
P0137	Inadequate	\$205,500	\$47,400	\$252,900	4	3	B	5263
P0138	Adequate	\$0	\$0	\$0	4	A	B	5263
P0139	Inadequate	\$788,800	\$23,500	\$812,300	4	3	B	5264
P0142	Inadequate	\$1,687,400	\$104,500	\$1,791,900	4	3	B	5264
P0143	Inadequate	\$41,700	\$81,700	\$123,400	4	3	B	5264
P0144	Inadequate	\$166,500	\$0	\$166,500	N/A	5	B	5264
P0145	Adequate	\$0	\$0	\$0	4	A	B	5264
P0146	Inadequate	\$249,200	\$212,300	\$461,500	4	3	B	5264
P0147	Inadequate	\$522,800	\$1,800	\$524,600	4	3	B	5365
P0148	Inadequate	\$669,400	\$56,700	\$726,100	4	3	B	5365
P0149	Inadequate	\$632,200	\$578,300	\$1,210,500	4	3	B	5365
P0150	Inadequate	\$130,700	\$31,800	\$162,500	4	3	B	5365
P0151	Inadequate	\$595,400	\$267,200	\$862,600	4	3	B	5365
P0152	Inadequate	\$1,595,800	\$188,900	\$1,784,700	4	3	B	5365
P0153	Inadequate	\$40,460	\$11,600	\$52,060	4	3	B	5365
P0154	Adequate	\$0	\$0	\$0	4	A	B	5365
P0155	Adequate	\$0	\$0	\$0	4	A	B	5365
P0156	Inadequate	\$21,200	\$0	\$21,200	4	3	B	5365
P0157	Adequate	\$0	\$0	\$0	4	A	B	5365
P0158	Inadequate	\$186,900	\$75,600	\$262,500	4	3	B	5365
P0159	Inadequate	\$1,331,900	\$48,600	\$1,380,500	4	3	B	5365
P0160	Adequate	\$0	\$0	\$0	4	A	B	5365
P0161	Inadequate	\$183,600	\$16,200	\$199,800	4	3	B	5365
P0162	Inadequate	\$84,300	\$66,000	\$150,300	4	3	B	5365
P0163	Inadequate	\$542,400	\$1,719,100	\$2,261,500	N/A	5	B	5365
P0164	Inadequate	\$69,500	\$15,100	\$84,600	4	3	B	5265
P0165	Inadequate	\$805,000	\$59,200	\$864,200	4	3	B	5265
P0166	Adequate	\$0	\$0	\$0	4	A	B	5365
P0167	Inadequate	\$422,500	\$1,516,400	\$1,938,900	4	3	B	5265
P0168	Adequate	\$0	\$0	\$0	4	A	B	5265
P0169	Inadequate	\$13,800	\$0	\$13,800	N/A	5	B	5265
P0170	Adequate	\$0	\$0	\$0	N/A	5	B	5265
P0171	Inadequate	\$94,400	\$20,400	\$114,800	N/A	5	B	5265
P0172	Adequate	\$0	\$0	\$0	N/A	5	B	5265
P0173	Adequate	\$0	\$159,800	\$159,800	4	A	B	5365
P0174	Inadequate	\$71,700	\$11,600	\$83,300	4	3	B	5265

**TABLE 2P
GREENS BAYOU SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
P0196	Adequate	\$0	\$0	\$0	4	A	B	5265
P0197	Adequate	\$0	\$0	\$0	4	A	B	5265
P0198	Adequate	\$0	\$0	\$0	4	A	B	5265
P0199	Adequate	\$0	\$0	\$0	4	A	B	5265
P0200	Adequate	\$0	\$0	\$0	4	A	B	5265
P0201	Inadequate	\$1,121,300	\$489,300	\$1,610,600	4	3	B	5265
P0202	Adequate	\$0	\$0	\$0	4	A	B	5265
P0203	Adequate	\$0	\$0	\$0	4	A	B	5265
P0204	Inadequate	\$127,700	\$19,300	\$147,000	4	3	B	5265
P0205	Inadequate	\$68,000	\$0	\$68,000	4	3	B	5265
P0206	Inadequate	\$1,813,000	\$157,100	\$1,970,100	4	3	B	5266
P0207	Adequate	\$0	\$0	\$0	N/A	5	A	4965
P0208	Adequate	\$0	\$0	\$0	N/A	5	A	4965
P0209	Adequate	\$0	\$0	\$0	N/A	5	A	4965
P0210	Adequate	\$0	\$0	\$0	N/A	5	A	4965
P0211	Adequate	\$0	\$0	\$0	N/A	5	A	4965
P0212	Adequate	\$0	\$0	\$0	N/A	5	A	4965
P0213	Adequate	\$0	\$0	\$0	N/A	5	A	4965
P0214	Adequate	\$0	\$0	\$0	4	A	A	4965
P0215	Inadequate	\$40,800	\$159,200	\$200,000	4	3	A	4965
P0216	Adequate	\$0	\$0	\$0	N/A	5	A	4965
P0217	Adequate	\$0	\$0	\$0	N/A	5	A	4965
P0218	Inadequate	\$17,700	\$0	\$17,700	4	3	A	4965
P0219	Adequate	\$0	\$0	\$0	N/A	5	A	4965
P0220	Adequate	\$0	\$0	\$0	N/A	5	A	4965
P0221	Adequate	\$0	\$18,800	\$18,800	N/A	5	A	4965
P0222	Inadequate	\$1,176,400	\$60,600	\$1,237,000	4	3	A	4965
P0223	Inadequate	\$319,300	\$130,000	\$449,300	N/A	5	A	4965
P0224	Inadequate	\$142,800	\$113,300	\$256,100	4	3	A	4965
P0225	Inadequate	\$134,300	\$170,900	\$305,200	4	3	A	4965
P0226	Adequate	\$0	\$0	\$0	N/A	5	A	4965
P0227	Inadequate	\$324,200	\$631,300	\$955,500	4	3	A	4965
P0228	Inadequate	\$54,500	\$117,700	\$172,200	4	3	A	4965
P0229	Adequate	\$0	\$0	\$0	4	A	B	4965
P0231	Inadequate	\$38,400	\$133,300	\$171,700	4	3	B	5365
P1001	Proposed system	\$785,500	\$0	\$785,500	4	4	B	5566
P1003	Proposed system	\$942,800	\$0	\$942,800	4	4	B	5565
P1004	Proposed system	\$1,878,500	\$493,400	\$2,371,900	4	4	B	5565
P1005	Proposed system	\$1,070,300	\$0	\$1,070,300	4	4	B	5565

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
P1006	Proposed system	\$1,910,100	\$173,900	\$2,084,000	4	4	B	5565
P1007	Proposed system	\$505,500	\$0	\$505,500	4	4	B	5165
P1008	Proposed system	\$1,448,600	\$183,500	\$1,632,100	4	4	B	5465
P1009	Proposed system	\$691,300	\$0	\$691,300	4	4	B	5465
P1010	Proposed system	\$2,442,200	\$0	\$2,442,200	4	4	B	5465
P1011	Proposed system	\$2,629,600	\$0	\$2,629,600	4	4	B	5465
P1014	Proposed system	\$255,700	\$0	\$255,700	4	4	B	5565
P1015	Proposed system	\$369,300	\$0	\$369,300	4	4	B	5565
P1016	Proposed system	\$664,200	\$0	\$664,200	4	4	B	5565
P1017	Proposed system	\$745,300	\$58,000	\$803,300	4	4	B	5565
P1018	Proposed system	\$528,000	\$70,300	\$598,300	4	4	B	5565
P1019	Proposed system	\$945,400	\$0	\$945,400	4	4	B	5565
P1020	Proposed system	\$467,100	\$0	\$467,100	4	4	B	5565
P1021	Proposed system	\$382,400	\$0	\$382,400	4	4	B	5565
P1022	Proposed system	\$380,900	\$0	\$380,900	4	4	B	5565
P1023	Proposed system	\$603,000	\$0	\$603,000	4	4	B	5565
P1024	Proposed system	\$313,800	\$0	\$313,800	N/A	5	B	5565
P1025	Proposed system	\$602,600	\$0	\$602,600	N/A	5	B	5565
P1026	Proposed system	\$228,900	\$0	\$228,900	4	4	B	5565
P1027	Proposed system	\$1,425,500	\$163,400	\$1,588,900	4	4	B	5567
P1028	Proposed system	\$887,900	\$121,300	\$1,009,200	4	4	B	5567
P1029	Proposed system	\$471,200	\$0	\$471,200	4	4	B	5567

**TABLE 2P
GREENS BAYOU SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
P1030	Proposed system.	\$904,100	\$0	\$904,100	4	4	B	5567
P1031	Proposed system.	\$2,391,600	\$445,200	\$2,836,800	4	4	B	5567
P1032	Proposed system.	\$670,900	\$100,400	\$771,300	N/A	5	B	5567
P1033	Proposed system.	\$1,465,900	\$161,900	\$1,627,800	N/A	5	B	5567
P1034	Proposed system.	\$1,474,100	\$187,900	\$1,662,000	N/A	5	B	5567
P1035	Proposed system.	\$216,000	\$0	\$216,000	4	4	B	5567
P1036	Proposed system.	\$190,300	\$0	\$190,300	4	4	B	5265
P1037	Proposed system.	\$553,900	\$0	\$553,900	4	4	B	5365
P1038	Proposed system.	\$426,600	\$0	\$426,600	4	4	B	5365
P1039	Proposed system.	\$287,200	\$0	\$287,200	N/A	5	B	5365
P1040	Proposed system.	\$306,100	\$0	\$306,100	4	4	B	5365
P1041	Proposed system.	\$329,600	\$5,200	\$334,800	4	4	B	5365
P1042	Proposed system.	\$147,200	\$0	\$147,200	4	4	B	5262
P1043	Proposed system.	\$188,500	\$0	\$188,500	4	4	B	5262
P1044	Proposed system.	\$169,900	\$0	\$169,900	4	4	B	5262
P1045	Proposed system.	\$1,355,300	\$162,100	\$1,517,400	4	4	B	5262
P1046	Proposed system.	\$212,500	\$30,400	\$242,900	4	4	B	5262
P1047	Proposed system.	\$257,800	\$55,700	\$313,500	4	4	B	5262
P1048	Proposed system.	\$456,000	\$0	\$456,000	N/A	5	B	5262
P1049	Proposed system.	\$946,600	\$0	\$946,600	3	1	B	5857
P1050	Proposed system.	\$3,382,400	\$0	\$3,382,400	1	1	I	5858
P1051	Proposed system.	\$3,508,500	\$605,200	\$4,113,700	1	1	I	5858

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
P1052	Proposed system.	\$2,804,100	\$0	\$2,804,100	1	1	B	5858
P1053	Proposed system.	\$785,900	\$0	\$785,900	1	1	B	5858
P1054	Proposed system.	\$1,958,700	\$0	\$1,958,700	3	1	B	5858
P1057	Proposed system.	\$702,500	\$81,900	\$784,400	N/A	5	I	5758
P1058	Proposed system.	\$8,063,700	\$1,427,900	\$9,491,600	1	1	I	5759
P1059	Proposed system.	\$839,800	\$607,800	\$1,447,600	1	1	I	5759
P1060	Proposed system.	\$2,765,700	\$229,700	\$2,995,400	3	1	I	5759
P1061	Proposed system.	\$1,795,800	\$0	\$1,795,800	N/A	5	I	5760
P1066	Proposed system.	\$1,338,600	\$0	\$1,338,600	N/A	5	I	5760
P1067	Proposed system.	\$590,500	\$0	\$590,500	N/A	5	I	5760
P1068	Proposed system.	\$870,500	\$0	\$870,500	4	3	I	5760
P1069	Proposed system.	\$3,222,300	\$452,900	\$3,675,200	1	1	I	5760
P1071	Proposed system.	\$776,100	\$0	\$776,100	N/A	5	I	5761
P1072	Proposed system.	\$2,311,800	\$255,200	\$2,567,000	4	4	I	5761
P1074	Proposed system.	\$2,257,700	\$0	\$2,257,700	N/A	5	B	5761
P1075	Proposed system.	\$3,413,000	\$193,200	\$3,606,200	1	1	B	5562
P1076	Proposed system.	\$737,100	\$0	\$737,100	N/A	5	B	5761
P1078	Proposed system.	\$2,528,400	\$606,300	\$3,134,700	3	3	I	5660
P1079	Proposed system.	\$1,653,700	\$0	\$1,653,700	3	1	I	5660
P1080	Proposed system.	\$978,700	\$16,900	\$995,600	1	1	B	5661
P1081	Proposed system.	\$546,400	\$9,400	\$555,800	1	1	B	5661
P1082	Proposed system.	\$1,199,600	\$0	\$1,199,600	1	1	B	5661

**TABLE 2P
GREENS BAYOU SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
P1083	Proposed system	\$121,000	\$0	\$121,000	4	4	B	5560
P1084	Proposed system	\$186,200	\$0	\$186,200	4	4	B	5560
P1085	Proposed system	\$1,173,400	\$0	\$1,173,400	1	1	B	5660
P1086	Proposed system	\$5,319,200	\$895,800	\$6,215,000	3	1	B	5660
P1087	Proposed system	\$967,500	\$0	\$967,500	4	3	I	5660
P1088	Proposed system	\$1,071,600	\$0	\$1,071,600	1	1	I	5660
P1089	Proposed system	\$1,420,300	\$0	\$1,420,300	4	4	I	5660
P1090	Proposed system	\$1,141,500	\$207,400	\$1,348,900	2	1	B	5662
P1091	Proposed system	\$656,500	\$88,500	\$745,000	3	1	B	5661
P1092	Proposed system	\$3,824,000	\$647,300	\$4,471,300	3	1	B	5661
P1093	Proposed system	\$1,314,300	\$0	\$1,314,300	3	1	B	5661
P1094	Proposed system	\$812,900	\$18,700	\$831,600	3	1	B	5662
P1095	Proposed system	\$2,189,000	\$184,100	\$2,373,100	N/A	5	B	5662
P1096	Proposed system	\$447,800	\$25,800	\$473,600	4	4	B	5662
P1097	Proposed system	\$341,400	\$0	\$341,400	4	4	B	5662
P1098	Proposed system	\$3,853,700	\$461,500	\$4,315,200	4	4	B	5662
P1099	Proposed system	\$1,474,100	\$213,000	\$1,687,100	1	1	B	5661
P1100	Proposed system	\$1,503,800	\$0	\$1,503,800	1	1	B	5661
P1101	Proposed system	\$623,700	\$0	\$623,700	4	4	B	5561
P1103	Proposed system	\$57,100	\$0	\$57,100	3	1	B	5561
P1104	Proposed system	\$469,500	\$0	\$469,500	1	1	B	5561
P1105	Proposed system	\$1,841,900	\$0	\$1,841,900	1	1	B	5561

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
P1106	Proposed system	\$886,600	\$0	\$886,600	1	1	B	5561
P1107	Proposed system	\$1,197,000	\$0	\$1,197,000	1	1	B	5561
P1108	Proposed system	\$1,318,300	\$199,700	\$1,518,000	3	1	B	5561
P1109	Proposed system	\$1,155,900	\$0	\$1,155,900	1	1	B	5561
P1110	Proposed system	\$299,200	\$40,300	\$339,500	3	1	B	5561
P1111	Proposed system	\$177,500	\$38,400	\$215,900	4	4	B	5661
P1112	Proposed system	\$148,600	\$21,600	\$170,200	1	1	B	5561
P1113	Proposed system	\$155,800	\$63,100	\$218,900	1	1	B	5561
P1114	Proposed system	\$212,600	\$86,100	\$298,700	1	1	B	5561
P1115	Proposed system	\$1,185,100	\$112,400	\$1,297,500	1	1	B	5561
P1116	Proposed system	\$846,600	\$63,100	\$909,700	1	1	B	5561
P1117	Proposed system	\$201,100	\$0	\$201,100	1	1	B	5561
P1118	Proposed system	\$3,039,400	\$519,300	\$3,558,700	1	1	B	5562
P1119	Proposed system	\$4,606,500	\$637,200	\$5,243,700	3	1	B	5562
P1120	Proposed system	\$342,100	\$0	\$342,100	4	3	B	5562
P1121	Proposed system	\$3,455,000	\$343,700	\$3,798,700	1	1	B	5562
P1122	Proposed system	\$1,785,800	\$257,700	\$2,043,500	1	1	H	5461
P1123	Proposed system	\$272,000	\$0	\$272,000	4	3	B	5461
P1124	Proposed system	\$5,295,200	\$661,500	\$5,956,700	4	4	H	5461
P1125	Proposed system	\$855,900	\$0	\$855,900	1	1	H	5462
P1126	Proposed system	\$1,273,500	\$75,100	\$1,348,600	1	1	H	5461
P1127	Proposed system	\$1,083,400	\$179,300	\$1,262,700	1	1	H	5461

**TABLE 2P
GREENS BAYOU SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
P1128	Proposed system	\$882,600	\$147,900	\$1,030,500	1	1	B	5461
P1129	Proposed system	\$3,288,700	\$960,700	\$4,249,400	1	1	B	5461
P1130	Proposed system	\$646,600	\$115,400	\$762,000	1	1	B	5462
P1131	Proposed system	\$1,784,800	\$186,400	\$1,971,200	1	1	B	5462
P1132	Proposed system	\$1,646,100	\$124,100	\$1,770,200	1	1	B	5462
P1133	Proposed system	\$2,467,000	\$311,700	\$2,778,700	1	1	B	5362
P1134	Proposed system	\$2,118,200	\$182,700	\$2,300,900	1	1	B	5362
P1135	Proposed system	\$1,075,300	\$0	\$1,075,300	1	1	B	5362
P1136	Proposed system	\$571,800	\$0	\$571,800	1	1	B	5362
P1137	Proposed system	\$1,083,900	\$190,600	\$1,274,500	3	1	B	5362
P1138	Proposed system	\$1,248,900	\$0	\$1,248,900	N/A	5	B	5362
P1139	Proposed system	\$697,100	\$58,200	\$755,300	1	1	B	5362
P1140	Proposed system	\$1,002,200	\$102,700	\$1,104,900	4	3	B	5363
P1142	Proposed system	\$202,300	\$0	\$202,300	4	3	B	5462
P1143	Proposed system	\$623,600	\$64,700	\$688,300	1	1	B	5362
P1144	Proposed system	\$2,755,100	\$563,200	\$3,318,300	3	1	B	5462
P1145	Proposed system	\$271,200	\$18,100	\$289,300	3	1	B	5561
P1146	Proposed system	\$519,100	\$0	\$519,100	1	1	B	5561
P1147	Proposed system	\$10,472,900	\$1,020,300	\$11,493,200	3	1	I	5759
P1149	Proposed system	\$879,400	\$0	\$879,400	4	3	I	5758
P1150	Proposed system	\$1,116,300	\$0	\$1,116,300	1	1	B	5858
P1151	Proposed system	\$1,232,100	\$0	\$1,232,100	1	1	H	5462

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
P1152	Proposed system	\$807,400	\$0	\$807,400	1	1	H	5462
P1153	Proposed system	\$1,163,000	\$0	\$1,163,000	3	1	B	5562
P1154	Proposed system	\$249,500	\$0	\$249,500	4	3	B	5562
P1155	Proposed system	\$2,743,400	\$759,400	\$3,502,800	1	1	B	5562
P1156	Proposed system	\$1,307,800	\$106,100	\$1,413,900	4	4	B	5662
P1157	Proposed system	\$333,100	\$36,800	\$369,900	1	1	B	5362
P1158	Proposed system	\$368,300	\$24,500	\$392,800	3	1	B	5362
P1159	Proposed system	\$1,014,400	\$0	\$1,014,400	1	1	H	5462
P1160	Proposed system	\$1,877,100	\$263,100	\$2,140,200	3	1	B	5561
P1161	Proposed system	\$1,764,600	\$0	\$1,764,600	1	1	B	5562
P1162	Proposed system	\$2,027,500	\$318,700	\$2,346,200	1	1	B	5562
P1163	Proposed system	\$2,868,300	\$551,500	\$3,419,800	3	1	B	5662
P1164	Proposed system	\$179,200	\$38,700	\$217,900	1	1	B	5562
P1165	Proposed system	\$291,100	\$19,400	\$310,500	3	1	B	5562
P1166	Proposed system	\$2,087,200	\$287,600	\$2,374,800	1	1	B	5562
P1167	Proposed system	\$1,233,400	\$102,000	\$1,335,400	3	1	B	5562
P1168	Proposed system	\$1,138,000	\$120,400	\$1,258,400	3	1	B	5662
P1169	Proposed system	\$120,400	\$0	\$120,400	4	4	B	5561
P1170	Proposed system	\$111,200	\$9,800	\$121,000	N/A	5	B	5662
P1171	Proposed system	\$975,400	\$179,800	\$1,155,200	4	4	B	5661
P1172	Proposed system	\$1,136,000	\$0	\$1,136,000	N/A	5	B	5662
P1173	Proposed system	\$275,500	\$18,400	\$293,900	3	1	B	5662

**TABLE 2P
GREENS BAYOU SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
P1174	Proposed system	\$3,967,600	\$800,100	\$4,767,700	N/A	5	B	5662
P1175	Proposed system	\$419,200	\$0	\$419,200	4	4	B	5662
P1176	Proposed system	\$184,400	\$0	\$184,400	4	3	B	5661
P1177	Proposed system	\$181,900	\$0	\$181,900	N/A	5	I	5661
P1178	Proposed system	\$1,041,500	\$93,700	\$1,135,200	N/A	5	I	5661
P1179	Proposed system	\$858,700	\$83,000	\$941,700	4	3	I	5661
P1180	Proposed system	\$619,500	\$46,500	\$666,000	N/A	5	I	5661
P1181	Proposed system	\$251,300	\$54,300	\$305,600	N/A	5	I	5759
P1182	Proposed system	\$166,500	\$0	\$166,500	N/A	5	I	5759
P1183	Proposed system	\$38,700	\$0	\$38,700	4	4	I	5759
P1184	Proposed system	\$824,600	\$30,300	\$854,900	4	4	I	4965
P1185	Proposed system	\$62,200	\$0	\$62,200	N/A	5	A	4965
P1186	Proposed system	\$1,490,800	\$199,100	\$1,689,900	4	4	A	4965
P1187	Proposed system	\$1,292,800	\$0	\$1,292,800	N/A	5	A	4965
P1188	Proposed system	\$1,024,700	\$0	\$1,024,700	N/A	5	A	4965
P1189	Proposed system	\$526,800	\$83,800	\$610,600	4	4	A	4965
P1190	Proposed system	\$374,500	\$52,400	\$426,900	4	4	A	4965
P1191	Proposed system	\$283,600	\$40,400	\$324,000	N/A	5	A	4965
P1192	Proposed system	\$411,500	\$0	\$411,500	4	4	A	5165
P1193	Proposed system	\$214,600	\$0	\$214,600	4	4	B	5165
P1194	Proposed system	\$276,900	\$0	\$276,900	4	4	B	5265
P1195	Proposed system	\$1,199,800	\$0	\$1,199,800	4	4	B	5262

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
P1196	Proposed system	\$3,712,500	\$315,500	\$4,028,000	4	4	B	5263
P1197	Proposed system	\$408,300	\$0	\$408,300	4	4	B	5263
P1198	Proposed system	\$811,900	\$0	\$811,900	N/A	5	B	5465
P1199	Proposed system	\$571,800	\$0	\$571,800	N/A	5	B	5465
P1200	Proposed system	\$519,100	\$0	\$519,100	N/A	5	B	5465
P1201	Proposed system	\$2,179,200	\$0	\$2,179,200	4	4	B	5465
P1202	Proposed system	\$1,331,700	\$0	\$1,331,700	4	4	B	5465
P1203	Proposed system	\$817,700	\$99,700	\$917,400	4	4	B	5465
P1204	Proposed system	\$293,400	\$0	\$293,400	4	4	B	5565
P1205	Proposed system	\$311,500	\$0	\$311,500	4	4	B	5565
P1206	Proposed system	\$393,900	\$0	\$393,900	4	4	B	5565
P1207	Proposed system	\$139,400	\$0	\$139,400	N/A	5	B	5565
P1208	Proposed system	\$362,300	\$47,300	\$409,600	4	4	B	5565
P1209	Proposed system	\$1,039,100	\$97,100	\$1,136,200	4	4	B	5565
P1210	Proposed system	\$279,800	\$0	\$279,800	N/A	5	B	5565
P1211	Proposed system	\$713,600	\$0	\$713,600	N/A	5	B	5565
P1212	Proposed system	\$584,200	\$0	\$584,200	N/A	5	B	5565
P1214	Proposed system	\$434,600	\$0	\$434,600	N/A	5	B	5565
P1215	Proposed system	\$4,284,800	\$1,201,000	\$5,485,800	4	4	B	5566
P1221	Proposed system	\$199,900	\$0	\$199,900	N/A	5	B	5567
P1222	Proposed system	\$74,200	\$0	\$74,200	N/A	5	B	5567
P1223	Proposed system	\$940,400	\$51,200	\$991,600	4	4	B	5262

**TABLE 2P
GREENS BAYOU SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
P1224	Proposed system	\$225,600	\$0	\$225,600	4	4	B	5567
P1225	Proposed system	\$192,200	\$0	\$192,200	N/A	5	B	5567
P1226	Proposed system	\$303,500	\$40,800	\$344,300	N/A	5	B	5567
P1227	Proposed system	\$647,000	\$11,500	\$658,500	N/A	5	B	5567
P1228	Proposed system	\$503,900	\$0	\$503,900	N/A	5	B	5567
P1229	Proposed system	\$2,068,800	\$281,200	\$2,350,000	N/A	5	B	5567
P1230	Proposed system	\$454,300	\$0	\$454,300	N/A	5	B	5567
P1231	Proposed system	\$417,600	\$0	\$417,600	N/A	5	B	5567
P1232	Proposed system	\$1,828,800	\$235,900	\$2,064,700	N/A	5	B	5567
P1233	Proposed system	\$1,893,000	\$228,700	\$2,121,700	N/A	5	B	5567
P1234	Proposed system	\$1,901,400	\$228,000	\$2,129,400	4	4	B	5567
P1235	Proposed system	\$836,400	\$142,600	\$979,000	4	4	B	5567
P1236	Proposed system	\$2,198,100	\$0	\$2,198,100	4	4	B	5567
P1238	Proposed system	\$185,000	\$0	\$185,000	4	4	B	5567
P1242	Proposed system	\$380,700	\$0	\$380,700	4	4	B	5563
P1250	Proposed system	\$121,000	\$0	\$121,000	4	4	I	5858
P1251	Proposed system	\$186,200	\$0	\$186,200	4	4	I	5858
P1252	Proposed system	\$125,900	\$27,900	\$153,800	4	4	H	5561
P1253	Proposed system	\$543,500	\$0	\$543,500	1	1	H	5462
TOTAL		\$342,056,500	\$44,592,800	\$386,649,300				

TABLE 3P 2-YEAR COST - GROUP 1
GREENS BAYOU

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Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
Sorted by 2-Year CIP Cost							
W0010	\$145,800	1	179	\$815	100%	G	4857
W0566	\$222,900	1	57	\$3,911	93%	G	5156
W0600	\$305,000	1	296	\$1,030	9%	G	5157
W1017	\$426,900	2	31	\$13,771	100%	G	4957
W1030	\$438,300	2	97	\$4,519	100%	H	5357
W1016	\$621,600	2	49	\$12,686	100%	G	4957
W0005	\$658,500	1	659	\$999	90%	G	4857
W0710	\$664,600	1	230	\$2,890	100%	G	5256
W1026	\$716,400	2	118	\$6,071	100%	A	5159
W0571	\$769,500	1	138	\$5,576	98%	G	5156
W1041	\$910,600	2	153	\$5,952	0%	C	5156
W0682	\$946,000	1	548	\$1,726	96%	D	5357
W0704	\$952,200	1	171	\$5,568	66%	H	5457
W1014	\$964,300	2	164	\$5,880	74%	A	4958
W0711	\$1,048,100	1	418	\$2,507	100%	G	5257
W0564	\$1,087,500	1	215	\$5,058	94%	G	5056
W0624	\$1,092,600	1	33	\$33,109	0%	G	5156
W1012	\$1,248,500	2	326	\$3,830	96%	A	4958
W1015	\$1,316,700	2	72	\$18,288	100%	G	4957
W1011	\$1,330,700	2	159	\$8,369	100%	A	4958
W1021	\$1,394,000	2	118	\$11,814	90%	A	5058
W0197	\$1,431,100	1	360	\$3,975	100%	G	4857
W1010	\$1,456,200	2	195	\$7,468	100%	A	4959
W1003	\$1,523,500	2	301	\$5,061	100%	A	4858
W0804	\$1,780,800	1	991	\$1,797	88%	I	5556
W1024	\$2,139,700	2	258	\$8,293	88%	A	5159
W0558	\$2,142,800	1	363	\$5,903	72%	G	5156
W0678	\$2,542,700	1	326	\$7,800	100%	G	5257
W0014	\$2,921,200	1	3,335	\$876	69%	G	4856
W0245	\$3,115,700	1	535	\$5,824	93%	G	4958
W1005	\$3,115,700	2	249	\$12,513	95%	A	4859
W0699	\$3,624,400	1	1,297	\$2,794	33%	C	5156
W0706	\$3,848,100	1	470	\$8,187	75%	H	5457
W0224	\$3,932,200	1	572	\$6,874	91%	G	4858
W0574	\$4,084,500	1	1,365	\$2,992	23%	G	5157
W0213	\$4,190,000	1	529	\$7,921	94%	G	4858
W0697	\$4,436,300	1	1,557	\$2,849	27%	G	5156
W0595	\$5,505,300	1	665	\$8,279	74%	G	5157
W0611	\$8,186,300	1	842	\$9,722	51%	G	5156

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
W0679	\$8,219,600	1	1,706	\$4,818	87%	G	5257
W0573	\$14,421,500	1	2,807	\$5,138	20%	G	5156
W0686	\$23,419,000	1	4,303	\$5,708	50%	I	5357
TOTAL	\$123,297,300						
Sorted by Cost per Address							
W0010	\$145,800	1	179	\$815	100%	G	4857
W0014	\$2,921,200	1	3,335	\$876	69%	G	4856
W0005	\$658,500	1	659	\$999	90%	G	4857
W0600	\$305,000	1	296	\$1,030	9%	G	5157
W0682	\$946,000	1	548	\$1,726	96%	D	5357
W0804	\$1,780,800	1	991	\$1,797	88%	I	5556
W0711	\$1,048,100	1	418	\$2,507	100%	G	5257
W0699	\$3,624,400	1	1,297	\$2,794	33%	C	5156
W0697	\$4,436,300	1	1,557	\$2,849	27%	G	5156
W0710	\$664,600	1	230	\$2,890	100%	G	5256
W0574	\$4,084,500	1	1,365	\$2,992	23%	G	5157
W1012	\$1,248,500	2	326	\$3,830	96%	A	4958
W0566	\$222,900	1	57	\$3,911	93%	G	5156
W0197	\$1,431,100	1	360	\$3,975	100%	G	4857
W1030	\$438,300	2	97	\$4,519	100%	H	5357
W0679	\$8,219,600	1	1,706	\$4,818	87%	G	5257
W0564	\$1,087,500	1	215	\$5,058	94%	G	5056
W1003	\$1,523,500	2	301	\$5,061	100%	A	4858
W0573	\$14,421,500	1	2,807	\$5,138	20%	G	5156
W0704	\$952,200	1	171	\$5,568	66%	H	5457
W0571	\$769,500	1	138	\$5,576	98%	G	5156
W0686	\$23,419,000	1	4,303	\$5,708	50%	I	5357
W0245	\$3,115,700	1	535	\$5,824	93%	G	4958
W1014	\$964,300	2	164	\$5,880	74%	A	4958
W0558	\$2,142,800	1	363	\$5,903	72%	G	5156
W1041	\$910,600	2	153	\$5,952	0%	C	5156
W1026	\$716,400	2	118	\$6,071	100%	A	5159
W0224	\$3,932,200	1	572	\$6,874	91%	G	4858
W1010	\$1,456,200	2	195	\$7,468	100%	A	4959
W0678	\$2,542,700	1	326	\$7,800	100%	G	5257
W0213	\$4,190,000	1	529	\$7,921	94%	G	4858
W0706	\$3,848,100	1	470	\$8,187	75%	H	5457
W0595	\$5,505,300	1	665	\$8,279	74%	G	5157
W1024	\$2,139,700	2	258	\$8,293	88%	A	5159

TABLE 3P 2-YEAR COST - GROUP 1
GREENS BAYOU

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
W1011	\$1,330,700	2	159	\$8,369	100%	A	4958
W0611	\$8,186,300	1	842	\$9,722	51%	G	5156
W1021	\$1,394,000	2	118	\$11,814	90%	A	5058
W1005	\$3,115,700	2	249	\$12,513	95%	A	4859
W1016	\$621,600	2	49	\$12,686	100%	G	4957
W1017	\$426,900	2	31	\$13,771	100%	G	4957
W1015	\$1,316,700	2	72	\$18,288	100%	G	4957
W0624	\$1,092,600	1	33	\$33,109	0%	G	5156
TOTAL	\$123,297,300						

**TABLE 4P 2-YEAR COST – GROUP 2
GREENS BAYOU**

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
Sorted by 2-Year CIP Cost							
P1090	\$1,141,500	1	192	\$5,945	99.5%	B	5662
Total	\$1,141,500						
Sorted by Cost per Address							
P1090	\$1,141,500	1	192	\$5,945	99.5%	B	5662
Total	\$1,141,500						

**TABLE 5P 2-YEAR COST – GROUP 3
GREENS BAYOU**

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
Sorted by 2-Year CIP Cost							
P1103	\$57,100	1	34	\$1,679	100.0%	B	5561
P0037	\$67,100	1	40	\$1,678	90.0%	I	5661
P0081	\$103,100	1	132	\$781	93.9%	B	5561
P0038	\$126,400	1	34	\$3,718	100.0%	I	5661
P0069	\$136,300	1	57	\$2,391	87.7%	B	5661
P1145	\$271,200	1	104	\$2,608	92.3%	B	5561
P1173	\$275,500	1	20	\$13,775	95.0%	B	5662
P1165	\$291,100	1	161	\$1,808	98.1%	B	5562
P1110	\$299,200	1	162	\$1,847	84.0%	B	5561
P0080	\$352,400	1	76	\$4,637	96.1%	B	5561
P1158	\$368,300	1	113	\$3,259	98.2%	B	5362
P0075	\$372,800	1	166	\$2,246	100.0%	B	5561
P0073	\$429,100	1	184	\$2,332	100.0%	B	5561
P0065	\$508,200	1	198	\$2,567	33.3%	B	5661
P1091	\$656,500	1	174	\$3,773	100.0%	B	5661
P1094	\$812,900	1	131	\$6,205	100.0%	B	5662
P0042	\$866,100	1	245	\$3,535	95.5%	I	5661
P1049	\$946,600	1	119	\$7,955	84.0%	B	5857
P0074	\$1,054,300	1	269	\$3,919	100.0%	B	5561
P0055	\$1,075,800	1	257	\$4,186	99.2%	B	5661
P0056	\$1,081,100	1	76	\$14,225	78.9%	B	5661
P1137	\$1,083,900	1	54	\$20,072	70.4%	B	5362
P0082	\$1,102,500	1	87	\$12,672	89.7%	B	5562
P1168	\$1,138,000	1	159	\$7,157	99.4%	B	5662
P1153	\$1,163,000	1	371	\$3,135	98.4%	B	5562
P1167	\$1,233,400	1	147	\$8,390	95.2%	B	5562
P1093	\$1,314,300	1	220	\$5,974	100.0%	B	5661
P1108	\$1,318,300	1	270	\$4,883	81.1%	B	5561
P1079	\$1,653,700	1	48	\$34,452	68.8%	I	5660
P0036	\$1,665,400	1	341	\$4,884	92.4%	I	5661
P1160	\$1,877,100	1	131	\$14,329	98.5%	B	5561
P1054	\$1,958,700	1	209	\$9,372	98.1%	B	5858
P1078	\$2,528,400	1	77	\$32,836	37.7%	I	5660
P1144	\$2,755,100	1	150	\$18,367	88.7%	B	5462
P1060	\$2,765,700	1	74	\$37,374	90.5%	I	5759
P1163	\$2,868,300	1	226	\$12,692	92.5%	B	5662
P1092	\$3,824,000	1	183	\$20,896	96.7%	B	5661
P1119	\$4,606,500	1	106	\$43,458	93.4%	B	5562
P1086	\$5,319,200	1	155	\$34,317	65.8%	B	5660
TOTAL	\$50,326,600						

TABLE 5P 2-YEAR COST - GROUP 3
GREENS BAYOU

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
Sorted by Cost per Address							
P0081	\$103,100	1	132	\$781	93.9%	B	5561
P0037	\$67,100	1	40	\$1,678	90.0%	I	5661
P1103	\$57,100	1	34	\$1,679	100.0%	B	5561
P1165	\$291,100	1	161	\$1,808	98.1%	B	5562
P1110	\$299,200	1	162	\$1,847	84.0%	B	5561
P0075	\$372,800	1	166	\$2,246	100.0%	B	5561
P0073	\$429,100	1	184	\$2,332	100.0%	B	5561
P0069	\$136,300	1	57	\$2,391	87.7%	B	5661
P0065	\$508,200	1	198	\$2,567	33.3%	B	5661
P1145	\$271,200	1	104	\$2,608	92.3%	B	5561
P1153	\$1,163,000	1	371	\$3,135	98.4%	B	5562
P1158	\$368,300	1	113	\$3,259	98.2%	B	5362
P0042	\$866,100	1	245	\$3,535	95.5%	I	5661
P0038	\$126,400	1	34	\$3,718	100.0%	I	5661
P1091	\$656,500	1	174	\$3,773	100.0%	B	5661
P0074	\$1,054,300	1	269	\$3,919	100.0%	B	5561
P0055	\$1,075,800	1	257	\$4,186	99.2%	B	5661
P0080	\$352,400	1	76	\$4,637	96.1%	B	5561
P1108	\$1,318,300	1	270	\$4,883	81.1%	B	5561
P0036	\$1,665,400	1	341	\$4,884	92.4%	I	5661
P1093	\$1,314,300	1	220	\$5,974	100.0%	B	5661
P1094	\$812,900	1	131	\$6,205	100.0%	B	5662
P1168	\$1,138,000	1	159	\$7,157	99.4%	B	5662
P1049	\$946,600	1	119	\$7,955	84.0%	B	5857
P1167	\$1,233,400	1	147	\$8,390	95.2%	B	5562
P1054	\$1,958,700	1	209	\$9,372	98.1%	B	5858
P0082	\$1,102,500	1	87	\$12,672	89.7%	B	5562
P1163	\$2,868,300	1	226	\$12,692	92.5%	B	5662
P1173	\$275,500	1	20	\$13,775	95.0%	B	5662
P0056	\$1,081,100	1	76	\$14,225	78.9%	B	5661
P1160	\$1,877,100	1	131	\$14,329	98.5%	B	5561
P1144	\$2,755,100	1	150	\$18,367	88.7%	B	5462
P1137	\$1,083,900	1	54	\$20,072	70.4%	B	5362
P1092	\$3,824,000	1	183	\$20,896	96.7%	B	5661
P1078	\$2,528,400	1	77	\$32,836	37.7%	I	5660
P1086	\$5,319,200	1	155	\$34,317	65.8%	B	5660
P1079	\$1,653,700	1	48	\$34,452	68.8%	I	5660
P1060	\$2,765,700	1	74	\$37,374	90.5%	I	5759
P1119	\$4,606,500	1	106	\$43,458	93.4%	B	5562
TOTAL	\$50,326,600						

TABLE 6P 2 - YEAR COST - GROUP 4
GREENS BAYOU

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
Sorted by 2-Year CIP Cost							
P0130	\$4,900	3	1	\$4,900	0.0%	B	5262
P0129	\$5,500	3	1	\$5,500	0.0%	B	5262
P0023	\$12,500	3	11	\$1,136	100.0%	B	5858
P0002	\$13,300	3	2	\$6,650	0.0%	I	5858
P0021	\$15,700	3	43	\$365	100.0%	B	5858
P0218	\$17,700	3	1	\$17,700	0.0%	A	4965
P0156	\$21,200	3	1	\$21,200	0.0%	B	5365
P0231	\$38,400	3	1	\$38,400	0.0%	B	5365
P1183	\$38,700	4	1	\$38,700	0.0%	I	5759
P0153	\$40,400	3	1	\$40,400	0.0%	B	5365
P0215	\$40,800	3	1	\$40,800	0.0%	A	4965
P0014	\$41,300	3	66	\$626	100.0%	B	5858
P0143	\$41,700	3	1	\$41,700	0.0%	B	5264
P0025	\$46,800	3	1	\$46,800	0.0%	I	5760
P0125	\$50,000	3	1	\$50,000	0.0%	B	5262
P0228	\$54,500	3	1	\$54,500	0.0%	A	4965
P0012	\$62,900	3	36	\$1,747	83.3%	I	5758
P0011	\$65,100	3	13	\$5,008	61.5%	B	5858
P0116	\$65,300	3	1	\$65,300	0.0%	B	5565
P0132	\$67,800	3	1	\$67,800	0.0%	B	5262
P0205	\$68,000	3	1	\$68,000	0.0%	B	5265
P0164	\$69,500	3	1	\$69,500	0.0%	B	5265
P0174	\$71,700	3	1	\$71,700	0.0%	B	5265
P0162	\$84,300	3	1	\$84,300	0.0%	B	5365
P0005	\$92,300	3	11	\$8,391	72.7%	B	5858
P0019	\$93,100	3	88	\$1,058	100.0%	B	5858
P0026	\$119,200	3	1	\$119,200	0.0%	I	5660
P1169	\$120,400	4	1	\$120,400	0.0%	B	5561
P1083	\$121,000	4	1	\$121,000	87.0%	B	5560
P1250	\$121,000	4	1	\$121,000	72.0%	I	5858
P1252	\$125,900	4	1	\$125,900	65.0%	H	5561
P0204	\$127,700	3	1	\$127,700	0.0%	B	5265
P0150	\$130,700	3	1	\$130,700	0.0%	B	5365
P0225	\$134,300	3	1	\$134,300	0.0%	A	4965
P0224	\$142,800	3	1	\$142,800	0.0%	A	4965
P1042	\$147,200	4	1	\$147,200	0.0%	B	5262
P1044	\$169,900	4	1	\$169,900	0.0%	B	5262
P1111	\$177,500	4	1	\$177,500	0.0%	B	5661
P0161	\$183,600	3	1	\$183,600	0.0%	B	5365

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
P1176	\$184,400	3	14	\$13,171	71.4%	B	5661
P1238	\$185,000	4	1	\$185,000	0.0%	B	5567
P1084	\$186,200	4	1	\$186,200	29.0%	B	5560
P1251	\$186,200	4	1	\$186,200	96.0%	I	5858
P0158	\$186,900	3	1	\$186,900	0.0%	B	5365
P1043	\$188,500	4	1	\$188,500	0.0%	B	5262
P1036	\$190,300	4	1	\$190,300	0.0%	B	5265
P1142	\$202,300	3	52	\$3,890	63.5%	B	5462
P0137	\$205,500	3	1	\$205,500	0.0%	B	5263
P0059	\$209,400	3	1	\$209,400	0.0%	B	5661
P0060	\$209,400	3	24	\$8,725	83.3%	B	5661
P1046	\$212,500	4	1	\$212,500	0.0%	B	5262
P1193	\$214,600	4	1	\$214,600	0.0%	B	5165
P1035	\$216,000	4	1	\$216,000	0.0%	B	5567
P0077	\$220,700	3	1	\$220,700	0.0%	B	5561
P1224	\$225,600	4	1	\$225,600	0.0%	B	5567
P1026	\$228,900	4	1	\$228,900	0.0%	B	5565
P0087	\$241,100	3	11	\$21,918	100.0%	B	5562
P0146	\$249,200	3	1	\$249,200	0.0%	B	5264
P1154	\$249,500	3	27	\$9,241	100.0%	B	5562
P0127	\$255,700	3	1	\$255,700	0.0%	B	5262
P1014	\$255,700	4	1	\$255,700	0.0%	B	5565
P1047	\$257,800	4	1	\$257,800	0.0%	B	5262
P1123	\$272,000	3	124	\$2,194	99.2%	B	5461
P1194	\$276,900	4	1	\$276,900	0.0%	B	5265
P1204	\$293,400	4	1	\$293,400	0.0%	B	5565
P1040	\$306,100	4	1	\$306,100	0.0%	B	5365
P1205	\$311,500	4	1	\$311,500	0.0%	B	5565
P0227	\$324,200	3	1	\$324,200	0.0%	A	4965
P1041	\$329,600	4	1	\$329,600	0.0%	B	5365
P1097	\$341,400	4	1	\$341,400	1.0%	B	5662
P1120	\$342,100	3	52	\$6,579	84.6%	B	5562
P1208	\$362,300	4	1	\$362,300	0.0%	B	5565
P1015	\$369,300	4	1	\$369,300	0.0%	B	5565
P1190	\$374,500	4	1	\$374,500	0.0%	A	4965
P1242	\$380,700	4	1	\$380,700	96.0%	B	5563
P1022	\$380,900	4	1	\$380,900	0.0%	B	5565
P1021	\$382,400	4	1	\$382,400	0.0%	B	5565
P0126	\$392,000	3	1	\$392,000	0.0%	B	5262
P1206	\$393,900	4	1	\$393,900	0.0%	B	5565

**TABLE 6P 2 - YEAR COST - GROUP 4
GREENS BAYOU**

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
P1197	\$408,300	4	1	\$408,300	0.0%	B	5263
P1192	\$411,500	4	1	\$411,500	0.0%	A	5165
P1175	\$419,200	4	1	\$419,200	0.0%	B	5662
P0167	\$422,500	3	1	\$422,500	0.0%	B	5265
P1038	\$426,600	4	1	\$426,600	0.0%	B	5365
P0063	\$433,300	3	1	\$433,300	0.0%	B	5662
P1096	\$447,800	4	1	\$447,800	0.0%	B	5662
P1020	\$467,100	4	1	\$467,100	0.0%	B	5565
P1029	\$471,200	4	1	\$471,200	0.0%	B	5567
P0131	\$482,100	3	1	\$482,100	0.0%	B	5262
P1007	\$505,500	4	1	\$505,500	0.0%	B	5165
P0147	\$522,800	3	1	\$522,800	0.0%	B	5365
P1189	\$526,800	4	1	\$526,800	0.0%	A	4965
P1018	\$528,000	4	1	\$528,000	0.0%	B	5565
P0119	\$528,700	3	1	\$528,700	0.0%	B	5565
P1037	\$553,900	4	1	\$553,900	0.0%	B	5365
P0151	\$595,100	3	1	\$595,100	0.0%	B	5365
P1023	\$603,000	4	1	\$603,000	0.0%	B	5565
P1101	\$623,700	4	1	\$623,700	88.0%	B	5561
P0149	\$632,200	3	1	\$632,200	0.0%	B	5365
P1016	\$664,200	4	1	\$664,200	0.0%	B	5565
P0148	\$669,100	3	1	\$669,100	0.0%	B	5365
P1009	\$691,300	4	1	\$691,300	0.0%	B	5465
P0104	\$725,400	3	1	\$725,400	0.0%	B	5465
P0001	\$741,800	3	11	\$67,436	0.0%	I	5858
P1017	\$745,300	4	1	\$745,300	0.0%	B	5565
P0058	\$751,400	3	231	\$3,253	97.0%	B	5661
P0091	\$769,600	3	39	\$19,733	61.5%	B	5562
P0031	\$785,300	3	1	\$785,300	0.0%	I	5660
P1001	\$785,500	4	1	\$785,500	0.0%	B	5566
P0139	\$788,800	3	1	\$788,800	0.0%	B	5264
P0165	\$805,000	3	1	\$805,000	0.0%	B	5265
P1203	\$817,700	4	1	\$817,700	0.0%	B	5465
P0032	\$824,100	3	1	\$824,100	0.0%	I	5660
P1184	\$824,600	4	1	\$824,600	0.0%	I	4965
P1235	\$836,400	4	1	\$836,400	0.0%	B	5567
P1179	\$858,700	3	3	\$286,233	33.3%	I	5661
P1068	\$870,500	3	12	\$72,542	91.7%	I	5760
P1149	\$879,400	3	48	\$18,321	100.0%	I	5758
P1028	\$887,900	4	1	\$887,900	0.0%	B	5567

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
P0006	\$894,200	3	312	\$2,866	91.0%	B	5858
P1030	\$904,100	4	1	\$904,100	0.0%	B	5567
P1223	\$940,400	4	1	\$940,400	0.0%	B	5262
P1003	\$942,800	4	1	\$942,800	0.0%	B	5565
P1019	\$945,400	4	1	\$945,400	0.0%	B	5565
P1087	\$967,500	3	92	\$10,516	84.8%	I	5660
P1171	\$975,400	4	1	\$975,400	0.0%	B	5661
P1140	\$1,002,200	3	19	\$52,747	63.2%	B	5363
P1209	\$1,039,100	4	1	\$1,039,100	0.0%	B	5565
P0134	\$1,057,900	3	1	\$1,057,900	0.0%	B	5262
P0089	\$1,069,100	3	76	\$14,067	59.2%	B	5563
P1005	\$1,070,300	4	1	\$1,070,300	0.0%	B	5565
P0201	\$1,121,300	3	1	\$1,121,300	0.0%	B	5265
P0222	\$1,176,400	3	1	\$1,176,400	0.0%	A	4965
P1195	\$1,199,800	4	1	\$1,199,800	0.0%	B	5262
P1156	\$1,307,800	4	1	\$1,307,800	0.0%	B	5662
P1202	\$1,331,700	4	1	\$1,331,700	0.0%	B	5465
P0159	\$1,331,900	3	1	\$1,331,900	0.0%	B	5365
P1045	\$1,355,300	4	1	\$1,355,300	0.0%	B	5262
P1089	\$1,420,300	4	1	\$1,420,300	13.0%	I	5660
P1027	\$1,425,500	4	1	\$1,425,500	0.0%	B	5567
P1008	\$1,448,600	4	1	\$1,448,600	0.0%	B	5465
P1186	\$1,490,800	4	1	\$1,490,800	0.0%	A	4965
P0007	\$1,503,000	3	362	\$4,152	85.6%	B	5859
P0152	\$1,595,800	3	1	\$1,595,800	0.0%	B	5365
P0142	\$1,687,400	3	1	\$1,687,400	0.0%	B	5264
P0206	\$1,813,000	3	1	\$1,813,000	0.0%	B	5266
P1004	\$1,878,500	4	1	\$1,878,500	0.0%	B	5565
P0136	\$1,898,500	3	1	\$1,898,500	0.0%	B	5263
P1234	\$1,901,400	4	1	\$1,901,400	0.0%	B	5567
P1006	\$1,910,100	4	1	\$1,910,100	0.0%	B	5565
P1201	\$2,179,200	4	1	\$2,179,200	0.0%	B	5465
P1236	\$2,198,100	4	1	\$2,198,100	0.0%	B	5567
P1072	\$2,311,800	4	1	\$2,311,800	0.0%	I	5761
P1031	\$2,391,600	4	1	\$2,391,600	0.0%	B	5567
P1010	\$2,442,200	4	1	\$2,442,200	0.0%	B	5465
P1011	\$2,629,600	4	1	\$2,629,600	0.0%	B	5465
P1013	\$3,685,200	4	1	\$3,685,200	0.0%	B	5465
P1196	\$3,712,500	4	1	\$3,712,500	0.0%	B	5263
P1098	\$3,853,700	4	1	\$3,853,700	0.0%	B	5662

**TABLE 6P 2 - YEAR COST - GROUP 4
GREENS BAYOU**

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
P1215	\$4,284,800	4	1	\$4,284,800	0.0%	B	5566
P1124	\$5,295,200	4	709	\$7,469	77.6%	H	5461
Total	\$115,159,900						
Sorted by Cost per Address							
P0021	\$15,700	3	43	\$365	100.0%	B	5858
P0014	\$41,300	3	66	\$626	100.0%	B	5858
P0019	\$93,100	3	88	\$1,058	100.0%	B	5858
P0023	\$12,500	3	11	\$1,136	100.0%	B	5858
P0012	\$62,900	3	36	\$1,747	83.3%	I	5758
P1123	\$272,000	3	124	\$2,194	99.2%	B	5461
P0006	\$894,200	3	312	\$2,866	91.0%	B	5858
P0058	\$751,400	3	231	\$3,253	97.0%	B	5661
P1142	\$202,300	3	52	\$3,890	63.5%	B	5462
P0007	\$1,503,000	3	362	\$4,152	85.6%	B	5859
P0130	\$4,900	3	1	\$4,900	0.0%	B	5262
P0011	\$65,100	3	13	\$5,008	61.5%	B	5858
P0129	\$5,500	3	1	\$5,500	0.0%	B	5262
P1120	\$342,100	3	52	\$6,579	84.6%	B	5562
P0002	\$13,300	3	2	\$6,650	0.0%	I	5858
P1124	\$5,295,200	4	709	\$7,469	77.6%	H	5461
P0005	\$92,300	3	11	\$8,391	72.7%	B	5858
P0060	\$209,400	3	24	\$8,725	83.3%	B	5661
P1154	\$249,500	3	27	\$9,241	100.0%	B	5562
P1087	\$967,500	3	92	\$10,516	84.8%	I	5660
P1176	\$184,400	3	14	\$13,171	71.4%	B	5661
P0089	\$1,069,100	3	76	\$14,067	59.2%	B	5563
P0218	\$17,700	3	1	\$17,700	0.0%	A	4965
P1149	\$879,400	3	48	\$18,321	100.0%	I	5758
P0091	\$769,600	3	39	\$19,733	61.5%	B	5562
P0156	\$21,200	3	1	\$21,200	0.0%	B	5365
P0087	\$241,100	3	11	\$21,918	100.0%	B	5562
P0231	\$38,400	3	1	\$38,400	0.0%	B	5365
P1183	\$38,700	4	1	\$38,700	0.0%	I	5759
P0153	\$40,400	3	1	\$40,400	0.0%	B	5365
P0215	\$40,800	3	1	\$40,800	0.0%	A	4965
P0143	\$41,700	3	1	\$41,700	0.0%	B	5264
P0025	\$46,800	3	1	\$46,800	0.0%	I	5760
P0125	\$50,000	3	1	\$50,000	0.0%	B	5262
P1140	\$1,002,200	3	19	\$52,747	63.2%	B	5363

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
P0228	\$54,500	3	1	\$54,500	0.0%	A	4965
P0116	\$65,300	3	1	\$65,300	0.0%	B	5565
P0001	\$741,800	3	13	\$67,436	0.0%	I	5858
P0132	\$67,800	3	1	\$67,800	0.0%	B	5262
P0205	\$68,000	3	1	\$68,000	0.0%	B	5265
P0164	\$69,500	3	1	\$69,500	0.0%	B	5265
P0174	\$71,700	3	1	\$71,700	0.0%	B	5265
P1068	\$870,500	3	12	\$72,542	91.7%	I	5760
P0162	\$84,300	3	1	\$84,300	0.0%	B	5365
P0026	\$119,200	3	1	\$119,200	0.0%	I	5660
P1169	\$120,400	4	1	\$120,400	0.0%	B	5561
P1083	\$121,000	4	1	\$121,000	87.0%	B	5560
P1250	\$121,000	4	1	\$121,000	72.0%	I	5858
P1252	\$125,900	4	1	\$125,900	65.0%	H	5561
P0204	\$127,700	3	1	\$127,700	0.0%	B	5265
P0150	\$130,700	3	1	\$130,700	0.0%	B	5365
P0225	\$134,300	3	1	\$134,300	0.0%	A	4965
P0224	\$142,800	3	1	\$142,800	0.0%	A	4965
P1042	\$147,200	4	1	\$147,200	0.0%	B	5262
P1044	\$169,900	4	1	\$169,900	0.0%	B	5262
P1111	\$177,500	4	1	\$177,500	0.0%	B	5661
P0161	\$183,600	3	1	\$183,600	0.0%	B	5365
P1238	\$185,000	4	1	\$185,000	0.0%	B	5567
P1084	\$186,200	4	1	\$186,200	29.0%	B	5560
P1251	\$186,200	4	1	\$186,200	96.0%	I	5858
P0158	\$186,900	3	1	\$186,900	0.0%	B	5365
P1043	\$188,500	4	1	\$188,500	0.0%	B	5262
P1036	\$190,300	4	1	\$190,300	0.0%	B	5265
P0137	\$205,500	3	1	\$205,500	0.0%	B	5263
P0059	\$209,400	3	1	\$209,400	0.0%	B	5661
P1046	\$212,500	4	1	\$212,500	0.0%	B	5262
P1193	\$214,600	4	1	\$214,600	0.0%	B	5165
P1035	\$216,000	4	1	\$216,000	0.0%	B	5567
P0077	\$220,700	3	1	\$220,700	0.0%	B	5561
P1224	\$225,600	4	1	\$225,600	0.0%	B	5567
P1026	\$228,900	4	1	\$228,900	0.0%	B	5565
P0146	\$249,200	3	1	\$249,200	0.0%	B	5264
P0127	\$255,700	3	1	\$255,700	0.0%	B	5262
P1014	\$255,700	4	1	\$255,700	0.0%	B	5565
P1047	\$257,800	4	1	\$257,800	0.0%	B	5262

TABLE 6P 2 - YEAR COST - GROUP 4
GREENS BAYOU

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
P1194	\$276,900	4	1	\$276,900	0.0%	B	5265
P1179	\$858,700	3	3	\$286,233	33.3%	I	5661
P1204	\$293,400	4	1	\$293,400	0.0%	B	5565
P1040	\$306,100	4	1	\$306,100	0.0%	B	5365
P1205	\$311,500	4	1	\$311,500	0.0%	B	5565
P0227	\$324,200	3	1	\$324,200	0.0%	A	4965
P1041	\$329,600	4	1	\$329,600	0.0%	B	5365
P1097	\$341,400	4	1	\$341,400	1.0%	B	5662
P1208	\$362,300	4	1	\$362,300	0.0%	B	5565
P1015	\$369,300	4	1	\$369,300	0.0%	B	5565
P1190	\$374,500	4	1	\$374,500	0.0%	A	4965
P1242	\$380,700	4	1	\$380,700	96.0%	B	5563
P1022	\$380,900	4	1	\$380,900	0.0%	B	5565
P1021	\$382,400	4	1	\$382,400	0.0%	B	5565
P0126	\$392,000	3	1	\$392,000	0.0%	B	5262
P1206	\$393,900	4	1	\$393,900	0.0%	B	5565
P1197	\$408,300	4	1	\$408,300	0.0%	B	5263
P1192	\$411,500	4	1	\$411,500	0.0%	A	5165
P1175	\$419,200	4	1	\$419,200	0.0%	B	5662
P0167	\$422,500	3	1	\$422,500	0.0%	B	5265
P1038	\$426,600	4	1	\$426,600	0.0%	B	5365
P0063	\$433,300	3	1	\$433,300	0.0%	B	5662
P1096	\$447,800	4	1	\$447,800	0.0%	B	5662
P1020	\$467,100	4	1	\$467,100	0.0%	B	5565
P1029	\$471,200	4	1	\$471,200	0.0%	B	5567
P0131	\$482,100	3	1	\$482,100	0.0%	B	5262
P1007	\$505,500	4	1	\$505,500	0.0%	B	5165
P1147	\$522,800	3	1	\$522,800	0.0%	B	5365
P1189	\$526,800	4	1	\$526,800	0.0%	A	4965
P1018	\$528,000	4	1	\$528,000	0.0%	B	5565
P0119	\$528,700	3	1	\$528,700	0.0%	B	5565
P1037	\$553,900	4	1	\$553,900	0.0%	B	5365
P0151	\$595,100	3	1	\$595,100	0.0%	B	5365
P1023	\$603,000	4	1	\$603,000	0.0%	B	5565
P1101	\$623,700	4	1	\$623,700	88.0%	B	5561
P0149	\$632,200	3	1	\$632,200	0.0%	B	5365
P1016	\$664,200	4	1	\$664,200	0.0%	B	5565
P0148	\$669,100	3	1	\$669,100	0.0%	B	5365
P1009	\$691,300	4	1	\$691,300	0.0%	B	5465
P0104	\$725,400	3	1	\$725,400	0.0%	B	5465

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
P1017	\$745,300	4	1	\$745,300	0.0%	B	5565
P0031	\$785,300	3	1	\$785,300	0.0%	I	5660
P1001	\$785,500	4	1	\$785,500	0.0%	B	5566
P0139	\$788,800	3	1	\$788,800	0.0%	B	5264
P0165	\$805,000	3	1	\$805,000	0.0%	B	5265
P1203	\$817,700	4	1	\$817,700	0.0%	B	5465
P0032	\$824,100	3	1	\$824,100	0.0%	I	5660
P1184	\$824,600	4	1	\$824,600	0.0%	I	4965
P1235	\$836,400	4	1	\$836,400	0.0%	B	5567
P1028	\$887,900	4	1	\$887,900	0.0%	B	5567
P1030	\$904,100	4	1	\$904,100	0.0%	B	5567
P1223	\$940,400	4	1	\$940,400	0.0%	B	5262
P1003	\$942,800	4	1	\$942,800	0.0%	B	5565
P1019	\$945,400	4	1	\$945,400	0.0%	B	5565
P1171	\$975,400	4	1	\$975,400	0.0%	B	5661
P1209	\$1,039,100	4	1	\$1,039,100	0.0%	B	5565
P0134	\$1,057,900	3	1	\$1,057,900	0.0%	B	5262
P1005	\$1,070,300	4	1	\$1,070,300	0.0%	B	5565
P0201	\$1,121,300	3	1	\$1,121,300	0.0%	B	5265
P0222	\$1,176,400	3	1	\$1,176,400	0.0%	A	4965
P1195	\$1,199,800	4	1	\$1,199,800	0.0%	B	5262
P1156	\$1,307,800	4	1	\$1,307,800	0.0%	B	5662
P1202	\$1,331,700	4	1	\$1,331,700	0.0%	B	5465
P0159	\$1,331,900	3	1	\$1,331,900	0.0%	B	5365
P1045	\$1,355,300	4	1	\$1,355,300	0.0%	B	5262
P1089	\$1,420,300	4	1	\$1,420,300	13.0%	I	5660
P1027	\$1,425,500	4	1	\$1,425,500	0.0%	B	5567
P1008	\$1,448,600	4	1	\$1,448,600	0.0%	B	5465
P1186	\$1,490,800	4	1	\$1,490,800	0.0%	A	4965
P0152	\$1,595,800	3	1	\$1,595,800	0.0%	B	5365
P0142	\$1,687,400	3	1	\$1,687,400	0.0%	B	5264
P0206	\$1,813,000	3	1	\$1,813,000	0.0%	B	5266
P1004	\$1,878,500	4	1	\$1,878,500	0.0%	B	5565
P0136	\$1,898,500	3	1	\$1,898,500	0.0%	B	5263
P1234	\$1,901,400	4	1	\$1,901,400	0.0%	B	5567
P1006	\$1,910,100	4	1	\$1,910,100	0.0%	B	5565
P1201	\$2,179,200	4	1	\$2,179,200	0.0%	B	5465
P1236	\$2,198,100	4	1	\$2,198,100	0.0%	B	5567
P1072	\$2,311,800	4	1	\$2,311,800	0.0%	I	5761
P1031	\$2,391,600	4	1	\$2,391,600	0.0%	B	5567

TABLE 6P 2 - YEAR COST - GROUP 4
GREENS BAYOU

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
P1010	\$2,442,200	4	1	\$2,442,200	0.0%	B	5465
P1011	\$2,629,600	4	1	\$2,629,600	0.0%	B	5465
P1013	\$3,685,200	4	1	\$3,685,200	0.0%	B	5465
P1196	\$3,712,500	4	1	\$3,712,500	0.0%	B	5263
P1098	\$3,853,700	4	1	\$3,853,700	0.0%	B	5662
P1215	\$4,284,800	4	1	\$4,284,800	0.0%	B	5566
Total	\$115,159,900						

**TABLE 7D
5-YEAR COST – GROUP 1
BRAYS BAYOU**

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
Sorted by Additional for 5-Year Storm						
P0067	\$492,200	\$493,700	\$1,500	I	B	5661
P1081	\$546,400	\$555,800	\$9,400	I	B	5661
P1080	\$978,700	\$995,600	\$16,900	I	B	5661
P1112	\$148,600	\$170,200	\$21,600	I	B	5561
P0100	\$220,500	\$255,000	\$34,500	I	H	5462
P0093	\$384,200	\$419,900	\$35,700	I	H	5461
P1157	\$333,100	\$369,900	\$36,800	I	B	5362
P1164	\$179,200	\$217,900	\$38,700	I	B	5562
P0033	\$625,000	\$678,100	\$53,100	I	B	5660
P0044	\$1,074,500	\$1,128,700	\$54,200	I	I	5661
P1139	\$697,100	\$755,300	\$58,200	I	B	5362
P1113	\$155,800	\$218,900	\$63,100	I	B	5561
P1116	\$846,600	\$909,700	\$63,100	I	B	5561
P1143	\$623,600	\$688,300	\$64,700	I	B	5362
P0071	\$0	\$65,700	\$65,700	A	B	5561
P1126	\$1,273,500	\$1,348,600	\$75,100	I	H	5461
P0102	\$705,100	\$786,200	\$81,100	I	B	5462
P1114	\$212,600	\$298,700	\$86,100	I	B	5561
P0066	\$272,300	\$364,500	\$92,200	I	B	5561
P1115	\$1,185,100	\$1,297,500	\$112,400	I	B	5561
P1130	\$646,600	\$762,000	\$115,400	I	B	5462
P0092	\$694,900	\$814,800	\$119,900	I	H	5461
P0076	\$1,549,400	\$1,670,600	\$121,200	I	B	5561
P1132	\$1,646,100	\$1,770,200	\$124,100	I	B	5462
P0083	\$967,500	\$1,100,500	\$133,000	I	B	5562
P1128	\$882,600	\$1,030,500	\$147,900	I	B	5461
P1127	\$1,083,400	\$1,262,700	\$179,300	I	H	5461
P1134	\$2,118,200	\$2,300,900	\$182,700	I	B	5362
P1131	\$1,784,800	\$1,971,200	\$186,400	I	B	5462
P1075	\$3,413,000	\$3,606,200	\$193,200	I	B	5562
P0103	\$2,210,100	\$2,408,300	\$198,200	I	B	5464
P1099	\$1,474,100	\$1,687,100	\$213,000	I	B	5661
P0072	\$55,500	\$311,600	\$256,100	I	B	5561
P1122	\$1,785,800	\$2,043,500	\$257,700	I	H	5461
P1166	\$2,087,200	\$2,374,800	\$287,600	I	B	5562
P1133	\$2,467,000	\$2,778,700	\$311,700	I	B	5362
P1162	\$2,027,500	\$2,346,200	\$318,700	I	B	5562
P0086	\$1,352,100	\$1,684,800	\$332,700	I	B	5561

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
P1121	\$3,455,000	\$3,798,700	\$343,700	I	B	5562
P0053	\$3,595,900	\$4,039,600	\$443,700	I	B	5661
P1069	\$3,222,300	\$3,675,200	\$452,900	I	I	5760
P0035	\$4,248,100	\$4,732,000	\$483,900	I	B	5560
P1118	\$3,039,400	\$3,558,700	\$519,300	I	B	5562
P1051	\$3,508,500	\$4,113,700	\$605,200	I	I	5858
P1059	\$839,800	\$1,447,600	\$607,800	I	I	5759
P1155	\$2,743,400	\$3,502,800	\$759,400	I	B	5562
P1129	\$3,288,700	\$4,249,400	\$960,700	I	B	5461
P1058	\$8,063,700	\$9,491,600	\$1,427,900	I	I	5759
P0096	\$10,161,100	\$11,612,400	\$1,451,300	I	H	5461
P0095	\$8,257,500	\$9,756,700	\$1,499,200	I	H	5461
P0097	\$7,002,300	\$9,100,300	\$2,098,000	I	H	5461
Total	\$100,625,600	\$117,021,500	\$16,395,900			

**TABLE 8P 5-YEAR COST – GROUP 2
GREENS BAYOU**

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
Sorted by Additional for 5-Year Storm						
P1090	\$1,141,500	\$1,348,900	\$207,400	2	B	5662
Total	\$1,141,500	\$1,348,900	\$207,400			

**TABLE 9P 5-YEAR COST – GROUP 3
GREENS BAYOU**

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
Sorted by Additional for 5-Year Storm						
P0080	\$352,400	\$366,300	\$13,900	1	B	5561
P1145	\$271,200	\$289,300	\$18,100	1	B	5561
P1173	\$275,500	\$293,900	\$18,400	1	B	5662
P1094	\$812,900	\$831,600	\$18,700	1	B	5662
P1165	\$291,100	\$310,500	\$19,400	1	B	5562
P0073	\$429,100	\$453,200	\$24,100	1	B	5561
P1158	\$368,300	\$392,800	\$24,500	1	B	5362
P1110	\$299,200	\$339,500	\$40,300	1	H	5561
P0065	\$508,200	\$571,700	\$63,500	1	B	5661
P0074	\$1,054,300	\$1,119,200	\$64,900	1	B	5561
P0056	\$1,081,100	\$1,146,600	\$65,500	1	B	5661
P1091	\$656,500	\$745,000	\$88,500	1	B	5661
P1167	\$1,233,400	\$1,335,400	\$102,000	1	H	5562
P0082	\$1,102,500	\$1,213,700	\$111,200	1	B	5562
P1168	\$1,138,000	\$1,258,400	\$120,400	1	B	5662
P1137	\$1,083,900	\$1,274,500	\$190,600	1	B	5362
P1108	\$1,318,300	\$1,518,000	\$199,700	1	B	5561
P1060	\$2,765,700	\$2,995,400	\$229,700	1	I	5759
P0055	\$1,075,800	\$1,312,600	\$236,800	1	B	5661
P1160	\$1,877,100	\$2,140,200	\$263,100	1	B	5561
P0036	\$1,665,400	\$1,968,500	\$303,100	1	I	5661
P0081	\$103,100	\$411,200	\$308,100	1	B	5561
P1163	\$2,868,300	\$3,419,800	\$551,500	1	B	5662
P1144	\$2,755,100	\$3,318,300	\$563,200	1	B	5462
P1078	\$2,528,400	\$3,134,700	\$606,300	1	I	5660
P1119	\$4,606,500	\$5,243,700	\$637,200	1	B	5562
P1092	\$3,824,000	\$4,471,300	\$647,300	1	B	5661
P1086	\$5,319,200	\$6,215,000	\$895,800	1	B	5660
P1147	\$10,472,900	\$11,493,200	\$1,020,300	1	I	5759
Total	\$52,137,400	\$59,583,500	\$7,446,100			

**TABLE 10P 5 - YEAR COST - GROUP 4
GREENS BAYOU**

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
Sorted by Additional for 5-Year Storm						
P0023	\$12,500	\$13,500	\$1,000	3	B	5858
P0012	\$62,900	\$64,100	\$1,200	3	I	5758
P0021	\$15,700	\$17,100	\$1,400	3	B	5858
P0147	\$522,800	\$524,600	\$1,800	3	B	5365
P0077	\$220,700	\$224,800	\$4,100	3	B	5561
P0014	\$41,300	\$46,400	\$5,100	3	B	5858
P1041	\$329,600	\$334,800	\$5,200	4	B	5365
P0087	\$241,100	\$247,400	\$6,300	3	B	5562
P0019	\$93,100	\$100,900	\$7,800	3	B	5858
P0127	\$255,700	\$267,100	\$11,400	3	B	5262
P0153	\$40,400	\$52,000	\$11,600	3	B	5365
P0174	\$71,700	\$83,300	\$11,600	3	B	5265
P0116	\$65,300	\$79,400	\$14,100	3	B	5565
P0164	\$69,500	\$84,600	\$15,100	3	B	5265
P0059	\$209,400	\$224,500	\$15,100	3	B	5661
P0161	\$183,600	\$199,800	\$16,200	3	B	5365
P0204	\$127,700	\$147,000	\$19,300	3	B	5265
P0026	\$119,200	\$140,800	\$21,600	3	I	5660
P0126	\$392,000	\$414,100	\$22,100	3	B	5262
P0139	\$788,800	\$812,300	\$23,500	3	B	5264
P1096	\$447,800	\$473,600	\$25,800	4	B	5662
P1252	\$125,900	\$153,800	\$27,900	4	H	5561
P1184	\$824,600	\$854,900	\$30,300	4	I	4965
P1046	\$212,500	\$242,900	\$30,400	4	B	5262
P0150	\$130,700	\$162,500	\$31,800	3	B	5365
P1111	\$177,500	\$215,900	\$38,400	4	B	5661
P1208	\$362,300	\$409,600	\$47,300	4	B	5565
P0137	\$205,500	\$252,900	\$47,400	3	B	5263
P0063	\$433,300	\$481,800	\$48,500	3	B	5662
P0159	\$1,331,900	\$1,380,500	\$48,600	3	B	5365
P1223	\$940,400	\$991,600	\$51,200	4	B	5262
P1190	\$374,500	\$426,900	\$52,400	4	A	4965
P1047	\$257,800	\$313,500	\$55,700	4	B	5262
P0148	\$669,100	\$725,800	\$56,700	3	B	5365
P1017	\$745,300	\$803,300	\$58,000	4	B	5565
P0165	\$805,000	\$864,200	\$59,200	3	B	5265
P0222	\$1,176,400	\$1,237,000	\$60,600	3	A	4965
P0058	\$751,400	\$816,000	\$64,600	3	B	5661
P0162	\$84,100	\$150,300	\$66,000	3	B	5365

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
P0136	\$1,898,500	\$1,965,100	\$66,600	3	B	5263
P1018	\$528,000	\$598,300	\$70,300	4	B	5565
P0091	\$769,600	\$843,200	\$73,600	3	B	5562
P0158	\$186,900	\$262,500	\$75,600	3	B	5365
P0070	\$0	\$80,000	\$80,000	4	B	5561
P0143	\$41,700	\$123,400	\$81,700	3	B	5264
P1179	\$858,700	\$941,700	\$83,000	3	I	5661
P0031	\$785,300	\$869,000	\$83,700	3	I	5660
P1189	\$526,800	\$610,600	\$83,800	4	A	4965
P1209	\$1,039,100	\$1,136,200	\$97,100	4	B	5565
P0005	\$92,300	\$189,600	\$97,300	3	B	5858
P1203	\$817,700	\$917,400	\$99,700	4	B	5465
P1140	\$1,002,200	\$1,104,900	\$102,700	3	B	5363
P0142	\$1,687,400	\$1,791,900	\$104,500	3	B	5264
P1156	\$1,307,800	\$1,413,900	\$106,100	4	B	5662
P0224	\$142,800	\$256,100	\$113,300	3	A	4965
P0228	\$54,500	\$172,200	\$117,700	3	A	4965
P1028	\$887,900	\$1,009,200	\$121,300	4	B	5567
P0003	\$0	\$121,500	\$121,500	A	B	5858
P0089	\$1,069,100	\$1,194,300	\$125,200	3	B	5563
P0231	\$38,400	\$171,700	\$133,300	3	B	5365
P1235	\$836,400	\$979,000	\$142,600	4	B	5567
P0007	\$1,503,000	\$1,649,200	\$146,200	3	B	5859
P0131	\$482,100	\$633,300	\$151,200	3	B	5262
P0206	\$1,813,000	\$1,970,100	\$157,100	3	B	5266
P0215	\$40,800	\$200,000	\$159,200	3	A	4965
P0173	\$0	\$159,800	\$159,800	A	B	5365
P1045	\$1,355,300	\$1,517,400	\$162,100	4	B	5262
P1027	\$1,425,500	\$1,588,900	\$163,400	4	B	5567
P0004	\$0	\$168,300	\$168,300	4	B	5858
P0225	\$134,300	\$305,200	\$170,900	3	A	4965
P1006	\$1,910,100	\$2,084,000	\$173,900	4	B	5565
P1171	\$975,400	\$1,155,200	\$179,800	4	B	5661
P1008	\$1,448,600	\$1,632,100	\$183,500	4	B	5465
P0152	\$1,595,800	\$1,784,700	\$188,900	3	B	5365
P0062	\$0	\$197,000	\$197,000	4	B	5662
P1186	\$1,490,800	\$1,689,900	\$199,100	4	A	4965
P0146	\$249,200	\$461,500	\$212,300	3	B	5264
P0119	\$528,700	\$750,500	\$221,800	3	B	5565
P1234	\$1,901,400	\$2,129,400	\$228,000	4	B	5567

**TABLE 10P 5 - YEAR COST - GROUP 4
GREENS BAYOU**

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
P1072	\$2,311,800	\$2,567,000	\$255,200	4	I	5762
P0086	\$894,200	\$1,150,800	\$256,600	3	B	5858
P0032	\$824,100	\$1,083,200	\$259,100	3	I	5660
P0151	\$595,100	\$862,300	\$267,200	3	B	5365
P0104	\$725,400	\$1,015,800	\$290,400	3	B	5465
P1196	\$3,712,500	\$4,028,000	\$315,500	4	B	5263
P1031	\$2,391,600	\$2,836,800	\$445,200	4	B	5567
P1098	\$3,853,700	\$4,315,200	\$461,500	4	B	5662
P0201	\$1,121,300	\$1,610,600	\$489,300	3	B	5265
P1004	\$1,878,500	\$2,371,900	\$493,400	4	B	5565
P0134	\$1,057,900	\$1,602,300	\$544,400	3	B	5262
P0149	\$632,200	\$1,210,500	\$578,300	3	B	5365
P0227	\$324,200	\$955,500	\$631,300	3	A	4965
P1013	\$3,685,200	\$4,329,500	\$644,300	4	B	5465
P1124	\$5,295,200	\$5,956,700	\$661,500	4	H	5461
P0001	\$741,800	\$1,555,400	\$813,600	3	I	5858
P1215	\$4,284,800	\$5,485,800	\$1,201,000	4	B	5566
P0167	\$422,500	\$1,928,900	\$1,506,400	3	B	5265
Total	\$80,096,300	\$96,739,900	\$16,643,600			

TABLE GLOSSARY

2-Year Analysis Status

- Inadequate – Storm sewer analysis program results indicate system is not adequate.
- Adequate – Storm sewer analysis program results indicate system is adequate.
- Cannot Analyze – System could not be analyzed with the storm sewer analysis program due to lack of information.

2-Year CIP Cost – Probable cost to meet 2-year design criteria

Additional for 5-Year – Additional cost for major thoroughfares criteria (5-year storm)

Group

- Group 1 Systems that have reported structure and street-related flooding complaints.
- Group 2 Systems that have reported structure flooding complaints only.
- Group 3 Systems that have reported street flooding complaints only.
- Group 4 Systems that have no reported flooding complaints. Group 4 costs types will be applicable for categories 3 and 4 only.

Category

- Category 1 Existing storm sewer systems that have been determined to be inadequate and where flooding complaints have been reported within drainage boundaries.
- Category 2 Converting existing open-ditch systems (non-storm sewer areas) to storm sewer systems where previous flooding complaints have been reported. Proposed storm sewer systems for this category type address the main trunk system requirements only.
- Category 3 Existing storm sewer systems that have been determined to be inadequate and where flooding complaints *have not* been reported.
- Category 4 Converting existing open-ditch systems (non-storm sewer areas) to storm sewer systems where previous flooding complaints *have not* been reported. Proposed storm sewer systems for this category type address the main trunk system requirements only.
- Category 5 Areas currently considered to be undeveloped and having no defined drainage system. For this category type, drainage areas and main (trunk) sewer systems were determined.
- Category A Existing storm sewer systems that have been determined to be adequate. These systems may or may not have reported flooding complaints.

Category C.N.A. – System that could not be analyzed due to lack of storm sewer information.

City Council District – City Council district within which storm sewer system is located.

Facet Number – Facet (system map) number sheet on which storm sewer system is located.

Number of Addresses – Total number of addresses that are located in storm sewer study drainage boundary.

Cost Per Address – 2-year CIP cost divided by number of addresses.

Percent of System Single Family – Percent of storm sewer system drainage area classified as a *Single-family land-use type*.

TABLE 1 – STORM SEWER UNIT COST RATES

Pipe Diameter (in)	Unit Cost Rate (\$/ln ft)	Equivalent Box Size (ft x ft)
24	\$240	
30	\$260	
36	\$290	
42	\$340	
48	\$370	
54	\$450	
60	\$480	
66	\$520	
72	\$550	
78	\$590	
84	\$620	
90	\$720	
96	\$760	8 x 7
102	\$810	
108	\$820	
114	\$890	
120	\$930	10 x 9
126	\$1,060	10 x 9
132	\$1,110	10 x 10
138	\$1,150	10 x 10
144	\$1,190	8 x 7 & 8 x 7
150	\$1,350	8 x 7 & 8 x 8
156	\$1,400	8 x 8 & 8 x 8
162	\$1,450	10 x 9 & 8 x 7
168	\$1,490	10 x 9 & 8 x 8
174	\$1,540	10 x 10 & 8 x 8
180	\$1,590	10 x 9 & 10 x 9
186	\$1,640	10 x 10 & 10 x 9
192	\$1,680	10 x 10 & 10 x 10
198	\$1,730	10 x 10 & 8 x 7 & 8 x 7
204	\$1,780	10 x 9 & 10 x 9 & 8 x 7
210	\$1,820	10 x 10 & 10 x 9 & 8 x 7
216	\$1,870	10 x 10 & 10 x 10 & 8 x 7
222	\$1,920	See Note 1
228	\$1,970	See Note 1
234	\$2,010	See Note 1
240	\$2,060	See Note 1
246	\$2,110	See Note 1
252	\$2,150	See Note 1
258	\$2,200	See Note 1

Pipe Diameter (in)	Unit Cost Rate (\$/ln ft)	Equivalent Box Size (ft x ft)
264	\$2,250	See Note 1
270	\$2,300	See Note 1
276	\$2,340	See Note 1
282	\$2,390	See Note 1
288	\$2,440	See Note 1
Unit Cost Rates were developed based on City of Houston Bid Tabs for storm sewer projects constructed during 1994 and 1998.		
Unit Cost Rates include the following:		
Removal of existing pipe and pavement		
Storm sewer pipe		
Manholes		
Inlets		
Replacement of pavement		
Dewatering		
Trench safety		
Traffic control		
Engineering and contingency (20 percent)		
Unit Cost Rates do not include the following:		
Relocation of existing utilities		
Acquisition of additional right-of-way		

Notes

1. Equivalent box sizes for pipe diameters 222 inches or greater were not determined. It may be more cost effective to propose an open channel instead of a box.



**TABLE 2H – HUNTING BAYOU
SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5 Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
Sorted by Outfall System ID								
H0001	Inadequate	\$158,100	\$7,200	\$165,300	1	I	I	5757
H0002	Adequate	\$0	\$33,400	\$33,400	3	A	I	5757
H0006	Inadequate	\$106,100	\$0	\$106,100	3	I	I	5757
H0009	Inadequate	\$1,040,100	\$0	\$1,040,100	3	I	I	5758
H0011	Adequate	\$0	\$0	\$0	3	A	I	5757
H0013	Inadequate	\$1,826,600	\$811,500	\$2,638,100	1	I	I	5758
H0014	Cannot Analyze	\$0	\$0	\$0	3	C.N.A	I	5758
H0015	Cannot Analyze	\$0	\$0	\$0	3	C.N.A	I	5758
H0016	Cannot Analyze	\$0	\$0	\$0	3	C.N.A	B	5459
H0017	Adequate	\$0	\$0	\$0	3	A	I	5758
H0018	Inadequate	\$324,300	\$0	\$324,300	4	I	I	5758
H0019	Inadequate	\$679,300	\$0	\$679,300	4	I	I	5758
H0020	Adequate	\$0	\$0	\$0	3	A	I	5758
H0021	Adequate	\$0	\$0	\$0	4	A	I	5758
H0022	Adequate	\$0	\$0	\$0	3	A	I	5758
H0023	Inadequate	\$620,500	\$0	\$620,500	1	I	I	5758
H0024	Adequate	\$0	\$0	\$0	2	A	I	5758
H0025	Cannot Analyze	\$0	\$0	\$0	3	C.N.A	I	5758
H0026	Adequate	\$0	\$0	\$0	3	A	I	5758
H0029	Adequate	\$0	\$0	\$0	3	A	I	5758
H0030	Adequate	\$0	\$0	\$0	1	A	I	5758
H0031	Adequate	\$0	\$0	\$0	3	A	I	5758
H0032	Adequate	\$0	\$0	\$0	3	A	I	5758
H0033	Inadequate	\$853,200	\$0	\$853,200	3	I	I	5758
H0034	Inadequate	\$428,300	\$0	\$428,300	3	I	I	5758
H0035	Adequate	\$0	\$0	\$0	1	A	I	5758
H0036	Adequate	\$0	\$0	\$0	1	A	I	5758
H0037	Inadequate	\$290,400	\$0	\$290,400	1	I	I	5758
H0038	Adequate	\$0	\$0	\$0	3	A	I	5658
H0039	Adequate	\$0	\$0	\$0	4	A	I	5658
H0041	Adequate	\$0	\$0	\$0	3	A	I	5758
H0042	Cannot Analyze	\$0	\$0	\$0	3	C.N.A	I	5758
H0043	Cannot Analyze	\$0	\$0	\$0	3	C.N.A	I	5658
H0044	Inadequate	\$259,200	\$11,000	\$270,200	1	I	I	5658
H0045	Adequate	\$0	\$0	\$0	3	A	I	5759
H0046	Inadequate	\$744,500	\$0	\$744,500	4	I	I	5659

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5 Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
H0047	Cannot Analyze	\$0	\$0	\$0	3	C.N.A	I	5658
H0048	Adequate	\$0	\$19,600	\$19,600	4	A	I	5658
H0049	Adequate	\$0	\$0	\$0	3	A	I	5658
H0050	Adequate	\$0	\$0	\$0	3	A	I	5658
H0051	Adequate	\$0	\$0	\$0	3	A	B	5658
H0052	Adequate	\$0	\$0	\$0	3	A	B	5658
H0053	Adequate	\$0	\$22,700	\$22,700	4	A	I	5659
H0054	Inadequate	\$366,200	\$361,600	\$727,800	4	I	I	5659
H0055	Adequate	\$0	\$0	\$0	3	A	I	5659
H0056	Adequate	\$0	\$0	\$0	3	A	I	5659
H0057	Adequate	\$0	\$0	\$0	3	A	I	5659
H0058	Adequate	\$0	\$0	\$0	3	A	I	5659
H0059	Adequate	\$0	\$0	\$0	3	A	I	5659
H0060	Cannot Analyze	\$0	\$0	\$0	3	C.N.A	I	5659
H0061	Cannot Analyze	\$0	\$0	\$0	3	C.N.A	I	5659
H0062	Cannot Analyze	\$0	\$0	\$0	3	C.N.A	I	5659
H0063	Cannot Analyze	\$0	\$0	\$0	3	C.N.A	I	5659
H0064	Inadequate	\$307,700	\$0	\$307,700	4	I	B	5658
H0065	Inadequate	\$505,400	\$0	\$505,400	4	I	B	5658
H0066	Inadequate	\$438,900	\$0	\$438,900	3	I	I	5657
H0067	Cannot Analyze	\$0	\$0	\$0	3	C.N.A	I	5657
H0068	Cannot Analyze	\$0	\$0	\$0	3	C.N.A	I	5657
H0069	Cannot Analyze	\$0	\$0	\$0	3	C.N.A	I	5657
H0070	Cannot Analyze	\$0	\$0	\$0	3	C.N.A	I	5657
H0071	Cannot Analyze	\$0	\$0	\$0	3	C.N.A	I	5657
H0072	Cannot Analyze	\$0	\$0	\$0	1	C.N.A	B	5657
H0073	Inadequate	\$129,900	\$0	\$129,900	4	I	B	5657
H0075	Adequate	\$0	\$0	\$0	3	A	B	5657
H0076	Inadequate	\$611,200	\$0	\$611,200	3	I	I	5656
H0077	Inadequate	\$49,700	\$0	\$49,700	4	I	I	5656
H0078	Adequate	\$0	\$0	\$0	3	A	I	5656
H0079	Adequate	\$0	\$0	\$0	3	A	I	5656
H0080	Inadequate	\$222,700	\$0	\$222,700	2	I	I	5657

**TABLE 2H – HUNTING BAYOU
SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5 Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
H0081	Inadequate	\$16,100	\$0	\$16,100	4	3	I	5657
H0082	Inadequate	\$502,800	\$0	\$502,800	4	3	B	5658
H0083	Adequate	\$0	\$0	\$0	3	A	B	5658
H0084	Adequate	\$0	\$0	\$0	3	A	B	5658
H0085	Inadequate	\$68,800	\$0	\$68,800	4	3	B	5658
H0086	Inadequate	\$3,949,000	\$1,295,600	\$5,244,600	4	3	B	5558
H0087	Adequate	\$0	\$0	\$0	3	A	B	5659
H0088	Adequate	\$0	\$0	\$0	3	A	B	5659
H0089	Adequate	\$0	\$0	\$0	3	A	B	5659
H0090	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	I	5659
H0091	Adequate	\$0	\$0	\$0	3	A	I	5659
H0092	Inadequate	\$1,259,500	\$114,700	\$1,374,200	2	I	B	5659
H0093	Inadequate	\$4,252,300	\$2,586,600	\$6,838,900	2	I	B	5560
H0094	Inadequate	\$355,900	\$76,800	\$432,700	2	I	B	5560
H0095	Adequate	\$0	\$0	\$0	3	A	B	5559
H0096	Inadequate	\$1,350,700	\$296,200	\$1,646,900	2	I	B	5559
H0097	Inadequate	\$111,300	\$316,500	\$427,800	4	3	B	5559
H0098	Inadequate	\$123,000	\$5,900	\$128,900	4	3	B	5559
H0101	Cannot Analyze	\$0	\$0	\$0	2	C.N.A.	B	5559
H0102	Adequate	\$0	\$0	\$0	3	A	B	5559
H0103	Inadequate	\$1,631,500	\$754,300	\$2,385,800	4	3	H	5558
H0104	Adequate	\$0	\$0	\$0	3	A	B	5559
H0105	Inadequate	\$28,100	\$0	\$28,100	2	I	B	5559
H0106	Adequate	\$0	\$0	\$0	3	A	B	5559
H0107	Adequate	\$0	\$0	\$0	3	A	B	5559
H0108	Adequate	\$0	\$0	\$0	3	A	B	5559
H0110	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	B	5559
H0111	Adequate	\$0	\$0	\$0	3	A	B	5560
H0112	Inadequate	\$0	\$1,100	\$1,100	2	A	B	5560
H0114	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	B	5560
H0115	Inadequate	\$349,600	\$131,400	\$481,000	4	3	B	5560
H0116	Adequate	\$0	\$0	\$0	3	A	B	5560
H0117	Adequate	\$0	\$0	\$0	3	A	B	5459
H0118	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	H	5459
H0119	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	H	5459
H0120	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	H	5459

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5 Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
H0122	Adequate	\$0	\$0	\$0	3	A	B	5560
H0123	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	B	5459
H0124	Adequate	\$0	\$0	\$0	3	A	B	5459
H0125	Adequate	\$0	\$0	\$0	3	A	H	5459
H0126	Adequate	\$0	\$0	\$0	3	A	H	5459
H0128	Adequate	\$0	\$111,300	\$111,300	4	A	B	5459
H0129	Adequate	\$0	\$129,600	\$129,600	4	A	B	5459
H0130	Adequate	\$0	\$0	\$0	3	A	B	5559
H0131	Adequate	\$0	\$0	\$0	4	A	B	5459
H0132	Adequate	\$0	\$0	\$0	3	A	B	5459
H0133	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	B	5459
H0134	Adequate	\$0	\$0	\$0	3	A	B	5458
H0135	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	B	5458
H0136	Adequate	\$0	\$0	\$0	3	A	B	5458
H0138	Inadequate	\$1,656,700	\$0	\$1,656,700	4	3	H	5459
H0139	Inadequate	\$104,500	\$0	\$104,500	4	3	H	5459
H0140	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	H	5459
H0141	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	H	5459
H0142	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	H	5459
H0143	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	H	5459
H0144	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	B	5560
H0145	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	B	5657
H0146	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	H	5460
H0147	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	H	5460
H1001	Proposed System	\$3,571,600	\$339,100	\$3,910,700	1	2	H	5460
H1002	Proposed System	\$1,884,600	\$205,200	\$2,089,800	1	2	H	5460
H1003	Proposed System	\$1,838,000	\$147,300	\$1,985,300	4	4	H	5460
H1004	Proposed System	\$1,592,900	\$190,700	\$1,783,600	4	4	H	5460
H1005	Proposed	\$4,609,000	\$541,600	\$5,150,600	2	2	H	5460

**TABLE 2H – HUNTING BAYOU
SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5 Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
	Systems							
H1007	Proposed System	\$124,500	\$0	\$124,500	4	4	B	5460
H1008	Proposed System	\$4,969,600	\$624,200	\$5,593,800	4	4	B	5560
H1009	Proposed System	\$1,543,100	\$102,800	\$1,645,900	4	4	B	5560
H1010	Proposed System	\$5,325,700	\$659,000	\$5,984,700	1	2	H	5460
H1011	Proposed System	\$688,300	\$53,700	\$742,000	3	2	H	5460
H1012	Proposed System	\$1,292,100	\$91,800	\$1,383,900	3	2	H	5460
H1013	Proposed System	\$1,048,000	\$88,300	\$1,136,300	4	4	B	5460
H1014	Proposed System	\$2,983,600	\$315,400	\$3,299,000	4	4	H	5460
H1015	Proposed System	\$447,500	\$14,700	\$462,200	4	4	B	5460
H1016	Proposed System	\$1,264,600	\$167,100	\$1,431,700	4	4	B	5460
H1017	Proposed System	\$276,700	\$23,000	\$299,700	4	4	B	5460
H1018	Proposed System	\$348,400	\$60,000	\$408,400	4	4	B	5460
H1019	Proposed System	\$221,600	\$38,200	\$259,800	4	4	B	5560
H1020	Proposed System	\$219,600	\$0	\$219,600	4	4	B	5560
H1021	Proposed System	\$195,200	\$22,500	\$217,700	4	4	B	5560
H1022	Proposed System	\$187,500	\$0	\$187,500	4	4	B	5560
H1023	Proposed System	\$205,900	\$15,000	\$220,900	3	2	H	5459
H1024	Proposed System	\$326,800	\$27,200	\$354,000	4	4	B	5560
H1025	Proposed System	\$119,800	\$0	\$119,800	4	4	B	5560
H1026	Proposed System	\$97,500	\$0	\$97,500	4	4	B	5560
H1027	Proposed System	\$296,000	\$40,100	\$336,100	4	4	B	5560
H1028	Proposed System	\$546,100	\$41,500	\$587,600	4	4	B	5560

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5 Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
H1029	Proposed System	\$258,400	\$0	\$258,400	4	4	B	5560
H1030	Proposed System	\$3,536,800	\$355,200	\$3,892,000	4	4	B	5560
H1031	Proposed System	\$389,600	\$0	\$389,600	3	2	H	5459
H1032	Proposed System	\$256,600	\$0	\$256,600	4	4	H	5459
H1033	Proposed System	\$136,200	\$15,700	\$151,900	4	4	H	5459
H1034	Proposed System	\$107,700	\$0	\$107,700	4	4	H	5459
H1035	Proposed System	\$73,400	\$0	\$73,400	4	4	H	5459
H1036	Proposed System	\$280,500	\$0	\$280,500	4	4	B	5459
H1037	Proposed System	\$266,300	\$45,900	\$312,200	2	2	B	5459
H1038	Proposed System	\$63,700	\$0	\$63,700	4	4	H	5459
H1039	Proposed System	\$59,900	\$0	\$59,900	4	4	B	5459
H1040	Proposed System	\$51,000	\$0	\$51,000	4	4	B	5459
H1041	Proposed System	\$65,300	\$5,400	\$70,700	4	4	B	5459
H1042	Proposed System	\$142,000	\$0	\$142,000	4	4	B	5459
H1044	Proposed System	\$52,900	\$4,400	\$57,300	4	4	B	5459
H1045	Proposed System	\$46,000	\$3,800	\$49,800	4	4	B	5459
H1046	Proposed System	\$74,300	\$6,200	\$80,500	4	4	B	5559
H1047	Proposed System	\$89,100	\$0	\$89,100	4	4	B	5559
H1048	Proposed System	\$108,400	\$0	\$108,400	2	2	B	5559
H1049	Proposed System	\$156,300	\$18,000	\$174,300	4	4	B	5559
H1050	Proposed System	\$86,300	\$7,200	\$93,500	4	4	B	5559
H1051	Proposed System	\$98,200	\$0	\$98,200	4	4	B	5559
H1052	Proposed	\$338,400	\$56,900	\$395,300	2	2	B	5559

**TABLE 2H – HUNTING BAYOU
SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5 Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
	System							
H1053	Proposed System	\$1,119,400	\$159,100	\$1,278,500	4	4	B	5559
H1054	Proposed System	\$375,100	\$71,900	\$447,000	4	4	B	5559
H1055	Proposed System	\$1,076,700	\$162,400	\$1,239,100	4	4	B	5559
H1056	Proposed System	\$63,700	\$7,400	\$71,100	4	4	B	5559
H1057	Proposed System	\$117,000	\$0	\$117,000	4	4	B	5559
H1058	Proposed System	\$460,700	\$40,700	\$501,400	4	4	H	5459
H1059	Proposed System	\$364,600	\$12,100	\$376,700	4	4	B	5459
H1060	Proposed System	\$247,200	\$41,700	\$288,900	2	2	B	5459
H1061	Proposed System	\$57,900	\$4,900	\$62,800	4	4	B	5559
H1062	Proposed System	\$68,100	\$0	\$68,100	4	4	B	5559
H1063	Proposed System	\$101,300	\$0	\$101,300	4	4	B	5559
H1064	Proposed System	\$1,667,700	\$223,200	\$1,890,900	4	4	B	5559
H1065	Proposed System	\$1,274,400	\$177,100	\$1,451,500	4	4	H	5559
H1066	Proposed System	\$1,606,400	\$235,000	\$1,841,400	4	4	H	5458
H1067	Proposed System	\$2,497,500	\$134,900	\$2,632,400	4	4	B	5458
H1068	Proposed System	\$193,800	\$17,100	\$210,900	N/A	5	B	5559
H1069	Proposed System	\$864,600	\$80,600	\$945,200	4	4	B	5559
H1070	Proposed System	\$936,800	\$34,800	\$971,600	4	4	B	5559
H1071	Proposed System	\$173,900	\$14,500	\$188,400	N/A	5	B	5657
H1072	Proposed System	\$982,900	\$78,000	\$1,060,900	4	4	B	5659
H1073	Proposed System	\$302,400	\$0	\$302,400	4	4	I	5659
H1074	Proposed System	\$1,123,900	\$57,200	\$1,181,100	4	4	I	5659

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5 Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
H1076	Proposed System	\$1,648,100	\$256,300	\$1,904,400	4	4	I	5659
H1077	Proposed System	\$1,507,400	\$149,200	\$1,656,600	4	4	I	5659
H1078	Proposed System	\$191,100	\$32,900	\$224,000	N/A	5	I	5659
H1079	Proposed System	\$1,876,000	\$0	\$1,876,000	N/A	5	I	5659
H1080	Proposed System	\$681,000	\$0	\$681,000	N/A	4	I	5659
H1081	Proposed System	\$450,000	\$0	\$450,000	N/A	4	I	5659
H1082	Proposed System	\$1,710,900	\$0	\$1,710,900	4	4	I	5759
H1083	Proposed System	\$158,400	\$0	\$158,400	4	4	I	5659
H1084	Proposed System	\$272,300	\$0	\$272,300	N/A	5	I	5659
H1085	Proposed System	\$135,200	\$11,900	\$147,100	N/A	5	I	5659
H1086	Proposed System	\$169,300	\$15,000	\$184,300	N/A	5	I	5659
H1087	Proposed System	\$310,700	\$48,300	\$359,000	4	4	I	5659
H1088	Proposed System	\$79,300	\$0	\$79,300	N/A	5	I	5659
H1089	Proposed System	\$247,100	\$15,300	\$262,400	4	4	I	5659
H1090	Proposed System	\$121,700	\$14,100	\$135,800	N/A	5	I	5659
H1091	Proposed System	\$1,791,100	\$307,100	\$2,098,200	4	4	B	5659
H1092	Proposed System	\$1,039,200	\$53,600	\$1,092,800	N/A	5	B	5659
H1093	Proposed System	\$670,200	\$52,500	\$722,700	N/A	5	B	5659
H1094	Proposed System	\$352,500	\$0	\$352,500	N/A	5	B	5659
H1095	Proposed System	\$474,500	\$36,500	\$511,000	N/A	5	B	5659
H1096	Proposed System	\$272,000	\$46,900	\$318,900	N/A	5	B	5659
H1097	Proposed System	\$77,600	\$0	\$77,600	N/A	5	B	5659
H1098	Proposed	\$569,000	\$75,700	\$644,700	N/A	5	B	5658

**TABLE 2H – HUNTING BAYOU
SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5 Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
	System							
H1099	Proposed System	\$327,600	\$48,200	\$375,800	4	4	I	5658
H1100	Proposed System	\$1,983,600	\$197,900	\$2,181,500	4	4	I	5659
H1101	Proposed System	\$97,700	\$0	\$97,700	N/A	5	I	5759
H1102	Proposed System	\$1,809,200	\$165,800	\$1,975,000	N/A	5	I	5759
H1103	Proposed System	\$604,200	\$21,100	\$625,300	N/A	5	I	5758
H1104	Proposed System	\$2,409,600	\$308,800	\$2,718,400	N/A	5	I	5758
H1105	Proposed System	\$170,100	\$19,600	\$189,700	N/A	5	I	5658
H1107	Proposed System	\$118,700	\$13,700	\$132,400	N/A	5	I	5758
H1108	Proposed System	\$608,800	\$89,000	\$697,800	4	4	I	5758
H1109	Proposed System	\$265,100	\$45,700	\$310,800	N/A	5	I	5658
H1110	Proposed System	\$204,300	\$0	\$204,300	N/A	5	I	5758
H1111	Proposed System	\$204,400	\$18,100	\$222,500	4	4	I	5758
H1112	Proposed System	\$203,800	\$0	\$203,800	N/A	5	I	5758
H1113	Proposed System	\$265,500	\$0	\$265,500	N/A	5	I	5758
H1114	Proposed System	\$214,000	\$18,900	\$232,900	N/A	5	I	5758
H1115	Proposed System	\$163,300	\$35,300	\$198,600	N/A	5	I	5758
H1116	Proposed System	\$235,400	\$40,600	\$276,000	4	4	I	5758
H1118	Proposed System	\$250,000	\$22,000	\$272,000	N/A	5	I	5658
H1119	Proposed System	\$269,700	\$0	\$269,700	N/A	5	I	5658
H1120	Proposed System	\$453,300	\$35,200	\$488,500	N/A	5	I	5658
H1121	Proposed System	\$451,300	\$35,200	\$486,500	N/A	5	I	5658
H1122	Proposed System	\$295,900	\$19,700	\$315,600	4	4	I	5658

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5 Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
H1123	Proposed System	\$64,500	\$7,500	\$72,000	N/A	5	I	5758
H1124	Proposed System	\$31,800	\$5,400	\$37,200	4	4	I	5758
H1125	Proposed System	\$62,000	\$0	\$62,000	3	2	I	5758
H1126	Proposed System	\$98,600	\$0	\$98,600	4	4	I	5758
H1127	Proposed System	\$158,300	\$27,300	\$185,600	N/A	5	I	5758
H1128	Proposed System	\$110,500	\$12,700	\$123,200	N/A	5	I	5758
H1129	Proposed System	\$195,000	\$0	\$195,000	N/A	5	I	5758
H1130	Proposed System	\$626,800	\$123,400	\$750,200	4	4	B	5658
H1131	Proposed System	\$68,100	\$0	\$68,100	N/A	5	I	5758
H1132	Proposed System	\$151,100	\$26,100	\$177,200	N/A	5	I	5757
H1133	Proposed System	\$215,700	\$19,100	\$234,800	N/A	5	I	5757
H1134	Proposed System	\$160,000	\$0	\$160,000	4	4	I	5757
H1135	Proposed System	\$332,000	\$20,800	\$352,800	N/A	5	I	5757
H1136	Proposed System	\$320,400	\$21,400	\$341,800	4	4	I	5757
H1137	Proposed System	\$3,197,400	\$407,100	\$3,604,500	4	4	B	5657
H1138	Proposed System	\$761,100	\$58,500	\$819,600	4	4	B	5657
H1139	Proposed System	\$1,935,000	\$191,300	\$2,126,300	N/A	5	B	5657
H1140	Proposed System	\$2,864,200	\$439,700	\$3,303,900	4	4	I	5657
H1141	Proposed System	\$943,600	\$117,400	\$1,061,000	4	4	I	5657
H1142	Proposed System	\$719,700	\$65,000	\$784,700	3	2	B	5657
H1143	Proposed System	\$96,500	\$0	\$96,500	4	4	B	5559
H1144	Proposed System	\$1,227,100	\$84,200	\$1,311,300	3	2	I	5757
H1145	Proposed	\$681,000	\$0	\$681,000	N/A	5	I	5659

TABLE 2H – HUNTING BAYOU
SUMMARY OF PROPOSED IMPROVEMENTS

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5 Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
	System							
TOTAL		\$125,770,100	\$16,843,700	\$142,613,800				

**TABLE 3H 2-YEAR COST – GROUP 1
HUNTING BAYOU**

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
Sorted by 2-Year CIP Cost							
H0001	\$158,100	1	234	\$676	93%	I	5757
H0044	\$259,200	1	334	\$776	99%	I	5658
H0037	\$290,400	1	72	\$4,033	86%	I	5758
H0023	\$620,500	1	193	\$3,215	44%	I	5758
H0013	\$1,826,600	1	192	\$9,514	19%	I	5758
H1002	\$1,884,600	2	198	\$9,518	97%	H	5460
H1001	\$3,571,600	2	279	\$12,801	87%	H	5460
H1010	\$5,325,700	2	419	\$12,711	81%	H	5460
TOTAL	\$13,936,700						
Sorted by Cost per Address							
H0001	\$158,100	1	234	\$676	93%	I	5757
H0044	\$259,200	1	334	\$776	99%	I	5658
H0023	\$620,500	1	193	\$3,215	44%	I	5758
H0037	\$290,400	1	72	\$4,033	86%	I	5758
H0013	\$1,826,600	1	192	\$9,514	19%	I	5758
H1002	\$1,884,600	2	198	\$9,518	97%	H	5460
H1010	\$5,325,700	2	419	\$12,711	81%	H	5460
H1001	\$3,571,600	2	279	\$12,801	87%	H	5460
TOTAL	\$13,936,700						

**TABLE 4H 2-YEAR COST – GROUP 2
HUNTING BAYOU**

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
Sorted by 2-Year CIP Cost							
H0105	\$28,100	1	46	\$611	96%	B	5559
H1048	\$108,400	2	17	\$6,376	65%	B	5559
H0080	\$222,700	1	220	\$1,012	90%	I	5657
H1060	\$247,200	2	179	\$1,381	89%	B	5459
H1037	\$266,300	2	117	\$2,276	100%	B	5459
H1052	\$338,400	2	121	\$2,797	99%	B	5559
H0094	\$355,900	1	1043	\$341	95%	B	5560
H0092	\$1,259,500	1	1795	\$702	97%	B	5659
H0096	\$1,350,700	1	233	\$5,797	84%	B	5559
H0093	\$4,252,300	1	565	\$7,526	95%	B	5560
H1005	\$4,609,000	2	1	\$4,609,000	0%	H	5460
TOTAL	\$13,038,500						
Sorted by Cost per Address							
H0094	\$355,900	1	1043	\$341	95%	B	5560
H0105	\$28,100	1	46	\$611	96%	B	5559
H0092	\$1,259,500	1	1795	\$702	97%	B	5659
H0080	\$222,700	1	220	\$1,012	90%	I	5657
H1060	\$247,200	2	179	\$1,381	89%	B	5459
H1037	\$266,300	2	117	\$2,276	100%	B	5459
H1052	\$338,400	2	121	\$2,797	99%	B	5559
H0096	\$1,350,700	1	233	\$5,797	84%	B	5559
H1048	\$108,400	2	17	\$6,376	65%	B	5559
H0093	\$4,252,300	1	565	\$7,526	95%	B	5560
H1005	\$4,609,000	2	1	\$4,609,000	0%	H	5460
TOTAL	\$13,038,500						

**TABLE 5H 2-YEAR COST – GROUP 3
HUNTING BAYOU**

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
Sorted by 2-Year CIP Cost							
H1125	\$62,000	2	18	\$3,444	89%	I	5758
H0006	\$106,100	1	89	\$1,192	98%	I	5757
H1023	\$205,900	2	230	\$895	92%	H	5459
H1031	\$389,600	2	97	\$4,016	94%	H	5459
H0034	\$428,300	1	153	\$2,799	100%	I	5758
H0066	\$438,900	1	756	\$581	58%	I	5657
H0076	\$611,200	1	565	\$1,082	99%	I	5656
H1011	\$688,300	2	131	\$5,254	97%	H	5460
H1142	\$719,700	2	148	\$4,863	78%	B	5657
H0033	\$853,200	1	222	\$3,843	100%	I	5758
H0009	\$1,040,100	1	119	\$8,740	93%	I	5758
H1144	\$1,227,100	2	20	\$61,355	80%	I	5757
H1012	\$1,292,100	2	312	\$4,141	88%	H	5460
TOTAL	\$8,062,500						
Sorted by Cost per Address							
H0066	\$438,900	1	756	\$581	58%	I	5657
H1023	\$205,900	2	230	\$895	92%	H	5459
H0076	\$611,200	1	565	\$1,082	99%	I	5656
H0006	\$106,100	1	89	\$1,192	98%	I	5757
H0034	\$428,300	1	153	\$2,799	100%	I	5758
H1125	\$62,000	2	18	\$3,444	89%	I	5758
H0033	\$853,200	1	222	\$3,843	100%	I	5758
H1031	\$389,600	2	97	\$4,016	94%	H	5459
H1012	\$1,292,100	2	312	\$4,141	88%	H	5460
H1142	\$719,700	2	148	\$4,863	78%	B	5657
H1011	\$688,300	2	131	\$5,254	97%	H	5460
H0009	\$1,040,100	1	119	\$8,740	93%	I	5758
H1144	\$1,227,100	2	20	\$61,355	80%	I	5757
TOTAL	\$8,062,500						

**TABLE 6H 2-YEAR COST – GROUP 4
HUNTING BAYOU**

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
Sorted by 2-Year CIP Cost							
H0081	\$16,100	3	591	\$27	70%	I	5657
H1124	\$31,800	4	3	\$10,600	100%	I	5758
H1045	\$46,000	4	7	\$6,571	100%	B	5459
H0077	\$49,700	3	42	\$1,183	69%	I	5656
H1040	\$51,000	4	12	\$4,250	92%	B	5459
H1044	\$52,900	4	12	\$4,408	92%	B	5459
H1061	\$57,900	4	4	\$14,475	75%	B	5559
H1039	\$59,900	4	12	\$4,992	100%	B	5459
H1038	\$63,700	4	13	\$4,900	92%	H	5459
H1056	\$63,700	4	16	\$3,981	94%	B	5559
H1041	\$65,300	4	16	\$4,081	100%	B	5459
H1062	\$68,100	4	11	\$6,191	82%	B	5559
H0085	\$68,800	3	4	\$17,200	0%	B	5658
H1035	\$73,400	4	4	\$18,350	50%	H	5459
H1046	\$74,300	4	12	\$6,192	83%	B	5559
H1050	\$86,300	4	16	\$5,394	100%	B	5559
H1047	\$89,100	4	15	\$5,940	100%	B	5559
H1143	\$96,500	4	23	\$4,196	100%	B	5559
H1026	\$97,500	4	30	\$3,250	100%	B	5560
H1051	\$98,200	4	8	\$12,275	100%	B	5559
H1126	\$98,600	4	2	\$49,300	0%	I	5758
H1063	\$101,300	4	12	\$8,442	100%	B	5559
H0139	\$104,500	3	11	\$9,500	0%	H	5459
H1034	\$107,700	4	6	\$17,950	0%	H	5459
H0097	\$111,300	3	22	\$5,059	0%	B	5559
H1057	\$117,000	4	48	\$2,438	100%	B	5559
H1025	\$119,800	4	17	\$7,047	100%	B	5560
H0098	\$123,000	3	7	\$17,571	0%	B	5559
H1007	\$124,500	4	50	\$2,490	94%	B	5460
H0073	\$129,900	3	4	\$32,475	0%	B	5657
H1033	\$136,200	4	34	\$4,006	65%	H	5459
H1042	\$142,000	4	17	\$8,353	94%	B	5459
H1049	\$156,300	4	29	\$5,390	62%	B	5559
H1083	\$158,400	4	12	\$13,200	8%	I	5659
H1134	\$160,000	4	1	\$160,000	0%	I	5757
H1022	\$187,500	4	38	\$4,934	79%	B	5560
H1021	\$195,200	4	43	\$4,540	84%	B	5560
H1111	\$204,400	4	1	\$204,400	0%	I	5758
H1020	\$219,600	4	54	\$4,067	89%	B	5560

**TABLE 6H 2-YEAR COST - GROUP 4
HUNTING BAYOU**

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
H1019	\$221,600	4	63	\$3,517	89%	B	5560
H1116	\$235,400	4	22	\$10,700	77%	I	5758
H1089	\$247,100	4	30	\$8,237	97%	I	5659
H1032	\$256,600	4	19	\$13,505	42%	H	5459
H1029	\$258,400	4	34	\$7,600	100%	B	5560
H1017	\$276,700	4	41	\$6,749	100%	B	5460
H1036	\$280,500	4	73	\$3,842	86%	B	5459
H0129	\$284,400	3	304	\$936	94%	B	5459
H1122	\$295,900	4	6	\$49,317	0%	I	5658
H1027	\$296,000	4	46	\$6,435	100%	B	5560
H1073	\$302,400	4	5	\$60,480	0%	I	5659
H0064	\$307,700	3	6	\$51,283	0%	B	5658
H1087	\$310,700	4	20	\$15,535	0%	I	5659
H1136	\$320,400	4	1	\$320,400	0%	I	5757
H0018	\$324,300	3	1	\$324,300	0%	I	5758
H1024	\$326,800	4	70	\$4,669	99%	B	5560
H1099	\$327,600	4	16	\$20,475	0%	I	5658
H1018	\$348,400	4	53	\$6,574	92%	B	5460
H0115	\$349,600	3	86	\$4,065	84%	B	5560
H1059	\$364,600	4	51	\$7,149	61%	B	5459
H0054	\$366,200	3	175	\$2,093	87%	I	5659
H1054	\$375,100	4	58	\$6,467	88%	B	5559
H1015	\$447,500	4	52	\$8,606	92%	B	5460
H1058	\$460,700	4	16	\$28,794	0%	H	5459
H0082	\$502,800	3	5	\$100,560	0%	B	5658
H0065	\$505,400	3	69	\$7,325	0%	B	5658
H1028	\$546,100	4	89	\$6,136	100%	B	5560
H1108	\$608,800	4	2	\$304,400	0%	I	5758
H1130	\$626,800	4	12	\$52,233	0%	B	5658
H0019	\$679,300	3	26	\$26,127	31%	I	5758
H0046	\$744,500	3	44	\$16,920	20%	I	5659
H1138	\$761,100	4	22	\$34,595	0%	B	5657
H1069	\$864,600	4	9	\$96,067	0%	B	5559
H1070	\$936,800	4	2	\$468,400	0%	B	5559
H1141	\$943,600	4	1	\$943,600	0%	I	5657
H1072	\$982,900	4	48	\$20,477	0%	B	5659
H1013	\$1,048,000	4	388	\$5,574	99%	B	5460
H1055	\$1,076,700	4	193	\$5,579	96%	B	5559
H1053	\$1,119,400	4	16	\$69,963	25%	B	5559
H1074	\$1,123,900	4	27	\$41,626	7%	I	5659

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
H1016	\$1,264,600	4	267	\$4,736	99%	B	5460
H1065	\$1,274,400	4	249	\$5,118	90%	H	5559
H1077	\$1,507,400	4	12	\$125,617	0%	I	5659
H1009	\$1,543,100	4	511	\$3,020	99%	B	5560
H1004	\$1,592,900	4	191	\$8,340	98%	H	5460
H1066	\$1,606,400	4	1	\$1,606,400	0%	H	5458
H0103	\$1,631,500	3	834	\$1,956	94%	H	5558
H1076	\$1,648,100	4	122	\$13,509	58%	I	5659
H0138	\$1,656,700	3	45	\$36,816	16%	H	5459
H1064	\$1,667,700	4	313	\$5,328	97%	B	5559
H1082	\$1,710,900	4	16	\$106,931	56%	I	5759
H1091	\$1,791,100	4	29	\$61,762	10%	B	5659
H1003	\$1,838,000	4	155	\$11,858	63%	H	5460
H1100	\$1,983,600	4	39	\$50,862	44%	I	5659
H1067	\$2,497,500	4	570	\$4,382	98%	B	5458
H1140	\$2,864,200	4	2	\$1,432,100	0%	I	5657
H1014	\$2,983,600	4	544	\$5,485	98%	H	5460
H1137	\$3,197,400	4	16	\$199,838	13%	B	5657
H1030	\$3,536,800	4	270	\$13,099	99%	B	5560
H0086	\$3,949,000	3	859	\$4,597	89%	B	5558
H1008	\$4,969,600	4	562	\$8,843	88%	B	5560
TOTAL	\$71,377,200						
Sorted by Cost per Address							
H0081	\$16,100	3	591	\$27	70%	I	5657
H0129	\$284,400	3	304	\$936	94%	B	5459
H0077	\$49,700	3	42	\$1,183	69%	I	5656
H0103	\$1,631,500	3	834	\$1,956	94%	H	5558
H0054	\$366,200	3	175	\$2,093	87%	I	5659
H1057	\$117,000	4	48	\$2,438	100%	B	5559
H1007	\$124,500	4	50	\$2,490	94%	B	5460
H1009	\$1,543,100	4	511	\$3,020	99%	B	5560
H1026	\$97,500	4	30	\$3,250	100%	B	5560
H1019	\$221,600	4	63	\$3,517	89%	B	5560
H1036	\$280,500	4	73	\$3,842	86%	B	5459
H1056	\$63,700	4	16	\$3,981	94%	B	5559
H1033	\$136,200	4	34	\$4,006	65%	H	5459
H0115	\$349,600	3	86	\$4,065	84%	B	5560
H1020	\$219,600	4	54	\$4,067	89%	B	5560
H1041	\$65,300	4	16	\$4,081	100%	B	5459

**TABLE 6H 2-YEAR COST - GROUP 4
HUNTING BAYOU**

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
H1143	\$96,500	4	23	\$4,196	100%	B	5559
H1040	\$51,000	4	12	\$4,250	92%	B	5459
H1067	\$2,497,500	4	570	\$4,382	98%	B	5458
H1044	\$52,900	4	12	\$4,408	92%	B	5459
H1021	\$195,200	4	43	\$4,540	84%	B	5560
H0086	\$3,949,000	3	859	\$4,597	89%	B	5558
H1024	\$326,800	4	70	\$4,669	99%	B	5560
H1016	\$1,264,600	4	267	\$4,736	99%	B	5460
H1038	\$63,700	4	13	\$4,900	92%	H	5459
H1022	\$187,500	4	38	\$4,934	79%	B	5560
H1039	\$59,900	4	12	\$4,992	100%	B	5459
H0097	\$111,300	3	22	\$5,059	0%	B	5559
H1065	\$1,274,400	4	249	\$5,118	90%	H	5559
H1064	\$1,667,700	4	313	\$5,328	97%	B	5559
H1049	\$156,300	4	29	\$5,390	62%	B	5559
H1050	\$86,300	4	16	\$5,394	100%	B	5559
H1014	\$2,983,600	4	544	\$5,485	98%	H	5460
H1013	\$1,048,000	4	188	\$5,574	99%	B	5460
H1055	\$1,076,700	4	193	\$5,579	96%	B	5559
H1047	\$89,100	4	15	\$5,940	100%	B	5559
H1028	\$546,100	4	89	\$6,136	100%	B	5560
H1062	\$68,100	4	11	\$6,191	82%	B	5559
H1046	\$74,300	4	12	\$6,192	83%	B	5559
H1027	\$296,000	4	46	\$6,435	100%	B	5560
H1054	\$375,100	4	58	\$6,467	88%	B	5559
H1045	\$46,000	4	7	\$6,571	100%	B	5459
H1018	\$348,400	4	53	\$6,574	92%	B	5460
H1017	\$276,700	4	41	\$6,749	100%	B	5460
H1025	\$119,800	4	17	\$7,047	100%	B	5560
H1059	\$364,600	4	51	\$7,149	61%	B	5459
H0065	\$505,400	3	69	\$7,325	0%	B	5658
H1029	\$258,400	4	34	\$7,600	100%	B	5560
H1089	\$247,100	4	30	\$8,237	97%	I	5659
H1004	\$1,592,900	4	191	\$8,340	98%	H	5460
H1042	\$142,000	4	17	\$8,353	94%	B	5459
H1063	\$101,300	4	12	\$8,442	100%	B	5559
H1015	\$447,500	4	52	\$8,606	92%	B	5460
H1008	\$4,969,600	4	562	\$8,843	88%	B	5560
H0139	\$104,500	3	11	\$9,500	0%	H	5459
H1124	\$31,800	4	3	\$10,600	100%	I	5758

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
H1116	\$235,400	4	22	\$10,700	77%	I	5758
H1003	\$1,838,000	4	155	\$11,858	63%	H	5460
H1051	\$98,200	4	8	\$12,275	100%	B	5559
H1030	\$3,536,800	4	270	\$13,099	99%	B	5560
H1083	\$158,400	4	12	\$13,200	8%	I	5659
H1032	\$256,600	4	19	\$13,505	42%	H	5459
H1076	\$1,648,100	4	122	\$13,509	58%	I	5659
H1061	\$57,900	4	4	\$14,475	75%	B	5559
H1087	\$310,700	4	20	\$15,535	0%	I	5659
H0046	\$744,500	3	44	\$16,920	20%	I	5659
H0085	\$68,800	3	4	\$17,200	0%	B	5658
H0098	\$123,000	3	7	\$17,571	0%	B	5559
H1034	\$107,700	4	6	\$17,950	0%	H	5459
H1035	\$73,400	4	4	\$18,350	50%	H	5459
H1099	\$327,600	4	16	\$20,475	0%	I	5658
H1072	\$982,900	4	48	\$20,477	0%	B	5659
H0019	\$679,300	3	26	\$26,127	31%	I	5758
H1058	\$460,700	4	16	\$28,794	0%	H	5459
H0073	\$129,900	3	4	\$32,475	0%	B	5657
H1138	\$761,100	4	22	\$34,595	0%	B	5657
H0138	\$1,656,700	3	45	\$36,816	16%	H	5459
H1074	\$1,123,900	4	27	\$41,626	7%	I	5659
H1126	\$98,600	4	2	\$49,300	0%	I	5758
H1122	\$295,900	4	6	\$49,317	0%	I	5658
H1100	\$1,983,600	4	39	\$50,862	44%	I	5659
H0064	\$307,700	3	6	\$51,283	0%	B	5658
H1130	\$626,800	4	12	\$52,233	0%	B	5658
H1073	\$302,400	4	5	\$60,480	0%	I	5659
H1091	\$1,791,100	4	29	\$61,762	10%	B	5659
H1053	\$1,119,400	4	16	\$69,963	25%	B	5559
H1069	\$864,600	4	9	\$96,067	0%	B	5559
H0082	\$502,800	3	5	\$100,560	0%	B	5658
H1082	\$1,710,900	4	16	\$106,931	56%	I	5759
H1077	\$1,507,400	4	12	\$125,617	0%	I	5659
H1134	\$160,000	4	1	\$160,000	0%	I	5757
H1137	\$3,197,400	4	16	\$199,838	13%	B	5657
H1111	\$204,400	4	1	\$204,400	0%	I	5758
H1108	\$608,800	4	2	\$304,400	0%	I	5758
H1136	\$320,400	4	1	\$320,400	0%	I	5757
H0018	\$324,300	3	1	\$324,300	0%	I	5758

TABLE 6H 2-YEAR COST - GROUP 4
HUNTING BAYOU

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
H1070	\$936,800	4	2	\$468,400	0%	B	5559
H1141	\$943,600	4	1	\$943,600	0%	I	5657
H1140	\$2,864,200	4	2	\$1,432,100	0%	I	5657
H1066	\$1,606,400	4	1	\$1,606,400	0%	H	5458
TOTAL	\$71,377,200						

**TABLE 7H 5-YEAR COST – GROUP 1
HUNTING BAYOU**

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
Sorted by Additional for 5-Year Storm						
H0001	\$158,100	\$165,300	\$7,200	1	I	5757
H0013	\$1,826,600	\$2,638,100	\$811,500	1	I	5758
H0044	\$259,200	\$270,200	\$11,000	1	I	5658
H1001	\$3,571,600	\$3,910,700	\$339,100	2	H	5460
H1002	\$1,884,600	\$2,089,800	\$205,200	2	H	5460
H1010	\$5,325,700	\$5,984,700	\$659,000	2	H	5460
TOTAL	\$13,025,800	\$15,058,800	\$2,033,000			

**TABLE 9H 5-YEAR COST – GROUP 3
HUNTING BAYOU**

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
Sorted by Additional for 5-Year Storm						
H1023	\$205,900	\$220,900	\$15,000	2	H	5459
H0002	\$0	\$33,400	\$33,400	A	I	5757
H1011	\$688,300	\$742,000	\$53,700	2	H	5460
H1142	\$719,700	\$784,700	\$65,000	2	B	5657
H1144	\$1,227,100	\$1,311,300	\$84,200	2	I	5757
H1012	\$1,292,100	\$1,383,900	\$91,800	2	H	5460
TOTAL	\$4,133,100	\$4,476,200	\$343,100			

**TABLE 8H 5-YEAR COST - GROUP 2
HUNTING BAYOU**

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
Sorted by Additional for 5-Year Storm						
H0112	\$0	\$1,100	\$1,100	A	B	5560
H1060	\$247,200	\$288,900	\$41,700	2	B	5459
H1037	\$266,300	\$312,200	\$45,900	2	B	5459
H1052	\$338,400	\$395,300	\$56,900	2	B	5559
H0094	\$355,900	\$432,700	\$76,800	1	B	5560
H1006	\$1,402,000	\$1,515,800	\$113,800	2	H	5460
H0092	\$1,259,500	\$1,374,200	\$114,700	1	B	5659
H0096	\$1,350,700	\$1,646,900	\$296,200	1	B	5559
H0093	\$4,252,300	\$6,838,900	\$2,586,600	1	B	5560
TOTAL	\$9,472,300	\$12,806,000	\$3,333,700			

**TABLE 10H 5-YEAR COST – GROUP 4
HUNTING BAYOU**

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5 Year Storm	2-Year Category	City Council District	Facet Number
Sorted by Additional for 5-Year						
H1045	\$46,000	\$49,800	\$3,800	4	B	5459
H1044	\$52,900	\$57,300	\$4,400	4	B	5459
H1061	\$57,900	\$62,800	\$4,900	4	B	5559
H1041	\$65,300	\$70,700	\$5,400	4	B	5459
H1124	\$31,800	\$37,200	\$5,400	4	I	5758
H0098	\$123,000	\$128,900	\$5,900	3	B	5559
H1046	\$74,300	\$80,500	\$6,200	4	B	5559
H1050	\$86,300	\$93,500	\$7,200	4	B	5559
H1056	\$63,700	\$71,100	\$7,400	4	B	5559
H1059	\$364,600	\$376,700	\$12,100	4	B	5459
H1015	\$447,500	\$462,200	\$14,700	4	B	5460
H1089	\$247,100	\$262,400	\$15,300	4	I	5659
H1033	\$136,200	\$151,900	\$15,700	4	H	5459
H1049	\$156,300	\$174,300	\$18,000	4	B	5559
H1111	\$204,400	\$222,500	\$18,100	4	I	5758
H0048	\$0	\$19,600	\$19,600	A	I	5658
H1122	\$295,900	\$315,600	\$19,700	4	I	5658
H1136	\$320,400	\$341,800	\$21,400	4	I	5757
H1021	\$195,200	\$217,700	\$22,500	4	B	5560
H0053	\$0	\$22,700	\$22,700	A	I	5659
H1017	\$276,700	\$299,700	\$23,000	4	B	5460
H1024	\$326,800	\$354,000	\$27,200	4	B	5560
H1070	\$936,800	\$971,600	\$34,800	4	B	5559
H1019	\$221,600	\$259,800	\$38,200	4	B	5560
H1027	\$296,000	\$336,100	\$40,100	4	B	5560
H1116	\$235,400	\$276,000	\$40,600	4	I	5758
H1058	\$460,700	\$501,400	\$40,700	4	H	5459
H1028	\$546,100	\$587,600	\$41,500	4	B	5560
H1099	\$327,600	\$375,800	\$48,200	4	I	5658
H1087	\$310,700	\$359,000	\$48,300	4	I	5659
H1074	\$1,123,900	\$1,181,100	\$57,200	4	I	5659
H1138	\$761,100	\$819,600	\$58,500	4	B	5657
H1018	\$348,400	\$408,400	\$60,000	4	B	5460
H1054	\$375,100	\$447,000	\$71,900	4	B	5559
H1072	\$982,900	\$1,060,900	\$78,000	4	B	5659
H1069	\$864,600	\$945,200	\$80,600	4	B	5559
H1013	\$1,048,000	\$1,136,300	\$88,300	4	B	5460
H1108	\$608,800	\$697,800	\$89,000	4	I	5758
H1009	\$1,543,100	\$1,645,900	\$102,800	4	B	5560
H0128	\$0	\$111,300	\$111,300	A	B	5459

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5 Year Storm	2-Year Category	City Council District	Facet Number
H1141	\$943,600	\$1,061,000	\$117,400	4	I	5657
H1130	\$626,800	\$750,200	\$123,400	4	B	5658
H0129	\$284,400	\$414,000	\$129,600	3	B	5459
H0115	\$349,600	\$481,000	\$131,400	3	B	5560
H1067	\$2,497,500	\$2,632,400	\$134,900	4	B	5458
H1003	\$1,838,000	\$1,985,300	\$147,300	4	H	5460
H1077	\$1,507,400	\$1,656,600	\$149,200	4	I	5659
H1053	\$1,119,400	\$1,278,500	\$159,100	4	B	5559
H1055	\$1,076,700	\$1,239,100	\$162,400	4	B	5559
H1016	\$1,264,600	\$1,431,700	\$167,100	4	B	5460
H1065	\$1,274,400	\$1,451,500	\$177,100	4	H	5559
H1004	\$1,592,900	\$1,783,600	\$190,700	4	H	5460
H1100	\$1,983,600	\$2,181,500	\$197,900	4	I	5659
H1064	\$1,667,700	\$1,890,900	\$223,200	4	B	5559
H1066	\$1,606,400	\$1,841,400	\$235,000	4	H	5458
H1076	\$1,648,100	\$1,904,400	\$256,300	4	I	5659
H1091	\$1,791,100	\$2,098,200	\$307,100	4	B	5659
H1014	\$2,983,600	\$3,299,000	\$315,400	4	H	5460
H0097	\$111,300	\$427,800	\$316,500	3	B	5559
H1030	\$3,526,800	\$3,892,000	\$365,200	4	B	5560
H0054	\$366,200	\$727,800	\$361,600	3	I	5659
H1137	\$3,197,400	\$3,604,500	\$407,100	4	B	5657
H1005	\$3,207,000	\$3,634,800	\$427,800	4	H	5460
H1140	\$2,864,200	\$3,303,900	\$439,700	4	I	5657
H1008	\$4,969,600	\$5,593,800	\$624,200	4	B	5560
H0103	\$1,631,500	\$2,385,800	\$754,300	3	H	5558
H0086	\$3,949,000	\$5,244,600	\$1,295,600	3	B	5558
TOTAL	\$64,451,900	\$74,189,000	\$9,737,100			

TABLE GLOSSARY

2-Year Analysis Status

- Inadequate – Storm sewer analysis program results indicate system is not adequate.
- Adequate – Storm sewer analysis program results indicate system is adequate.
- Cannot Analyze – System could not be analyzed with the storm sewer analysis program due to lack of information.

2-Year CIP Cost – Probable cost to meet 2-year design criteria

Additional for 5-Year – Additional cost for major thoroughfares criteria (5-year storm)

Group

- Group 1 Systems that have reported structure and street-related flooding complaints.
- Group 2 Systems that have reported structure flooding complaints only.
- Group 3 Systems that have reported street flooding complaints only.
- Group 4 Systems that have no reported flooding complaints. Group 4 costs types will be applicable for categories 3 and 4 only.

Category

- Category 1 Existing storm sewer systems that have been determined to be inadequate and where flooding complaints have been reported within drainage boundaries.
- Category 2 Converting existing open-ditch systems (non-storm sewer areas) to storm sewer systems where previous flooding complaints have been reported. Proposed storm sewer systems for this category type address the main trunk system requirements only.
- Category 3 Existing storm sewer systems that have been determined to be inadequate and where flooding complaints *have not* been reported.
- Category 4 Converting existing open-ditch systems (non-storm sewer areas) to storm sewer systems where previous flooding complaints *have not* been reported. Proposed storm sewer systems for this category type address the main trunk system requirements only.
- Category 5 Areas currently considered to be undeveloped and having no defined drainage system. For this category type, drainage areas and main (trunk) sewer systems were determined
- Category A Existing storm sewer systems that have been determined to be adequate. These systems may or may not have reported flooding complaints.

Category C.N.A. – System that could not be analyzed due to lack of storm sewer information.

City Council District – City Council district within which storm sewer system is located.

Facet Number – Facet (system map) number sheet on which storm sewer system is located.

Number of Addresses – Total number of addresses that are located in storm sewer study drainage boundary.

Cost Per Address – 2-year CIP cost divided by number of addresses.

Percent of System Single Family – Percent of storm sewer system drainage area classified as a *Single-family land-use type*.

TABLE 1 – STORM SEWER UNIT COST RATES

Pipe Diameter (in)	Unit Cost Rate (\$/ln ft)	Equivalent Box Size (ft x ft)
24	\$240	
30	\$260	
36	\$290	
42	\$340	
48	\$370	
54	\$450	
60	\$480	
66	\$520	
72	\$550	
78	\$590	
84	\$620	
90	\$720	
96	\$760	8 x 7
102	\$810	
108	\$820	
114	\$890	
120	\$930	10 x 9
126	\$1,060	10 x 9
132	\$1,110	10 x 10
138	\$1,150	10 x 10
144	\$1,190	8 x 7 & 8 x 7
150	\$1,350	8 x 7 & 8 x 8
156	\$1,400	8 x 8 & 8 x 8
162	\$1,450	10 x 9 & 8 x 7
168	\$1,490	10 x 9 & 8 x 8
174	\$1,540	10 x 10 & 8 x 8
180	\$1,590	10 x 9 & 10 x 9
186	\$1,640	10 x 10 & 10 x 9
192	\$1,680	10 x 10 & 10 x 10
198	\$1,730	10 x 10 & 8 x 7 & 8 x 7
204	\$1,780	10 x 9 & 10 x 9 & 8 x 7
210	\$1,820	10 x 10 & 10 x 9 & 8 x 7
216	\$1,870	10 x 10 & 10 x 10 & 8 x 7
222	\$1,920	See Note 1
228	\$1,970	See Note 1
234	\$2,010	See Note 1
240	\$2,060	See Note 1
246	\$2,110	See Note 1
252	\$2,150	See Note 1
258	\$2,200	See Note 1

Pipe Diameter (in)	Unit Cost Rate (\$/ln ft)	Equivalent Box Size (ft x ft)
264	\$2,250	See Note 1
270	\$2,300	See Note 1
276	\$2,340	See Note 1
282	\$2,390	See Note 1
288	\$2,440	See Note 1
Unit Cost Rates were developed based on City of Houston Bid Tabs for storm sewer projects constructed during 1994 and 1998.		
Unit Cost Rates include the following:		
Removal of existing pipe and pavement		
Storm sewer pipe		
Manholes		
Inlets		
Replacement of pavement		
Dewatering		
Trench safety		
Traffic control		
Engineering and contingency (20 percent)		
Unit Cost Rates do not include the following:		
Relocation of existing utilities		
Acquisition of additional right-of-way		

Notes

1. Equivalent box sizes for pipe diameters 222 inches or greater were not determined. It may be more cost-effective to propose an open channel instead of a box.

**TABLE 2C
SIMS BAYOU SUMMARY OF PROPOSED IMPROVEMENTS**

1

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
Sorted by Outfall System ID								
C0001	Inadequate	\$1,435,600	\$0	\$1,435,600	4	3	I	5655
C0002	Inadequate	\$1,547,300	\$0	\$1,547,300	4	3	E	5655
C0003	Inadequate	\$1,188,700	\$176,000	\$1,364,700	3	1	E	5654
C0004	Adequate	\$0	\$0	\$0	1	A	I	5654
C0005	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	E	5654
C0006	Inadequate	\$251,200	\$0	\$251,200	2	1	E	5654
C0007	Inadequate	\$111,000	\$0	\$111,000	2	1	E	5654
C0008	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	E	5654
C0009	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	E	5654
C0010	Adequate	\$0	\$0	\$0	2	A	E	5654
C0011	Inadequate	\$80,500	\$0	\$80,500	3	1	E	5654
C0012	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	E	5654
C0013	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	E	5654
C0014	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	E	5654
C0015	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	E	5654
C0016	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	E	5654
C0017	Adequate	\$0	\$0	\$0	4	A	E	5654
C0018	Did Not Analyze	\$0	\$0	\$0	4	C.N.A.	E	5654
C0019	Inadequate	\$3,942,000	\$201,000	\$4,143,000	4	3	I	5653
C0020	Inadequate	\$356,500	\$73,300	\$429,800	2	1	I	5654
C0021	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	I	5654
C0022	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	I	5654
C0023	Inadequate	\$1,522,800	\$194,400	\$1,717,200	4	3	I	5654
C0024	Adequate	\$0	\$0	\$0	1	A	I	5654
C0025	Adequate	\$0	\$0	\$0	1	A	I	5654
C0026	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	E	5654
C0027	Adequate	\$0	\$0	\$0	3	A	I	5654
C0028	Inadequate	\$398,000	\$0	\$398,000	1	1	E	5654
C0029	Inadequate	\$422,300	\$346,900	\$769,200	3	1	I	5554
C0030	Inadequate	\$3,072,200	\$249,100	\$3,321,300	3	1	I	5554
C0031	Inadequate	\$179,200	\$0	\$179,200	1	1	I	5554

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
C0032	Adequate	\$0	\$0	\$0	4	A	I	5554
C0033	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	E	5654
C0034	Inadequate	\$5,732,800	\$244,100	\$5,976,900	1	1	E	5653
C0035	Inadequate	\$7,800,700	\$608,800	\$8,409,500	1	1	I	5553
C0036	Adequate	\$0	\$0	\$0	1	A	E	5553
C0037	Adequate	\$0	\$195,000	\$195,000	3	A	I	5553
C0038	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	I	5553
C0039	Inadequate	\$312,300	\$0	\$312,300	1	1	E	5553
C0040	Inadequate	\$873,800	\$0	\$873,800	1	1	I	5553
C0041	Inadequate	\$3,439,600	\$0	\$3,439,600	1	1	E	5553
C0042	Adequate	\$0	\$0	\$0	1	A	I	5553
C0043	Inadequate	\$3,986,100	\$114,200	\$4,100,300	1	1	I	5554
C0044	Inadequate	\$163,800	\$0	\$163,800	3	1	E	5553
C0045	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	E	5553
C0046	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	E	5553
C0047	Inadequate	\$104,400	\$204,000	\$308,400	3	1	E	5553
C0048	Adequate	\$0	\$0	\$0	1	A	E	5553
C0049	Inadequate	\$236,100	\$0	\$236,100	3	1	E	5452
C0050	Adequate	\$0	\$0	\$0	1	A	E	5452
C0051	Inadequate	\$7,030,400	\$663,500	\$7,693,900	1	1	E	5453
C0052	Inadequate	\$2,216,200	\$1,624,100	\$3,840,300	1	1	E	5452
C0053	Inadequate	\$25,100	\$0	\$25,100	1	1	E	5452
C0054	Inadequate	\$4,689,100	\$326,900	\$5,016,000	1	1	D	5453
C0055	Adequate	\$0	\$547,700	\$547,700	1	A	D	5452
C0056	Adequate	\$0	\$0	\$0	4	A	D	5452
C0057	Adequate	\$0	\$0	\$0	4	A	D	5452
C0058	Inadequate	\$2,495,800	\$386,400	\$2,882,200	3	1	D	5452
C0059	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	D	5352
C0060	Adequate	\$0	\$0	\$0	3	A	D	5352
C0061	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	D	5352
C0062	Adequate	\$0	\$0	\$0	4	A	D	5352
C0063	Adequate	\$0	\$0	\$0	4	A	D	5352
C0064	Adequate	\$0	\$0	\$0	4	A	D	5251
C0065	Adequate	\$0	\$0	\$0	1	A	D	5251
C0066	Adequate	\$0	\$0	\$0	1	A	D	5251
C0067	Inadequate	\$239,700	\$0	\$239,700	1	1	D	5251
C0068	Cannot	\$0	\$0	\$0	4	C.N.A.	D	5251

TABLE 2C
SIMS BAYOU SUMMARY OF PROPOSED IMPROVEMENTS

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
	Analyze							
C0069	Adequate	\$0	\$0	\$0	2	A	D	5251
C0070	Adequate	\$0	\$0	\$0	4	A	D	5251
C0071	Adequate	\$0	\$0	\$0	1	A	D	5251
C0072	Adequate	\$0	\$0	\$0	2	A	D	5251
C0073	Adequate	\$0	\$0	\$0	1	A	D	5251
C0074	Adequate	\$0	\$0	\$0	1	A	D	5251
C0075	Adequate	\$0	\$0	\$0	1	A	D	5251
C0076	Inadequate	\$176,200	\$0	\$176,200	1	I	D	5251
C0077	Adequate	\$0	\$0	\$0	1	A	D	5251
C0078	Adequate	\$0	\$0	\$0	1	A	D	5251
C0079	Adequate	\$0	\$0	\$0	1	A	D	5251
C0080	Adequate	\$0	\$0	\$0	4	A	D	5251
C0081	Adequate	\$0	\$0	\$0	4	A	D	5251
C0082	Adequate	\$0	\$0	\$0	4	A	D	5251
C0083	Adequate	\$0	\$0	\$0	4	A	D	5251
C0084	Adequate	\$0	\$0	\$0	4	A	D	5251
C0085	Adequate	\$0	\$0	\$0	4	A	D	5251
C0086	Inadequate	\$96,100	\$16,500	\$112,600	4	3	D	5151
C0087	Adequate	\$0	\$0	\$0	4	A	D	5151
C0088	Inadequate	\$229,000	\$0	\$229,000	1	I	D	5151
C0089	Inadequate	\$404,900	\$0	\$404,900	3	I	D	5151
C0090	Inadequate	\$313,400	\$0	\$313,400	3	I	D	5151
C0091	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	D	5151
C0092	Inadequate	\$105,300	\$0	\$105,300	3	I	D	5151
C0093	Inadequate	\$78,900	\$0	\$78,900	3	I	D	5151
C0094	Inadequate	\$1,360,500	\$0	\$1,360,500	1	I	D	5151
C0095	Inadequate	\$329,400	\$0	\$329,400	3	I	D	5151
C0096	Inadequate	\$380,400	\$0	\$380,400	1	I	D	5151
C0097	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	D	5151
C0098	Adequate	\$0	\$0	\$0	3	A	D	5151
C0099	Adequate	\$0	\$0	\$0	4	A	D	5151
C0100	Adequate	\$0	\$0	\$0	3	A	D	5152
C0101	Adequate	\$0	\$0	\$0	4	A	D	5151
C0102	Adequate	\$0	\$0	\$0	3	A	D	5151
C0103	Adequate	\$0	\$0	\$0	3	A	D	5151
C0104	Adequate	\$0	\$0	\$0	4	A	D	5151
C0105	Adequate	\$0	\$0	\$0	4	A	D	5151
C0106	Adequate	\$0	\$0	\$0	4	A	C	5151
C0107	Adequate	\$0	\$0	\$0	4	A	C	5151
C0108	Adequate	\$0	\$0	\$0	4	A	C	5151

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
C0109	Inadequate	\$100,500	\$274,900	\$375,400	4	3	C	5051
C0110	Adequate	\$0	\$0	\$0	4	A	C	5051
C0111	Adequate	\$0	\$0	\$0	4	A	C	5051
C0112	Adequate	\$0	\$0	\$0	4	A	I	5655
C0113	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	I	5655
C0114	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	I	5655
C0115	Inadequate	\$133,300	\$15,400	\$148,700	4	3	I	5655
C0116	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	I	5655
C0117	Adequate	\$0	\$0	\$0	4	A	I	5655
C0118	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	I	5655
C0119	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	I	5655
C0120	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	I	5655
C0121	Adequate	\$0	\$0	\$0	3	A	I	5655
C0122	Adequate	\$0	\$290,700	\$290,700	4	A	I	5655
C0123	Adequate	\$0	\$0	\$0	1	A	I	5655
C0124	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	I	5655
C0125	Inadequate	\$771,300	\$473,400	\$1,244,700	1	I	I	5655
C0126	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	I	5655
C0127	Inadequate	\$555,400	\$1,082,600	\$1,638,000	3	I	I	5555
C0128	Adequate	\$0	\$0	\$0	3	A	I	5555
C0129	Adequate	\$0	\$0	\$0	4	A	I	5655
C0130	Adequate	\$0	\$0	\$0	4	A	I	5555
C0131	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	I	5555
C0132	Adequate	\$0	\$0	\$0	3	A	I	5555
C0133	Adequate	\$0	\$468,000	\$468,000	3	A	I	5555
C0134	Inadequate	\$472,000	\$434,700	\$906,700	1	I	I	5555
C0135	Adequate	\$0	\$0	\$0	4	A	I	5555
C0137	Adequate	\$0	\$0	\$0	1	A	I	5554
C0138	Inadequate	\$151,900	\$0	\$151,900	3	I	I	5554
C0139	Adequate	\$0	\$0	\$0	4	A	I	5554
C0140	Inadequate	\$4,598,300	\$220,000	\$4,818,300	1	I	I	5554
C0141	Inadequate	\$1,316,600	\$826,500	\$2,143,100	1	I	I	5554
C0142	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	I	5554

**TABLE 2C
SIMS BAYOU SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
C0143	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	I	5554
C0144	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	I	5554
C0145	Adequate	\$0	\$0	\$0	4	A	I	5554
C0146	Adequate	\$0	\$0	\$0	4	A	I	5554
C0147	Inadequate	\$86,500	\$0	\$86,500	1	I	I	5554
C0148	Adequate	\$0	\$276,800	\$276,800	1	A	I	5554
C0149	Inadequate	\$1,836,400	\$79,400	\$1,915,800	1	I	I	5554
C0150	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	I	5654
C0151	Inadequate	\$784,000	\$1,253,500	\$2,037,500	1	I	I	5654
C0152	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	I	5654
C0153	Inadequate	\$253,000	\$0	\$253,000	3	I	I	5654
C0154	Adequate	\$0	\$0	\$0	4	A	I	5655
C0155	Inadequate	\$1,136,000	\$70,400	\$1,206,400	1	I	I	5655
C0156	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	I	5655
C0157	Adequate	\$0	\$0	\$0	4	A	I	5655
C0158	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	I	5655
C0159	Adequate	\$0	\$0	\$0	4	A	I	5654
C0160	Adequate	\$0	\$0	\$0	4	A	I	5655
C0161	Inadequate	\$853,300	\$81,200	\$934,500	3	I	I	5654
C0162	Adequate	\$0	\$0	\$0	1	A	I	5654
C0163	Adequate	\$0	\$0	\$0	4	A	I	5654
C0164	Inadequate	\$413,300	\$0	\$413,300	1	I	I	5655
C0165	Inadequate	\$267,600	\$0	\$267,600	3	I	I	5655
C0166	Inadequate	\$193,200	\$0	\$193,200	1	I	I	5655
C0167	Adequate	\$0	\$0	\$0	4	A	I	5655
C0168	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	I	5655
C0169	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	I	5655
C0170	Adequate	\$0	\$0	\$0	4	A	I	5654
C0171	Adequate	\$0	\$0	\$0	4	A	I	5655
C0172	Adequate	\$0	\$0	\$0	4	A	I	5654
C0173	Inadequate	\$64,900	\$0	\$64,900	1	I	E	5654
C0174	Inadequate	\$3,137,900	\$57,900	\$3,195,800	1	I	E	5755
C0175	Inadequate	\$591,300	\$320,900	\$912,200	1	I	E	5754
C0176	Inadequate	\$794,700	\$68,000	\$862,700	1	I	E	5754
C0177	Adequate	\$0	\$0	\$0	4	A	E	5755

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
C0178	Adequate	\$0	\$0	\$0	4	A	E	5754
C0179	Adequate	\$0	\$0	\$0	3	A	E	5754
C0180	Adequate	\$0	\$0	\$0	4	A	E	5654
C0181	Adequate	\$0	\$0	\$0	3	A	E	5754
C0182	Adequate	\$0	\$0	\$0	3	A	E	5654
C0183	Inadequate	\$82,900	\$0	\$82,900	4	I	E	5754
C0184	Inadequate	\$77,800	\$0	\$77,800	3	I	E	5754
C0185	Adequate	\$0	\$0	\$0	4	A	E	5754
C0186	Adequate	\$0	\$0	\$0	4	A	E	5754
C0187	Adequate	\$0	\$0	\$0	4	A	E	5754
C0188	Inadequate	\$343,900	\$0	\$343,900	3	I	E	5754
C0189	Inadequate	\$564,100	\$0	\$564,100	3	I	E	5754
C0190	Adequate	\$0	\$0	\$0	3	A	E	5754
C0191	Adequate	\$0	\$0	\$0	3	A	E	5754
C0192	Inadequate	\$913,200	\$0	\$913,200	1	I	E	5754
C0193	Adequate	\$0	\$0	\$0	4	A	E	5754
C0194	Adequate	\$0	\$0	\$0	4	A	E	5754
C0195	Adequate	\$0	\$0	\$0	4	A	E	5754
C0196	Inadequate	\$109,400	\$0	\$109,400	3	I	E	5754
C0197	Inadequate	\$105,900	\$0	\$105,900	3	I	E	5754
C0198	Inadequate	\$173,900	\$0	\$173,900	3	I	E	5754
C0199	Adequate	\$0	\$0	\$0	4	A	E	5754
C0200	Adequate	\$0	\$0	\$0	4	A	E	5754
C0201	Adequate	\$0	\$0	\$0	4	A	E	5754
C0202	Adequate	\$0	\$0	\$0	4	A	E	5754
C0203	Adequate	\$0	\$0	\$0	4	A	E	5754
C0204	Adequate	\$0	\$0	\$0	4	A	E	5754
C0205	Adequate	\$0	\$0	\$0	4	A	I	5654
C0206	Adequate	\$0	\$0	\$0	4	A	E	5654
C0207	Adequate	\$0	\$0	\$0	4	A	E	5654
C0208	Inadequate	\$666,800	\$0	\$666,800	1	I	I	5654
C0209	Adequate	\$0	\$0	\$0	4	A	E	5654
C0210	Inadequate	\$117,700	\$0	\$117,700	1	I	I	5654
C0212	Inadequate	\$390,700	\$0	\$390,700	2	I	E	5654
C0213	Inadequate	\$594,300	\$0	\$594,300	3	I	E	5654
C0214	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	E	5653
C0215	Adequate	\$0	\$0	\$0	2	A	E	5653
C0216	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	I	5653
C0217	Adequate	\$0	\$84,700	\$84,700	4	A	E	5653
C0218	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	I	5653

TABLE 2C
SIMS BAYOU SUMMARY OF PROPOSED IMPROVEMENTS

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
C0219	Inadequate	\$207,500	\$42,300	\$249,800	1	I	I	5653
C0220	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	I	5653
C0221	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	I	5653
C0222	Adequate	\$0	\$0	\$0	3	A	E	5653
C0223	Adequate	\$0	\$0	\$0	3	A	E	5653
C0224	Adequate	\$0	\$0	\$0	3	A	E	5653
C0225	Adequate	\$0	\$0	\$0	4	A	I	5653
C0226	Adequate	\$0	\$0	\$0	3	A	I	5653
C0227	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	I	5653
C0228	Adequate	\$0	\$0	\$0	3	A	I	5653
C0229	Adequate	\$0	\$0	\$0	3	A	I	5653
C0230	Adequate	\$0	\$0	\$0	3	A	E	5653
C0231	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	E	5653
C0232	Adequate	\$0	\$0	\$0	4	A	E	5653
C0233	Adequate	\$0	\$0	\$0	4	A	E	5653
C0234	Adequate	\$0	\$0	\$0	4	A	I	5653
C0235	Adequate	\$0	\$0	\$0	4	A	I	5653
C0236	Adequate	\$0	\$0	\$0	4	A	I	5653
C0237	Adequate	\$0	\$0	\$0	4	A	I	5653
C0238	Adequate	\$0	\$0	\$0	4	A	E	5653
C0239	Adequate	\$0	\$0	\$0	4	A	E	5653
C0240	Adequate	\$0	\$0	\$0	4	A	E	5652
C0241	Adequate	\$0	\$0	\$0	4	A	E	5652
C0242	Adequate	\$0	\$0	\$0	4	A	E	5652
C0243	Adequate	\$0	\$0	\$0	4	A	E	5652
C0244	Adequate	\$0	\$0	\$0	4	A	E	5652
C0245	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	E	5752
C0246	Adequate	\$0	\$0	\$0	1	A	E	5753
C0247	Inadequate	\$1,185,200	\$0	\$1,185,200	3	I	E	5752
C0248	Did Not Analyze	\$0	\$0	\$0	4	C.N.A.		5753
C0249	Adequate	\$0	\$0	\$0	3	A	E	5753
C0250	Inadequate	\$605,000	\$0	\$605,000	1	I	E	5753
C0251	Adequate	\$0	\$0	\$0	1	A	E	5753
C0252	Adequate	\$0	\$0	\$0	3	A	E	5753
C0253	Adequate	\$0	\$0	\$0	1	A	E	5753
C0254	Adequate	\$0	\$0	\$0	1	A	E	5753
C0255	Cannot	\$0	\$0	\$0	1	C.N.A.	E	5753

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
	Analyze							
C0256	Did Not Analyze	\$0	\$0	\$0	4	C.N.A.	E	5753
C0257	Adequate	\$0	\$0	\$0	1	A	E	5753
C0258	Did Not Analyze	\$0	\$0	\$0	1	C.N.A.	E	5753
C0259	Inadequate	\$418,600	\$0	\$418,600	1	I	E	5753
C0260	Did Not Analyze	\$0	\$0	\$0	4	C.N.A.	E	5753
C0261	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	E	5753
C0262	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	E	5753
C0263	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	E	5753
C0264	Adequate	\$0	\$102,400	\$102,400	1	A	E	5752
C0265	Adequate	\$0	\$0	\$0	3	A	E	5753
C0266	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	E	5753
C0267	Did Not Analyze	\$0	\$0	\$0	4	C.N.A.	E	5753
C0268	Inadequate	\$393,300	\$178,800	\$572,100			E	5753
C0269	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	E	5753
C0270	Inadequate	\$128,100	\$0	\$128,100	3	I	E	5753
C0271	Adequate	\$0	\$0	\$0	1	A	E	5752
C0272	Adequate	\$0	\$0	\$0	4	A	E	5752
C0273	Adequate	\$0	\$0	\$0	4	A	E	5752
C0274	Adequate	\$0	\$0	\$0	4	A	E	5752
C0275	Inadequate	\$172,400	\$0	\$172,400	3	I	E	5753
C0276	Inadequate	\$73,700	\$0	\$73,700	3	I	E	5753
C0277	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	E	5753
C0278	Inadequate	\$264,500	\$0	\$264,500	1	I	E	5753
C0279	Inadequate	\$18,200	\$0	\$18,200	3	I	E	5752
C0280	Inadequate	\$997,300	\$0	\$997,300	3	I	E	5752
C0281	Inadequate	\$85,200	\$0	\$85,200	1	I	E	5752
C0282	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	E	5752
C0283	Inadequate	\$52,100	\$0	\$52,100	1	I	E	5752
C0284	Inadequate	\$51,900	\$0	\$51,900	3	I	E	5752
C0285	Adequate	\$0	\$0	\$0	3	A	E	5752
C0286	Adequate	\$0	\$0	\$0	3	A	E	5752

**TABLE 2C
SIMS BAYOU SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
C0287	Adequate	\$0	\$0	\$0	3	A	E	5752
C0288	Adequate	\$0	\$0	\$0	2	A	E	5752
C0289	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	E	5752
C0290	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	E	5752
C0291	Adequate	\$0	\$0	\$0	4	A	E	5752
C0292	Adequate	\$0	\$0	\$0	4	A	E	5752
C0293	Adequate	\$0	\$0	\$0	4	A	E	5752
C0294	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	E	5752
C0295	Adequate	\$0	\$0	\$0	3	A	E	5752
C0296	Adequate	\$0	\$0	\$0	3	A	E	5752
C0297	Adequate	\$0	\$0	\$0	3	A	E	5752
C0298	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	E	5752
C0299	Inadequate	\$96,100	\$0	\$96,100	3	I	E	5752
C0300	Inadequate	\$359,400	\$0	\$359,400	4	3	E	5752
C0301	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	E	5752
C0302	Did Not Analyze	\$0	\$0	\$0	4	C.N.A.	E	5752
C0304	Adequate	\$0	\$0	\$0	3	A	E	5652
C0305	Adequate	\$0	\$0	\$0	4	A	E	5652
C0306	Adequate	\$0	\$120,600	\$120,600	4	A	E	5652
C0307	Adequate	\$0	\$0	\$0	4	A	E	5652
C0308	Adequate	\$0	\$0	\$0	3	A	E	5752
C0309	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	E	5752
C0310	Adequate	\$0	\$0	\$0	4	A	E	5752
C0311	Adequate	\$0	\$0	\$0	1	A	E	5752
C0312	Adequate	\$0	\$0	\$0	3	A	E	5752
C0313	Adequate	\$0	\$0	\$0	3	A	E	5752
C0315	Inadequate	\$1,029,100	\$519,800	\$1,548,900	1	I	E	5852
C0316	Adequate	\$0	\$0	\$0	4	A	E	5752
C0317	Adequate	\$0	\$0	\$0	3	A	E	5752
C0318	Adequate	\$0	\$0	\$0	3	A	E	5752
C0319	Adequate	\$0	\$0	\$0	3	A	E	5752
C0320	Adequate	\$0	\$0	\$0	4	A	E	5752
C0321	Adequate	\$0	\$382,800	\$382,800	4	A	E	5752
C0322	Adequate	\$0	\$0	\$0	4	A	E	5752
C0323	Adequate	\$0	\$0	\$0	4	A	E	5752
C0324	Adequate	\$0	\$0	\$0	4	A	E	5752

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
C0325	Adequate	\$0	\$0	\$0	4	A	E	5752
C0326	Adequate	\$0	\$0	\$0	4	A	E	5752
C0327	Adequate	\$0	\$0	\$0	4	A	E	5752
C0328	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	I	5654
C0329	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	I	5654
C0330	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	E	5654
C0331	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	I	5654
C0332	Inadequate	\$302,000	\$0	\$302,000	4	3	I	5654
C0333	Adequate	\$0	\$0	\$0	4	A	E	5653
C0334	Adequate	\$0	\$0	\$0	3	A	I	5653
C0335	Adequate	\$0	\$0	\$0	4	A	I	5653
C0336	Inadequate	\$346,800	\$0	\$346,800	3	I	I	5653
C0337	Adequate	\$0	\$0	\$0	3	A	I	5653
C0338	Adequate	\$0	\$0	\$0	4	A	I	5653
C0339	Adequate	\$0	\$0	\$0	3	A	I	5653
C0340	Adequate	\$0	\$0	\$0	3	A	I	5653
C0341	Adequate	\$0	\$0	\$0	4	A	I	5653
C0342	Adequate	\$0	\$0	\$0	4	A	E	5653
C0343	Inadequate	\$242,100	\$0	\$242,100	3	I	E	5653
C0344	Adequate	\$0	\$0	\$0	3	A	E	5653
C0345	Adequate	\$0	\$0	\$0	4	A	E	5653
C0346	Adequate	\$0	\$0	\$0	4	A	E	5653
C0347	Adequate	\$0	\$0	\$0	3	A	E	5653
C0348	Adequate	\$0	\$0	\$0	4	A	E	5653
C0349	Adequate	\$0	\$0	\$0	4	A	E	5653
C0350	Adequate	\$0	\$0	\$0	3	A	I	5653
C0352	Did Not Analyze	\$0	\$0	\$0	4	C.N.A.	E	5652
C0353	Did Not Analyze	\$0	\$0	\$0	4	C.N.A.	E	5652
C0355	Inadequate	\$1,020,100	\$155,300	\$1,175,400	1	I	E	5653
C0356	Adequate	\$0	\$0	\$0	4	A	E	5654
C0357	Adequate	\$0	\$0	\$0	1	A	I	5654
C0358	Inadequate	\$3,390,900	\$789,800	\$4,180,700	1	I	E	5553
C0359	Adequate	\$0	\$0	\$0	4	A	E	5553
C0360	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	E	5553
C0361	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	E	5553

TABLE 2C
SIMS BAYOU SUMMARY OF PROPOSED IMPROVEMENTS

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
C0362	Adequate	\$0	\$0	\$0	3	A	E	5553
C0363	Inadequate	\$1,232,400	\$0	\$1,232,400	1	I	E	5553
C0364	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	E	5553
C0365	Adequate	\$0	\$0	\$0	4	A	E	5553
C0366	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	E	5553
C0367	Adequate	\$0	\$0	\$0	4	A	E	5553
C0368	Adequate	\$0	\$0	\$0	1	A	E	5553
C0369	Adequate	\$0	\$0	\$0	3	A	E	5553
C0370	Inadequate	\$713,800	\$0	\$713,800	1	I	E	5553
C0371	Adequate	\$0	\$0	\$0	3	A	E	5553
C0372	Adequate	\$0	\$0	\$0	3	A	E	5553
C0373	Adequate	\$0	\$0	\$0	3	A	E	5553
C0374	Adequate	\$0	\$0	\$0	3	A	E	5553
C0375	Inadequate	\$62,300	\$0	\$62,300	1	I	E	5553
C0376	Adequate	\$0	\$0	\$0	1	A	E	5553
C0377	Adequate	\$0	\$0	\$0	3	A	E	5553
C0378	Inadequate	\$654,200	\$0	\$654,200	1	I	E	5553
C0379	Inadequate	\$869,400	\$0	\$869,400	1	I	E	5553
C0380	Inadequate	\$1,154,000	\$61,700	\$1,215,700	1	I	E	5454
C0381	Adequate	\$0	\$0	\$0	4	A	E	5553
C0382	Adequate	\$0	\$114,700	\$114,700	3	A	D	5453
C0383	Inadequate	\$22,750,800	\$2,716,200	\$25,467,000	1	I	D	5453
C0384	Inadequate	\$14,220,800	\$0	\$14,220,800	1	I	D	5353
C0385	Inadequate	\$3,069,000	\$0	\$3,069,000	1	I	D	5453
C0386	Inadequate	\$201,700	\$0	\$201,700	1	I	E	5454
C0387	Inadequate	\$479,700	\$0	\$479,700	1	I	D	5454
C0388	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	E	5454
C0389	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	E	5454
C0390	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	D	5454
C0391	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	E	5454
C0392	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	E	5454
C0393	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	E	5454
C0394	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	D	5454
C0395	Cannot	\$0	\$0	\$0	3	C.N.A.	E	5454

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
	Analyze							
C0396	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	E	5454
C0397	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	E	5454
C0398	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	D	5454
C0399	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	E	5454
C0400	Adequate	\$0	\$0	\$0	4	A	D	5353
C0401	Adequate	\$0	\$0	\$0	4	A	D	5353
C0402	Inadequate	\$219,400	\$0	\$219,400	4	I	D	5353
C0403	Inadequate	\$278,700	\$0	\$278,700	4	I	D	5353
C0404	Inadequate	\$53,200	\$0	\$53,200	4	I	D	5453
C0405	Inadequate	\$281,800	\$0	\$281,800	4	I	D	5453
C0406	Adequate	\$0	\$0	\$0	4	A	D	5453
C0407	Inadequate	\$305,700	\$0	\$305,700	4	I	D	5453
C0408	Adequate	\$0	\$0	\$0	4	A	D	5452
C0409	Adequate	\$0	\$713,800	\$713,800	1	A	D	5452
C0410	Adequate	\$0	\$0	\$0	1	A	D	5452
C0411	Inadequate	\$416,400	\$12,300	\$428,700	3	I	D	5452
C0412	Adequate	\$0	\$0	\$0	3	A	D	5452
C0413	Inadequate	\$1,195,600	\$0	\$1,195,600	1	I	D	5452
C0414	Adequate	\$0	\$0	\$0	3	A	D	5452
C0415	Inadequate	\$244,800	\$0	\$244,800	1	I	D	5452
C0416	Adequate	\$0	\$0	\$0	3	A	D	5452
C0417	Adequate	\$0	\$0	\$0	4	A	D	5452
C0418	Inadequate	\$693,600	\$0	\$693,600	3	I	D	5452
C0419	Inadequate	\$973,700	\$0	\$973,700	3	I	D	5452
C0420	Adequate	\$0	\$0	\$0	3	A	D	5452
C0421	Adequate	\$0	\$0	\$0	4	A	D	5452
C0422	Inadequate	\$62,700	\$0	\$62,700	3	I	D	5452
C0423	Inadequate	\$595,900	\$0	\$595,900	3	I	D	5452
C0424	Inadequate	\$117,100	\$0	\$117,100	1	I	D	5452
C0425	Adequate	\$0	\$0	\$0	4	A	D	5452
C0426	Inadequate	\$894,300	\$92,800	\$987,100	3	I	D	5452
C0427	Inadequate	\$18,600	\$111,400	\$130,000	4	I	D	5452
C0428	Inadequate	\$620,600	\$0	\$620,600	3	I	D	5451
C0429	Inadequate	\$138,100	\$240,500	\$378,600	3	I	D	5451
C0430	Inadequate	\$199,500	\$162,500	\$362,000	1	I	D	5451
C0431	Adequate	\$0	\$0	\$0	4	A	D	5451
C0432	Adequate	\$0	\$0	\$0	4	A	D	5451
C0433	Adequate	\$0	\$0	\$0	1	A	D	5451

TABLE 2C
SIMS BAYOU SUMMARY OF PROPOSED IMPROVEMENTS

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
C0434	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	D	5451
C0435	Inadequate	\$114,200	\$0	\$114,200	4	3	D	5453
C0436	Inadequate	\$183,400	\$0	\$183,400	3	1	D	5453
C0437	Adequate	\$0	\$0	\$0	4	A	E	5453
C0438	Inadequate	\$36,100	\$0	\$36,100	3	1	E	5453
C0439	Adequate	\$0	\$0	\$0	4	A	E	5453
C0440	Adequate	\$0	\$0	\$0	4	A	E	5453
C0441	Adequate	\$0	\$0	\$0	3	A	E	5453
C0442	Inadequate	\$72,900	\$0	\$72,900	4	3	E	5453
C0443	Adequate	\$0	\$0	\$0	3	A	E	5453
C0444	Adequate	\$0	\$0	\$0	4	A	E	5453
C0445	Adequate	\$0	\$37,300	\$37,300	4	A	E	5453
C0446	Adequate	\$0	\$0	\$0	4	A	D	5453
C0447	Adequate	\$0	\$0	\$0	4	A	D	5453
C0448	Adequate	\$0	\$0	\$0	3	A	D	5453
C0449	Adequate	\$0	\$0	\$0	4	A	D	5453
C0450	Inadequate	\$38,100	\$0	\$38,100	3	1	D	5453
C0451	Adequate	\$0	\$0	\$0	3	A	D	5453
C0452	Inadequate	\$36,900	\$0	\$36,900	4	3	D	5453
C0453	Inadequate	\$35,400	\$0	\$35,400	4	3	D	5453
C0454	Inadequate	\$33,200	\$0	\$33,200	3	1	D	5453
C0455	Inadequate	\$46,000	\$0	\$46,000	3	1	E	5452
C0456	Adequate	\$0	\$0	\$0	4	A	E	5452
C0457	Inadequate	\$44,200	\$0	\$44,200	1	1	E	5452
C0458	Adequate	\$0	\$0	\$0	4	A	D	5452
C0459	Adequate	\$0	\$0	\$0	4	A	D	5452
C0460	Inadequate	\$81,100	\$0	\$81,100	4	3	E	5452
C0461	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	E	5452
C0462	Adequate	\$0	\$0	\$0	4	A	E	5452
C0463	Inadequate	\$226,800	\$0	\$226,800	4	3	E	5452
C0464	Adequate	\$0	\$0	\$0	4	A	E	5452
C0465	Inadequate	\$33,100	\$0	\$33,100	4	3	E	5452
C0466	Adequate	\$0	\$0	\$0	1	A	D	5452
C0467	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	D	5452
C0468	Inadequate	\$300,900	\$0	\$300,900	1	1	D	5452
C0469	Inadequate	\$168,600	\$0	\$168,600	1	1	D	5452
C0470	Inadequate	\$251,000	\$0	\$251,000	3	1	D	5452
C0471	Adequate	\$0	\$0	\$0	3	A	D	5452
C0472	Adequate	\$0	\$0	\$0	4	A	D	5452
C0473	Adequate	\$0	\$0	\$0	4	A	D	5452

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
C0474	Inadequate	\$99,900	\$0	\$99,900	4	3	D	5452
C0475	Inadequate	\$554,600	\$1,521,500	\$2,076,100	1	1	D	5451
C0476	Inadequate	\$1,205,500	\$808,600	\$2,014,100	2	1	D	5452
C0477	Adequate	\$0	\$0	\$0	4	A	E	5552
C0478	Inadequate	\$594,300	\$0	\$594,300	4	3	E	5552
C0479	Adequate	\$0	\$0	\$0	4	A	E	5452
C0480	Inadequate	\$611,000	\$148,500	\$759,500	4	3	E	5553
C0481	Adequate	\$0	\$0	\$0	4	A	D	5352
C0482	Adequate	\$0	\$0	\$0	1	A	D	5352
C0483	Adequate	\$0	\$0	\$0	4	A	D	5352
C0484	Adequate	\$0	\$0	\$0	4	A	D	5352
C0485	Inadequate	\$70,300	\$0	\$70,300	3	1	D	5352
C0486	Adequate	\$0	\$0	\$0	4	A	D	5352
C0487	Inadequate	\$332,300	\$18,700	\$351,000	4	3	D	5352
C0488	Inadequate	\$73,800	\$0	\$73,800	4	3	D	5352
C0489	Adequate	\$0	\$359,300	\$359,300	4	A	D	5351
C0490	Adequate	\$0	\$0	\$0	3	A	D	5351
C0491	Adequate	\$0	\$0	\$0	3	A	D	5351
C0492	Adequate	\$0	\$0	\$0	4	A	D	5351
C0493	Adequate	\$0	\$0	\$0	4	A	D	5351
C0494	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	D	5351
C0495	Adequate	\$0	\$0	\$0	4	A	D	5351
C0496	Adequate	\$0	\$0	\$0	3	A	D	5351
C0497	Adequate	\$0	\$0	\$0	3	A	D	5351
C0498	Inadequate	\$334,600	\$0	\$334,600	3	1	D	5351
C0499	Inadequate	\$37,200	\$3,100	\$40,300	3	1	D	5351
C0500	Inadequate	\$260,500	\$12,700	\$273,200	1	1	D	5352
C0501	Adequate	\$0	\$0	\$0	3	A	D	5352
C0502	Adequate	\$0	\$0	\$0	4	A	D	5352
C0503	Inadequate	\$358,500	\$0	\$358,500	1	1	D	5252
C0504	Inadequate	\$142,700	\$0	\$142,700	3	1	D	5252
C0505	Adequate	\$0	\$0	\$0	4	A	D	5252
C0506	Inadequate	\$569,000	\$0	\$569,000	1	1	D	5252
C0507	Adequate	\$0	\$0	\$0	3	A	D	5252
C0508	Adequate	\$0	\$0	\$0	3	A	D	5252
C0509	Inadequate	\$1,127,900	\$256,700	\$1,384,600	1	1	D	5252
C0510	Adequate	\$0	\$0	\$0	1	A	D	5252
C0511	Adequate	\$0	\$0	\$0	1	A	D	5252
C0512	Adequate	\$0	\$0	\$0	4	A	D	5251
C0513	Adequate	\$0	\$0	\$0	4	A	D	5251
C0514	Adequate	\$0	\$0	\$0	4	A	D	5251
C0515	Adequate	\$0	\$0	\$0	4	A	D	5251

**TABLE 2C
SIMS BAYOU SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
C0516	Adequate	\$0	\$0	\$0	1	A	D	5251
C0517	Adequate	\$0	\$0	\$0	1	A	D	5251
C0518	Adequate	\$0	\$0	\$0	4	A	D	5251
C0519	Inadequate	\$59,800	\$0	\$59,800	4	3	D	5251
C0520	Inadequate	\$228,700	\$0	\$228,700	4	3	D	5251
C0521	Adequate	\$0	\$0	\$0	4	A	D	5251
C0522	Adequate	\$0	\$0	\$0	1	A	D	5251
C0523	Adequate	\$0	\$0	\$0	4	A	D	5251
C0524	Inadequate	\$117,100	\$4,100	\$121,200	3	I	D	5251
C0525	Inadequate	\$59,900	\$134,500	\$194,400	1	I	D	5251
C0526	Adequate	\$0	\$0	\$0	1	A	D	5251
C0527	Adequate	\$0	\$0	\$0	4	A	D	5251
C0528	Inadequate	\$422,500	\$103,400	\$525,900	3	I	D	5251
C0529	Adequate	\$0	\$1,263,700	\$1,263,700	4	A	D	5252
C0530	Adequate	\$0	\$0	\$0	4	A	D	5252
C0531	Inadequate	\$1,231,000	\$471,800	\$1,702,800	4	3	D	5252
C0532	Adequate	\$0	\$0	\$0	3	A	D	5252
C0533	Inadequate	\$35,200	\$0	\$35,200	3	I	D	5252
C0534	Adequate	\$0	\$0	\$0	3	A	D	5252
C0535	Adequate	\$0	\$0	\$0	4	A	D	5252
C0536	Adequate	\$0	\$0	\$0	3	A	D	5252
C0537	Adequate	\$0	\$0	\$0	3	A	D	5252
C0538	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	D	5252
C0539	Inadequate	\$358,300	\$0	\$358,300	3	I	D	5252
C0540	Inadequate	\$191,600	\$0	\$191,600	3	I	D	5252
C0541	Adequate	\$0	\$0	\$0	3	A	D	5252
C0542	Inadequate	\$120,000	\$0	\$120,000	1	I	D	5252
C0543	Inadequate	\$52,700	\$0	\$52,700	4	3	D	5252
C0544	Adequate	\$0	\$0	\$0	1	A	D	5252
C0545	Adequate	\$0	\$0	\$0	3	A	D	5252
C0546	Inadequate	\$892,600	\$111,800	\$1,004,400	1	I	D	5252
C0547	Adequate	\$0	\$0	\$0	4	A	D	5251
C0548	Adequate	\$0	\$0	\$0	1	A	D	5251
C0549	Inadequate	\$56,700	\$221,400	\$278,100	4	3	D	5251
C0550	Adequate	\$0	\$0	\$0	1	A	D	5251
C0551	Inadequate	\$410,500	\$0	\$410,500	1	I	D	5251
C0552	Adequate	\$0	\$0	\$0	1	A	D	5251
C0553	Inadequate	\$67,100	\$0	\$67,100	2	I	D	5251
C0554	Adequate	\$0	\$0	\$0	1	I	D	5251
C0555	Inadequate	\$56,700	\$0	\$56,700	3	I	D	5251
C0556	Inadequate	\$143,600	\$0	\$143,600	4	3	D	5251
C0557	Inadequate	\$154,100	\$0	\$154,100	1	I	D	5251

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
C0558	Adequate	\$0	\$0	\$0	4	A	D	5251
C0559	Adequate	\$0	\$0	\$0	1	A	D	5251
C0560	Inadequate	\$726,500	\$0	\$726,500	3	I	D	5251
C0561	Inadequate	\$1,252,200	\$653,500	\$1,905,700	1	I	D	5251
C0562	Adequate	\$0	\$0	\$0	3	A	D	5251
C0563	Inadequate	\$86,400	\$0	\$86,400	1	I	D	5251
C0564	Inadequate	\$123,500	\$0	\$123,500	1	I	D	5251
C0565	Adequate	\$0	\$0	\$0	2	A	D	5251
C0566	Adequate	\$0	\$0	\$0	4	A	D	5251
C0567	Adequate	\$0	\$0	\$0	4	A	D	5251
C0568	Adequate	\$0	\$0	\$0	4	A	D	5251
C0569	Adequate	\$0	\$0	\$0	3	A	D	5251
C0570	Adequate	\$0	\$0	\$0	4	A	D	5251
C0571	Adequate	\$0	\$0	\$0	4	A	D	5251
C0572	Adequate	\$0	\$0	\$0	4	A	D	5251
C0573	Inadequate	\$273,200	\$0	\$273,200	3	I	D	5251
C0574	Inadequate	\$308,400	\$7,200	\$315,600	4	3	D	5251
C0575	Adequate	\$0	\$0	\$0	3	A	D	5250
C0576	Adequate	\$0	\$0	\$0	3	A	D	5250
C0577	Adequate	\$0	\$0	\$0	4	A	D	5250
C0578	Adequate	\$0	\$0	\$0	4	A	D	5250
C0579	Inadequate	\$1,266,300	\$0	\$1,266,300	3	I	D	5250
C0580	Adequate	\$0	\$0	\$0	3	A	D	5250
C0581	Adequate	\$0	\$0	\$0	3	A	D	5250
C0582	Adequate	\$0	\$0	\$0	4	A	D	5250
C0583	Inadequate	\$850,100	\$87,300	\$937,400	4	3	D	5150
C0584	Adequate	\$0	\$0	\$0	4	A	D	5250
C0585	Adequate	\$0	\$0	\$0	4	A	D	5250
C0586	Adequate	\$0	\$0	\$0	4	A	D	5150
C0587	Inadequate	\$945,000	\$237,300	\$1,182,300	4	3	D	5250
C0588	Adequate	\$0	\$0	\$0	4	3	D	5250
C0589	Adequate	\$0	\$0	\$0	4	A	D	5250
C0590	Adequate	\$0	\$0	\$0	4	A	D	5250
C0592	Adequate	\$0	\$0	\$0	4	A	D	5250
C0593	Inadequate	\$1,906,100	\$175,500	\$2,081,600	4	3	D	5150
C0594	Adequate	\$0	\$0	\$0	4	A	D	5150
C0595	Adequate	\$0	\$0	\$0	4	A	D	5150
C0596	Adequate	\$0	\$0	\$0	4	A	D	5150
C0597	Adequate	\$0	\$0	\$0	4	A	D	5150
C0598	Adequate	\$0	\$0	\$0	4	A	D	5150
C0599	Inadequate	\$177,200	\$0	\$177,200	4	3	D	5150
C0600	Inadequate	\$399,500	\$45,200	\$444,700	4	3	D	5150
C0601	Adequate	\$0	\$0	\$0	4	A	D	5150

**TABLE 2C
SIMS BAYOU SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
C0602	Adequate	\$0	\$0	\$0	4	A	D	5150
C0603	Inadequate	\$815,700	\$346,500	\$1,162,200	4	3	D	5150
C0604	Adequate	\$0	\$0	\$0	4	A	D	5150
C0605	Adequate	\$0	\$0	\$0	4	A	D	5150
C0606	Adequate	\$0	\$0	\$0	2	A	D	5150
C0607	Adequate	\$0	\$0	\$0	3	A	D	5151
C0608	Adequate	\$0	\$0	\$0	4	A	D	5150
C0609	Adequate	\$0	\$0	\$0	4	A	D	5150
C0610	Adequate	\$0	\$0	\$0	2	A	D	5150
C0611	Adequate	\$0	\$0	\$0	4	A	D	5150
C0612	Adequate	\$0	\$0	\$0	2	A	D	5150
C0613	Adequate	\$0	\$0	\$0	4	A	D	5150
C0614	Adequate	\$0	\$0	\$0	4	A	D	5150
C0615	Adequate	\$0	\$0	\$0	4	A	D	5150
C0616	Adequate	\$0	\$0	\$0	4	A	D	5150
C0617	Inadequate	\$1,078,600	\$0	\$1,078,600	4	3	D	5150
C0618	Adequate	\$0	\$0	\$0	4	A	D	5150
C0619	Inadequate	\$245,800	\$12,400	\$258,200	4	3	D	5150
C0620	Adequate	\$0	\$0	\$0	4	A	D	5150
C0621	Inadequate	\$843,900	\$167,100	\$1,011,000	4	3	D	5150
C0622	Adequate	\$0	\$0	\$0	4	A	D	5150
C0623	Inadequate	\$1,000,100	\$774,500	\$1,774,600	4	3	D	5150
C0624	Adequate	\$0	\$0	\$0	4	A	D	5150
C0625	Inadequate	\$1,083,400	\$345,000	\$1,428,400	4	3	D	5150
C0626	Adequate	\$0	\$0	\$0	4	A	D	5150
C0627	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	D	5150
C0628	Adequate	\$0	\$0	\$0	4	A	D	5150
C0629	Adequate	\$0	\$0	\$0	4	A	D	5150
C0630	Adequate	\$0	\$0	\$0	4	A	D	5150
C0631	Inadequate	\$1,715,900	\$93,700	\$1,809,600	4	3	D	5150
C0632	Adequate	\$0	\$0	\$0	4	A	D	5150
C0633	Inadequate	\$109,600	\$0	\$109,600	4	3	D	5150
C0634	Adequate	\$0	\$0	\$0	4	A	D	5050
C0635	Adequate	\$0	\$0	\$0	4	A	D	5050
C0636	Adequate	\$0	\$0	\$0	4	A	D	5050
C0637	Adequate	\$0	\$0	\$0	4	A	D	5050
C0638	Adequate	\$0	\$0	\$0	4	A	D	5050
C0639	Inadequate	\$234,800	\$0	\$234,800	4	3	D	5050
C0640	Adequate	\$0	\$0	\$0	4	A	D	5050
C0641	Adequate	\$0	\$0	\$0	4	A	D	5050
C0643	Adequate	\$0	\$0	\$0	4	A	D	5151
C0644	Adequate	\$0	\$0	\$0	3	A	D	5252

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
C0645	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	D	5152
C0646	Inadequate	\$954,600	\$0	\$954,600	1	I	D	5252
C0647	Adequate	\$0	\$0	\$0	4	A	D	5152
C0648	Inadequate	\$378,200	\$39,000	\$417,200	3	I	D	5151
C0649	Inadequate	\$576,000	\$217,100	\$793,100	1	I	D	5151
C0650	Inadequate	\$416,600	\$0	\$416,600	3	I	D	5151
C0651	Inadequate	\$365,300	\$0	\$365,300	3	I	D	5151
C0652	Adequate	\$0	\$0	\$0	3	A	D	5151
C0653	Adequate	\$0	\$0	\$0	4	A	D	5151
C0654	Adequate	\$0	\$0	\$0	4	A	D	5251
C0655	Inadequate	\$1,044,100	\$141,300	\$1,185,400	1	I	D	5151
C0656	Inadequate	\$35,900	\$0	\$35,900	3	I	D	5151
C0657	Inadequate	\$185,900	\$0	\$185,900	4	3	D	5151
C0658	Adequate	\$0	\$0	\$0	3	A	D	5151
C0659	Inadequate	\$99,600	\$0	\$99,600	1	I	D	5151
C0660	Inadequate	\$102,300	\$0	\$102,300	4	3	D	5151
C0661	Inadequate	\$115,100	\$0	\$115,100	3	I	D	5151
C0662	Inadequate	\$111,300	\$0	\$111,300	3	I	D	5151
C0663	Inadequate	\$67,100	\$0	\$67,100	4	3	D	5151
C0664	Adequate	\$0	\$0	\$0	4	A	D	5152
C0665	Inadequate	\$531,700	\$108,900	\$640,600	4	3	C	5152
C0666	Adequate	\$0	\$0	\$0	4	A	C	5152
C0667	Adequate	\$0	\$0	\$0	4	A	C	5151
C0668	Adequate	\$0	\$0	\$0	4	A	C	5151
C0670	Inadequate	\$10,700	\$0	\$10,700	4	3	C	5151
C0671	Adequate	\$0	\$0	\$0	4	A	D	5151
C0672	Adequate	\$0	\$0	\$0	4	A	D	5151
C0673	Adequate	\$0	\$0	\$0	4	A	D	5051
C0674	Adequate	\$0	\$0	\$0	4	A	D	5051
C0675	Inadequate	\$39,200	\$0	\$39,200	4	A	D	5051
C0676	Adequate	\$0	\$0	\$0	4	3	D	5051
C0677	Inadequate	\$61,100	\$0	\$61,100	4	3	D	5051
C0678	Adequate	\$0	\$81,000	\$81,000	4	A	D	5051
C0679	Adequate	\$0	\$0	\$0	4	A	D	5051
C0680	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	D	5051
C0681	Adequate	\$0	\$0	\$0	4	A	D	5051
C0682	Adequate	\$0	\$0	\$0	4	A	D	5051
C0683	Adequate	\$0	\$0	\$0	4	A	D	5050
C0684	Adequate	\$0	\$0	\$0	4	A	D	5050
C0685	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	D	5050

**TABLE 2C
SIMS BAYOU SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
C0686	Adequate	\$0	\$0	\$0	4	A	D	5050
C0687	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	D	5050
C0688	Adequate	\$0	\$100,400	\$100,400	4	A	D	5050
C0689	Inadequate	\$132,100	\$0	\$132,100	4	3	D	5050
C0690	Adequate	\$0	\$0	\$0	4	A	D	5050
C0691	Adequate	\$0	\$0	\$0	4	A	D	5050
C0692	Adequate	\$0	\$0	\$0	4	A	D	5050
C0693	Adequate	\$0	\$0	\$0	4	A	D	5050
C0694	Adequate	\$0	\$0	\$0	4	A	D	5050
C0695	Adequate	\$0	\$0	\$0	4	A	D	5050
C0696	Adequate	\$0	\$0	\$0	4	A	D	5050
C0697	Adequate	\$0	\$0	\$0	4	A	D	5050
C0698	Inadequate	\$148,000	\$15,400	\$163,400	4	3	E	5453
C0699	Inadequate	\$223,700	\$0	\$223,700	4	3	E	5453
C0700	Adequate	\$0	\$0	\$0	3	A	D	5452
C0702	Inadequate	\$1,133,800	\$120,700	\$1,254,500	3	I	E	5453
C0703	Adequate	\$0	\$0	\$0	4	A	D	5152
C0704	Adequate	\$0	\$0	\$0	4	A	E	5454
C0705	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	E	5454
C0706	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	E	5454
C0707	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	E	5454
C0708	Cannot Analyze	\$0	\$0	\$0	1	C.N.A.	E	5454
C0709	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	E	5454
C0756	Adequate	\$0	\$0	\$0	4	A	D	5251
C0757	Adequate	\$0	\$0	\$0	1	A	E	5452
C1001	Non Proposed	\$0	\$0	\$0	N/A	0	I	5755
C1002	Non Proposed	\$0	\$0	\$0	N/A	0	I	5655
C1003	Non Proposed	\$0	\$0	\$0	N/A	0	I	5655
C1004	Non Proposed	\$0	\$0	\$0	N/A	0	I	5655
C1005	Non Proposed	\$0	\$0	\$0	N/A	0	I	5655
C1006	Proposed System	\$613,600	\$138,600	\$752,200	4	4	I	5655
C1007	Proposed	\$4,086,700	\$0	\$4,086,700	4	4	E	5655

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
	System							
C1008	Proposed System	\$350,900	\$0	\$350,900	2	2	E	5655
C1009	Proposed System	\$175,400	\$0	\$175,400	4	4	E	5755
C1010	Proposed System	\$267,400	\$0	\$267,400	4	4	E	5755
C1011	Proposed System	\$280,600	\$0	\$280,600	4	4	E	5755
C1014	Proposed System	\$3,044,000	\$0	\$3,044,000	3	2	E	5754
C1015	Proposed System	\$705,400	\$0	\$705,400	3	2		5754
C1017	Proposed System	\$2,111,200	\$0	\$2,111,200	4	4	E	5655
C1018	Proposed System	\$674,500	\$0	\$674,500	N/A	5	E	5655
C1019	Proposed System	\$1,236,300	\$0	\$1,236,300	4	4	I	5655
C1021	Proposed System	\$335,300	\$22,400	\$357,700	N/A	5	I	5655
C1022	Proposed System	\$93,500	\$0	\$93,500	4	4	I	5654
C1023	Proposed System	\$209,800	\$0	\$209,800	1	2	I	5654
C1024	Proposed System	\$225,100	\$19,800	\$244,900	N/A	5	I	5654
C1025	Proposed System	\$313,800	\$27,700	\$341,500	4	4	I	5654
C1026	Proposed System	\$293,700	\$0	\$293,700	4	4	I	5654
C1027	Proposed System	\$576,000	\$0	\$576,000	3	2	I	5654
C1028	Proposed System	\$183,700	\$0	\$183,700	4	4	E	5654
C1029	Proposed System	\$134,700	\$0	\$134,700	N/A	5		5654
C1030	Proposed System	\$503,900	\$88,600	\$592,500	N/A	5	E	5754
C1031	Proposed System	\$787,000	\$0	\$787,000	4	4	E	5754
C1032	Proposed System	\$68,900	\$0	\$68,900	4	4	E	5754
C1033	Proposed	\$77,900	\$0	\$77,900	4	4	E	5754

**TABLE 2C
SIMS BAYOU SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
	System							
C1034	Proposed System	\$223,100	\$0	\$223,100	N/A	5	E	5754
C1035	Proposed System	\$336,800	\$29,800	\$366,600	4	4	E	5754
C1036	Proposed System	\$297,600	\$64,300	\$361,900	4	4	E	5654
C1037	Proposed System	\$149,100	\$0	\$149,100	4	4	E	5654
C1038	Proposed System	\$123,200	\$10,800	\$134,000	4	4	I	5654
C1039	Proposed System	\$85,000	\$0	\$85,000	N/A	5	I	5654
C1040	Proposed System	\$581,600	\$0	\$581,600	3	2	I	5654
C1041	Proposed System	\$94,200	\$0	\$94,200	N/A	5	E	5654
C1042	Proposed System	\$705,700	\$0	\$705,700	4	4	E	5653
C1043	Proposed System	\$162,400	\$20,200	\$182,600	1	2	E	5753
C1046	Proposed System	\$289,400	\$0	\$289,400	4	4	E	5753
C1049	Proposed System	\$145,800	\$0	\$145,800	N/A	5	E	5752
C1050	Proposed System	\$99,900	\$0	\$99,900	N/A	5	E	5752
C1051	Proposed System	\$1,708,800	\$0	\$1,708,800	1	2	E	5752
C1052	Proposed System	\$2,433,000	\$0	\$2,433,000	4	4	E	5752
C1053	Non Proposed	\$0	\$0	\$0	N/A	0	E	5752
C1054	Proposed System	\$2,913,600	\$411,800	\$3,325,400	1	2	E	5752
C1055	Proposed System	\$924,600	\$0	\$924,600	1	2	E	5652
C1056	Proposed System	\$570,300	\$0	\$570,300	4	4	E	5653
C1057	Proposed System	\$313,400	\$0	\$313,400	N/A	5	E	5652
C1058	Proposed System	\$684,400	\$0	\$684,400	4	4	I	5653
C1059	Proposed	\$159,300	\$0	\$159,300	N/A	5	I	5653

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
	System							
C1061	Non Proposed	\$0	\$0	\$0	N/A	0	E	5653
C1062	Proposed System	\$192,000	\$0	\$192,000	4	4	E	5652
C1063	Proposed System	\$2,024,200	\$0	\$2,024,200	3	2	E	5652
C1064	Proposed System	\$284,800	\$0	\$284,800	N/A	5	E	5653
C1065	Proposed System	\$1,332,000	\$0	\$1,332,000	3	2	E	5652
C1066	Proposed System	\$149,500	\$0	\$149,500	N/A	5	I	5653
C1067	Proposed System	\$112,400	\$0	\$112,400	N/A	5	I	5653
C1068	Proposed System	\$188,600	\$0	\$188,600	4	4	E	5653
C1069	Non Proposed	\$0	\$0	\$0	N/A	0	I	5653
C1070	Proposed System	\$88,100	\$0	\$88,100	N/A	5	I	5653
C1071	Proposed System	\$110,800	\$0	\$110,800	N/A	5	I	5653
C1072	Proposed System	\$58,200	\$0	\$58,200	N/A	5	E	5653
C1073	Proposed System	\$43,900	\$0	\$43,900	N/A	5	E	5653
C1078	Proposed System	\$101,300	\$0	\$101,300	4	4	I	5654
C1080	Proposed System	\$111,600	\$0	\$111,600	4	4	I	5654
C1081	Proposed System	\$89,700	\$0	\$89,700	N/A	5	I	5654
C1082	Proposed System	\$180,200	\$0	\$180,200	1	2	I	5654
C1084	Proposed System	\$988,600	\$0	\$988,600	3	2	I	5654
C1085	Non Proposed	\$0	\$0	\$0	N/A	0	I	5654
C1086	Proposed System	\$100,300	\$0	\$100,300	1	2	E	5553
C1087	Proposed System	\$356,500	\$0	\$356,500	N/A	5	I	5553
C1088	Proposed	\$120,400	\$0	\$120,400	4	4	E	5553

**TABLE 2C
SIMS BAYOU SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
	System							
C1089	Proposed System	\$146,400	\$0	\$146,400	3	2	E	5553
C1090	Proposed System	\$782,900	\$0	\$782,900	3	2	E	5553
C1091	Proposed System	\$38,700	\$0	\$38,700	1	2	E	5553
C1096	Proposed System	\$3,745,200	\$0	\$3,745,200	4	4	E	5652
C1097	Proposed System	\$9,802,400	\$0	\$9,802,400	4	4	E	5552
C1098	Proposed System	\$86,700	\$0	\$86,700	4	4	I	5654
C1102	Proposed System	\$506,000	\$0	\$506,000	I	2	I	5555
C1103	Non Proposed	\$0	\$0	\$0	N/A	0	I	5554
C1104	Proposed System	\$449,400	\$10,600	\$460,000	N/A	5	I	5554
C1105	Proposed System	\$619,600	\$0	\$619,600	4	4	E	5554
C1106	Proposed System	\$441,900	\$0	\$441,900	N/A	5	I	5553
C1107	Proposed System	\$400,100	\$31,800	\$431,900	N/A	5	I	5553
C1108	Proposed System	\$113,800	\$0	\$113,800	N/A	5	E	5553
C1109	Proposed System	\$1,702,600	\$206,600	\$1,909,200	4	4	E	5553
C1110	Proposed System	\$94,700	\$0	\$94,700	N/A	5	E	5553
C1111	Proposed System	\$20,179,700	\$2,354,400	\$22,534,100	1	2	E	5552
C1113	Proposed System	\$4,905,900	\$802,500	\$5,708,400	3	2	E	5552
C1114	Proposed System	\$2,015,000	\$0	\$2,015,000	4	4	D	5551
C1115	Proposed System	\$507,500	\$0	\$507,500	N/A	5	E	5552
C1116	Proposed System	\$965,500	\$0	\$965,500	4	4	E	5552
C1117	Proposed System	\$493,600	\$0	\$493,600	N/A	5	E	5552
C1118	Proposed	\$430,400	\$85,300	\$515,700	N/A	5	E	5552

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
	System							
C1119	Non Proposed	\$0	\$0	\$0	N/A	0	E	5452
C1121	Proposed System	\$253,500	\$39,400	\$292,900	N/A	5	E	5552
C1122	Proposed System	\$1,199,400	\$0	\$1,199,400	N/A	5	E	5453
C1123	Proposed System	\$1,715,900	\$231,700	\$1,947,600	N/A	5	E	5553
C1137	Proposed System	\$900,000	\$0	\$900,000	3	2	D	5453
C1139	Proposed System	\$12,693,200	\$1,466,200	\$14,159,400	1	2	D	5453
C1140	Non Proposed	\$0	\$0	\$0	N/A	0	D	5452
C1141	Proposed System	\$1,036,100	\$56,700	\$1,092,800	4	4	E	5452
C1142	Proposed System	\$744,400	\$83,800	\$828,200	4	4	E	5452
C1143	Proposed System	\$106,000	\$0	\$106,000	N/A	5	E	5452
C1144	Proposed System	\$913,000	\$62,000	\$975,000	3	2	E	5452
C1145	Proposed System	\$282,700	\$0	\$282,700	N/A	5	D	5452
C1146	Proposed System	\$726,300	\$0	\$726,300	N/A	5	D	5452
C1147	Proposed System	\$18,277,000	\$0	\$18,277,000	1	2	D	5451
C1149	Proposed System	\$1,074,000	\$0	\$1,074,000	1	2	D	5451
C1150	Proposed System	\$513,500	\$0	\$513,500	N/A	5	D	5452
C1151	Proposed System	\$4,509,000	\$0	\$4,509,000	N/A	5	D	5452
C1152	Proposed System	\$306,400	\$0	\$306,400	N/A	5	D	5452
C1153	Proposed System	\$92,900	\$0	\$92,900	N/A	5	D	5452
C1154	Proposed System	\$385,100	\$0	\$385,100	N/A	5	D	5452
C1155	Proposed System	\$336,100	\$0	\$336,100	N/A	5	D	5452
C1156	Non	\$976,100	\$67,300	\$1,043,400	N/A	5	D	5453

TABLE 2C
SIMS BAYOU SUMMARY OF PROPOSED IMPROVEMENTS

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
	Proposed							
C1158	Proposed System	\$1,000,300	\$497,600	\$1,497,900	3	2	D	5353
C1159	Proposed System	\$3,706,200	\$0	\$3,706,200	3	2	D	5352
C1160	Proposed System	\$494,300	\$0	\$494,300	1	2	D	5352
C1161	Proposed System	\$245,400	\$0	\$245,400	N/A	5	D	5352
C1162	Proposed System	\$580,200	\$0	\$580,200	N/A	5	D	5452
C1165	Proposed System	\$4,251,000	\$516,900	\$4,767,900	N/A	5	D	5352
C1167	Proposed System	\$2,672,100	\$429,000	\$3,101,100	N/A	5	D	5351
C1168	Proposed System	\$2,957,700	\$376,600	\$3,334,300	N/A	5	D	5351
C1170	Proposed System	\$13,146,800	\$1,185,000	\$14,331,800	N/A	5	D	5352
C1172	Proposed System	\$1,152,000	\$0	\$1,152,000	N/A	5	D	5352
C1173	Proposed System	\$576,200	\$0	\$576,200	4	4	D	5352
C1174	Proposed System	\$2,327,700	\$0	\$2,327,700	2	2	D	5352
C1175	Non Proposed	\$0	\$0	\$0	N/A	0	D	5352
C1176	Non Proposed	\$0	\$0	\$0	N/A	0	D	5352
C1177	Proposed System	\$5,107,000	\$474,300	\$5,581,300	N/A	5	D	5252
C1178	Proposed System	\$1,542,500	\$0	\$1,542,500	N/A	5	D	5252
C1179	Proposed System	\$2,113,100	\$333,200	\$2,446,300	4	4	D	5252
C1180	Proposed System	\$1,294,900	\$185,500	\$1,480,400	N/A	5	D	5252
C1181	Proposed System	\$815,600	\$0	\$815,600	N/A	5	D	5252
C1182	Proposed System	\$15,986,000	\$1,523,900	\$17,509,900	3	2	D	5252
C1183	Proposed System	\$1,987,100	\$0	\$1,987,100	N/A	5	D	5252
C1184	Non	\$0	\$0	\$0	N/A	0	D	5251

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
	Proposed							
C1185	Proposed System	\$1,114,000	\$0	\$1,114,000	N/A	5	D	5251
C1187	Proposed System	\$128,400	\$0	\$128,400	N/A	5	D	5251
C1189	Proposed System	\$538,500	\$0	\$538,500	N/A	5	D	5251
C1190	Proposed System	\$329,200	\$0	\$329,200	N/A	5	D	5251
C1191	Proposed System	\$1,098,200	\$0	\$1,098,200	4	4	D	5351
C1193	Proposed System	\$509,000	\$0	\$509,000	4	4	D	5251
C1195	Proposed System	\$820,000	\$0	\$820,000	1	2	D	5250
C1196	Proposed System	\$232,000	\$0	\$232,000	4	4	D	5251
C1197	Non Proposed	\$2,310,000	\$0	\$2,310,000	4	4	D	5150
C1199	Proposed System	\$820,000	\$0	\$820,000	5	5	D	5150
C1201	Proposed System	\$2,572,900	\$155,300	\$2,728,200	N/A	5	D	5250
C1202	Non Proposed	\$0	\$0	\$0	4	4	D	5150
C1204	Non Proposed	\$0	\$0	\$0	4	4	D	5150
C1206	Proposed System	\$1,211,700	\$213,500	\$1,425,200	4	4	D	5150
C1207	Proposed System	\$6,814,400	\$886,800	\$7,701,200	4	4	D	5251
C1208	Proposed System	\$452,300	\$83,900	\$536,200	1	2	D	5150
C1209	Non Proposed	\$0	\$0	\$0	4	4	D	5150
C1210	Proposed System	\$338,100	\$53,000	\$391,100	4	4	D	5150
C1211	Proposed System	\$176,500	\$38,200	\$214,700	N/A	5	D	5150
C1212	Proposed System	\$533,000	\$35,600	\$568,600	1	2	D	5150
C1213	Proposed System	\$194,300	\$17,100	\$211,400	N/A	5	D	5151
C1214	Proposed	\$370,000	\$0	\$370,000	4	4	D	5150

**TABLE 2C
SIMS BAYOU SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
	System							
C1215	Non Proposed	\$0	\$0	\$0	N/A	0	D	5251
C1216	Proposed System	\$340,000	\$0	\$340,000	N/A	5	D	5251
C1217	Proposed System	\$646,800	\$0	\$646,800	2	2	D	5251
C1218	Proposed System	\$568,500	\$0	\$568,500	3	2	D	5251
C1219	Proposed System	\$682,000	\$0	\$682,000	1	2	D	5251
C1220	Proposed System	\$71,800	\$0	\$71,800	4	4	D	5252
C1221	Proposed System	\$870,200	\$0	\$870,200	N/A	5	D	5252
C1222	Proposed System	\$1,096,000	\$0	\$1,096,000	4	4	D	5251
C1223	Proposed System	\$7,491,000	\$678,900	\$8,169,900	4	4	D	5252
C1224	Proposed System	\$9,864,000	\$0	\$9,864,000	N/A	5	D	5152
C1226	Proposed System	\$576,000	\$0	\$576,000	3	2	D	5152
C1227	Proposed System	\$370,000	\$0	\$370,000	N/A	5	D	5251
C1228	Proposed System	\$3,620,100	\$376,100	\$3,996,200	1	2	D	5152
C1229	Proposed System	\$708,000	\$0	\$708,000	N/A	5	D	5152
C1230	Proposed System	\$1,421,000	\$225,400	\$1,646,400	N/A	5	D	5152
C1231	Proposed System	\$2,818,700	\$236,500	\$3,055,200	N/A	5	D	5152
C1232	Proposed System	\$246,600	\$0	\$246,600	3	2	D	5151
C1233	Proposed System	\$255,400	\$0	\$255,400	1	2	D	5151
C1234	Proposed System	\$888,000	\$0	\$888,000	N/A	5	D	5151
C1237	Proposed System	\$135,300	\$11,900	\$147,200	N/A	5	D	5151
C1238	Non Proposed	\$0	\$0	\$0	N/A	0	D	5151
C1239	Proposed	\$212,000	\$40,500	\$252,500	N/A	5	D	5151

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
	System							
C1240	Proposed System	\$1,636,500	\$0	\$1,636,500	4	4	D	5151
C1241	Proposed System	\$1,885,800	\$179,900	\$2,065,700	N/A	5	D	5151
C1242	Proposed System	\$2,061,000	\$0	\$2,061,000	3	2	D	5151
C1243	Proposed System	\$1,373,000	\$0	\$1,373,000	N/A	5	D	5151
C1248	Non Proposed	\$0	\$0	\$0	N/A	0	C	5152
C1249	Proposed System	\$358,000	\$48,200	\$406,200	4	4	C	5052
C1250	Proposed System	\$120,800	\$0	\$120,800	N/A	5	D	5152
C1253	Non Proposed	\$0	\$0	\$0	N/A	0	C	5051
C1254	Proposed System	\$330,000	\$0	\$330,000	N/A	5	C	5051
C1255	Proposed System	\$553,000	\$0	\$553,000	2	2	C	5051
C1256	Proposed System	\$259,000	\$0	\$259,000	N/A	5	C	5051
C1258	Proposed System	\$4,744,700	\$547,100	\$5,291,800	N/A	0	D	5151
C1260	Proposed System	\$203,000	\$0	\$203,000	N/A	5	C	5051
C1262	Proposed System	\$132,800	\$0	\$132,800	N/A	5	C	5051
C1263	Proposed System	\$1,893,000	\$0	\$1,893,000	N/A	5	D	5051
C1264	Non Proposed	\$0	\$0	\$0	N/A	0	D	5051
C1266	Non Proposed	\$0	\$0	\$0	N/A	0	D	5051
C1267	Non Proposed	\$0	\$0	\$0	N/A	0	D	5051
C1268	Proposed System	\$170,000	\$0	\$170,000	N/A	5	D	5250
C1269	Proposed System	\$2,796,500	\$0	\$2,796,500	N/A	5	D	5050
C1270	Proposed System	\$54,200	\$0	\$54,200	N/A	5	D	5150
C1271	Proposed	\$408,000	\$0	\$408,000	N/A	5	D	5050

**TABLE 2C
SIMS BAYOU SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
	System							
C1272	Proposed System	\$1,046,000	\$0	\$1,046,000	N/A	5	D	5050
C1273	Proposed System	\$323,400	\$0	\$323,400	N/A	5	D	5150
C1275	Non Proposed	\$0	\$0	\$0	N/A	0	D	5050
C1276	Proposed System	\$4,906,000	\$0	\$4,906,000	N/A	5	D	5050
C1277	Proposed System	\$2,182,800	\$240,200	\$2,423,000	4	4	D	5150
C1278	Proposed System	\$450,000	\$0	\$450,000	N/A	5	D	5251
C1280	Proposed System	\$8,881,000	\$0	\$8,881,000	N/A	5	D	5352
C1281	Proposed System	\$5,069,800	\$503,400	\$5,573,200	N/A	5	D	5252
C1282	Proposed System	\$1,272,000	\$0	\$1,272,000	N/A	5	D	5353
C1283	Proposed System	\$1,176,000	\$0	\$1,176,000	N/A	5	D	5353
C1284	Proposed System	\$2,139,700	\$200,600	\$2,340,300	N/A	5	D	5252
C1285	Proposed System	\$1,562,800	\$0	\$1,562,800	N/A	5	D	5253
C1286	Proposed System	\$820,000	\$0	\$820,000	N/A	5	D	5353
C1287	Proposed System	\$1,962,400	\$282,100	\$2,244,500	4	4	E	5852
C1289	Proposed System	\$900,000	\$0	\$900,000	N/A	5	E	5852
C1290	Proposed System	\$1,932,000	\$0	\$1,932,000	N/A	5	E	5852
C1291	Proposed System	\$10,125,000	\$0	\$10,125,000	N/A	5	E	5852
C1292	Proposed System	\$791,000	\$0	\$791,000	1	2	D	5250
C1293	Proposed System	\$857,000	\$0	\$857,000	1	2	D	5250
C1294	Proposed System	\$2,141,000	\$0	\$2,141,000	4	2	D	5251
C1295	Proposed System	\$432,000	\$0	\$432,000	N/A	5	D	5350
C1296	Proposed	\$590,000	\$0	\$590,000	N/A	5	D	5350

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
	System							
C1297	Proposed System	\$337,500	\$0	\$337,500	N/A	5	D	5351
C1298	Proposed System	\$360,000	\$0	\$360,000	N/A	5	D	5351
C1299	Proposed System	\$384,000	\$0	\$384,000	N/A	5	D	5351
C1300	Proposed System	\$222,000	\$0	\$222,000	N/A	5	D	5351
C1301	Proposed System	\$5,797,000	\$0	\$5,897,000	N/A	5	D	5351
C1302	Proposed System	\$720,000	\$0	\$720,000	N/A	5	D	5351
C1304	Proposed System	\$752,000	\$0	\$752,000	N/A	5	D	5351
C1305	Proposed System	\$405,000	\$0	\$405,000	N/A	5	D	5351
C1307	Proposed System	\$504,000	\$0	\$504,000	N/A	5	D	5351
C1308	Proposed System	\$550,000	\$0	\$550,000	N/A	5	D	5351
C1309	Proposed System	\$572,000	\$0	\$572,000	N/A	5	D	5351
C1310	Proposed System	\$413,000	\$0	\$413,000	N/A	5	D	5351
C1311	Proposed System	\$1,004,000	\$0	\$1,004,000	N/A	5	D	5151
C1312	Proposed System	\$1,798,000	\$0	\$1,798,000	N/A	5	D	5151
C1313	Proposed System	\$1,332,000	\$0	\$1,332,000	4	4	E	5751
C1314	Proposed System	\$1,656,000	\$0	\$1,656,000	1	2	E	5752
C1315	Proposed System	\$410,000	\$0	\$410,000	1	2	E	5752
C1316	Proposed System	\$2,707,000	\$0	\$2,707,000	N/A	5	E	5752
C1317	Proposed System	\$694,000	\$0	\$694,000	3	2	E	5652
C1319	Proposed System	\$942,000	\$0	\$942,000	3	2	E	5652
C1320	Proposed System	\$2,008,000	\$0	\$2,008,000	3	2	E	5652
C1321	Proposed	\$259,000	\$0	\$259,000	N/A	5	E	5552

TABLE 2C
SIMS BAYOU SUMMARY OF PROPOSED IMPROVEMENTS

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
	System							
C1322	Proposed System	\$333,000	\$0	\$333,000	3	2	E	5552
C1323	Proposed System	\$296,000	\$0	\$296,000	3	2	E	5552
C1324	Proposed System	\$468,000	\$0	\$468,000	N/A	5	E	5552
C1325	Proposed System	\$720,000	\$0	\$720,000	N/A	5	E	5552
C1326	Proposed System	\$222,000	\$0	\$222,000	N/A	5	E	5552
C1327	Proposed System	\$2,264,000	\$0	\$2,264,000	4	4	E	5552
C1328	Proposed System	\$1,296,000	\$0	\$1,296,000	3	2	E	5551
C1329	Proposed System	\$385,000	\$0	\$385,000	N/A	5	E	5552
C1330	Proposed System	\$468,000	\$0	\$468,000	4	4	E	5552
C1331	Proposed System	\$370,000	\$0	\$370,000	N/A	4	E	5552
C1332	Proposed System	\$360,000	\$0	\$360,000	N/A	4	E	5552
C1333	Proposed System	\$2,825,000	\$0	\$2,825,000	N/A	4	E	5551
C1334	Proposed System	\$460,000	\$0	\$460,000	N/A	5	D	5452
C1336	Proposed System	\$1,080,000	\$0	\$1,080,000	N/A	5	D	5353
C1337	Proposed System	\$322,000	\$0	\$322,000	4	4	D	5353
C1338	Proposed System	\$322,000	\$0	\$322,000	4	4	D	5353
C1339	Proposed System	\$1,140,000	\$0	\$1,140,000	N/A	5	D	5352
C1340	Proposed System	\$404,000	\$0	\$404,000	N/A	5	D	5352
C1342	Proposed System	\$1,520,000	\$0	\$1,520,000	N/A	5	D	5352
C1343	Proposed System	\$2,300,000	\$0	\$2,300,000	N/A	5	D	5353
TOTAL		\$536,816,100	\$45,223,200	\$582,139,300				

TABLE 3C 2-YEAR COST - GROUP 1
SIMS BAYOU

System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
Sorted by 2-Year CIP Cost							
C0053	\$25,100	1	12	\$2,092	100%	E	5452
C1091	\$38,700	2	13	\$2,977	92%	E	5553
C0457	\$44,200	1	36	\$1,228	100%	E	5452
C0283	\$52,100	1	19	\$2,742	100%	E	5752
C0525	\$59,900	1	47	\$1,274	100%	D	5251
C0375	\$62,300	1	21	\$2,967	95%	E	5553
C0173	\$64,900	1	22	\$2,950	82%	E	5654
C0281	\$85,200	1	204	\$418	100%	E	5752
C0563	\$86,400	1	28	\$3,086	100%	D	5251
C0147	\$86,500	1	117	\$739	97%	I	5554
C0659	\$99,600	1	25	\$3,984	100%	D	5151
C1086	\$100,300	2	15	\$6,687	93%	E	5553
C0424	\$117,100	1	30	\$3,903	100%	D	5452
C0210	\$117,700	1	219	\$537	93%	I	5654
C0542	\$120,000	1	144	\$833	100%	D	5252
C0564	\$123,500	1	76	\$1,625	100%	D	5251
C0557	\$154,100	1	40	\$3,853	100%	D	5251
C1043	\$162,400	2	259	\$627	47%	E	5753
C0469	\$168,600	1	52	\$3,242	100%	D	5452
C0076	\$176,200	1	147	\$1,199	98%	D	5251
C0031	\$179,200	1	169	\$1,060	100%	I	5554
C1082	\$180,200	2	24	\$7,508	67%	I	5654
C0166	\$193,200	1	82	\$2,356	100%	I	5655
C0430	\$199,500	1	103	\$1,937	100%	D	5451
C0386	\$201,700	1	90	\$2,241	99%	E	5454
C0219	\$207,500	1	41	\$5,061	73%	I	5653
C1023	\$209,600	2	18	\$11,656	78%	I	5654
C0088	\$229,000	1	62	\$3,694	98%	D	5151
C1196	\$232,000	2	135	\$1,719	73%	D	5250
C0067	\$239,700	1	104	\$2,305	100%	D	5251
C0415	\$244,800	1	56	\$4,371	100%	D	5452
C1233	\$255,400	2	98	\$2,606	58%	D	5151
C0500	\$260,500	1	29	\$8,983	62%	D	5352
C0278	\$264,500	1	77	\$3,435	100%	E	5753
C0468	\$300,900	1	94	\$3,201	99%	D	5452
C0039	\$312,300	1	491	\$636	63%	E	5553
C0503	\$358,500	1	154	\$2,328	97%	D	5252
C0096	\$380,400	1	103	\$3,693	100%	D	5151
C0028	\$398,000	1	131	\$3,038	2%	E	5654
C1315	\$410,000	1	1	\$410,000	0%	E	5752

System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
C0551	\$410,500	1	159	\$2,582	100%	D	5251
	\$413,300	1	176	\$2,348	88%	I	5655
C0259	\$418,600	1	140	\$2,990	100%	E	5753
C1208	\$452,300	2	1	\$452,300	0%	D	5150
C0134	\$472,000	1	723	\$653	76%	I	5555
C0387	\$479,700	1	96	\$4,997	94%	D	5454
C1160	\$494,300	2	124	\$3,986	100%	D	5352
C1102	\$506,000	2	54	\$9,370	83%	I	5555
C1193	\$509,000	2	346	\$1,471	61%	D	5251
C1212	\$533,000	2	1	\$533,000	0%	D	5150
C0475	\$554,600	1	783	\$708	82%	D	5451
C0506	\$569,000	1	230	\$2,474	100%	D	5252
C0649	\$576,000	1	106	\$5,434	66%	D	5151
C0175	\$591,300	1	243	\$2,433	97%	E	5754
C0250	\$605,000	1	250	\$2,420	94%	E	5753
C0378	\$654,200	1	139	\$4,706	99%	E	5553
C0208	\$666,800	1	226	\$2,950	87%	I	5654
C1219	\$682,000	2	32	\$21,313	81%	D	5251
C0370	\$713,800	1	168	\$4,249	99%	E	5553
C0125	\$771,300	1	474	\$1,627	97%	I	5655
C0151	\$784,000	1	390	\$2,010	89%	I	5654
C1292	\$791,000	2	1	\$791,000	0%	D	5250
C0176	\$794,700	1	368	\$2,160	92%	E	5754
C1195	\$820,000	2	443	\$1,851	26%	D	5250
C1293	\$857,000	2	1	\$857,000	0%	D	5250
C0379	\$869,400	1	289	\$3,008	100%	E	5553
C0040	\$873,800	1	441	\$1,981	78%	I	5553
C0546	\$892,600	1	410	\$2,177	100%	D	5252
C0192	\$913,200	1	435	\$2,099	97%	E	5754
C1055	\$924,600	2	224	\$4,128	81%	E	5652
C0646	\$954,600	1	218	\$4,379	100%	D	5252
C0355	\$1,020,100	1	601	\$1,697	91%	E	5653
C0315	\$1,029,100	1	461	\$2,232	95%	E	5852
C0655	\$1,044,100	1	204	\$5,118	88%	D	5151
C1185	\$1,114,000	2	50	\$22,280	60%	D	5251
C0509	\$1,127,900	1	250	\$4,512	100%	D	5252
C0155	\$1,136,000	1	384	\$2,958	92%	I	5655
C0380	\$1,154,000	1	250	\$4,616	98%	E	5454
C0413	\$1,195,600	1	227	\$5,267	100%	D	5452
C0363	\$1,232,400	1	219	\$5,627	99%	E	5553
C0561	\$1,252,200	1	312	\$4,013	95%	D	5251

TABLE 3C 2-YEAR COST - GROUP 1
SIMS BAYOU

System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
C0141	\$1,316,600	1	431	\$3,055	84%	I	5554
C0094	\$1,360,500	1	204	\$6,669	99%	D	5151
C1314	\$1,656,000	2	1	\$1,656,000	0%	E	5752
C0149	\$1,836,400	1	235	\$7,814	75%	I	5554
C0052	\$2,216,200	1	920	\$2,409	96%	E	5452
C1054	\$2,913,600	2	244	\$11,941	54%	E	5752
C0385	\$3,069,000	1	525	\$5,846	99%	D	5453
C0174	\$3,137,900	1	878	\$3,574	95%	E	5755
C0358	\$3,390,900	1	860	\$3,943	99%	E	5553
C0041	\$3,439,600	1	292	\$11,779	96%	E	5553
C1228	\$3,620,100	2	81	\$44,693	60%	D	5152
C0043	\$3,986,100	1	1116	\$3,572	67%	I	5554
C0140	\$4,598,300	1	476	\$9,660	10%	I	5554
C0054	\$4,689,100	1	547	\$8,572	76%	D	5453
C0034	\$5,732,800	1	449	\$12,768	60%	E	5653
C0051	\$7,030,400	1	992	\$7,087	96%	E	5453
C0035	\$7,800,700	1	1073	\$7,270	78%	I	5553
C1139	\$12,693,200	2	1377	\$9,218	58%	D	5453
C0384	\$14,220,800	1	1797	\$7,914	87%	D	5353
C1147	\$18,277,000	2	247	\$73,996	36%	D	5451
C1111	\$20,179,700	2	177	\$114,010	64%	E	5552
C0383	\$22,750,800	1	1916	\$11,874	89%	D	5453
TOTAL	\$188,970,600						
Sorted by Cost per Address							
C0281	\$85,200	1	204	\$418	100%	E	5752
C0210	\$117,700	1	219	\$537	93%	I	5654
C1043	\$162,400	2	259	\$627	47%	E	5753
C0039	\$312,300	1	491	\$636	63%	E	5553
C0134	\$472,000	1	723	\$653	76%	I	5555
C0475	\$554,600	1	783	\$708	82%	D	5451
C0147	\$86,500	1	117	\$739	97%	I	5554
C0542	\$120,000	1	144	\$833	100%	D	5252
C0031	\$179,200	1	169	\$1,060	100%	I	5554
C0076	\$176,200	1	147	\$1,199	98%	D	5251
C0457	\$44,200	1	36	\$1,228	100%	E	5452
C0525	\$59,900	1	47	\$1,274	100%	D	5251
C1193	\$509,000	2	346	\$1,471	61%	D	5251
C0564	\$123,500	1	76	\$1,625	100%	D	5251
C0125	\$771,300	1	474	\$1,627	97%	I	5655
C0355	\$1,020,100	1	601	\$1,697	91%	E	5653

System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
C1196	\$232,000	2	135	\$1,719	73%	D	5250
C1195	\$820,000	2	443	\$1,851	26%	D	5250
C0430	\$199,500	1	103	\$1,937	100%	D	5451
C0040	\$873,800	1	441	\$1,981	78%	I	5553
C0151	\$784,000	1	390	\$2,010	89%	I	5654
C0053	\$25,100	1	12	\$2,092	100%	E	5452
C0192	\$913,200	1	435	\$2,099	97%	E	5754
C0176	\$794,700	1	368	\$2,160	92%	E	5754
C0546	\$892,600	1	410	\$2,177	100%	D	5252
C0315	\$1,029,100	1	461	\$2,232	95%	E	5852
C0386	\$201,700	1	90	\$2,241	99%	E	5454
C0067	\$239,700	1	104	\$2,305	100%	D	5251
C0503	\$358,500	1	154	\$2,328	97%	D	5252
C0164	\$413,300	1	176	\$2,348	88%	I	5655
C0166	\$193,200	1	82	\$2,356	100%	I	5655
C0052	\$2,216,200	1	920	\$2,409	96%	E	5452
C0250	\$605,000	1	250	\$2,420	94%	E	5753
C0175	\$591,300	1	243	\$2,433	97%	E	5754
C0506	\$569,000	1	230	\$2,474	100%	D	5252
C0551	\$410,500	1	159	\$2,582	100%	D	5251
C1233	\$255,400	2	98	\$2,606	58%	D	5151
C0283	\$52,100	1	19	\$2,742	100%	E	5752
C0173	\$64,900	1	22	\$2,950	82%	E	5654
C0208	\$666,800	1	226	\$2,950	87%	I	5654
C0155	\$1,136,000	1	384	\$2,958	92%	I	5655
C0375	\$62,300	1	21	\$2,967	95%	E	5553
C1091	\$38,700	2	13	\$2,977	92%	E	5553
C0259	\$418,600	1	140	\$2,990	100%	E	5753
C0379	\$869,400	1	289	\$3,008	100%	E	5553
C0028	\$398,000	1	131	\$3,038	2%	E	5654
C0141	\$1,316,600	1	431	\$3,055	84%	I	5554
C0563	\$86,400	1	28	\$3,086	100%	D	5251
C0468	\$300,900	1	94	\$3,201	99%	D	5452
C0469	\$168,600	1	52	\$3,242	100%	D	5452
C0278	\$264,500	1	77	\$3,435	100%	E	5753
C0043	\$3,986,100	1	1116	\$3,572	67%	I	5554
C0174	\$3,137,900	1	878	\$3,574	95%	E	5755
C0096	\$380,400	1	103	\$3,693	100%	D	5151
C0088	\$229,000	1	62	\$3,694	98%	D	5151
C0557	\$154,100	1	40	\$3,853	100%	D	5251
C0424	\$117,100	1	30	\$3,903	100%	D	5452

**TABLE 3C 2-YEAR COST - GROUP 1
SIMS BAYOU**

System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
C0358	\$3,390,900	1	860	\$3,943	99%	E	5553
C0659	\$99,600	1	25	\$3,984	100%	D	5151
C1160	\$494,300	2	124	\$3,986	100%	D	5352
C0561	\$1,252,200	1	312	\$4,013	95%	D	5251
C1055	\$924,600	2	224	\$4,128	81%	E	5652
C0370	\$713,800	1	168	\$4,249	99%	E	5553
C0415	\$244,800	1	56	\$4,371	100%	D	5452
C0646	\$954,600	1	218	\$4,379	100%	D	5252
C0509	\$1,127,900	1	250	\$4,512	100%	D	5252
C0380	\$1,154,000	1	250	\$4,616	98%	E	5454
C0378	\$654,200	1	139	\$4,706	99%	E	5553
C0387	\$479,700	1	96	\$4,997	94%	D	5454
C0219	\$207,500	1	41	\$5,061	73%	I	5653
C0655	\$1,044,100	1	204	\$5,118	88%	D	5151
C0413	\$1,195,600	1	227	\$5,267	100%	D	5452
C0649	\$576,000	1	106	\$5,434	66%	D	5151
C0363	\$1,232,400	1	219	\$5,627	99%	E	5553
C0385	\$3,069,000	1	525	\$5,846	99%	D	5453
C0094	\$1,360,500	1	204	\$6,669	99%	D	5151
C1086	\$100,300	2	15	\$6,687	93%	E	5553
C0051	\$7,030,400	1	992	\$7,087	96%	E	5453
C0035	\$7,800,700	1	1073	\$7,270	78%	I	5553
C1082	\$180,200	2	24	\$7,508	67%	I	5654
C0149	\$1,836,400	1	235	\$7,814	75%	I	5554
C0384	\$14,220,800	1	1797	\$7,914	87%	D	5353
C0054	\$4,689,100	1	547	\$8,572	76%	D	5453
C0500	\$260,500	1	29	\$8,983	62%	D	5352
C1139	\$12,693,200	2	1377	\$9,218	58%	D	5453
C1102	\$506,000	2	54	\$9,370	83%	I	5555
C0140	\$4,598,300	1	476	\$9,660	10%	I	5554
C1023	\$209,800	2	18	\$11,656	78%	I	5654
C0041	\$3,439,600	1	292	\$11,779	96%	E	5553
C0383	\$22,750,800	1	1916	\$11,874	89%	D	5453
C1054	\$2,913,600	2	244	\$11,941	54%	E	5752
C0034	\$5,732,800	1	449	\$12,768	60%	E	5653
C1219	\$682,000	2	32	\$21,313	81%	D	5251
C1185	\$1,114,000	2	50	\$22,280	60%	D	5251
C1228	\$3,620,100	2	81	\$44,693	60%	D	5152
C1147	\$18,277,000	2	247	\$73,996	36%	D	5451
C1111	\$20,179,700	2	177	\$114,010	64%	E	5552
C1315	\$410,000	1	1	\$410,000	0%	E	5752

System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
C1208	\$452,300	2	1	\$452,300	0%	D	5150
C1212	\$533,000	2	1	\$533,000	0%	D	5150
C1292	\$791,000	2	1	\$791,000	0%	D	5250
C1293	\$857,000	2	1	\$857,000	0%	D	5250
C1314	\$1,656,000	2	1	\$1,656,000	0%	E	5752
TOTAL	\$188,970,600						

**TABLE 4C 2-YEAR COST – GROUP 2
SIMS BAYOU**

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
Sorted by 2-Year Cost							
C0553	\$67,100	1	80	\$839	100%	D	5251
C0007	\$111,000	1	310	\$358	23%	E	5654
C0006	\$251,200	1	116	\$2,166	19%	E	5654
C1008	\$350,900	2	92	\$3,814	70%	E	5655
C0020	\$356,500	1	53	\$6,726	83%	I	5654
C0212	\$390,700	1	130	\$3,005	73%	E	5654
C1217	\$646,800	2	40	\$16,170	85%	D	5251
C1255	\$553,000	2	112	\$4,938	68%	C	5051
C1149	\$1,074,000	2	133	\$8,075	44%	D	5451
C0476	\$1,205,500	1	60	\$20,092	87%	D	5452
C1174	\$2,327,700	2	15	\$155,180	0%	D	5352
TOTAL	\$7,334,400						
Sorted by Cost per Address							
C0007	\$111,000	1	310	\$358	23%	E	5654
C0553	\$67,100	1	80	\$839	100%	D	5251
C0006	\$251,200	1	116	\$2,166	19%	E	5654
C0212	\$390,700	1	130	\$3,005	73%	E	5654
C1008	\$350,900	2	92	\$3,814	70%	E	5655
C0020	\$356,500	1	53	\$6,726	83%	I	5654
C1255	\$553,000	2	112	\$4,938	68%	C	5051
C1149	\$1,074,000	2	133	\$8,075	44%	D	5451
C1217	\$646,800	2	40	\$16,170	85%	D	5251
C0476	\$1,205,500	1	60	\$20,092	87%	D	5452
C1174	\$2,327,700	2	15	\$155,180	0%	D	5352
TOTAL	\$7,334,400						

**TABLE 5C 2-YEAR COST – GROUP 3
SIMS BAYOU**

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
Sorted by 2-Year Cost							
C0279	\$18,200	1	9	\$2,022	78%	E	5752
C0454	\$33,200	1	13	\$2,554	100%	D	5453
C0533	\$35,200	1	21	\$1,676	100%	D	5252
C0656	\$35,900	1	9	\$3,989	100%	D	5151
C0438	\$36,100	1	19	\$1,900	100%	E	5453
C0499	\$37,200	1	32	\$1,163	91%	D	5351
C0450	\$38,100	1	24	\$1,588	92%	D	5453
C0455	\$46,000	1	57	\$807	100%	E	5452
C0284	\$51,900	1	20	\$2,595	100%	E	5752
C0555	\$56,700	1	49	\$1,157	100%	D	5251
C0422	\$62,700	1	51	\$1,229	100%	D	5452
C0485	\$70,300	1	88	\$799	98%	D	5352
C0276	\$73,700	1	17	\$4,335	100%	E	5753
C0184	\$77,800	1	71	\$1,096	100%	E	5754
C0093	\$78,900	1	11	\$7,173	100%	D	5151
C0011	\$80,500	1	79	\$1,019	97%	E	5654
C0299	\$96,100	1	28	\$3,432	100%	E	5752
C0047	\$104,400	1	150	\$696	100%	E	5553
C0092	\$105,300	1	25	\$4,212	100%	D	5151
C0197	\$105,900	1	107	\$990	99%	E	5754
C0196	\$109,400	1	69	\$1,586	97%	E	5754
C0662	\$111,300	1	24	\$4,638	100%	D	5151
C0661	\$115,100	1	24	\$4,796	100%	D	5151
C0524	\$117,100	1	83	\$1,411	98%	D	5251
C0270	\$128,100	1	32	\$4,003	97%	E	5753
C0429	\$138,100	1	106	\$1,303	100%	D	5451
C0504	\$142,700	1	76	\$1,878	100%	D	5252
C1089	\$146,400	2	41	\$3,571	100%	E	5553
C0138	\$151,900	1	40	\$3,798	88%	I	5554
C0044	\$163,800	1	49	\$3,343	100%	E	5553
C0275	\$172,400	1	77	\$2,239	100%	E	5753
C0198	\$173,900	1	72	\$2,415	100%	E	5754
C0436	\$183,400	1	91	\$2,015	100%	D	5453
C0540	\$191,600	1	25	\$7,664	92%	D	5252
C0049	\$236,100	1	95	\$2,485	100%	E	5452
C0343	\$242,100	1	25	\$9,684	84%	E	5653
C1232	\$246,600	2	18	\$13,700	33%	D	5151
C0470	\$251,000	1	86	\$2,919	98%	D	5452
C0153	\$253,000	1	76	\$3,329	87%	I	5654

TABLE 5C 2-YEAR COST - GROUP 3
SIMS BAYOU

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
C0165	\$267,600	1	77	\$3,475	91%	I	5655
C0573	\$273,200	1	104	\$2,627	100%	D	5251
C1323	\$296,000	2	1	\$296,000	0%	E	5552
C0090	\$313,400	1	61	\$5,138	100%	D	5151
C0095	\$329,400	1	36	\$9,150	100%	D	5151
C1322	\$333,000	2	1	\$333,000	0%	E	5552
C0498	\$334,600	1	92	\$3,637	100%	D	5351
C0188	\$343,900	1	36	\$9,553	94%	E	5754
C0336	\$346,800	1	83	\$4,178	99%	I	5653
C0539	\$358,300	1	100	\$3,583	96%	D	5252
C0651	\$365,300	1	65	\$5,620	92%	D	5151
C0648	\$378,200	1	91	\$4,156	100%	D	5151
C0089	\$404,900	1	71	\$5,703	92%	D	5151
C0411	\$416,400	1	80	\$5,205	96%	D	5452
C0650	\$416,600	1	58	\$7,183	95%	D	5151
C0029	\$422,300	1	264	\$1,600	98%	I	5554
C0528	\$422,500	1	174	\$2,428	99%	D	5251
C0127	\$555,400	1	816	\$681	95%	I	5555
C0189	\$564,100	1	135	\$4,179	100%	E	5754
C1218	\$568,500	2	35	\$16,243	94%	D	5251
C1027	\$576,000	2	72	\$8,000	81%	I	5654
C1226	\$576,000	2	199	\$2,894	91%	D	5152
C1040	\$581,600	2	117	\$4,971	97%	I	5654
C0213	\$594,300	1	359	\$1,655	96%	E	5654
C0423	\$595,900	1	153	\$3,895	97%	D	5452
C0428	\$620,600	1	134	\$4,631	100%	D	5451
C0418	\$693,600	1	155	\$4,475	100%	D	5452
C1317	\$694,000	2	1	\$694,000	0%	E	5652
C1015	\$705,400	2	110	\$6,413	99%	E	5754
C0560	\$726,500	1	205	\$3,544	100%	D	5251
C1090	\$782,900	2	75	\$10,439	97%	E	5553
C0161	\$853,300	1	108	\$7,901	65%	I	5654
C0426	\$894,300	1	139	\$6,434	97%	D	5452
C1137	\$900,000	2	60	\$15,000	97%	D	5453
C1144	\$913,000	2	320	\$2,853	98%	E	5452
C1319	\$942,000	2	1	\$942,000	0%	E	5652
C0419	\$973,700	1	265	\$3,674	97%	D	5452
C1084	\$988,600	2	139	\$7,112	99%	I	5654
C0280	\$997,300	1	360	\$2,770	100%	E	5752
C1158	\$1,000,300	2	188	\$5,321	94%	D	5353
C0702	\$1,133,800	1	245	\$4,628	97%	E	5453

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
C0247	\$1,185,200	1	188	\$6,304	97%	E	5752
C0003	\$1,188,700	1	217	\$5,478	97%	E	5654
C0579	\$1,266,300	1	157	\$8,066	99%	D	5250
C1328	\$1,296,000	2	1	\$1,296,000	0%	E	5551
C1065	\$1,332,000	2	731	\$1,822	63%	E	5652
C1320	\$2,008,000	2	1	\$2,008,000	0%	E	5652
C1063	\$2,024,200	2	291	\$6,956	71%	E	5652
C1242	\$2,061,000	2	323	\$6,381	93%	D	5151
C0058	\$2,495,800	1	570	\$4,379	71%	D	5452
C1014	\$3,044,000	2	675	\$4,510	97%	E	5754
C0030	\$3,072,200	1	404	\$7,604	77%	I	5554
C1159	\$3,706,200	2	511	\$7,253	98%	D	5352
C1113	\$4,905,900	2	80	\$61,324	29%	E	5552
C1182	\$15,986,000	2	259	\$61,722	9%	D	5252
TOTAL	\$74,543,100						
Sorted by Cost per Address							
C0127	\$555,400	1	816	\$681	95%	I	5555
C0047	\$104,400	1	150	\$696	100%	E	5553
C0485	\$70,300	1	88	\$799	98%	D	5352
C0455	\$46,000	1	57	\$807	100%	E	5452
C0197	\$105,900	1	107	\$990	99%	E	5754
C0011	\$80,500	1	79	\$1,019	97%	E	5654
C0184	\$77,800	1	71	\$1,096	100%	E	5754
C0555	\$56,700	1	49	\$1,157	100%	D	5251
C0499	\$37,200	1	32	\$1,163	91%	D	5351
C0422	\$62,700	1	51	\$1,229	100%	D	5452
C0429	\$138,100	1	106	\$1,303	100%	D	5451
C0524	\$117,100	1	83	\$1,411	98%	D	5251
C0196	\$109,400	1	69	\$1,586	97%	E	5754
C0450	\$38,100	1	24	\$1,588	92%	D	5453
C0029	\$422,300	1	264	\$1,600	98%	I	5554
C0213	\$594,300	1	359	\$1,655	96%	E	5654
C0533	\$35,200	1	21	\$1,676	100%	D	5252
C1065	\$1,332,000	2	731	\$1,822	63%	E	5652
C0504	\$142,700	1	76	\$1,878	100%	D	5252
C0438	\$36,100	1	19	\$1,900	100%	E	5453
C0436	\$183,400	1	91	\$2,015	100%	D	5453
C0279	\$18,200	1	9	\$2,022	78%	E	5752
C0275	\$172,400	1	77	\$2,239	100%	E	5753
C0198	\$173,900	1	72	\$2,415	100%	E	5754

TABLE 5C 2-YEAR COST - GROUP 3
SIMS BAYOU

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
C0528	\$422,500	1	174	\$2,428	99%	D	5251
C0049	\$236,100	1	95	\$2,485	100%	E	5452
C0454	\$33,200	1	13	\$2,554	100%	D	5453
C0284	\$51,900	1	20	\$2,595	100%	E	5752
C0573	\$273,200	1	104	\$2,627	100%	D	5251
C0280	\$997,300	1	360	\$2,770	100%	E	5752
C1144	\$913,000	2	320	\$2,853	98%	E	5452
C1226	\$576,000	2	199	\$2,894	91%	D	5152
C0470	\$251,000	1	86	\$2,919	98%	D	5452
C0153	\$253,000	1	76	\$3,329	87%	I	5654
C0044	\$163,800	1	49	\$3,343	100%	E	5553
C0299	\$96,100	1	28	\$3,432	100%	E	5752
C0165	\$267,600	1	77	\$3,475	91%	I	5655
C0560	\$726,500	1	205	\$3,544	100%	D	5251
C1089	\$146,400	2	41	\$3,571	100%	E	5553
C0539	\$358,300	1	100	\$3,583	96%	D	5252
C0498	\$334,600	1	92	\$3,637	100%	D	5351
C0419	\$973,700	1	265	\$3,674	97%	D	5452
C0138	\$151,900	1	40	\$3,798	88%	I	5554
C0423	\$595,900	1	153	\$3,895	97%	D	5452
C0656	\$35,900	1	9	\$3,989	100%	D	5151
C0270	\$128,100	1	32	\$4,003	97%	E	5753
C0648	\$378,200	1	91	\$4,156	100%	D	5151
C0336	\$346,800	1	83	\$4,178	99%	I	5653
C0189	\$564,100	1	135	\$4,179	100%	E	5754
C0092	\$105,300	1	25	\$4,212	100%	D	5151
C0276	\$73,700	1	17	\$4,335	100%	E	5753
C0058	\$2,495,800	1	570	\$4,379	71%	D	5452
C0418	\$693,600	1	155	\$4,475	100%	D	5452
C1014	\$3,044,000	2	675	\$4,510	97%	E	5754
C0702	\$1,133,800	1	245	\$4,628	97%	E	5453
C0428	\$620,600	1	134	\$4,631	100%	D	5451
C0662	\$111,300	1	24	\$4,638	100%	D	5151
C0661	\$115,100	1	24	\$4,796	100%	D	5151
C1040	\$581,600	2	117	\$4,971	97%	I	5654
C0090	\$313,400	1	61	\$5,138	100%	D	5151
C0411	\$416,400	1	80	\$5,205	96%	D	5452
C1158	\$1,000,300	2	188	\$5,321	94%	D	5353
C0003	\$1,188,700	1	217	\$5,478	97%	E	5654
C0651	\$365,300	1	65	\$5,620	92%	D	5151
C0089	\$404,900	1	71	\$5,703	92%	D	5151

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
C0247	\$1,185,200	1	188	\$6,304	97%	E	5752
C1242	\$2,061,000	2	323	\$6,381	93%	D	5151
C1015	\$705,400	2	110	\$6,413	99%	E	5754
C0426	\$894,300	1	139	\$6,434	97%	D	5452
C1063	\$2,024,200	2	291	\$6,956	71%	E	5652
C1084	\$988,600	2	139	\$7,112	99%	I	5654
C0093	\$78,900	1	11	\$7,173	100%	D	5151
C0650	\$416,600	1	58	\$7,183	95%	D	5151
C1159	\$3,706,200	2	511	\$7,253	98%	D	5352
C0030	\$3,072,200	1	404	\$7,604	77%	I	5554
C0540	\$191,600	1	25	\$7,664	92%	D	5252
C0161	\$853,300	1	108	\$7,901	65%	I	5654
C1027	\$576,000	2	72	\$8,000	81%	I	5654
C0579	\$1,266,300	1	157	\$8,066	99%	D	5250
C0095	\$329,400	1	36	\$9,150	100%	D	5151
C0188	\$343,900	1	36	\$9,553	94%	E	5754
C0343	\$242,100	1	25	\$9,684	84%	E	5653
C1090	\$782,900	2	75	\$10,439	97%	E	5553
C1232	\$246,600	2	18	\$13,700	33%	D	5151
C1137	\$900,000	2	60	\$15,000	97%	D	5453
C1218	\$568,500	2	35	\$16,243	94%	D	5251
C1113	\$4,905,900	2	80	\$61,324	29%	E	5552
C1182	\$15,986,000	2	259	\$61,722	9%	D	5252
C1323	\$296,000	2	1	\$296,000	0%	E	5552
C1322	\$333,000	2	1	\$333,000	0%	E	5552
C1317	\$694,000	2	1	\$694,000	0%	E	5652
C1319	\$942,000	2	1	\$942,000	0%	E	5652
C1328	\$1,296,000	2	1	\$1,296,000	0%	E	5551
C1320	\$2,008,000	2	1	\$2,008,000	0%	E	5652
TOTAL	\$74,543,100						

TABLE 6C 2-YEAR COST – GROUP 4
SIMS BAYOU

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
Sorted by 2-Year CIP Cost							
C0670	\$10,700	3	1	\$10,700	0%	C	5151
C0427	\$18,600	3	37	\$503	97%	D	5452
C0465	\$33,100	3	26	\$1,273	100%	E	5452
C0453	\$35,400	3	12	\$2,950	100%	D	5453
C0452	\$36,900	3	20	\$1,845	100%	D	5453
C0675	\$39,200	4	51	\$769	100%	D	5051
C0543	\$52,700	3	8	\$6,588	88%	D	5252
C0404	\$53,200	3	21	\$2,533	24%	D	5453
C0549	\$56,700	3	59	\$961	85%	D	5251
C0519	\$59,800	3	2	\$29,900	0%	D	5251
C0677	\$61,100	3	54	\$1,131	100%	D	5051
C0663	\$67,100	3	17	\$3,947	100%	D	5151
C1032	\$68,900	4	5	\$13,780	0%	E	5754
C1220	\$71,800	4	3	\$23,933	0%	D	5252
C0442	\$72,900	3	15	\$4,860	100%	E	5453
C0488	\$73,800	3	3	\$24,600	0%	D	5352
C1033	\$77,900	4	7	\$11,129	0%	E	5754
C0460	\$81,100	3	16	\$5,069	100%	E	5452
C0183	\$82,900	3	25	\$3,316	100%	E	5754
C1098	\$86,700	4	52	\$1,667	69%	I	5654
C1022	\$93,500	4	10	\$9,350	60%	I	5654
C0086	\$96,100	3	44	\$2,184	43%	D	5151
C0474	\$99,900	3	2	\$49,950	0%	D	5452
C0109	\$100,500	3	61	\$1,648	90%	C	5051
C1078	\$101,300	4	25	\$4,052	52%	I	5654
C0660	\$102,300	3	16	\$6,394	100%	D	5151
C0633	\$109,600	3	51	\$2,149	100%	D	5150
C1080	\$111,600	4	1	\$111,600	0%	I	5654
C0435	\$114,200	3	39	\$2,928	97%	D	5453
C1088	\$120,400	4	12	\$10,033	100%	E	5553
C1038	\$123,200	4	29	\$4,248	59%	I	5654
C0689	\$132,100	3	1	\$132,100	0%	D	5050
C0115	\$133,300	3	1	\$133,300	0%	I	5655
C0556	\$143,600	3	44	\$3,264	93%	D	5251
C0698	\$148,000	3	10	\$14,800	0%	E	5453
C1037	\$149,100	4	1	\$149,100	0%	E	5654
C1009	\$175,400	4	48	\$3,654	92%	E	5755
C0599	\$177,200	3	77	\$2,301	100%	D	5150
C1028	\$183,700	4	25	\$7,348	92%	E	5654
C0657	\$185,900	3	45	\$4,131	100%	D	5151

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
C1068	\$188,600	4	2	\$94,300	0%	E	5653
C1062	\$192,000	4	7	\$27,429	0%	E	5652
C0402	\$219,400	3	1	\$219,400	0%	D	5353
C0699	\$223,700	3	76	\$2,943	97%	E	5453
C0463	\$226,800	3	62	\$3,658	100%	E	5452
C0520	\$228,700	3	9	\$25,411	0%	D	5251
C0639	\$234,800	3	103	\$2,280	100%	D	5050
C0619	\$245,800	3	27	\$9,104	100%	D	5150
C1010	\$267,400	4	51	\$5,243	75%	E	5755
C0403	\$278,700	3	1	\$278,700	0%	D	5353
C1011	\$280,600	4	27	\$10,393	33%	E	5755
C0405	\$281,800	3	1	\$281,800	0%	D	5453
C1046	\$289,400	4	19	\$15,232	0%	E	5753
C1026	\$293,700	4	6	\$48,950	0%	E	5654
C1036	\$297,600	4	3	\$99,200	0%	E	5654
C0332	\$302,000	3	24	\$12,583	92%	I	5654
C0407	\$305,700	3	3	\$101,900	0%	D	5453
C0574	\$308,400	3	105	\$2,937	100%	D	5251
C1025	\$313,800	4	4	\$78,450	0%	I	5654
C1337	\$322,000	4	1	\$322,000	0%	D	5353
C1338	\$322,000	4	1	\$322,000	0%	D	5353
C0487	\$332,300	3	1	\$332,300	0%	D	5352
C1035	\$336,800	4	4	\$84,200	0%	E	5754
C1210	\$338,100	4	92	\$3,675	99%	D	5150
C1249	\$358,000	4	44	\$8,136	43%	C	5052
C0300	\$359,400	3	25	\$14,376	4%	E	5752
C1214	\$370,000	4	30	\$12,333	73%	D	5150
C0600	\$399,500	3	126	\$3,171	100%	D	5150
C1330	\$468,000	4	1	\$468,000	0%	E	5552
C0665	\$531,700	3	7	\$75,957	0%	C	5152
C1056	\$570,300	4	19	\$30,016	5%	E	5653
C1173	\$576,200	4	10	\$57,620	0%	D	5352
C0478	\$594,300	3	2	\$297,150	50%	E	5552
C0480	\$611,000	3	4	\$152,750	0%	E	5553
C1006	\$613,600	4	3	\$204,533	0%	I	5655
C1105	\$619,600	4	22	\$28,164	0%	E	5554
C1058	\$684,400	4	27	\$25,348	0%	I	5653
C1042	\$705,700	4	63	\$11,202	0%	E	5653
C1142	\$744,400	4	29	\$25,669	62%	E	5452
C1031	\$787,000	4	236	\$3,335	68%	E	5754

TABLE 6C 2-YEAR COST – GROUP 4
SIMS BAYOU

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
C0603	\$815,700	3	347	\$2,351	96%	D	5150
C1199	\$820,000	4	136	\$6,029	40%	D	5150
C0621	\$843,900	3	122	\$6,917	99%	D	5150
C0583	\$850,100	3	4	\$212,525	100%	D	5150
C0587	\$945,000	3	301	\$3,140	76%	D	5250
C1116	\$965,500	4	14	\$68,964	43%	E	5552
C0623	\$1,000,100	3	130	\$7,693	98%	D	5150
C1141	\$1,036,100	4	42	\$24,669	19%	E	5452
C0617	\$1,078,600	3	10	\$107,860	100%	D	5150
C0625	\$1,083,400	3	162	\$6,688	99%	D	5150
C1222	\$1,096,000	4	17	\$64,471	0%	D	5251
C1191	\$1,098,200	4	6	\$183,033	0%	D	5351
C1206	\$1,211,700	4	9	\$134,633	67%	D	5150
C0531	\$1,231,000	3	17	\$72,412	59%	D	5252
C1019	\$1,236,300	4	60	\$20,605	3%	I	5655
C1313	\$1,332,000	4	1	\$1,332,000	0%	E	5751
C0001	\$1,435,600	3	30	\$47,853	27%	I	5655
C0023	\$1,522,800	3	165	\$9,229	67%	E	5654
C0002	\$1,547,300	3	565	\$2,739	91%	E	5655
C1240	\$1,636,500	4	143	\$11,444	73%	D	5151
C1109	\$1,702,600	4	1	\$1,702,600	0%	E	5553
C0631	\$1,715,900	3	171	\$10,035	99%	D	5150
C0593	\$1,906,100	3	317	\$6,013	96%	D	5150
C1287	\$1,962,400	4	1	\$1,962,400	0%	E	5852
C1114	\$2,015,000	4	68	\$29,632	21%	D	5551
C1017	\$2,111,200	4	4	\$527,800	0%	E	5655
C1179	\$2,113,100	4	209	\$10,111	89%	D	5252
C1294	\$2,141,000	2	1	\$2,141,000	0%	D	5251
C1277	\$2,182,800	4	64	\$34,106	8%	D	5150
C1327	\$2,264,000	4	1	\$2,264,000	0%	E	5552
C1052	\$2,433,000	4	227	\$10,718	8%	E	5752
C1096	\$3,745,200	4	35	\$107,006	6%	E	5652
C0019	\$3,942,000	3	67	\$58,836	10%	I	5653
C1007	\$4,086,700	4	8	\$510,838	0%	E	5655
C1207	\$6,814,400	4	101	\$67,469	59%	D	5251
C1223	\$7,491,000	4	47	\$159,383	0%	D	5252
C1097	\$9,802,400	4	47	\$208,562	43%	E	5552
TOTAL	\$100,579,200						
Sorted by Cost per Address							
C0427	\$18,600	3	37	\$503	97%	D	5452

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
C0675	\$39,200	4	51	\$769	100%	D	5051
C0549	\$56,700	3	59	\$961	85%	D	5251
C0677	\$61,100	3	54	\$1,131	100%	D	5051
C0465	\$33,100	3	26	\$1,273	100%	E	5452
C0109	\$100,500	3	61	\$1,648	90%	C	5051
C1098	\$86,700	4	52	\$1,667	69%	I	5654
C0452	\$36,900	3	20	\$1,845	100%	D	5453
C0633	\$109,600	3	51	\$2,149	100%	D	5150
C0086	\$96,100	3	44	\$2,184	43%	D	5151
C0639	\$234,800	3	103	\$2,280	100%	D	5050
C0599	\$177,200	3	77	\$2,301	100%	D	5150
C0603	\$815,700	3	347	\$2,351	96%	D	5150
C0404	\$53,200	3	21	\$2,533	24%	D	5453
C0002	\$1,547,300	3	565	\$2,739	91%	E	5655
C0435	\$114,200	3	39	\$2,928	97%	D	5453
C0574	\$308,400	3	105	\$2,937	100%	D	5251
C0699	\$223,700	3	76	\$2,943	97%	E	5453
C0453	\$35,400	3	12	\$2,950	100%	D	5453
C0587	\$945,000	3	301	\$3,140	76%	D	5250
C0600	\$399,500	3	126	\$3,171	100%	D	5150
C0556	\$143,600	3	44	\$3,264	93%	D	5251
C0183	\$82,900	3	25	\$3,316	100%	E	5754
C1031	\$787,000	4	236	\$3,335	68%	E	5754
C1009	\$175,400	4	48	\$3,654	92%	E	5755
C0463	\$226,800	3	62	\$3,658	100%	E	5452
C1210	\$338,100	4	92	\$3,675	99%	D	5150
C0663	\$67,100	3	17	\$3,947	100%	D	5151
C1078	\$101,300	4	25	\$4,052	52%	I	5654
C0657	\$185,900	3	45	\$4,131	100%	D	5151
C1038	\$123,200	4	29	\$4,248	59%	I	5654
C0442	\$72,900	3	15	\$4,860	100%	E	5453
C0460	\$81,100	3	16	\$5,069	100%	E	5452
C1010	\$267,400	4	51	\$5,243	75%	E	5755
C0593	\$1,906,100	3	317	\$6,013	96%	D	5150
C1199	\$820,000	4	136	\$6,029	40%	D	5150
C0660	\$102,300	3	16	\$6,394	100%	D	5151
C0543	\$52,700	3	8	\$6,588	88%	D	5252
C0625	\$1,083,400	3	162	\$6,688	99%	D	5150
C0621	\$843,900	3	122	\$6,917	99%	D	5150
C1028	\$183,700	4	25	\$7,348	92%	E	5654
C0623	\$1,000,100	3	130	\$7,693	98%	D	5150

**TABLE 6C 2-YEAR COST – GROUP 4
SIMS BAYOU**

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
C1249	\$358,000	4	44	\$8,136	43%	C	5052
C0619	\$245,800	3	27	\$9,104	100%	D	5150
C0023	\$1,522,800	3	165	\$9,229	67%	I	5654
C1022	\$93,500	4	10	\$9,350	60%	I	5654
C1088	\$120,400	4	12	\$10,033	100%	E	5553
C0631	\$1,715,900	3	171	\$10,035	99%	D	5150
C1179	\$2,113,100	4	209	\$10,111	89%	D	5252
C1011	\$280,600	4	27	\$10,393	33%	E	5755
C0670	\$10,700	3	1	\$10,700	0%	C	5151
C1052	\$2,433,000	4	227	\$10,718	8%	E	5752
C1033	\$77,900	4	7	\$11,129	0%	E	5754
C1042	\$705,700	4	63	\$11,202	0%	E	5653
C1240	\$1,636,500	4	143	\$11,444	73%	D	5151
C1214	\$370,000	4	30	\$12,333	73%	D	5150
C0332	\$302,000	3	24	\$12,583	92%	I	5654
C1032	\$68,900	4	5	\$13,780	0%	E	5754
C0300	\$359,400	3	25	\$14,376	4%	E	5752
C0698	\$148,000	3	10	\$14,800	0%	E	5453
C1046	\$289,400	4	19	\$15,232	0%	E	5753
C1019	\$1,236,300	4	60	\$20,605	3%	I	5655
C1220	\$71,800	4	3	\$23,933	0%	D	5252
C0488	\$73,800	3	3	\$24,600	0%	D	5352
C1141	\$1,036,100	4	42	\$24,669	19%	E	5452
C1058	\$684,400	4	27	\$25,348	0%	I	5653
C0520	\$228,700	3	9	\$25,411	0%	D	5251
C1142	\$744,400	4	29	\$25,669	62%	E	5452
C1062	\$192,000	4	7	\$27,429	0%	E	5652
C1105	\$619,600	4	22	\$28,164	0%	E	5554
C0519	\$59,800	3	2	\$29,900	0%	D	5251
C1114	\$2,015,000	4	68	\$29,632	21%	D	5551
C1056	\$570,300	4	19	\$30,016	5%	E	5653
C1277	\$2,182,800	4	64	\$34,106	8%	D	5150
C0001	\$1,435,600	3	30	\$47,853	27%	I	5655
C1026	\$293,700	4	6	\$48,950	0%	I	5654
C0474	\$99,900	3	2	\$49,950	0%	D	5452
C1173	\$576,200	4	10	\$57,620	0%	D	5352
C0019	\$3,942,000	3	67	\$58,836	10%	I	5653
C1222	\$1,096,000	4	17	\$64,471	0%	D	5251
C1207	\$6,814,400	4	101	\$67,469	59%	D	5251
C1116	\$965,500	4	14	\$68,964	43%	E	5552

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
C0531	\$1,231,000	3	17	\$72,412	59%	D	5252
C0665	\$531,700	3	7	\$75,957	0%	C	5152
C1025	\$313,800	4	4	\$78,450	0%	I	5654
C1035	\$336,800	4	4	\$84,200	0%	E	5754
C1068	\$188,600	4	2	\$94,300	0%	E	5653
C1036	\$297,600	4	3	\$99,200	0%	E	5654
C0407	\$305,700	3	3	\$101,900	0%	D	5453
C1096	\$3,745,200	4	35	\$107,006	6%	E	5652
C0617	\$1,078,600	3	10	\$107,860	100%	D	5150
C1080	\$111,600	4	1	\$111,600	0%	I	5654
C0689	\$132,100	3	1	\$132,100	0%	D	5050
C0115	\$133,300	3	1	\$133,300	0%	I	5655
C1206	\$1,211,700	4	9	\$134,633	67%	D	5150
C1037	\$149,100	4	1	\$149,100	0%	E	5654
C0480	\$611,000	3	4	\$152,750	0%	E	5553
C1223	\$7,491,000	4	47	\$159,383	0%	D	5252
C1191	\$1,098,200	4	6	\$183,033	0%	D	5351
C1006	\$613,600	4	3	\$204,533	0%	I	5655
C1097	\$9,802,400	4	47	\$208,562	43%	E	5552
C0583	\$850,100	3	4	\$212,525	100%	D	5150
C0402	\$219,400	3	1	\$219,400	0%	D	5353
C0403	\$278,700	3	1	\$278,700	0%	D	5353
C0405	\$281,800	3	1	\$281,800	0%	D	5453
C0478	\$594,300	3	2	\$297,150	50%	E	5552
C1337	\$322,000	4	1	\$322,000	0%	D	5353
C1338	\$322,000	4	1	\$322,000	0%	D	5353
C0487	\$332,300	3	1	\$332,300	0%	D	5352
C1330	\$468,000	4	1	\$468,000	0%	E	5552
C1007	\$4,086,700	4	8	\$510,838	0%	E	5655
C1017	\$2,111,200	4	4	\$527,800	0%	E	5655
C1313	\$1,332,000	4	1	\$1,332,000	0%	E	5751
C1109	\$1,702,600	4	1	\$1,702,600	0%	E	5553
C1287	\$1,962,400	4	1	\$1,962,400	0%	E	5852
C1294	\$2,141,000	2	1	\$2,141,000	0%	D	5251
C1327	\$2,264,000	4	1	\$2,264,000	0%	E	5552
TOTAL	\$100,579,200						

**TABLE 7C 2-YEAR COST – GROUP 1
SIMS BAYOU**

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
Sorted by Additional for 5-Year Storm						
C0574	\$308,400	\$315,600	\$7,200	3	D	5251
C1038	\$123,200	\$134,000	\$10,800	4	I	5654
C0619	\$245,800	\$258,200	\$12,400	3	D	5150
C0698	\$148,000	\$163,400	\$15,400	3	E	5453
C0115	\$133,300	\$148,700	\$15,400	3	I	5655
C0086	\$96,100	\$112,600	\$16,500	3	D	5151
C0487	\$332,300	\$351,000	\$18,700	3	D	5352
C1025	\$313,800	\$341,500	\$27,700	4	I	5654
C1035	\$336,800	\$366,600	\$29,800	4	E	5754
C0445	\$0	\$37,300	\$37,300	A	E	5453
C0600	\$399,500	\$444,700	\$45,200	3	D	5150
C1249	\$358,000	\$406,200	\$48,200	4	C	5052
C1210	\$338,100	\$391,100	\$53,000	4	D	5150
C1141	\$1,036,100	\$1,092,800	\$56,700	4	E	5452
C1036	\$297,600	\$361,900	\$64,300	4	E	5654
C0678	\$0	\$81,000	\$81,000	A	D	5051
C1142	\$744,400	\$828,200	\$83,800	4	E	5452
C0217	\$0	\$84,700	\$84,700	A	E	5653
C0583	\$850,100	\$937,400	\$87,300	3	D	5150
C0631	\$1,715,900	\$1,809,600	\$93,700	3	D	5150
C0688	\$0	\$100,400	\$100,400	A	D	5050
C0665	\$531,700	\$640,600	\$108,900	3	C	5152
C0427	\$18,600	\$130,000	\$111,400	3	D	5452
C0306	\$0	\$120,600	\$120,600	A	E	5652
C1006	\$613,600	\$752,200	\$138,600	4	I	5655
C0480	\$611,000	\$759,500	\$148,500	3	E	5553
C0621	\$843,900	\$1,011,000	\$167,100	3	D	5150
C0593	\$1,906,100	\$2,081,600	\$175,500	3	D	5150
C0023	\$1,522,800	\$1,717,200	\$194,400	3	I	5654
C0019	\$3,942,000	\$4,143,000	\$201,000	3	I	5653
C1109	\$1,702,600	\$1,909,200	\$206,600	4	E	5553
C1206	\$1,211,700	\$1,425,200	\$213,500	4	D	5150
C0549	\$56,700	\$278,100	\$221,400	3	D	5251
C0587	\$945,000	\$1,182,300	\$237,300	3	D	5250
C1277	\$2,182,800	\$2,423,000	\$240,200	4	D	5150
C0109	\$100,500	\$375,400	\$274,900	3	C	5051
C1287	\$1,962,400	\$2,244,500	\$282,100	4	E	5852
C0122	\$0	\$290,700	\$290,700	A	I	5655
C1179	\$2,113,100	\$2,446,300	\$333,200	4	D	5252

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
C0625	\$1,083,400	\$1,428,400	\$345,000	3	D	5150
C0603	\$815,700	\$1,162,200	\$346,500	3	D	5150
C0489	\$0	\$359,300	\$359,300	A	D	5351
C0321	\$0	\$382,800	\$382,800	A	E	5752
C0531	\$1,231,000	\$1,702,800	\$471,800	3	D	5252
C1223	\$7,491,000	\$8,169,900	\$678,900	4	D	5252
C0623	\$1,000,100	\$1,774,600	\$774,500	3	D	5150
C1207	\$6,814,400	\$7,701,200	\$886,800	4	D	5251
C0529	\$0	\$1,263,700	\$1,263,700	A	D	5252
TOTAL	\$46,477,500	\$56,642,200	\$10,164,700			

TABLE 8C 5-YEAR COST – GROUP 2
SIMS BAYOU

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
Sorted by Additional for 5-Year						
C0020	\$356,500	\$429,800	\$73,300	1	I	5654
C0476	\$1,205,500	\$2,014,100	\$808,600	1	D	5452
TOTAL	\$1,562,000	\$2,443,900	\$881,900			

TABLE 9C 5-YEAR COST – GROUP 3
SIMS BAYOU

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
Sorted by Additional for 5-Year Storm						
C0499	\$37,200	\$40,300	\$3,100	1	D	5351
C0524	\$117,100	\$121,200	\$4,100	1	D	5251
C0411	\$416,400	\$428,700	\$12,300	1	D	5452
C0648	\$378,200	\$417,200	\$39,000	1	D	5151
C1144	\$913,000	\$975,000	\$62,000	2	E	5452
C0161	\$853,300	\$934,500	\$81,200	1	I	5654
C0426	\$894,300	\$987,100	\$92,800	1	D	5452
C0528	\$422,500	\$525,900	\$103,400	1	D	5251
C0382	\$0	\$114,700	\$114,700	A	D	5453
C0702	\$1,133,800	\$1,254,500	\$120,700	1	E	5453
C0003	\$1,188,700	\$1,364,700	\$176,000	1	E	5654
C0037	\$0	\$195,000	\$195,000	A	I	5553
C0047	\$104,400	\$308,400	\$204,000	1	E	5553
C0429	\$138,100	\$378,600	\$240,500	1	D	5451
C0030	\$3,072,200	\$3,321,300	\$249,100	1	I	5554
C0029	\$422,300	\$769,200	\$346,900	1	I	5554
C0058	\$2,495,800	\$2,882,200	\$386,400	1	D	5452
C0133	\$0	\$468,000	\$468,000	A	I	5555
C1158	\$1,000,300	\$1,497,900	\$497,600	2	D	5353
C1113	\$4,905,900	\$5,708,400	\$802,500	2	E	5552
C0127	\$555,400	\$1,638,000	\$1,082,600	1	I	5555
C1182	\$15,986,000	\$17,509,900	\$1,523,900	2	D	5252
TOTAL	\$35,034,900	\$41,840,700	\$6,805,800			

**TABLE 10C 5-YEAR COST – GROUP 4
SIMS BAYOU**

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
Sorted by Additional for 5-Year Storm						
C0574	\$308,400	\$315,600	\$7,200	3	D	5251
C1038	\$123,200	\$134,000	\$10,800	4	I	5654
C0619	\$245,800	\$258,200	\$12,400	3	D	5150
C0698	\$148,000	\$163,400	\$15,400	3	E	5453
C0115	\$133,300	\$148,700	\$15,400	3	I	5655
C0086	\$96,100	\$112,600	\$16,500	3	D	5151
C0487	\$332,300	\$351,000	\$18,700	3	D	5352
C1025	\$313,800	\$341,500	\$27,700	4	I	5654
C1035	\$336,800	\$366,600	\$29,800	4	E	5754
C0445	\$0	\$37,300	\$37,300	A	E	5453
C0600	\$399,500	\$444,700	\$45,200	3	D	5150
C1249	\$358,000	\$406,200	\$48,200	4	C	5052
C1210	\$338,100	\$391,100	\$53,000	4	D	5150
C1141	\$1,036,100	\$1,092,800	\$56,700	4	E	5452
C1036	\$297,600	\$361,900	\$64,300	4	E	5654
C0678	\$0	\$81,000	\$81,000	A	D	5051
C1142	\$744,400	\$828,200	\$83,800	4	E	5452
C0217	\$0	\$84,700	\$84,700	A	E	5653
C0583	\$850,100	\$937,400	\$87,300	3	D	5150
C0631	\$1,715,900	\$1,809,600	\$93,700	3	D	5150
C0688	\$0	\$100,400	\$100,400	A	D	5050
C0665	\$531,700	\$640,600	\$108,900	3	C	5152
C0427	\$18,600	\$130,000	\$111,400	3	D	5452
C0306	\$0	\$120,600	\$120,600	A	E	5652
C1006	\$613,600	\$752,200	\$138,600	4	I	5655
C0480	\$611,000	\$759,500	\$148,500	3	E	5553
C0621	\$843,900	\$1,011,000	\$167,100	3	D	5150
C0593	\$1,906,100	\$2,081,600	\$175,500	3	D	5150
C0023	\$1,522,800	\$1,717,200	\$194,400	3	I	5654
C0019	\$3,942,000	\$4,143,000	\$201,000	3	I	5653
C1109	\$1,702,600	\$1,909,200	\$206,600	4	E	5553
C1206	\$1,211,700	\$1,425,200	\$213,500	4	D	5150
C0549	\$56,700	\$278,100	\$221,400	3	D	5251
C0587	\$945,000	\$1,182,300	\$237,300	3	D	5250
C1277	\$2,182,800	\$2,423,000	\$240,200	4	D	5150
C0109	\$100,500	\$375,400	\$274,900	3	C	5051
C1287	\$1,962,400	\$2,244,500	\$282,100	4	E	5852
C0122	\$0	\$290,700	\$290,700	A	I	5655
C1179	\$2,113,100	\$2,446,300	\$333,200	4	D	5252

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
C0625	\$1,083,400	\$1,428,400	\$345,000	3	D	5150
C0603	\$815,700	\$1,162,200	\$346,500	3	D	5150
C0489	\$0	\$359,300	\$359,300	A	D	5351
C0321	\$0	\$382,800	\$382,800	A	E	5752
C0531	\$1,231,000	\$1,702,800	\$471,800	3	D	5252
C1223	\$7,491,000	\$8,169,900	\$678,900	4	D	5252
C0623	\$1,000,100	\$1,774,600	\$774,500	3	D	5150
C1207	\$6,814,400	\$7,701,200	\$886,800	4	D	5251
C0529	\$0	\$1,263,700	\$1,263,700	A	D	5252
TOTAL	\$46,477,500	\$56,642,200	\$10,164,700			

TABLE GLOSSARY

2-Year Analysis Status

- Inadequate – Storm sewer analysis program results indicate system is not adequate.
- Adequate – Storm sewer analysis program results indicate system is adequate.
- Cannot Analyze – System could not be analyzed with the storm sewer analysis program due to lack of information.

2-Year CIP Cost – Probable cost to meet 2-year design criteria

Additional for 5-Year – Additional cost for major thoroughfares criteria (5-year storm)

Group

- Group 1 Systems that have reported structure and street-related flooding complaints.
- Group 2 Systems that have reported structure flooding complaints only.
- Group 3 Systems that have reported street flooding complaints only.
- Group 4 Systems that have no reported flooding complaints. Group 4 costs types will be applicable for categories 3 and 4 only.

Category

- Category 1 Existing storm sewer systems that have been determined to be inadequate and where flooding complaints have been reported within drainage boundaries.
- Category 2 Converting existing open-ditch systems (non-storm sewer areas) to storm sewer systems where previous flooding complaints have been reported. Proposed storm sewer systems for this category type address the main trunk system requirements only.
- Category 3 Existing storm sewer systems that have been determined to be inadequate and where flooding complaints *have not* been reported.
- Category 4 Converting existing open-ditch systems (non-storm sewer areas) to storm sewer systems where previous flooding complaints *have not* been reported. Proposed storm sewer systems for this category type address the main trunk system requirements only.
- Category 5 Areas currently considered to be undeveloped and having no defined drainage system. For this category type, drainage areas and main (trunk) sewer systems were determined.
- Category A Existing storm sewer systems that have been determined to be adequate. These systems may or may not have reported flooding complaints.

Category C.N.A. – System that could not be analyzed due to lack of storm sewer information.

City Council District – City Council district within which storm sewer system is located.

Facet Number – Facet (system map) number sheet on which storm sewer system is located.

Number of Addresses – Total number of addresses that are located in storm sewer study drainage boundary.

Cost Per Address – 2-year CIP cost divided by number of addresses.

Percent of System Single Family – Percent of storm sewer system drainage area classified as a *Single-family land-use type*.

TABLE 1 – STORM SEWER UNIT COST RATES

Pipe Diameter (in)	Unit Cost Rate (\$/ln ft)	Equivalent Box Size (ft x ft)
24	\$240	
30	\$260	
36	\$290	
42	\$340	
48	\$370	
54	\$450	
60	\$480	
66	\$520	
72	\$550	
78	\$590	
84	\$620	
90	\$720	
96	\$760	8 x 7
102	\$810	
108	\$820	
114	\$890	
120	\$930	10 x 9
126	\$1,060	10 x 9
132	\$1,110	10 x 10
138	\$1,150	10 x 10
144	\$1,190	8 x 7 & 8 x 7
150	\$1,350	8 x 7 & 8 x 8
156	\$1,400	8 x 8 & 8 x 8
162	\$1,450	10 x 9 & 8 x 7
168	\$1,490	10 x 9 & 8 x 8
174	\$1,540	10 x 10 & 8 x 8
180	\$1,590	10 x 9 & 10 x 9
186	\$1,640	10 x 10 & 10 x 9
192	\$1,680	10 x 10 & 10 x 10
198	\$1,730	10 x 10 & 8 x 7 & 8 x 7
204	\$1,780	10 x 9 & 10 x 9 & 8 x 7
210	\$1,820	10 x 10 & 10 x 9 & 8 x 7
216	\$1,870	10 x 10 & 10 x 10 & 8 x 7
222	\$1,920	See Note 1
228	\$1,970	See Note 1
234	\$2,010	See Note 1
240	\$2,060	See Note 1
246	\$2,110	See Note 1
252	\$2,150	See Note 1
258	\$2,200	See Note 1

Pipe Diameter (in)	Unit Cost Rate (\$/ln ft)	Equivalent Box Size (ft x ft)
264	\$2,250	See Note 1
270	\$2,300	See Note 1
276	\$2,340	See Note 1
282	\$2,390	See Note 1
288	\$2,440	See Note 1
Unit Cost Rates were developed based on City of Houston Bid Tabs for storm sewer projects constructed during 1994 and 1998.		
Unit Cost Rates include the following:		
Removal of existing pipe and pavement		
Storm sewer pipe		
Manholes		
Inlets		
Replacement of pavement		
Dewatering		
Trench safety		
Traffic control		
Engineering and contingency (20 percent)		
Unit Cost Rates do not include the following:		
Relocation of existing utilities		
Acquisition of additional right-of-way		

Notes

1. Equivalent box sizes for pipe diameters 222 inches or greater were not determined. It may be more cost-effective to propose an open channel instead of a box.

**TABLE 2E – WHITE OAK
SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
Sorted by Outfall System ID								
E0001	Datum	\$0	\$0	\$0	4	C.N.A.	H	5457
E0003	Datum	\$0	\$0	\$0	4	C.N.A.	H, I	5457
E0004	Inadequate	\$72,400	\$72,500	\$144,900	4	3	H, I	5457, 5458
E0005	Adequate	\$0	\$0	\$0	4	A	H, I	5357, 5457, 5458
E0006	Datum	\$678,300	\$849,700	\$1,528,000	3	1	H	5458
E0007	Adequate	\$0	\$0	\$0	4	A	H, I	5458
E0008	Adequate	\$0	\$0	\$0	4	A	H	5458
E0009	Adequate	\$0	\$176,100	\$176,100	3	A	H	5458
E0010	Inadequate	\$3,057,900	\$219,800	\$3,277,700	1	1	H	5458
E0011	Adequate	\$0	\$0	\$0	4	A	H	5358
E0012	Inadequate	\$5,211,900	\$0	\$5,211,900	2	1	H	5258, 5358
E0013	Cannot Analyze	\$0	\$0	\$0	2	C.N.A.	H	5358
E0014	Datum	\$1,581,400	\$0	\$1,581,400	3	1	H, I	5258, 5358, 5458
E0015	Adequate	\$0	\$0	\$0	4	A	H	5358
E0016	Adequate	\$0	\$0	\$0	4	A	H	5358
E0017	Adequate	\$0	\$0	\$0	4	A	H	5358
E0018	Adequate	\$0	\$0	\$0	4	A	H	5358
E0019	Adequate	\$0	\$0	\$0	4	A	H	5358
E0020	Adequate	\$0	\$0	\$0	4	A	H	5358
E0021	Adequate	\$0	\$0	\$0	4	A	H	5358
E0022	Adequate	\$0	\$0	\$0	4	A	H	5358
E0023	Adequate	\$0	\$0	\$0	4	A	H	5358
E0024	Adequate	\$0	\$0	\$0	4	A	H	5358
E0025	Adequate	\$0	\$0	\$0	4	A	H	5358
E0026	Inadequate	\$447,800	\$0	\$447,800	2	1	H	5358
E0027	Adequate	\$0	\$0	\$0	4	A	H	5358
E0028	Adequate	\$0	\$0	\$0	3	A	H	5358
E0029	Inadequate	\$63,700	\$69,500	\$133,200	4	3	H	5358
E0030	Adequate	\$0	\$0	\$0	4	A	H	5358
E0031	Adequate	\$0	\$0	\$0	4	A	H	5358
E0032	Adequate	\$0	\$0	\$0	4	A	H	5358
E0033	Inadequate	\$55,400	\$0	\$55,400	2	1	H	5358
E0034	Inadequate	\$7,028,800	\$773,400	\$7,802,200	2	1	H	5358, 5359
E0035	Inadequate	\$158,500	\$880,600	\$1,039,100	1	1	H	5358
E0036	Inadequate	\$2,109,100	\$230,300	\$2,339,400	2	1	G, H	5258, 5358
E0037	Adequate	\$0	\$0	\$0	4	A	H	5358
E0038	Adequate	\$0	\$0	\$0	4	A	H	5358
E0039	Adequate	\$0	\$0	\$0	4	A	H	5258, 5358

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
E0040	Cannot Analyze	\$0	\$0	\$0	A	C.N.A.	H	5258
E0041	Inadequate	\$653,200	\$1,125,900	\$1,779,100	3	1	H	5258, 5358
E0042	Adequate	\$0	\$0	\$0	4	A	H	5258
E0043	Adequate	\$0	\$0	\$0	4	A	H	5258
E0044	Adequate	\$0	\$0	\$0	4	A	H	5258
E0045	Adequate	\$0	\$0	\$0	4	A	H	5258
E0046	Adequate	\$0	\$140,700	\$140,700	2	A	H	5258
E0047	Adequate	\$0	\$0	\$0	4	A	H	5258
E0048	Adequate	\$0	\$0	\$0	4	A	H	5258
E0049	Inadequate	\$10,982,100	\$238,200	\$11,220,300	3	1	A	5158, 5258
E0050	Adequate	\$0	\$0	\$0	4	A	H	5258
E0051	Adequate	\$0	\$0	\$0	3	A	H	5258
E0053	Adequate	\$0	\$0	\$0	3	A	H	5258
E0054	Adequate	\$0	\$0	\$0	3	A	A	5258
E0055	Adequate	\$0	\$0	\$0	4	A	H	5258
E0057	Inadequate	\$474,000	\$0	\$474,000	1	1	A	5258
E0058	Inadequate	\$2,499,300	\$1,361,500	\$3,860,800	1	1	A	5258, 5358
E0059	Inadequate	\$13,891,900	\$0	\$13,891,900	1	1	A	5258, 5358
E0060	Adequate	\$0	\$0	\$0	1	A	H	5259
E0061	Adequate	\$0	\$0	\$0	4	A	H	5259
E0062	Adequate	\$0	\$0	\$0	2	A	H	5259
E0063	Inadequate	\$192,100	\$344,000	\$536,100	4	3	A	5259
E0064	Adequate	\$0	\$0	\$0	4	A	A	5259
E0065	Adequate	\$0	\$0	\$0	2	A	A	5259
E0066	Adequate	\$0	\$0	\$0	4	A	H	5259
E0067	Adequate	\$0	\$0	\$0	4	A	H	5259
E0068	Inadequate	\$87,300	\$248,900	\$336,200	3	1	A	5259
E0069	Inadequate	\$48,800	\$5,600	\$54,400	4	3	A	5259
E0070	Adequate	\$0	\$0	\$0	4	A	H	5259
E0071	Adequate	\$0	\$0	\$0	4	A	H	5259
E0072	Adequate	\$0	\$0	\$0	4	A	A, H	5259
E0073	Inadequate	\$1,574,700	\$408,800	\$1,983,500	4	3	A, H	5159, 5259
E0074	Adequate	\$0	\$0	\$0	4	A	A, H	5259
E0075	Adequate	\$0	\$0	\$0	4	A	A, H	5259
E0076	Adequate	\$0	\$0	\$0	4	A	A	5259
E0077	Adequate	\$0	\$0	\$0	4	A	H	5259
E0078	Inadequate	\$831,600	\$0	\$831,600	1	1	A	5259
E0079	Adequate	\$0	\$0	\$0	4	A	A	5259
E0080	Inadequate	\$489,800	\$0	\$489,800	1	1	H	5159, 5259
E0081	Adequate	\$0	\$0	\$0	4	A	A, H	5259
E0082	Inadequate	\$9,578,500	\$1,607,200	\$11,185,700	1	1	A	5259, 5260
E0083	Adequate	\$0	\$0	\$0	4	A	A	5259

**TABLE 2E – WHITE OAK
SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
E0084	Inadequate	\$938,300	\$0	\$938,300	4	3	A, II	5159, 5160, 5259
E0085	Adequate	\$0	\$150,200	\$150,200	3	A	A	5160, 5260
E0086	Inadequate	\$486,100	\$217,400	\$703,500	1	1	A	5160, 5260
E0087	Inadequate	\$1,992,500	\$1,310,200	\$3,302,700	3	1	A	5160, 5260
E0088	Adequate	\$0	\$0	\$0	3	A	A	5160
E0089	Inadequate	\$6,123,600	\$0	\$6,123,600	1	1	A	5160
E0090	Inadequate	\$4,370,700	\$72,500	\$4,443,200	3	1	A	5160, 5260
E0091	Adequate	\$0	\$0	\$0	3	A	A	5160
E0092	Adequate	\$0	\$0	\$0	4	A	A	5160
E0093	Adequate	\$0	\$0	\$0	4	A	A	5160
E0094	Adequate	\$0	\$0	\$0	4	A	A	5160
E0095	Adequate	\$0	\$0	\$0	4	A	A	5160
E0096	Inadequate	\$201,200	\$26,500	\$227,700	2	1	A	5160
E0097	Inadequate	\$139,400	\$24,100	\$163,500	3	1	A	5160
E0098	Adequate	\$0	\$0	\$0	4	A	A	5160
E0099	Adequate	\$0	\$0	\$0	4	A	A	5160
E0100	Adequate	\$0	\$0	\$0	4	A	A	5160
E0101	Inadequate	\$61,700	\$5,100	\$66,800	1	1	A	5160
E0102	Adequate	\$0	\$0	\$0	4	A	A	5160
E0103	Adequate	\$0	\$0	\$0	4	A	A	5160
E0104	Adequate	\$0	\$0	\$0	3	A	A	5160
E0105	Adequate	\$0	\$0	\$0	1	A	B	5160, 5161
E0106	Adequate	\$0	\$0	\$0	3	A	B	5161
E0107	Adequate	\$0	\$0	\$0	3	A	A	5161
E0108	Adequate	\$0	\$0	\$0	4	A	B	5161, 5261
E0109	Adequate	\$0	\$0	\$0	4	A	A	5161
E0110	Adequate	\$0	\$0	\$0	4	A	B	5161, 5261
E0111	Adequate	\$0	\$0	\$0	4	A	A	5161
E0112	Adequate	\$0	\$0	\$0	4	A	A	5161
E0113	Adequate	\$0	\$0	\$0	4	A	B	5161, 5261
E0114	Adequate	\$0	\$0	\$0	3	A	A	5161
E0115	Adequate	\$0	\$0	\$0	2	A	A	5161
E0116	Adequate	\$0	\$0	\$0	4	A	A	5161
E0117	Inadequate	\$198,800	\$727,300	\$926,100	3	1	A	5161
E0118	Adequate	\$0	\$0	\$0	3	A	A	5161
E0119	Inadequate	\$76,400	\$0	\$76,400	1	1	A	5162
E0120	Adequate	\$0	\$0	\$0	4	A	A	5161, 5162
E0121	Adequate	\$0	\$0	\$0	3	A	A	5162
E0122	Inadequate	\$205,700	\$0	\$205,700	1	1	A	5162
E0123	Inadequate	\$128,800	\$0	\$128,800	2	1	A	5161, 5162
E0124	Adequate	\$0	\$0	\$0	2	A	A	5162
E0125	Adequate	\$0	\$0	\$0	1	A	A	5162

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
E0126	Inadequate	\$240,400	\$0	\$240,400	1	1	A	5162
E0127	Adequate	\$0	\$0	\$0	1	A	A	5062, 5162
E0128	Cannot Analyze	\$0	\$0	\$0	2	C.N.A.	A	5062
E0129	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	A	5062
E0130	Inadequate	\$229,800	\$182,800	\$412,600	4	3	A	5061, 5062, 5161, 5162
E0131	Adequate	\$0	\$0	\$0	4	A	A	5062
E0132	Inadequate	\$1,352,300	\$0	\$1,352,300	2	1	A	5062
E0133	Adequate	\$0	\$0	\$0	1	A	A	5062
E0134	Adequate	\$0	\$0	\$0	2	A	A	5062
E0135	Adequate	\$0	\$0	\$0	1	A	A	5062
E0136	Adequate	\$0	\$0	\$0	3	A	A	5061, 5062
E0137	Adequate	\$0	\$0	\$0	3	A	A	5062
E0138	Adequate	\$0	\$129,800	\$129,800	3	A	H	5358
E0139	Inadequate	\$5,530,200	\$2,703,300	\$8,233,500	1	1	II	5358, 5359
E0140	Adequate	\$0	\$0	\$0	4	A	H	5258
E0141	Adequate	\$0	\$0	\$0	3	A	H	5258
E0142	Adequate	\$0	\$0	\$0	4	A	II	5258
E0143	Inadequate	\$2,194,400	\$0	\$2,194,400	3	1	H	5258
E0144	Adequate	\$0	\$0	\$0	4	A	H	5258
E0145	Inadequate	\$2,678,700	\$37,700	\$2,716,400	3	1	H	5258, 5259, 5358, 5359
E0146	Inadequate	\$7,972,200	\$417,900	\$8,390,100	1	1	A, H	5259, 5359
E0147	Inadequate	\$5,772,100	\$734,900	\$6,507,000	3	1	H	5259, 5359
E0148	Adequate	\$0	\$0	\$0	1	A	II	5259
E0149	Adequate	\$0	\$0	\$0	4	A	H	5259
E0150	Inadequate	\$2,052,800	\$0	\$2,052,800	3	1	H	5259
E0151	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	H	5259
E0152	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	II	5259
E0153	Adequate	\$0	\$0	\$0	4	A	H	5259
E0154	Adequate	\$0	\$0	\$0	4	A	H	5259
E0155	Inadequate	\$163,300	\$0	\$163,300	4	3	H	5259
E0156	Adequate	\$0	\$0	\$0	3	A	A	5259
E0157	Inadequate	\$686,300	\$226,500	\$912,800	1	1	A	5259
E0158	Adequate	\$0	\$0	\$0	4	A	A	5259
E0159	Inadequate	\$19,010,100	\$3,834,900	\$22,845,000	1	1	A	5259, 5260
E0160	Inadequate	\$212,000	\$58,000	\$270,000	4	3	II	5259
E0161	Adequate	\$0	\$0	\$0	4	A	A	5160
E0162	Adequate	\$0	\$0	\$0	1	A	A	5160

**TABLE 2E – WHITE OAK
SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
E0163	Adequate	\$0	\$0	\$0	4	A	A	5160
E0164	Adequate	\$0	\$0	\$0	4	A	A	5160
E0165	Adequate	\$0	\$0	\$0	4	A	A	5160
E0166	Adequate	\$0	\$0	\$0	4	A	A	5160
E0167	Adequate	\$0	\$0	\$0	4	A	A	5160, 5260
E0168	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	A	5160, 5260
E0169	Adequate	\$0	\$0	\$0	3	A	A	5260
E0170	Adequate	\$0	\$0	\$0	4	A	A	5260
E0171	Adequate	\$0	\$0	\$0	4	A	A	5260
E0172	Adequate	\$0	\$0	\$0	4	A	A	5260
E0173	Adequate	\$0	\$0	\$0	4	A	A	5260
E0174	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	A	5260
E0175	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	A	5260
E0176	Adequate	\$0	\$0	\$0	4	A	A	5260
E0177	Adequate	\$0	\$0	\$0	4	A	A	5260
E0178	Adequate	\$0	\$0	\$0	4	A	A	5260
E0179	Adequate	\$0	\$0	\$0	4	A	A	5260
E0180	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	A	5260
E0181	Adequate	\$0	\$0	\$0	4	A	A	5260
E0182	Adequate	\$0	\$0	\$0	3	A	A	5260
E0183	Adequate	\$0	\$0	\$0	3	A	A	5260
E0184	Adequate	\$0	\$0	\$0	1	A	A	5260
E0185	Adequate	\$0	\$0	\$0	1	A	A	5260
E0186	Adequate	\$0	\$0	\$0	4	A	A	5260
E0187	Adequate	\$0	\$0	\$0	3	A	A	5260
E0188	Adequate	\$0	\$0	\$0	4	A	A	5260
E0189	Inadequate	\$850,100	\$0	\$850,100	3	1	A	5260
E0190	Inadequate	\$241,300	\$127,700	\$369,000	1	1	A	5260
E0191	Adequate	\$0	\$0	\$0	4	A	A, B	5260
E0192	Adequate	\$0	\$0	\$0	4	A	B	5261
E0193	Adequate	\$0	\$0	\$0	4	A	B	5261
E0194	Adequate	\$0	\$0	\$0	4	A	B	5261
E0195	Inadequate	\$44,600	\$31,400	\$76,000	3	1	B	5161
E0196	Adequate	\$0	\$0	\$0	4	A	H	5258
E0197	Adequate	\$0	\$0	\$0	4	A	H	5259
E0198	Inadequate	\$1,543,400	\$0	\$1,543,400	3	1	A, H	5159, 5259
E0199	Adequate	\$0	\$0	\$0	3	A	H	5257
E0200	Inadequate	\$1,728,500	\$0	\$1,728,500	3	1	A	5062, 5162
E0201	Adequate	\$0	\$0	\$0	4	A	A	5162

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
E0202	Adequate	\$0	\$0	\$0	4	A	A	5062, 5162
E0203	Adequate	\$0	\$0	\$0	4	A	A	5062
E0205	Adequate	\$0	\$0	\$0	4	A	A	5062
E0206	Adequate	\$0	\$496,900	\$496,900	1	A	A	5062
E0207	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	A	5062
E0208	Adequate	\$0	\$0	\$0	2	A	A	5062
E0209	Adequate	\$0	\$0	\$0	4	A	A	5062
E0210	Inadequate	\$342,500	\$0	\$342,500	3	1	A	5062
E0211	Adequate	\$0	\$0	\$0	4	A	A	5062
E0212	Adequate	\$0	\$0	\$0	4	A	A	5062
E0213	Adequate	\$0	\$0	\$0	2	A	A	5062
E0214	Adequate	\$0	\$0	\$0	4	A	A	5062
E0215	Adequate	\$0	\$0	\$0	4	A	A	5062
E0216	Adequate	\$0	\$0	\$0	3	A	A	5062
E0217	Adequate	\$0	\$0	\$0	4	A	A	5062
E0218	Adequate	\$0	\$0	\$0	4	A	A	5062
E0219	Adequate	\$0	\$0	\$0	3	A	A	5062
E0220	Adequate	\$0	\$0	\$0	3	A	A	5062
E0221	Inadequate	\$838,400	\$0	\$838,400	3	1	A	5062
E0222	Adequate	\$0	\$0	\$0	4	A	A	5062
E0223	Adequate	\$0	\$0	\$0	3	A	A	5062
E0224	Adequate	\$0	\$0	\$0	4	A	A	5062
E0225	Adequate	\$0	\$0	\$0	4	A	A	5062
E0226	Adequate	\$0	\$0	\$0	4	A	A	5062
E0227	Inadequate	\$211,400	\$0	\$211,400	2	3	H	5358
E0228	Adequate	\$0	\$0	\$0	3	A	H	5358
E0229	Adequate	\$0	\$0	\$0	4	A	H	5258
E0230	Adequate	\$0	\$0	\$0	4	A	A	5160
E0231	Inadequate	\$1,173,600	\$0	\$1,173,600	4	3	H	5159, 5259
E0233	Adequate	\$0	\$69,100	\$69,100	4	A	H	5159, 5259
E0234	Inadequate	\$546,600	\$0	\$546,600	4	3	H	5159
E0235	Adequate	\$0	\$0	\$0	4	A	H	5159
E0236	Inadequate	\$2,016,600	\$298,800	\$2,314,800	4	3	H	5159, 5160
E0237	Inadequate	\$2,393,400	\$0	\$2,393,400	3	1	H	5159
E0238	Inadequate	\$197,600	\$0	\$197,600	4	3	H	5159
E0239	Adequate	\$0	\$0	\$0	4	A	H	5159
E0240	Datum	\$2,896,100	\$503,200	\$3,399,300	4	3	H	5159
E0241	Inadequate	\$462,100	\$0	\$462,100	2	1	H	5159
E0242	Adequate	\$0	\$0	\$0	3	A	H	5159
E0245	Inadequate	\$498,200	\$0	\$498,200	4	1	H	5259
E0246	Adequate	\$0	\$0	\$0	4	A	H	5259
E0247	Adequate	\$0	\$0	\$0	3	A	A	5260

**TABLE 2E – WHITE OAK
SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
E0248	Inadequate	\$88,400	\$0	\$88,400	4	3	A	5259, 5260
E0249	Adequate	\$0	\$0	\$0	4	A	B	5261
E0250	Adequate	\$0	\$0	\$0	3	A	B	5261
E0251	Adequate	\$0	\$0	\$0	3	A	B	5261
E0252	Adequate	\$0	\$0	\$0	4	A	B	5261
E0253	Adequate	\$0	\$0	\$0	3	A	B	5261
E0254	Adequate	\$0	\$0	\$0	4	A	B	5261
E0255	Adequate	\$0	\$0	\$0	4	A	B	5261
E0256	Adequate	\$0	\$0	\$0	3	A	B	5261
E0257	Inadequate	\$83,700	\$0	\$83,700	3	1	B	5261
E0258	Adequate	\$0	\$0	\$0	4	A	B	5261
E0259	Adequate	\$0	\$0	\$0	3	A	B	5261
E0260	Adequate	\$0	\$0	\$0	3	A	B	5261
E0300	Adequate	\$0	\$0	\$0	4	A	H	5358
E0301	Inadequate	\$5,107,200	\$1,013,900	\$6,121,100	1	1	H	5358
E0302	Inadequate	\$204,200	\$30,600	\$234,800	1	1	H	5358, 5458
E0303	Adequate	\$0	\$0	\$0	4	A	H	5358, 5458
E0304	Adequate	\$0	\$0	\$0	4	A	H	5358
E0305	Adequate	\$0	\$0	\$0	4	A	H	5358, 5359
E0306	Adequate	\$0	\$0	\$0	3	A	H	5358, 5458
E0307	Adequate	\$0	\$0	\$0	4	A	H	5458
E0308	Inadequate	\$130,800	\$89,700	\$220,500	3	1	H	5458
E0309	Adequate	\$0	\$0	\$0	3	A	H	5358, 5458
E0310	Inadequate	\$272,700	\$603,700	\$876,400	2	1	H	5458
E0311	Inadequate	\$373,400	\$287,000	\$660,400	1	1	H	5458, 5459
E0312	Inadequate	\$18,185,000	\$4,483,900	\$22,668,900	1	1	H	5459
E0313	Inadequate	\$971,400	\$208,200	\$1,179,600	3	1	H	5459
E0314	Inadequate	\$599,000	\$44,900	\$643,900	3	1	H	5358, 5359
E0315	Adequate	\$0	\$0	\$0	4	A	H	5359
E0316	Adequate	\$0	\$0	\$0	4	A	H	5359
E0317	Adequate	\$0	\$0	\$0	4	A	H	5359
E0318	Adequate	\$0	\$0	\$0	4	A	H	5359
E0319	Inadequate	\$8,899,200	\$8,310,200	\$17,209,400	1	1	H	5358, 5359
E0320	Inadequate	\$94,900	\$0	\$94,900	4	3	H	5359
E0321	Adequate	\$0	\$0	\$0	4	A	H	5359
E0322	Adequate	\$0	\$0	\$0	1	A	H	5359
E0323	Adequate	\$0	\$0	\$0	4	A	H	5359
E0324	Adequate	\$0	\$0	\$0	2	A	H	5359
E0325	Adequate	\$0	\$0	\$0	4	A	H	5359
E0326	Adequate	\$0	\$0	\$0	1	A	H	5359
E0327	Adequate	\$0	\$0	\$0	4	A	H	5359
E0328	Datum	\$3,529,300	\$156,600	\$3,685,900	1	1	H	5359
E0329	Adequate	\$0	\$3,530,000	\$3,530,000	1	A	H	5359, 5459

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
E0330	Adequate	\$0	\$0	\$0	4	A	H	5359
E0331	Adequate	\$0	\$0	\$0	4	A	H	5359
E0332	Adequate	\$0	\$0	\$0	4	A	H	5359
E0333	Inadequate	\$22,600	\$186,000	\$208,600	4	3	H	5359
E0334	Adequate	\$0	\$0	\$0	3	A	H	5359, 5459
E0335	Inadequate	\$74,000	\$0	\$74,000	1	1	H	5359
E0336	Adequate	\$0	\$0	\$0	4	A	H	5359
E0337	Inadequate	\$2,355,700	\$6,449,400	\$8,805,100	1	1	H	5359, 5459
E0338	Inadequate	\$1,890,000	\$8,054,600	\$9,944,600	2	1	A, H	5259, 5260, 5359, 5360
E0339	Adequate	\$0	\$0	\$0	4	A	H	5359
E0340	Inadequate	\$6,455,900	\$695,800	\$7,151,700	1	1	A, H	5359, 5360
E0341	Adequate	\$0	\$0	\$0	4	A	H	5360
E0342	Inadequate	\$361,900	\$41,700	\$403,600	4	3	H	5360
E0343	Adequate	\$0	\$0	\$0	4	A	H	5360
E0344	Inadequate	\$25,496,400	\$6,556,200	\$32,052,600	1	1	H	5360, 5460
E0345	Adequate	\$0	\$585,300	\$585,300	4	A	H	5360
E0346	Datum	\$10,765,100	\$2,851,200	\$13,616,300	1	1	A, H	5260, 5360
E0347	Inadequate	\$3,023,800	\$572,300	\$3,596,100	1	1	H	5360
E0348	Datum	\$3,440,200	\$936,400	\$4,376,600	2	1	A, H	5360, 5361
E0349	Inadequate	\$198,800	\$0	\$198,800	4	3	B, H	5360
E0350	Datum	\$6,204,300	\$1,436,700	\$7,641,000	1	1	H	5360, 5361, 5460, 5461
E0351	Adequate	\$0	\$0	\$0	4	A	B, H	5360
E0352	Adequate	\$0	\$0	\$0	2	A	B, H	5360, 5361
E0353	Adequate	\$0	\$0	\$0	4	A	B	5361
E0354	Inadequate	\$9,917,800	\$28,400	\$9,946,200	1	1	B, H	5361, 5362
E0355	Adequate	\$0	\$0	\$0	4	A	H	5360
E0356	Adequate	\$0	\$0	\$0	3	A	H	5360
E0357	Adequate	\$0	\$0	\$0	3	A	H	5360
E0358	Adequate	\$0	\$0	\$0	3	A	H	5360
E0359	Adequate	\$0	\$0	\$0	3	A	H	5360
E0360	Adequate	\$0	\$0	\$0	4	A	H	5360
E0361	Adequate	\$0	\$0	\$0	4	A	H	5360
E0362	Adequate	\$0	\$0	\$0	4	A	H	5360
E0363	Adequate	\$0	\$0	\$0	4	A	H	5360
E0364	Adequate	\$0	\$0	\$0	4	A	H	5360
E0365	Adequate	\$0	\$0	\$0	3	A	H	5360
E0366	Adequate	\$0	\$0	\$0	4	A	H	5360
E0367	Adequate	\$0	\$0	\$0	3	A	H	5360
E0368	Adequate	\$0	\$0	\$0	4	A	H	5360
E0369	Inadequate	\$23,604,500	\$3,652,400	\$27,256,900	1	1	B, H	5361, 5362
E0370	Inadequate	\$162,500	\$0	\$162,500	1	1	H	5360

**TABLE 2E – WHITE OAK
SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
E0371	Inadequate	\$282,400	\$289,000	\$571,400	3	1	H	5360
E0372	Adequate	\$0	\$0	\$0	1	A	H	5360
E0373	Adequate	\$0	\$0	\$0	4	A	H	5360
E0374	Adequate	\$0	\$0	\$0	4	A	B, H	5361
E0375	Adequate	\$0	\$0	\$0	4	A	B, H	5361
E0376	Adequate	\$0	\$0	\$0	4	A	B, H	5261, 5361
E0377	Adequate	\$0	\$0	\$0	1	A	B, H	5261, 5361
E0378	Inadequate	\$658,900	\$0	\$658,900	3	1	B	5261, 5361
E0379	Inadequate	\$5,814,500	\$767,000	\$6,581,500	1	1	B	5261, 5262, 5361, 5362
E0380	Inadequate	\$6,060,200	\$368,100	\$6,428,300	1	1	B	5361, 5362
E0381	Adequate	\$0	\$0	\$0	4	A	B	5261
E0382	Adequate	\$0	\$0	\$0	3	A	B	5261
E0383	Adequate	\$0	\$0	\$0	4	A	B	5261
E0384	Adequate	\$0	\$0	\$0	4	A	B	5261
E0385	Inadequate	\$4,072,600	\$360,400	\$4,433,000	3	1	B	5261, 5262
E0386	Adequate	\$0	\$0	\$0	4	A	B	5261, 5262
E0387	Adequate	\$0	\$0	\$0	4	A	B	5262
E0388	Adequate	\$0	\$0	\$0	3	A	B	5262
E0389	Adequate	\$0	\$0	\$0	4	A	B	5262
E0390	Adequate	\$0	\$0	\$0	4	A	B	5262
E0391	Adequate	\$0	\$0	\$0	4	A	B	5262
E0392	Datum	\$29,200	\$0	\$29,200	4	3	B	5262
E0393	Adequate	\$0	\$0	\$0	4	A	B	5262
E0394	Adequate	\$0	\$0	\$0	4	A	B	5262
E0395	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	B	5262
E0396	Adequate	\$0	\$0	\$0	4	A	B	5262
E0397	Adequate	\$0	\$0	\$0	4	A	B	5262
E0398	Adequate	\$0	\$0	\$0	4	A	B	5262
E0399	Adequate	\$0	\$0	\$0	4	A	B	5262
E0400	Adequate	\$0	\$0	\$0	4	A	B	5262
E0401	Inadequate	\$2,244,200	\$3,800	\$2,248,000	1	1	A	5260
E0402	Adequate	\$0	\$0	\$0	3	A	A	5260
E0403	Inadequate	\$1,041,500	\$0	\$1,041,500	2	1	A	5260
E0404	Adequate	\$0	\$0	\$0	4	A	A	5260
E0405	Adequate	\$0	\$0	\$0	4	A	A	5260
E0406	Inadequate	\$779,700	\$0	\$779,700	2	1	B	5261
E0407	Adequate	\$0	\$0	\$0	4	A	A, B	5261
E0408	Adequate	\$0	\$0	\$0	4	A	A	5260, 5261
E0409	Inadequate	\$271,900	\$76,100	\$348,000	3	1	A, B	5260, 5261
E0410	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	A, B	5260, 5261

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
E0411	Adequate	\$0	\$0	\$0	4	A	H	5358, 5458
E0412	Adequate	\$0	\$0	\$0	4	A	H	5360
E0413	Adequate	\$0	\$0	\$0	4	A	B, H	5361
E0414	Adequate	\$0	\$0	\$0	4	A	H	5458
E0416	Inadequate	\$70,500	\$0	\$70,500	4	3	B	5361
E0417	Adequate	\$0	\$0	\$0	3	A	H	5458
E0500	Adequate	\$0	\$0	\$0	4	A	A	5161
E0501	Adequate	\$0	\$0	\$0	3	A	A	5161
E0502	Adequate	\$0	\$0	\$0	4	A	A	5161
E0503	Adequate	\$0	\$0	\$0	2	A	A	5161
E0504	Adequate	\$0	\$0	\$0	4	A	A	5161
E0505	Adequate	\$0	\$0	\$0	2	A	A	5161
E0506	Cannot Analyze	\$0	\$0	\$0	3	C.N.A.	A	5161
E0507	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	A	5161
E0508	Adequate	\$0	\$0	\$0	4	A	A	5160, 5161
E0509	Inadequate	\$3,215,600	\$0	\$3,215,600	3	1	A	5160, 5161
E0510	Adequate	\$0	\$0	\$0	4	A	A	5161
E0511	Inadequate	\$642,900	\$0	\$642,900	3	1	A	5160, 5161
E0512	Inadequate	\$561,900	\$19,200	\$581,100	4	3	A	5161
E0513	Adequate	\$0	\$0	\$0	4	A	A	5161
E0514	Adequate	\$0	\$0	\$0	3	A	A	5161
E0515	Adequate	\$0	\$0	\$0	4	A	A	5161
E0516	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	A	5161
E0517	Inadequate	\$101,000	\$0	\$101,000	3	1	A	5161
E0518	Adequate	\$0	\$0	\$0	4	A	A	5161
E0519	Adequate	\$0	\$0	\$0	4	A	A	5161
E0520	Inadequate	\$1,215,000	\$0	\$1,215,000	1	1	A	5160, 5161
E0521	Adequate	\$0	\$0	\$0	4	A	A	5161
E0522	Adequate	\$0	\$0	\$0	4	A	A	5160, 5161
E0523	Adequate	\$0	\$0	\$0	4	A	A	5161
E0524	Adequate	\$0	\$0	\$0	4	A	A	5161
E0525	Inadequate	\$848,400	\$0	\$848,400	4	3	A	5061, 5161
E0526	Inadequate	\$2,743,800	\$1,637,900	\$4,381,700	4	3	A	5061, 5161
E0527	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	A	5061
E0528	Adequate	\$0	\$0	\$0	4	A	A	5061
E0529	Adequate	\$0	\$0	\$0	4	A	A	5061
E0530	Adequate	\$0	\$0	\$0	3	A	A	5061
E0531	Adequate	\$0	\$0	\$0	3	A	A	5061
E0532	Inadequate	\$133,300	\$0	\$133,300	4	3	A	5061

**TABLE 2E – WHITE OAK
SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
E0533	Adequate	\$0	\$0	\$0	3	A	A	5061
E0534	Adequate	\$0	\$0	\$0	4	A	A	5061
E0535	Adequate	\$0	\$0	\$0	4	A	A	5061
E0536	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	A	5061
E0537	Adequate	\$0	\$0	\$0	4	A	A	5061
E0538	Adequate	\$0	\$0	\$0	4	A	A	5061
E0539	Inadequate	\$2,552,700	\$310,600	\$2,863,300	1	1	A	5061
E0540	Adequate	\$0	\$0	\$0	4	A	A	5061
E0541	Adequate	\$0	\$0	\$0	4	A	A	5061
E0542	Adequate	\$0	\$0	\$0	4	A	A	5061
E0543	Adequate	\$0	\$0	\$0	4	A	A	4961, 5061
E0544	Adequate	\$0	\$0	\$0	4	A	A	4961, 5061
E0545	Adequate	\$0	\$0	\$0	4	A	A	4961
E0546	Adequate	\$0	\$0	\$0	4	A	A	4961
E0547	Adequate	\$0	\$0	\$0	4	A	A	4961
E0548	Inadequate	\$3,043,200	\$0	\$3,043,200	3	1	A	4961
E0549	Adequate	\$0	\$0	\$0	4	A	A	4961
E0550	Adequate	\$0	\$0	\$0	4	A	A	4961, 4962
E0551	Adequate	\$0	\$0	\$0	4	A	A	4961
E0552	Adequate	\$0	\$0	\$0	4	A	A	4961
E0553	Adequate	\$0	\$0	\$0	4	A	A	4961
E0554	Adequate	\$0	\$0	\$0	4	A	A	4961
E0555	Adequate	\$0	\$0	\$0	4	A	A	5061
E0556	Adequate	\$0	\$0	\$0	4	A	A	5061
E0557	Inadequate	\$128,700	\$22,200	\$150,900	4	3	A	5061
E0558	Adequate	\$0	\$0	\$0	4	A	A	5061
E0559	Adequate	\$0	\$0	\$0	3	A	A	5061
E0560	Inadequate	\$794,400	\$191,800	\$986,200	4	3	A	5061, 5062
E0561	Adequate	\$0	\$0	\$0	4	A	A	5061
E0700	Adequate	\$0	\$229,900	\$229,900	4	A	A	5160
E0701	Adequate	\$0	\$0	\$0	4	A	A	5160
E0702	Adequate	\$0	\$0	\$0	4	A	A, H	5160
E0703	Adequate	\$0	\$0	\$0	4	A	A	5160
E0704	Inadequate	\$1,791,900	\$0	\$1,791,900	1	1	A, H	5160
E0705	Adequate	\$0	\$209,700	\$209,700	4	A	A	5160
E0706	Adequate	\$0	\$0	\$0	3	A	A	5160
E0707	Adequate	\$0	\$0	\$0	4	A	A	5160
E0708	Adequate	\$0	\$0	\$0	1	A	A	5160
E0709	Inadequate	\$243,300	\$0	\$243,300	1	1	A	5160
E0710	Adequate	\$0	\$0	\$0	1	A	A	5160
E0711	Inadequate	\$73,300	\$0	\$73,300	2	1	A	5160
E0712	Inadequate	\$974,100	\$0	\$974,100	3	1	A	5160

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
E0713	Inadequate	\$662,300	\$0	\$662,300	1	1	A	5160
E0714	Inadequate	\$2,340,800	\$717,500	\$3,058,300	1	1	A	5160
E0715	Adequate	\$0	\$0	\$0	3	A	A	5160
E0716	Inadequate	\$8,755,600	\$1,527,700	\$10,283,300	2	1	A, H	5159, 5160
E0717	Inadequate	\$114,500	\$0	\$114,500	3	1	A	5160
E0718	Inadequate	\$147,500	\$0	\$147,500	4	3	A	5160
E0719	Adequate	\$0	\$0	\$0	4	A	A	5160
E0720	Adequate	\$0	\$0	\$0	4	A	A	5160
E0721	Inadequate	\$1,347,900	\$61,200	\$1,409,100	3	1	A	5160
E0722	Inadequate	\$72,200	\$0	\$72,200	3	1	A	5160
E0723	Adequate	\$0	\$0	\$0	4	A	A	5160
E0724	Adequate	\$0	\$0	\$0	4	A	A	5160
E0725	Adequate	\$0	\$0	\$0	4	A	A	5160
E0726	Inadequate	\$88,800	\$262,900	\$351,700	4	3	A	5060, 5160
E0727	Adequate	\$0	\$0	\$0	4	A	A	5060, 5160
E0728	Adequate	\$0	\$0	\$0	4	A	A	5060, 5160
E0729	Datum	\$6,287,800	\$641,600	\$6,929,400	2	1	A	5060, 5061
E0730	Inadequate	\$1,282,300	\$67,400	\$1,349,700	1	1	A	5060
E0731	Inadequate	\$1,775,100	\$131,400	\$1,906,500	4	3	A	5060, 5061
E0732	Adequate	\$0	\$130,300	\$130,300	4	A	A	5060, 5061
E0733	Inadequate	\$488,300	\$0	\$488,300	4	3	A	5060, 5061
E0734	Adequate	\$0	\$0	\$0	4	A	A	5061
E0735	Inadequate	\$641,700	\$43,400	\$685,100	4	3	A	5060, 5061
E0736	Inadequate	\$83,700	\$71,000	\$154,700	4	3	A	5061
E0737	Adequate	\$0	\$0	\$0	3	A	A	5060, 5061
E0738	Datum	\$2,017,200	\$189,100	\$2,206,300	1	1	A, H	5159, 5160
E0739	Inadequate	\$204,100	\$0	\$204,100	3	1	A	5160
E0740	Inadequate	\$662,400	\$0	\$662,400	3	1	A	5160
E0741	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	A	5159, 5160
E0742	Inadequate	\$580,400	\$386,400	\$966,800	2	1	A	5060, 5160
E0743	Inadequate	\$1,298,400	\$0	\$1,298,400	4	3	A	5059, 5060, 5159, 5160
E0744	Adequate	\$0	\$0	\$0	4	A	A	5059, 5060
E0745	Inadequate	\$633,800	\$81,300	\$715,100	3	1	A	5059, 5159
E0746	Inadequate	\$833,400	\$193,500	\$1,026,900	4	3	A	5059
E0747	Adequate	\$0	\$0	\$0	1	A	A	5060
E0748	Adequate	\$0	\$279,200	\$279,200	3	A	A	5059, 5060
E0749	Adequate	\$0	\$0	\$0	1	A	A	5060
E0750	Adequate	\$0	\$0	\$0	1	A	A	5060
E0751	Adequate	\$0	\$0	\$0	1	A	A	5060
E0752	Adequate	\$0	\$228,300	\$228,300	1	A	A	5059, 5060
E0753	Inadequate	\$236,500	\$0	\$236,500	1	1	A	5060

**TABLE 2E – WHITE OAK
SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
E0754	Adequate	\$0	\$0	\$0	4	A	A	5060
E0755	Adequate	\$0	\$0	\$0	2	A	A	5060
E0756	Adequate	\$0	\$8,552,300	\$8,552,300	2	A	A	5060
E0757	Adequate	\$0	\$0	\$0	1	A	A	5060
E0758	Inadequate	\$373,200	\$0	\$373,200	1	I	A	5060
E0759	Cannot Analyze	\$0	\$0	\$0	4	C.N.A.	A	5060
E0760	Inadequate	\$226,500	\$0	\$226,500	3	I	A	5060
E0761	Adequate	\$0	\$0	\$0	4	A	A	5060
E0762	Datum	\$1,401,100	\$369,300	\$1,770,400	4	3	A	4960, 5060
E0763	Inadequate	\$1,034,200	\$3,143,200	\$4,177,400	4	3	A	4960, 4961, 5060, 5061
E0764	Inadequate	\$3,645,500	\$458,100	\$4,103,600	4	3	A	4961, 5060, 5061
E0765	Adequate	\$0	\$0	\$0	3	A	A	4960, 5060
E0766	Adequate	\$0	\$0	\$0	4	A	A	4960, 5060
E0767	Inadequate	\$892,900	\$178,500	\$1,071,400	3	I	A	4960, 5060
E0768	Adequate	\$0	\$0	\$0	4	A	A	4960
E0769	Adequate	\$0	\$0	\$0	4	A	A	4960
E0770	Adequate	\$0	\$0	\$0	4	A	A	4960
E0771	Inadequate	\$448,200	\$0	\$448,200	4	3	A	4960
E0772	Adequate	\$0	\$0	\$0	4	A	A	5060
E0773	Inadequate	\$1,389,400	\$56,600	\$1,446,000	3	I	A	5059, 5060
E0774	Adequate	\$0	\$0	\$0	3	A	A	5060
E0775	Adequate	\$0	\$0	\$0	3	A	A	5060
E0776	Inadequate	\$358,700	\$826,300	\$1,185,000	1	I	A	5059, 5060
E0777	Inadequate	\$202,200	\$62,200	\$264,400	3	I	A	5060
E0778	Adequate	\$0	\$0	\$0	4	A	A	5060
E0779	Adequate	\$0	\$0	\$0	3	A	A	5060
E0780	Adequate	\$0	\$0	\$0	4	A	A	5060
E0781	Adequate	\$0	\$0	\$0	4	A	A	5060
E0782	Inadequate	\$415,000	\$133,500	\$548,500	3	I	A	5060
E0783	Adequate	\$0	\$327,000	\$327,000	3	A	A	5060
E0784	Adequate	\$0	\$0	\$0	4	A	A	5060
E0785	Adequate	\$0	\$0	\$0	4	A	A	4960, 5060
E0786	Adequate	\$0	\$0	\$0	3	A	A	4960, 5060
E0787	Adequate	\$0	\$62,700	\$62,700	3	A	A	4960, 5060
E0788	Adequate	\$0	\$0	\$0	4	A	A	4960
E0789	Inadequate	\$130,600	\$58,300	\$188,900	3	I	A	4959, 4960
E0790	Inadequate	\$1,464,400	\$211,300	\$1,675,700	3	I	A	4959, 4960
E0791	Adequate	\$0	\$0	\$0	4	A	A	4960
E0792	Inadequate	\$741,600	\$0	\$741,600	3	I	A	4959, 4960
E0793	Adequate	\$0	\$0	\$0	3	A	A	4960

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
E0794	Adequate	\$0	\$0	\$0	4	A	A	4960
E0795	Adequate	\$0	\$0	\$0	4	A	A	4960
E0796	Adequate	\$0	\$248,700	\$248,700	4	A	A	4959, 4960
E0797	Adequate	\$0	\$0	\$0	4	A	A	4959, 4960
E0798	Adequate	\$0	\$0	\$0	3	A	A	4960
E0799	Adequate	\$0	\$0	\$0	4	A	A	4960
E0800	Adequate	\$0	\$0	\$0	3	A	A	4959, 4960
E0801	Adequate	\$0	\$0	\$0	4	A	A	4960
E0802	Adequate	\$0	\$0	\$0	3	A	A	4959, 4960
E0803	Inadequate	\$442,900	\$400,000	\$842,900	1	I	A	4959, 4960
E0804	Adequate	\$0	\$0	\$0	4	A	A	4960
E0805	Adequate	\$0	\$0	\$0	4	A	A	4960
E0806	Adequate	\$0	\$0	\$0	4	A	A	4960
E0807	Inadequate	\$554,500	\$116,600	\$671,100	3	I	A	4959, 4960
E0808	Adequate	\$0	\$0	\$0	3	A	A	4960
E0809	Adequate	\$0	\$0	\$0	4	A	A	4960
E0810	Adequate	\$0	\$117,600	\$117,600	3	A	A	4959, 4960
E0811	Inadequate	\$141,400	\$0	\$141,400	3	I	A	4960
E0812	Inadequate	\$450,500	\$0	\$450,500	1	I	A	5160
E0900	Adequate	\$0	\$0	\$0	4	A	A, B	5161
E0901	Inadequate	\$1,353,700	\$606,600	\$1,960,300	3	I	A	5161, 5162
E0902	Adequate	\$0	\$0	\$0	4	A	A	5162
E0903	Adequate	\$0	\$0	\$0	1	A	A	5162
E0904	Adequate	\$0	\$0	\$0	3	A	A	5162
E0905	Adequate	\$0	\$0	\$0	3	A	A	5162
E0906	Inadequate	\$386,700	\$0	\$386,700	4	3	A	5162
E0907	Inadequate	\$1,371,800	\$7,515,800	\$8,887,600	2	I	B	5162, 5262
E0908	Adequate	\$0	\$0	\$0	4	A	A	5162
E0909	Inadequate	\$174,200	\$20,100	\$194,300	4	3	A	5162
E0910	Adequate	\$0	\$0	\$0	1	A	A	5162
E0911	Adequate	\$0	\$0	\$0	1	A	A	5162
E0912	Adequate	\$0	\$0	\$0	1	A	A	5162
E0913	Inadequate	\$519,600	\$0	\$519,600	3	I	A	5162
E0914	Adequate	\$0	\$0	\$0	1	A	A	5162
E0915	Adequate	\$0	\$0	\$0	2	A	A	5162
E0916	Adequate	\$0	\$0	\$0	4	A	A	5162
E0917	Adequate	\$0	\$0	\$0	3	A	A	5162
E0918	Inadequate	\$240,600	\$0	\$240,600	2	I	A	5162
E0919	Adequate	\$0	\$0	\$0	4	A	A	5162
E0920	Adequate	\$0	\$0	\$0	3	A	A	5162
E0921	Adequate	\$0	\$0	\$0	2	A	A	5162
E0922	Adequate	\$0	\$0	\$0	1	A	A	5162
E0923	Adequate	\$0	\$0	\$0	2	A	A	5162

**TABLE 2E – WHITE OAK
SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
E0924	Adequate	\$0	\$0	\$0	2	A	A	5162
E0925	Adequate	\$0	\$0	\$0	4	A	A	5162
E0926	Adequate	\$0	\$0	\$0	4	A	A	5162
E0927	Adequate	\$0	\$0	\$0	4	A	A	5162
E0928	Inadequate	\$491,700	\$93,600	\$585,300	4	3	A	5162
E0929	Adequate	\$0	\$0	\$0	4	A	A	5162
E0930	Adequate	\$0	\$0	\$0	3	A	A	5162
E5000	Proposed System	\$578,900	\$0	\$578,900	4	4	H	5358
E5001	Proposed System	\$448,400	\$0	\$448,400	4	4	H	5358
E5002	Proposed System	\$320,100	\$40,400	\$360,500	4	4	H	5358
E5004	Proposed System	\$147,500	\$0	\$147,500	4	4	H	5358
E5005	Proposed System	\$437,600	\$70,400	\$508,000	4	4	H	5358
E5006	Proposed System	\$377,500	\$0	\$377,500	3	2	H	5458
E5008	Proposed System	\$359,000	\$0	\$359,000	4	4	H	5359, 5459
E5009	Proposed System	\$456,400	\$0	\$456,400	3	2	H	5359
E5010	Proposed System	\$0	\$0	\$0	3	5	A, H	5258
E5011	Proposed System	\$548,700	\$161,400	\$650,100	3	2	H	5258, 5259
E5012	Proposed System	\$84,100	\$0	\$84,100	1	2	H	5258, 5259
E5013	Proposed System	\$108,600	\$0	\$108,600	4	4	H	5259
E5014	Proposed System	\$70,600	\$0	\$70,600	4	4	H	5259
E5015	Proposed System	\$1,233,500	\$211,700	\$1,445,200	2	2	H	5259
E5016	Proposed System	\$184,700	\$0	\$184,700	4	4	H	5259
E5017	Proposed System	\$246,300	\$0	\$246,300	4	4	H	5259
E5018	Proposed System	\$144,500	\$16,700	\$161,200	2	2	H	5259
E5019	Proposed System	\$607,500	\$0	\$607,500	1	2	H	5259

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
E5020	Proposed System	\$449,300	\$0	\$449,300	1	2	H	5259
E5021	Proposed System	\$561,600	\$0	\$561,600	4	4	H	5259
E5022	Proposed System	\$957,300	\$0	\$957,300	2	2	H	5259
E5023	Proposed System	\$65,900	\$11,400	\$77,300	4	4	H	5259
E5024	Proposed System	\$70,000	\$0	\$70,000	4	4	H	5259
E5025	Proposed System	\$176,100	\$0	\$176,100	4	4	H	5259
E5026	Proposed System	\$245,000	\$0	\$245,000	4	4	H	5259
E5027	Proposed System	\$484,600	\$0	\$484,600	4	4	H	5259
E5028	Proposed System	\$133,800	\$0	\$133,800	4	4	A	5259, 5260
E5029	Proposed System	\$169,000	\$23,800	\$192,800	2	2	A	5259, 5260
E5030	Proposed System	\$156,800	\$0	\$156,800	3	2	A	5260
E5031	Proposed System	\$130,100	\$11,500	\$141,600	3	2	A, H	5260
E5032	Proposed System	\$368,200	\$0	\$368,200	2	2	H	5360
E5033	Proposed System	\$619,600	\$0	\$619,600	4	4	H	5360
E5034	Proposed System	\$444,600	\$0	\$444,600	4	4	H	5360
E5035	Proposed System	\$106,100	\$0	\$106,100	4	4	H	5360
E5037	Proposed System	\$4,350,300	\$1,365,100	\$5,715,400	3	2	A, H	5260, 5360
E5039	Proposed System	\$6,601,500	\$916,100	\$7,517,600	1	2	A, B, H	5260, 5261, 5360, 5361
E5040	Proposed System	\$207,600	\$0	\$207,600	3	2	B, H	5360, 5361
E5041	Proposed System	\$851,600	\$0	\$851,600	1	2	B, H	5360, 5361
E5042	Proposed System	\$209,000	\$0	\$209,000	1	2	B	5361
E5043	Proposed System	\$282,000	\$0	\$282,000	4	4	B	5361

**TABLE 2E – WHITE OAK
SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
E5044	Proposed System	\$272,600	\$0	\$272,600	1	2	B, H	5361
E5045	Proposed System	\$214,700	\$0	\$214,700	1	2	A	5260
E5046	Proposed System	\$60,000	\$0	\$60,000	4	4	A	5260
E5047	Proposed System	\$202,700	\$0	\$202,700	2	2	A	5260
E5048	Proposed System	\$141,600	\$0	\$141,600	4	4	A	5260
E5049	Proposed System	\$319,900	\$0	\$319,900	2	2	A	5260
E5050	Proposed System	\$297,300	\$0	\$297,300	4	4	B	5261, 5361
E5051	Proposed System	\$663,600	\$0	\$663,600	3	2	B	5261, 5361
E5052	Proposed System	\$518,600	\$0	\$518,600	1	2	B	5362
E5053	Proposed System	\$153,000	\$0	\$153,000	4	4	B	5261
E5054	Proposed System	\$832,100	\$0	\$832,100	3	2	B	5261
E5055	Proposed System	\$77,200	\$0	\$77,200	4	4	B	5261
E5056	Proposed System	\$1,310,900	\$138,800	\$1,449,700	1	2	B	5261, 5262
E5057	Proposed System	\$57,300	\$0	\$57,300	4	4	B	5261
E5058	Proposed System	\$51,500	\$0	\$51,500	4	4	B	5261
E5059	Proposed System	\$59,800	\$0	\$59,800	4	4	B	5261
E5060	Proposed System	\$54,200	\$0	\$54,200	4	4	B	5261, 5262
E5061	Proposed System	\$117,300	\$20,300	\$137,600	4	4	B	5262
E5062	Proposed System	\$2,058,400	\$307,000	\$2,365,400	3	2	B	5261, 5262
E5063	Proposed System	\$160,900	\$0	\$160,900	4	4	B	5262
E5064	Proposed System	\$89,100	\$0	\$89,100	4	4	B	5262
E5065	Proposed System	\$772,800	\$0	\$772,800	4	4	B	5262

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
E5066	Proposed System	\$2,189,400	\$229,600	\$2,419,000	1	2	B	5262
E5067	Proposed System	\$7,761,200	\$152,700	\$7,913,900	3	2	B	5162, 5262
E5068	Proposed System	\$500,100	\$0	\$500,100	4	4	B	5262
E5069	Proposed System	\$217,000	\$0	\$217,000	4	4	B	5262
E5070	Proposed System	\$434,000	\$0	\$434,000	4	4	B	5262
E5071	Proposed System	\$39,800	\$0	\$39,800	4	5	A	5160
E5072	Proposed System	\$152,300	\$0	\$152,300	4	5	A	5260
E5073	Proposed System	\$108,900	\$0	\$108,900	4	5	A	5260
E5074	Proposed System	\$358,400	\$52,900	\$411,300	4	4	A, B	5160, 5260, 5261
E5075	Proposed System	\$349,500	\$43,900	\$393,400	3	2	A, B	5260, 5261
E5076	Proposed System	\$99,100	\$0	\$99,100	4	4	A, B	5260, 5261
E5077	Proposed System	\$105,300	\$0	\$105,300	1	2	A, B	5260, 5261
E5078	Proposed System	\$108,500	\$0	\$108,500	4	4	A, B	5260, 5261
E5079	Proposed System	\$113,100	\$0	\$113,100	4	4	A, B	5261
E5080	Proposed System	\$119,300	\$0	\$119,300	4	4	A, B	5261
E5081	Proposed System	\$133,300	\$0	\$133,300	4	5	B	5161, 5261
E5082	Proposed System	\$368,300	\$84,900	\$453,200	4	5	B	5261
E5083	Proposed System	\$540,000	\$0	\$540,000	4	5	B	5261
E5084	Proposed System	\$543,300	\$0	\$543,300	4	5	B	5261
E5085	Proposed System	\$784,100	\$71,200	\$855,300	4	4	B	5261
E5086	Proposed System	\$775,500	\$107,200	\$882,700	4	4	B	5261
E5087	Proposed System	\$607,600	\$0	\$607,600	4	4	B	5261

**TABLE 2E – WHITE OAK
SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
E5088	Proposed System	\$649,000	\$0	\$649,000	4	4	B	5261
E5090	Proposed System	\$718,400	\$88,500	\$806,900	3	2	B	5261
E5091	Proposed System	\$1,445,000	\$358,300	\$1,803,300	3	2	B	5261
E5093	Proposed System	\$2,824,200	\$353,100	\$3,177,300	1	2	B	5161, 5261
E5094	Proposed System	\$1,395,700	\$0	\$1,395,700	3	2	A, B	5161, 5162
E5095	Proposed System	\$1,584,700	\$222,300	\$1,807,000	3	2	B	5261, 5262
E5097	Proposed System	\$257,900	\$0	\$257,900	4	4	H	5159
E5098	Proposed System	\$214,500	\$0	\$214,500	4	4	H	5159
E5099	Proposed System	\$83,500	\$0	\$83,500	3	2	A	5160
E5100	Proposed System	\$125,600	\$0	\$125,600	1	2	A	5160
E5101	Proposed System	\$145,000	\$25,000	\$170,000	4	5	A	5160
E5102	Proposed System	\$1,609,200	\$0	\$1,609,200	2	2	A	5160
E5103	Proposed System	\$726,700	\$0	\$726,700	2	2	A	5160, 5161
E5104	Proposed System	\$812,500	\$0	\$812,500	4	5	A	5161
E5105	Proposed System	\$8,244,100	\$958,300	\$9,202,400	4	5	A	5161
E5108	Proposed System	\$742,200	\$0	\$742,200	3	2	A	5161
E5109	Proposed System	\$1,003,000	\$0	\$1,003,000	4	4	B	5161
E5110	Proposed System	\$596,900	\$97,800	\$694,700	1	2	A	5161, 5162
E5111	Proposed System	\$291,500	\$0	\$291,500	1	2	A	5161, 5162
E5112	Proposed System	\$1,301,200	\$198,700	\$1,499,900	1	2	A	5162
E5113	Proposed System	\$774,400	\$0	\$774,400	4	5	A	5162
E5114	Proposed System	\$261,800	\$0	\$261,800	4	4	A	5162

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
E5115	Proposed System	\$637,300	\$0	\$637,300	3	2	A	5162
E5116	Proposed System	\$1,115,500	\$173,000	\$1,288,500	4	5	A, B	5162
E5117	Proposed System	\$536,600	\$0	\$536,600	4	4	A	5162
E5118	Proposed System	\$315,000	\$45,200	\$360,200	4	5	B	5162
E5119	Proposed System	\$527,400	\$0	\$527,400	4	4	B	5162
E5120	Proposed System	\$637,100	\$0	\$637,100	4	5	B	5162, 5163
E5121	Proposed System	\$371,900	\$62,400	\$434,300	4	4	A	5162
E5122	Proposed System	\$757,300	\$112,900	\$870,200	2	2	A	5162
E5123	Proposed System	\$1,027,900	\$0	\$1,027,900	3	2	A	5162
E5124	Proposed System	\$742,500	\$0	\$742,500	3	2	A	5162
E5125	Proposed System	\$601,000	\$0	\$601,000	1	2	A	5162
E5126	Proposed System	\$731,700	\$0	\$731,700	4	4	A	5059
E5129	Proposed System	\$195,600	\$0	\$195,600	4	5	A	5060
E5130	Proposed System	\$302,600	\$0	\$302,600	4	4	A	5160
E5131	Proposed System	\$241,600	\$0	\$241,600	2	2	A	5160
E5132	Proposed System	\$140,000	\$0	\$140,000	4	4	A	5160
E5133	Proposed System	\$1,097,500	\$169,100	\$1,266,600	3	2	A	5060, 5160
E5134	Proposed System	\$478,500	\$0	\$478,500	2	2	A	5060
E5135	Proposed System	\$30,600	\$0	\$30,600	4	5	A	5160
E5136	Proposed System	\$218,200	\$0	\$218,200	4	5	A	5160
E5137	Proposed System	\$253,200	\$0	\$253,200	4	4	A	5060
E5138	Proposed System	\$531,100	\$0	\$531,100	4	4	A	5060

**TABLE 2E – WHITE OAK
SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
E5139	Proposed System	\$418,100	\$0	\$418,100	4	5	A	5060
E5140	Proposed System	\$230,800	\$0	\$230,800	4	4	A	5060
E5141	Proposed System	\$121,500	\$0	\$121,500	4	4	A	5060, 5061
E5144	Proposed System	\$39,800	\$0	\$39,800	4	5	A	5162
E5145	Proposed System	\$341,500	\$0	\$341,500	4	5	A	5063, 5163
E5146	Proposed System	\$450,300	\$62,200	\$512,500	4	4	A	5060
E5147	Proposed System	\$183,700	\$7,200	\$190,900	4	4	A	5060
E5148	Proposed System	\$288,600	\$33,600	\$322,200	1	2	A	5060
E5149	Proposed System	\$885,100	\$0	\$885,100	1	2	A	5060
E5150	Proposed System	\$150,800	\$0	\$150,800	4	4	A	5060
E5151	Proposed System	\$399,400	\$57,800	\$457,200	1	2	A	5060
E5152	Proposed System	\$1,891,200	\$0	\$1,891,200	2	2	A	5060
E5153	Proposed System	\$80,700	\$0	\$80,700	4	4	A	4960
E5154	Proposed System	\$404,800	\$0	\$404,800	4	4	A	4960
E5155	Proposed System	\$332,800	\$0	\$332,800	4	4	A	4960
E5160	Proposed System	\$2,325,000	\$0	\$2,325,000	N.A.	5	A	4960
E5161	Proposed System	\$802,900	\$123,700	\$926,600	4	4	A	4960
E5162	Proposed System	\$85,200	\$0	\$85,200	4	4	A	4960
E5163	Proposed System	\$1,122,900	\$0	\$1,122,900	4	4	A	4960
E5164	Proposed System	\$2,716,700	\$0	\$2,716,700	4	5	A	4960
E5166	Proposed System	\$829,500	\$80,500	\$910,000	4	4	A	4960, 4961
E5167	Proposed System	\$684,400	\$0	\$684,400	4	4	A	4960, 4961

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
E5168	Proposed System	\$1,076,200	\$160,100	\$1,236,300	4	4	A	4961, 5061
E5169	Proposed System	\$1,484,200	\$0	\$1,484,200	4	5	A	4961
E5170	Proposed System	\$1,225,900	\$0	\$1,225,900	4	5	A	4961
E5171	Proposed System	\$647,400	\$0	\$647,400	4	5	A	4961
E5172	Proposed System	\$1,795,000	\$222,500	\$2,017,500	4	5	A	4961
E5173	Proposed System	\$1,080,200	\$135,100	\$1,215,300	3	2	A	4961
E5174	Proposed System	\$894,200	\$0	\$894,200	3	2	A	4961
E5175	Proposed System	\$1,130,100	\$0	\$1,130,100	4	5	A	4961
E5176	Proposed System	\$1,703,200	\$0	\$1,703,200	4	5	A	4961
E5177	Proposed System	\$1,699,600	\$294,000	\$1,993,600	4	5	A	4961
E5178	Proposed System	\$714,900	\$102,500	\$817,400	4	4	A	4961
E5179	Proposed System	\$281,300	\$37,100	\$318,400	4	4	A	4961
E5180	Proposed System	\$443,000	\$67,700	\$510,700	4	4	A	4961
E5181	Proposed System	\$190,100	\$0	\$190,100	4	4	A	4961
E5182	Proposed System	\$74,100	\$0	\$74,100	4	4	A	4961
E5183	Proposed System	\$348,500	\$52,000	\$400,500	4	5	A	4961
E5184	Proposed System	\$90,800	\$0	\$90,800	4	5	A	4961
E5185	Proposed System	\$101,800	\$0	\$101,800	4	5	A	4961
E5186	Proposed System	\$135,500	\$29,300	\$164,800	4	5	A	4961
E5187	Proposed System	\$1,658,300	\$176,000	\$1,834,300	4	4	A	4961, 5061
E5188	Proposed System	\$1,517,700	\$203,600	\$1,721,300	4	4	A	5061
E5190	Proposed System	\$675,900	\$0	\$675,900	4	4	A	5061

**TABLE 2E – WHITE OAK
SUMMARY OF PROPOSED IMPROVEMENTS**

Outfall System ID	2-Year Analysis Status	2-Year CIP Cost	Additional for 5-Year	5-Year Storm Cost	Group	2-Year Category	City Council District	Facet Number
E5191	Proposed System	\$2,168,200	\$0	\$2,168,200	4	5	A	5061
E5192	Proposed System	\$1,119,700	\$0	\$1,119,700	4	5	A	5061
E5193	Proposed System	\$1,695,000	\$216,500	\$1,911,500	1	2	A	5062
E5194	Proposed System	\$773,800	\$120,100	\$893,900	4	4	A, B	5162
E5195	Proposed System	\$1,481,600	\$210,700	\$1,692,300	1	2	B	5261, 5262
E5196	Proposed System	\$409,100	\$59,100	\$468,200	4	5	A	4961
E5201	Proposed System	\$257,000	\$0	\$257,000	3	2	B	5261
E5202	Proposed System	\$290,400	\$0	\$290,400	3	2	B	5261
E5203	Proposed System	\$283,700	\$0	\$283,700	4	4	B	5261
E5204	Proposed System	\$329,000	\$0	\$329,000	4	4	B	5261
E5205	Proposed System	\$281,800	\$44,400	\$326,200	3	2	B	5262
E5206	Proposed System	\$149,100	\$0	\$149,100	4	4	B	5261
E5207	Proposed System	\$154,700	\$0	\$154,700	4	4	B	5261
E5208	Proposed System	\$421,400	\$0	\$421,400	4	4	B	5261
E5209	Proposed System	\$208,900	\$18,400	\$227,300	4	4	B	5261
E5210	Proposed System	\$2,822,000	\$0	\$2,822,000	4	4	A	5063
E5211	Proposed System	\$1,140,000	\$0	\$1,140,000	4	4	A	5063
TOTAL		\$497,001,200	\$114,355,900	\$611,357,100				

**TABLE 3E 2-YEAR COST – GROUP 1
WHITE OAK BAYOU**

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
Sorted by 2-Year CIP Cost							
E0101	\$61,700	1	38	\$1,624	100%	A	5160
E0335	\$74,000	1	129	\$574	93%	H	5359
E0119	\$76,400	1	78	\$979	49%	A	5162
E5012	\$84,100	2	21	\$4,005	N/A	H	5258, 5259
E5077	\$105,300	2	8	\$13,163	N/A	A, B	5260, 5261
E5100	\$125,600	2	18	\$6,978	N/A	A	5160
E0035	\$158,500	1	509	\$311	98%	H	5358
E0370	\$162,500	1	98	\$1,658	99%	H	5360
E0302	\$204,200	1	12	\$17,017	0%	H	5358, 5458
E0122	\$205,700	1	47	\$4,377	100%	A	5162
E5042	\$209,000	2	1	\$209,000	N/A	B	5361
E5045	\$214,700	2	45	\$4,771	N/A	A	5260
E0753	\$236,500	1	79	\$2,994	87%	A	5060
E0126	\$240,400	1	101	\$2,380	99%	A	5162
E0190	\$241,300	1	80	\$3,016	6%	A	5260
E0709	\$243,300	1	140	\$1,738	11%	A	5160
E5044	\$272,600	2	58	\$4,700	N/A	B, H	5361
E5148	\$288,600	2	135	\$2,138	N/A	A	5060
E5111	\$291,500	2	78	\$3,737	N/A	A	5161, 5162
E0776	\$358,700	1	109	\$3,291	94%	A	5059, 5060
E0758	\$373,200	1	180	\$2,073	100%	A	5060
E0311	\$373,400	1	947	\$394	89%	H	5458, 5459
E5151	\$399,400	2	88	\$4,539	N/A	A	5060
E0803	\$442,900	1	1	\$442,900	0%	A	4959, 4960
E5020	\$449,300	2	65	\$6,912	N/A	H	5259
E0812	\$450,500	1	43	\$10,477	100%	A	5160
E0057	\$474,000	1	213	\$2,225	99%	A	5258
E0086	\$486,100	1	270	\$1,800	100%	A	5160, 5260
E0080	\$489,800	1	232	\$2,111	41%	H	5159, 5259
E5052	\$518,600	2	150	\$3,457	N/A	B	5362
E5110	\$596,900	2	161	\$3,707	N/A	A	5161, 5162
E5125	\$601,000	2	120	\$5,008	N/A	A	5162
E5019	\$607,500	2	129	\$4,709	N/A	H	5259
E0713	\$662,300	1	35	\$18,923	100%	A	5160
E0157	\$686,300	1	97	\$7,075	90%	A	5259
E0078	\$831,600	1	246	\$3,380	100%	A	5259
E5041	\$851,600	2	86	\$9,902	N/A	B, H	5360, 5361
E5149	\$885,100	2	168	\$5,268	N/A	A	5060
E0520	\$1,215,000	1	383	\$3,172	95%	A	5160, 5161

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
E0730	\$1,282,300	1	24	\$53,429	0%	A	5060
E5112	\$1,301,200	2	339	\$3,838	N/A	A	5162
E5056	\$1,310,900	2	561	\$2,337	N/A	B	5261, 5262
E5195	\$1,481,600	2	341	\$4,345	N/A	B	5261, 5262
E5193	\$1,695,000	2	318	\$5,330	N/A	A	5062
E0704	\$1,791,900	1	284	\$6,310	8%	A, H	5160
E0738	\$2,017,200	1	167	\$12,079	68%	A, H	5159, 5160
E5066	\$2,189,400	2	654	\$3,348	N/A	B	5262
E0401	\$2,244,200	1	120	\$18,702	63%	A	5260
E0714	\$2,340,800	1	568	\$4,121	95%	A	5160
E0337	\$2,355,700	1	983	\$2,396	93%	H	5359, 5459
E0058	\$2,499,300	1	341	\$7,329	98%	A	5258, 5358
E0539	\$2,552,700	1	257	\$9,933	34%	A	5061
E5093	\$2,824,200	2	572	\$4,937	N/A	B	5161, 5261
E0347	\$3,023,800	1	572	\$5,286	84%	H	5360
E0010	\$3,057,900	1	606	\$5,046	89%	H	5458
E0328	\$3,529,300	1	546	\$6,464	86%	H	5359
E0301	\$5,107,200	1	1089	\$4,690	91%	H	5358
E0139	\$5,530,200	1	1480	\$3,737	94%	H	5358, 5359
E0379	\$5,814,500	1	752	\$7,732	69%	B	5261, 5262, 5361, 5362
E0380	\$6,060,200	1	845	\$7,172	92%	B	5361, 5362
E0089	\$6,123,600	1	857	\$7,145	99%	A	5160
E0350	\$6,204,300	1	1096	\$5,661	87%	H	5360, 5361, 5460, 5461
E0340	\$6,455,900	1	1596	\$4,045	97%	A, H	5359, 5360
E5039	\$6,601,500	2	359	\$18,389	N/A	A, B, H	5260, 5261, 5360, 5361
E0146	\$7,972,200	1	806	\$9,891	77%	A, H	5259, 5359
E0319	\$8,899,200	1	3919	\$2,271	92%	H	5358, 5359
E0082	\$9,578,500	1	1689	\$5,671	96%	A	5259, 5260
E0354	\$9,917,800	1	877	\$11,309	88%	B, H	5361, 5362
E0346	\$10,765,100	1	1543	\$6,977	94%	A, H	5260, 5360
E0059	\$13,891,900	1	682	\$20,369	91%	A	5258, 5358
E0312	\$18,185,000	1	2300	\$7,907	93%	H	5459
E0159	\$19,010,100	1	2580	\$7,368	94%	A	5259, 5260
E0369	\$23,604,500	1	2851	\$8,279	90%	B, H	5361, 5362
E0344	\$25,496,400	1	2004	\$12,723	94%	H	5360, 5460
TOTAL	\$247,964,600						

**TABLE 3E 2-YEAR COST – GROUP 1
WHITE OAK BAYOU**

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
Sorted by Cost per Address							
E0035	\$158,500	1	509	\$311	98%	H	5358
E0311	\$373,400	1	947	\$394	89%	H	5458, 5459
E0335	\$74,000	1	129	\$574	93%	H	5359
E0119	\$76,400	1	78	\$979	49%	A	5162
E0101	\$61,700	1	38	\$1,624	100%	A	5160
E0370	\$162,500	1	98	\$1,658	99%	H	5360
E0709	\$243,300	1	140	\$1,738	11%	A	5160
E0086	\$486,100	1	270	\$1,800	100%	A	5160, 5260
E0758	\$373,200	1	180	\$2,073	100%	A	5060
E0080	\$489,800	1	232	\$2,111	41%	H	5159, 5259
E5148	\$288,600	2	135	\$2,138	N/A	A	5060
E0057	\$474,000	1	213	\$2,225	99%	A	5258
E0319	\$8,899,200	1	3919	\$2,271	92%	H	5358, 5359
E5056	\$1,310,900	2	561	\$2,337	N/A	B	5261, 5262
E0126	\$240,400	1	101	\$2,380	99%	A	5162
E0337	\$2,355,700	1	983	\$2,396	93%	H	5359, 5459
E0753	\$236,500	1	79	\$2,994	87%	A	5060
E0190	\$241,300	1	80	\$3,016	6%	A	5260
E0520	\$1,215,000	1	383	\$3,172	95%	A	5160, 5161
E0776	\$358,700	1	109	\$3,291	94%	A	5059, 5060
E5066	\$2,189,400	2	654	\$3,348	N/A	B	5262
E0078	\$831,600	1	246	\$3,380	100%	A	5259
E5052	\$518,600	2	150	\$3,457	N/A	B	5362
E5110	\$596,900	2	161	\$3,707	N/A	A	5161, 5162
E0139	\$5,530,200	1	1480	\$3,737	94%	H	5358, 5359
E5111	\$291,500	2	78	\$3,737	N/A	A	5161, 5162
E5112	\$1,301,200	2	339	\$3,838	N/A	A	5162
E5012	\$84,100	2	21	\$4,005	N/A	H	5258, 5259
E0340	\$6,455,900	1	1596	\$4,045	97%	A, H	5359, 5360
E0714	\$2,340,800	1	568	\$4,121	95%	A	5160
E5195	\$1,481,600	2	341	\$4,345	N/A	B	5261, 5262
E0122	\$205,700	1	47	\$4,377	100%	A	5162
E5151	\$399,400	2	88	\$4,539	N/A	A	5060
E0301	\$5,107,200	1	1089	\$4,690	91%	H	5358
E5044	\$272,600	2	58	\$4,700	N/A	B, H	5361
E5019	\$607,500	2	129	\$4,709	N/A	H	5259
E5045	\$214,700	2	45	\$4,771	N/A	A	5260
E5093	\$2,824,200	2	572	\$4,937	N/A	B	5161, 5261
E5125	\$601,000	2	120	\$5,008	N/A	A	5162

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
E0010	\$3,057,900	1	606	\$5,046	89%	H	5458
E5149	\$885,100	2	168	\$5,268	N/A	A	5060
E0347	\$3,023,800	1	572	\$5,286	84%	H	5360
E5193	\$1,695,000	2	318	\$5,330	N/A	A	5062
E0350	\$6,204,300	1	1096	\$5,661	87%	H	5360, 5361, 5460, 5461
E0082	\$9,578,500	1	1689	\$5,671	96%	A	5259, 5260
E0704	\$1,791,900	1	284	\$6,310	8%	A, H	5160
E0328	\$3,529,300	1	546	\$6,464	86%	H	5359
E5020	\$449,300	2	65	\$6,912	N/A	H	5259
E0346	\$10,765,100	1	1543	\$6,977	94%	A, H	5260, 5360
E5100	\$125,600	2	18	\$6,978	N/A	A	5160
E0157	\$686,300	1	97	\$7,075	90%	A	5259
E0089	\$6,123,600	1	857	\$7,145	99%	A	5160
E0380	\$6,060,200	1	845	\$7,172	92%	B	5361, 5362
E0058	\$2,499,300	1	341	\$7,329	98%	A	5258, 5358
E0159	\$19,010,100	1	2580	\$7,368	94%	A	5259, 5260
E0379	\$5,814,500	1	752	\$7,732	69%	B	5261, 5262, 5361, 5362
E0312	\$18,185,000	1	2300	\$7,907	93%	H	5459
E0369	\$23,604,500	1	2851	\$8,279	90%	B, H	5361, 5362
E0146	\$7,972,200	1	806	\$9,891	77%	A, H	5259, 5359
E5041	\$851,600	2	86	\$9,902	N/A	B, H	5360, 5361
E0539	\$2,552,700	1	257	\$9,933	34%	A	5061
E0812	\$450,500	1	43	\$10,477	100%	A	5160
E0354	\$9,917,800	1	877	\$11,309	88%	B, H	5361, 5362
E0738	\$2,017,200	1	167	\$12,079	68%	A, H	5159, 5160
E0344	\$25,496,400	1	2004	\$12,723	94%	H	5360, 5460
E5077	\$105,300	2	8	\$13,163	N/A	A, B	5260, 5261
E0302	\$204,200	1	12	\$17,017	0%	H	5358, 5458
E5039	\$6,601,500	2	359	\$18,389	N/A	A, B, H	5260, 5261, 5360, 5361
E0401	\$2,244,200	1	120	\$18,702	63%	A	5260
E0713	\$662,300	1	35	\$18,923	100%	A	5160
E0059	\$13,891,900	1	682	\$20,369	91%	A	5258, 5358
E0730	\$1,282,300	1	24	\$53,429	0%	A	5060
E5042	\$209,000	2	1	\$209,000	N/A	B	5361
E0803	\$442,900	1	1	\$442,900	0%	A	4959, 4960
TOTAL	\$247,964,600						

**TABLE 4E 2-YEAR COST – GROUP 2
WHITE OAK BAYOU**

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
Sorted by 2-Year CIP Cost							
E0033	\$55,400	1	92	\$602	91%	H	5358
E0711	\$73,300	1	22	\$3,333	100%	A	5160
E0123	\$128,800	1	54	\$2,386	93%	A	5161, 5162
E5018	\$144,500	2	17	\$8,502	N/A	H	5259
E5029	\$169,000	2	14	\$12,070	N/A	A	5259, 5260
E0096	\$201,200	1	80	\$2,515	99%	A	5160
E5047	\$202,700	2	36	\$5,631	N/A	A	5260
E0227	\$211,400	1	369	\$573	99%	H	5358
E0918	\$240,600	1	101	\$2,383	100%	A	5162
E5131	\$241,600	2	23	\$10,503	N/A	A	5160
E0310	\$272,700	1	687	\$397	92%	H	5458
E5049	\$319,900	2	20	\$15,996	N/A	A	5260
E5032	\$368,200	2	399	\$923	N/A	H	5360
E0026	\$447,800	1	139	\$3,221	91%	H	5358
E0241	\$462,100	1	48	\$9,627	96%	H	5159
E5134	\$478,500	2	128	\$3,738	N/A	A	5060
E0742	\$580,400	1	302	\$1,922	98%	A	5060, 5160
E5103	\$726,700	2	163	\$4,458	N/A	A	5160, 5161
E5122	\$757,300	2	103	\$7,352	N/A	A	5162
E0406	\$779,700	1	140	\$5,569	99%	B	5261
E5022	\$957,300	2	216	\$4,432	N/A	H	5259
E0403	\$1,041,500	1	164	\$6,351	98%	A	5260
E5015	\$1,233,500	2	152	\$8,115	N/A	H	5259
E0132	\$1,352,300	1	261	\$5,181	99%	A	5062
E0907	\$1,371,800	1	917	\$1,496	74%	B	5162, 5262
E5102	\$1,609,200	2	93	\$17,303	N/A	A	5160
E0338	\$1,890,000	1	512	\$3,691	91%	A, H	5259, 5260, 5359, 5360
E5152	\$1,891,200	2	130	\$14,548	N/A	A	5060
E0036	\$2,109,100	1	710	\$2,971	88%	G, H	5258, 5358
E0348	\$3,440,200	1	358	\$9,609	76%	A, H	5360, 5361
E0012	\$5,211,900	1	543	\$9,598	78%	H	5258, 5358
E0729	\$6,287,800	1	229	\$27,458	32%	A	5060, 5061
E0034	\$7,028,800	1	1181	\$5,952	94%	H	5358, 5359
E0716	\$8,755,600	1	255	\$34,336	4%	A, H	5159, 5160
TOTAL	\$51,042,000						

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
Sorted by Cost Per Address							
E0310	\$272,700	1	687	\$397	92%	H	5458
E0227	\$211,400	1	369	\$573	99%	H	5358
E0033	\$55,400	1	92	\$602	91%	H	5358
E5032	\$368,200	2	399	\$923	N/A	H	5360
E0907	\$1,371,800	1	917	\$1,496	74%	B	5162, 5262
E0742	\$580,400	1	302	\$1,922	98%	A	5060, 5160
E0918	\$240,600	1	101	\$2,383	100%	A	5162
E0123	\$128,800	1	54	\$2,386	93%	A	5161, 5162
E0096	\$201,200	1	80	\$2,515	99%	A	5160
E0036	\$2,109,100	1	710	\$2,971	88%	G, H	5258, 5358
E0026	\$447,800	1	139	\$3,221	91%	H	5358
E0711	\$73,300	1	22	\$3,333	100%	A	5160
E0338	\$1,890,000	1	512	\$3,691	91%	A, H	5259, 5260, 5359, 5360
E5134	\$478,500	2	128	\$3,738	N/A	A	5060
E5022	\$957,300	2	216	\$4,432	N/A	H	5259
E5103	\$726,700	2	163	\$4,458	N/A	A	5160, 5161
E0132	\$1,352,300	1	261	\$5,181	99%	A	5062
E0406	\$779,700	1	140	\$5,569	99%	B	5261
E5047	\$202,700	2	36	\$5,631	N/A	A	5260
E0034	\$7,028,800	1	1181	\$5,952	94%	H	5358, 5359
E0403	\$1,041,500	1	164	\$6,351	98%	A	5260
E5122	\$757,300	2	103	\$7,352	N/A	A	5162
E5015	\$1,233,500	2	152	\$8,115	N/A	H	5259
E5018	\$144,500	2	17	\$8,502	N/A	H	5259
E0012	\$5,211,900	1	543	\$9,598	78%	H	5258, 5358
E0348	\$3,440,200	1	358	\$9,609	76%	A, H	5360, 5361
E0241	\$462,100	1	48	\$9,627	96%	H	5159
E5131	\$241,600	2	23	\$10,503	N/A	A	5160
E5029	\$169,000	2	14	\$12,070	N/A	A	5259, 5260
E5152	\$1,891,200	2	130	\$14,548	N/A	A	5060
E5049	\$319,900	2	20	\$15,996	N/A	A	5260
E5102	\$1,609,200	2	93	\$17,303	N/A	A	5160
E0729	\$6,287,800	1	229	\$27,458	32%	A	5060, 5061
E0716	\$8,755,600	1	255	\$34,336	4%	A, H	5159, 5160
TOTAL	\$51,042,000						

TABLE 5E 2-YEAR COST – GROUP 3
WHITE OAK BAYOU

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
Sorted by 2-Year CIP Cost							
E0195	\$44,600	1	234	\$191	100%	B	5161
E0722	\$72,200	1	55	\$1,313	98%	A	5160
E5099	\$83,500	2	24	\$3,479	N/A	A	5160
E0257	\$83,700	1	76	\$1,101	100%	B	5261
E0068	\$87,300	1	146	\$598	100%	A	5259
E0517	\$101,000	1	123	\$821	100%	A	5161
E0717	\$114,500	1	48	\$2,385	98%	A	5160
E5031	\$130,100	2	30	\$4,337	N/A	A, H	5260
E0789	\$130,600	1	3	\$43,533	0%	A	4959, 4960
E0308	\$130,800	1	132	\$991	82%	H	5458
E0097	\$139,400	1	38	\$3,668	100%	A	5160
E0811	\$141,400	1	16	\$8,838	100%	A	4960
E5030	\$156,800	2	80	\$1,960	N/A	A	5260
E0117	\$198,800	1	83	\$2,395	40%	A	5161
E0777	\$202,200	1	36	\$5,617	100%	A	5060
E0739	\$204,100	1	35	\$5,831	91%	A	5160
E5040	\$207,600	2	6	\$34,600	N/A	B, H	5360, 5361
E0760	\$226,500	1	99	\$2,288	100%	A	5060
E5201	\$257,000	2	1	\$257,000	N/A	B	5261
E0409	\$271,900	1	28	\$9,711	75%	A, B	5260, 5261
E5205	\$281,800	2	1	\$281,800	N/A	B	5262
E0371	\$282,400	1	126	\$2,241	100%	H	5360
E5202	\$290,400	2	1	\$290,400	N/A	B	5261
E0210	\$342,500	1	61	\$5,615	98%	A	5062
E5075	\$349,500	2	48	\$7,281	N/A	A, B	5260, 5261
E5006	\$377,500	2	77	\$4,903	N/A	H	5458
E0782	\$415,000	1	77	\$5,390	97%	A	5060
E5009	\$456,400	2	109	\$4,187	N/A	H	5359
E0913	\$519,600	1	84	\$6,186	100%	A	5162
E5011	\$548,700	2	143	\$3,837	N/A	H	5258, 5259
E0807	\$554,500	1	1	\$554,500	0%	A	4959, 4960
E0314	\$599,000	1	119	\$5,034	85%	H	5358, 5359
E0745	\$633,800	1	8	\$79,225	0%	A	5059, 5159
E5115	\$637,300	2	214	\$2,978	N/A	A	5162
E0511	\$642,900	1	86	\$7,476	94%	A	5160, 5161
E0041	\$653,200	1	72	\$9,072	67%	H	5258, 5358
E0378	\$658,900	1	19	\$34,679	53%	B	5261, 5361
E0740	\$662,400	1	218	\$3,039	99%	A	5160
E5051	\$663,600	2	171	\$3,881	N/A	B	5261, 5361
E0006	\$678,300	1	291	\$2,331	83%	H	5458
E5090	\$718,400	2	206	\$3,487	N/A	B	5261
E0792	\$741,600	1	1	\$741,600	0%	A	4959, 4960

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
E5108	\$742,200	2	161	\$4,610	N/A	A	5161
E5124	\$742,500	2	85	\$8,735	N/A	A	5162
E5054	\$832,100	2	191	\$4,357	N/A	B	5261
E0221	\$838,400	1	178	\$4,710	99%	A	5062
E0189	\$849,500	1	150	\$5,663	97%	A	5260
E0767	\$892,900	1	150	\$5,953	89%	A	4960, 5060
E5174	\$894,200	2	163	\$5,486	N/A	A	4961
E0313	\$971,400	1	312	\$3,113	86%	H	5459
E0712	\$974,100	1	228	\$4,272	80%	A	5160
E5123	\$1,027,900	2	252	\$4,079	N/A	A	5162
E5173	\$1,080,200	2	165	\$6,547	N/A	A	4961
E5010	\$1,080,700	5	63	\$17,154	N/A	A, H	5258
E5133	\$1,097,500	2	199	\$5,515	N/A	A	5060, 5160
E0721	\$1,347,900	1	225	\$5,991	99%	A	5160
E0901	\$1,353,700	1	287	\$4,717	48%	A	5161, 5162
E0773	\$1,389,400	1	223	\$6,230	79%	A	5059, 5060
E5094	\$1,395,700	2	269	\$5,188	N/A	A, B	5161, 5162
E5091	\$1,445,000	2	1	\$1,445,000	N/A	B	5261
E0790	\$1,464,400	1	6	\$244,067	0%	A	4959, 4960
E0198	\$1,543,400	1	213	\$7,246	100%	A, H	5159, 5259
E0014	\$1,581,400	1	463	\$3,416	76%	H, I	5258, 5358, 5458
E5095	\$1,584,700	2	475	\$3,336	N/A	B	5261, 5262
E0200	\$1,728,500	1	352	\$4,911	99%	A	5062, 5162
E0087	\$1,992,500	1	583	\$3,418	99%	A	5160, 5260
E0150	\$2,052,800	1	346	\$5,933	90%	H	5259
E5062	\$2,058,400	2	332	\$6,200	N/A	B	5261, 5262
E0143	\$2,194,400	1	621	\$3,534	95%	H	5258
E0237	\$2,393,400	1	24	\$99,725	0%	H	5159
E0145	\$2,678,700	1	560	\$4,783	89%	H	5258, 5259, 5358, 5359
E0548	\$3,043,200	1	100	\$30,432	45%	A	4961
E0509	\$3,215,600	1	306	\$10,508	69%	A	5160, 5161
E0385	\$4,072,600	1	623	\$6,537	95%	B	5261, 5262
E5037	\$4,350,300	2	144	\$30,210	N/A	A, H	5260, 5360
E0090	\$4,370,700	1	846	\$5,166	97%	A	5160, 5260
E0147	\$5,772,100	1	642	\$8,991	58%	H	5259, 5359
E5067	\$7,761,200	2	638	\$12,165	N/A	B	5162, 5262
E0049	\$10,982,100	1	177	\$62,046	51%	A	5158, 5258
TOTAL	\$98,487,400						

TABLE SE 2-YEAR COST – GROUP 3
WHITE OAK BAYOU

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
Sorted by Cost per Address							
E0195	\$44,600	1	234	\$191	100%	B	5161
E0068	\$87,300	1	146	\$598	100%	A	5259
E0517	\$101,000	1	123	\$821	100%	A	5161
E0308	\$130,800	1	132	\$991	82%	H	5458
E0257	\$83,700	1	76	\$1,101	100%	B	5261
E0722	\$72,200	1	55	\$1,313	98%	A	5160
E5030	\$156,800	2	80	\$1,960	N/A	A	5260
E0371	\$282,400	1	126	\$2,241	100%	H	5360
E0760	\$226,500	1	99	\$2,288	100%	A	5060
E0006	\$678,300	1	291	\$2,331	83%	H	5458
E0717	\$114,500	1	48	\$2,385	98%	A	5160
E0117	\$198,800	1	83	\$2,395	40%	A	5161
E5115	\$637,300	2	214	\$2,978	N/A	A	5162
E0740	\$662,400	1	218	\$3,039	99%	A	5160
E0313	\$971,400	1	312	\$3,113	86%	H	5459
E5095	\$1,584,700	2	475	\$3,336	N/A	B	5261, 5262
E0014	\$1,581,400	1	463	\$3,416	76%	H, I	5258, 5358, 5458
E0087	\$1,992,500	1	583	\$3,418	99%	A	5160, 5260
E5099	\$83,500	2	24	\$3,479	N/A	A	5160
E5090	\$718,400	2	206	\$3,487	N/A	B	5261
E0143	\$2,194,400	1	621	\$3,534	95%	H	5258
E0097	\$139,400	1	38	\$3,668	100%	A	5160
E5011	\$548,700	2	143	\$3,837	N/A	H	5258, 5259
E5051	\$663,600	2	171	\$3,881	N/A	B	5261, 5361
E5123	\$1,027,900	2	252	\$4,079	N/A	A	5162
E5009	\$456,400	2	109	\$4,187	N/A	H	5359
E0712	\$974,100	1	228	\$4,272	80%	A	5160
E5031	\$130,100	2	30	\$4,337	N/A	A, H	5260
E5054	\$832,100	2	191	\$4,357	N/A	B	5261
E5108	\$742,200	2	161	\$4,610	N/A	A	5161
E0221	\$838,400	1	178	\$4,710	99%	A	5062
E0901	\$1,353,700	1	287	\$4,717	48%	A	5161, 5162
E0145	\$2,678,700	1	560	\$4,783	89%	H	5258, 5259, 5358, 5359
E5006	\$377,500	2	77	\$4,903	N/A	H	5458
E0200	\$1,728,500	1	352	\$4,911	99%	A	5062, 5162
E0314	\$599,000	1	119	\$5,034	85%	H	5358, 5359
E0090	\$4,370,700	1	846	\$5,166	97%	A	5160, 5260
E5094	\$1,395,700	2	269	\$5,188	N/A	A, B	5161, 5162
E0782	\$415,000	1	77	\$5,390	97%	A	5060
E5174	\$894,200	2	163	\$5,486	N/A	A	4961

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
E5133	\$1,097,500	2	199	\$5,515	N/A	A	5060, 5160
E0210	\$342,500	1	61	\$5,615	98%	A	5062
E0777	\$202,200	1	36	\$5,617	100%	A	5060
E0189	\$849,500	1	150	\$5,663	97%	A	5260
E0739	\$204,100	1	35	\$5,831	91%	A	5160
E0150	\$2,052,800	1	346	\$5,933	90%	H	5259
E0767	\$892,900	1	150	\$5,953	89%	A	4960, 5060
E0721	\$1,347,900	1	225	\$5,991	99%	A	5160
E0913	\$519,600	1	84	\$6,186	100%	A	5162
E5062	\$2,058,400	2	332	\$6,200	N/A	B	5261, 5262
E0773	\$1,389,400	1	223	\$6,230	79%	A	5059, 5060
E0385	\$4,072,600	1	623	\$6,537	95%	B	5261, 5262
E5173	\$1,080,200	2	165	\$6,547	N/A	A	4961
E0198	\$1,543,400	1	213	\$7,246	100%	A, H	5159, 5259
E5075	\$349,500	2	48	\$7,281	N/A	A, B	5260, 5261
E0511	\$642,900	1	86	\$7,476	94%	A	5160, 5161
E5124	\$742,500	2	85	\$8,735	N/A	A	5162
E0811	\$141,400	1	16	\$8,838	100%	A	4960
E0147	\$5,772,100	1	642	\$8,991	58%	H	5259, 5359
E0041	\$653,200	1	72	\$9,072	67%	H	5258, 5358
E0409	\$271,900	1	28	\$9,711	75%	A, B	5260, 5261
E0509	\$3,215,600	1	306	\$10,508	69%	A	5160, 5161
E5067	\$7,761,200	2	638	\$12,165	N/A	B	5162, 5262
E5010	\$1,080,700	5	63	\$17,154	N/A	A, H	5258
E5037	\$4,350,300	2	144	\$30,210	N/A	A, H	5260, 5360
E0548	\$3,043,200	1	100	\$30,432	45%	A	4961
E5040	\$207,600	2	6	\$34,600	N/A	B, H	5360, 5361
E0378	\$658,900	1	19	\$34,679	53%	B	5261, 5361
E0789	\$130,600	1	3	\$43,533	0%	A	4959, 4960
E0049	\$10,982,100	1	177	\$62,046	51%	A	5158, 5258
E0745	\$633,800	1	8	\$79,225	0%	A	5059, 5159
E0237	\$2,393,400	1	24	\$99,725	0%	H	5159
E0790	\$1,464,400	1	6	\$244,067	0%	A	4959, 4960
E5201	\$257,000	2	1	\$257,000	N/A	B	5261
E5205	\$281,800	2	1	\$281,800	N/A	B	5262
E5202	\$290,400	2	1	\$290,400	N/A	B	5261
E0807	\$554,500	1	1	\$554,500	0%	A	4959, 4960
E0792	\$741,600	1	1	\$741,600	0%	A	4959, 4960
E5091	\$1,445,000	2	1	\$1,445,000	N/A	B	5261
TOTAL	\$98,487,400						

TABLE 6E 2-YEAR COST – GROUP 4
WHITE OAK BAYOU

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addressees	Cost per Address	Percent of System Single Family	City Council District	Facet Number
Sorted by 2-Year CIP Cost							
E0333	\$22,600	3	53	\$426	72%	H	5359
E0392	\$29,200	3	4	\$7,300	0%	B	5262
E5135	\$30,600	5	15	\$2,040	N/A	A	5160
E5071	\$39,800	5	21	\$1,895	N/A	A	5160
E5144	\$39,800	5	33	\$1,206	N/A	A	5162
E0069	\$48,800	3	37	\$1,319	100%	A	5259
E5058	\$51,500	4	8	\$6,438	N/A	B	5261
E5060	\$54,200	4	8	\$6,775	N/A	B	5261, 5262
E5057	\$57,300	4	12	\$4,775	N/A	B	5261
E5059	\$59,800	4	7	\$8,543	N/A	B	5261
E5046	\$60,000	4	2	\$30,000	N/A	A	5260
E0029	\$63,700	3	28	\$2,275	93%	H	5358
E5023	\$65,900	4	2	\$32,950	N/A	H	5259
E5024	\$70,000	4	5	\$14,000	N/A	H	5259
E0416	\$70,500	3	18	\$3,917	100%	B	5361
E5014	\$70,600	4	17	\$4,153	N/A	H	5259
E0004	\$72,400	3	1	\$72,400	0%	H, I	5457, 5458
E5182	\$74,100	4	7	\$10,586	N/A	A	4961
E5055	\$77,200	4	16	\$4,825	N/A	B	5261
E5153	\$80,700	4	1	\$80,700	N/A	A	4960
E0736	\$83,700	3	5	\$16,740	0%	A	5061
E5162	\$85,200	4	3	\$28,400	N/A	A	4960
E0248	\$88,400	3	2	\$44,200	0%	A	5259, 5260
E0726	\$88,800	3	51	\$1,741	92%	A	5060, 5160
E5064	\$89,100	4	2	\$44,550	N/A	B	5262
E5184	\$90,800	5	3	\$30,267	N/A	A	4961
E0320	\$94,900	3	18	\$5,272	33%	H	5359
E5076	\$99,100	4	11	\$9,009	N/A	A, B	5260, 5261
E5185	\$101,800	5	3	\$33,933	N/A	A	4961
E5035	\$106,100	4	12	\$8,842	N/A	H	5360
E5078	\$108,500	4	6	\$18,083	N/A	A, B	5260, 5261
E5013	\$108,600	4	22	\$4,936	N/A	H	5259
E5073	\$108,900	5	35	\$3,111	N/A	A	5260
E5079	\$113,100	4	5	\$22,620	N/A	A, B	5261
E5061	\$117,300	4	5	\$23,460	N/A	B	5262
E5080	\$119,300	4	12	\$9,942	N/A	A, B	5261
E5141	\$121,500	4	2	\$60,750	N/A	A	5060, 5061
E0557	\$128,700	3	23	\$5,596	0%	A	5061
E5081	\$133,300	5	1	\$133,300	N/A	B	5161, 5261
E0532	\$133,300	3	93	\$1,433	100%	A	5061
E5028	\$133,800	4	10	\$13,380	N/A	A	5259, 5260

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addressees	Cost per Address	Percent of System Single Family	City Council District	Facet Number
E5186	\$135,500	5	7	\$19,357	N/A	A	4961
E5132	\$140,000	4	37	\$3,784	N/A	A	5160
E5048	\$141,600	4	23	\$6,157	N/A	A	5260
E5101	\$145,000	5	3	\$48,333	N/A	A	5160
E0718	\$147,500	3	37	\$3,986	97%	A	5160
E5004	\$147,500	4	39	\$3,782	N/A	H	5358
E5206	\$149,100	4	1	\$149,100	N/A	B	5261
E5150	\$150,800	4	16	\$9,425	N/A	A	5060
E5072	\$152,300	5	37	\$4,116	N/A	A	5260
E5053	\$153,000	4	15	\$10,200	N/A	B	5261
E5207	\$154,700	4	1	\$154,700	N/A	B	5261
E5063	\$160,900	4	11	\$14,627	N/A	B	5262
E0155	\$163,300	3	3	\$54,433	0%	H	5259
E0909	\$174,200	3	3	\$58,067	0%	A	5162
E5025	\$176,100	4	41	\$4,295	N/A	H	5259
E5147	\$183,700	4	10	\$18,370	N/A	A	5060
E5016	\$184,700	4	30	\$6,157	N/A	H	5259
E5181	\$190,100	4	4	\$47,525	N/A	A	4961
E0063	\$192,100	3	217	\$885	72%	A	5259
E5129	\$195,600	5	2	\$97,800	N/A	A	5060
E0238	\$197,600	3	2	\$98,800	0%	H	5159
E0349	\$198,800	3	10	\$19,880	20%	B, H	5360
E5209	\$208,900	4	1	\$208,900	N/A	B	5261
E0160	\$212,000	3	25	\$8,480	96%	H	5259
E5098	\$214,500	4	13	\$16,500	N/A	H	5159
E5069	\$217,000	4	28	\$7,750	N/A	B	5262
E5136	\$218,200	5	4	\$54,550	N/A	A	5160
E0130	\$229,800	3	79	\$2,909	53%	A	5061, 5062, 5161, 5162
E5140	\$230,800	4	1	\$230,800	N/A	A	5060
E5026	\$245,000	4	43	\$5,698	N/A	H	5259
E5017	\$246,300	4	43	\$5,728	N/A	H	5259
E5137	\$253,200	4	11	\$23,018	N/A	A	5060
E5097	\$257,900	4	35	\$7,369	N/A	H	5159
E5114	\$261,800	4	37	\$7,076	N/A	A	5162
E5179	\$281,300	4	31	\$9,074	N/A	A	4961
E5043	\$282,000	4	40	\$7,050	N/A	B	5361
E5203	\$283,700	4	1	\$283,700	N/A	B	5261
E5050	\$297,300	4	23	\$12,926	N/A	B	5261, 5361
E5130	\$302,600	4	15	\$20,173	N/A	A	5160
E5118	\$315,000	5	4	\$78,750	N/A	B	5162
E5002	\$320,100	4	48	\$6,669	N/A	H	5358

TABLE 6E 2-YEAR COST – GROUP 4
WHITE OAK BAYOU

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addressees	Cost per Address	Percent of System Single Family	City Council District	Facet Number
E5204	\$329,000	4	1	\$329,000	N/A	B	5261
E5155	\$332,800	4	148	\$2,249	N/A	A	4960
E5145	\$341,500	5	13	\$26,269	N/A	A	5063, 5163
E5183	\$348,500	5	9	\$38,722	N/A	A	4961
E5074	\$358,400	4	57	\$6,288	N/A	A, B	5160, 5260, 5261
E5008	\$359,000	4	40	\$8,975	N/A	H	5359, 5459
E0342	\$361,900	3	18	\$20,106	39%	H	5360
E5082	\$368,300	5	6	\$61,383	N/A	B	5261
E5121	\$371,900	4	1	\$371,900	N/A	A	5162
E0906	\$386,700	3	52	\$7,437	100%	A	5162
E5154	\$404,800	4	132	\$3,067	N/A	A	4960
E5196	\$409,100	5	1	\$409,100	N/A	A	4961
E5139	\$418,100	5	20	\$20,905	N/A	A	5060
E5208	\$421,400	4	1	\$421,400	N/A	B	5261
E5070	\$434,000	4	112	\$3,875	N/A	B	5262
E5005	\$437,600	4	85	\$5,148	N/A	H	5358
E5180	\$443,000	4	12	\$36,917	N/A	A	4961
E5034	\$444,600	4	28	\$15,879	N/A	H	5360
E0771	\$448,200	3	3	\$149,400	0%	A	4960
E5001	\$448,400	4	114	\$3,933	N/A	H	5358
E5146	\$450,300	4	8	\$56,288	N/A	A	5060
E5027	\$484,600	4	12	\$40,383	N/A	H	5259
E0733	\$488,300	3	4	\$122,075	0%	A	5060, 5061
E0928	\$491,700	3	93	\$5,287	0%	A	5162
E0245	\$498,200	3	98	\$5,084	97%	H	5259
E5068	\$500,100	4	220	\$2,273	N/A	B	5262
E5119	\$527,400	4	319	\$1,653	N/A	B	5162
E5138	\$531,100	4	6	\$88,517	N/A	A	5060
E5117	\$536,600	4	15	\$35,773	N/A	A	5162
E5083	\$540,000	5	14	\$38,571	N/A	B	5261
E5084	\$543,300	5	30	\$18,110	N/A	B	5261
E0234	\$546,600	3	12	\$45,550	0%	H	5159
E5021	\$561,600	4	69	\$8,139	N/A	H	5259
E0512	\$561,900	3	34	\$16,526	0%	A	5161
E5000	\$578,900	4	18	\$32,161	N/A	H	5358
E5087	\$607,600	4	54	\$11,252	N/A	B	5261
E5033	\$619,600	4	24	\$25,817	N/A	H	5360
E5120	\$637,100	5	6	\$106,183	N/A	B	5162, 5163
E0735	\$641,700	3	35	\$18,334	34%	A	5060, 5061
E5171	\$647,400	5	24	\$26,975	N/A	A	4961
E5088	\$649,000	4	478	\$1,358	N/A	B	5261

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addressees	Cost per Address	Percent of System Single Family	City Council District	Facet Number
E5190	\$675,900	4	14	\$48,279	N/A	A	5061
E5167	\$684,400	4	187	\$3,660	N/A	A	4960, 4961
E5178	\$714,900	4	78	\$9,165	N/A	A	4961
E5126	\$731,700	4	30	\$24,390	N/A	A	5059
E5065	\$772,800	4	111	\$6,962	N/A	B	5262
E5194	\$773,800	4	273	\$2,834	N/A	A, B	5162
E5113	\$774,400	5	272	\$2,847	N/A	A	5162
E5086	\$775,500	4	77	\$10,071	N/A	B	5261
E5085	\$784,100	4	43	\$18,235	N/A	B	5261
E0560	\$794,400	3	70	\$11,349	3%	A	5061, 5062
E5161	\$802,900	4	41	\$19,583	N/A	A	4960
E5104	\$812,500	5	8	\$101,563	N/A	A	5161
E5166	\$829,500	4	248	\$3,345	N/A	A	4960, 4961
E0746	\$833,400	3	8	\$104,175	0%	A	5059
E0525	\$848,400	3	161	\$5,270	53%	A	5061, 5161
E0084	\$938,300	3	27	\$34,752	67%	A, H	5159, 5160, 5259
E5109	\$1,003,000	4	128	\$7,836	N/A	B	5161
E0763	\$1,034,200	3	50	\$20,684	46%	A	4960, 4961, 5060, 5061
E5168	\$1,076,200	4	24	\$44,842	N/A	A	4961, 5061
E5116	\$1,115,500	5	374	\$2,983	N/A	A, B	5162
E5192	\$1,119,700	5	30	\$37,323	N/A	A	5061
E5163	\$1,122,900	4	219	\$5,127	N/A	A	4960
E5175	\$1,130,100	5	7	\$161,443	N/A	A	4961
E5211	\$1,140,000	4	1	\$1,140,000	N/A	A	5063
E0231	\$1,173,600	3	44	\$26,673	0%	H	5159, 5259
E5170	\$1,225,900	5	12	\$102,158	N/A	A	4961
E0743	\$1,298,400	3	18	\$72,133	0%	A	5059, 5060, 5159, 5160
E0762	\$1,401,100	3	20	\$70,055	0%	A	4960, 5060
E5169	\$1,484,200	5	31	\$47,877	N/A	A	4961
E5188	\$1,517,700	4	50	\$30,354	N/A	A	5061
E0073	\$1,574,700	3	39	\$40,377	18%	A, H	5159, 5259
E5187	\$1,658,300	4	98	\$16,921	N/A	A	4961, 5061
E5177	\$1,699,600	5	7	\$242,800	N/A	A	4961
E5176	\$1,703,200	5	12	\$141,933	N/A	A	4961
E0731	\$1,775,100	3	105	\$16,906	90%	A	5060, 5061
E5172	\$1,795,000	5	236	\$7,606	N/A	A	4961
E0236	\$2,016,000	3	77	\$26,182	21%	H	5159, 5160
E5191	\$2,168,200	5	58	\$37,383	N/A	A	5061
E5164	\$2,736,700	5	5	\$543,340	N/A	A	4960

TABLE 6E 2-YEAR COST – GROUP 4
WHITE OAK BAYOU

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addressees	Cost per Address	Percent of System Single Family	City Council District	Facet Number
E0526	\$2,743,800	C.N.A.	48	\$57,163	0%	A	5061, 5161
E5210	\$2,822,000	4	1	\$2,822,000	N/A	A	5063
E0240	\$2,896,100	3	81	\$35,754	0%	H	5159
E0764	\$3,645,500	3	44	\$82,852	0%	A	4961, 5060, 5061
E5105	\$8,244,100	5	95	\$86,780	N/A	A	5161
TOTAL	\$98,262,300						
Sorted by Cost per Address							
E0333	\$22,600	3	53	\$426	72%	H	5359
E0063	\$192,100	3	217	\$885	72%	A	5259
E5144	\$39,800	5	33	\$1,206	N/A	A	5162
E0069	\$48,800	3	37	\$1,319	100%	A	5259
E5088	\$649,000	4	478	\$1,358	N/A	B	5261
E0532	\$133,300	3	93	\$1,433	100%	A	5061
E5119	\$527,400	4	319	\$1,653	N/A	B	5162
E0726	\$88,800	3	51	\$1,741	92%	A	5060, 5160
E5071	\$39,800	5	21	\$1,895	N/A	A	5160
E5135	\$30,600	5	15	\$2,040	N/A	A	5160
E5155	\$332,800	4	148	\$2,249	N/A	A	4960
E5068	\$500,100	4	220	\$2,273	N/A	B	5262
E0029	\$63,700	3	28	\$2,275	93%	H	5358
E5194	\$773,800	4	273	\$2,834	N/A	A, B	5162
E5113	\$774,400	5	272	\$2,847	N/A	A	5162
E0130	\$229,800	3	79	\$2,909	53%	A	5061, 5062, 5161, 5162
E5116	\$1,115,500	5	374	\$2,983	N/A	A, B	5162
E5154	\$404,800	4	132	\$3,067	N/A	A	4960
E5073	\$108,900	5	35	\$3,111	N/A	A	5260
E5166	\$829,500	4	248	\$3,345	N/A	A	4960, 4961
E5167	\$684,400	4	187	\$3,660	N/A	A	4960, 4961
E5004	\$147,500	4	39	\$3,782	N/A	H	5358
E5132	\$140,000	4	37	\$3,784	N/A	A	5160
E5070	\$434,000	4	112	\$3,875	N/A	B	5262
E0416	\$70,500	3	18	\$3,917	100%	B	5361
E5001	\$448,400	4	114	\$3,933	N/A	H	5358
E0718	\$147,500	3	37	\$3,986	97%	A	5160
E5072	\$152,300	5	37	\$4,116	N/A	A	5260
E5014	\$70,600	4	17	\$4,153	N/A	H	5259
E5025	\$176,100	4	41	\$4,295	N/A	H	5259
E5057	\$57,300	4	12	\$4,775	N/A	B	5261

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addressees	Cost per Address	Percent of System Single Family	City Council District	Facet Number
E5055	\$77,200	4	16	\$4,825	N/A	B	5261
E5013	\$108,600	4	22	\$4,936	N/A	H	5259
E0245	\$498,200	3	98	\$5,084	97%	H	5259
E5163	\$1,122,900	4	219	\$5,127	N/A	A	4960
E5005	\$437,600	4	85	\$5,148	N/A	H	5358
E0525	\$848,400	3	161	\$5,270	53%	A	5061, 5161
E0320	\$94,900	3	18	\$5,272	33%	H	5359
E0928	\$491,700	3	93	\$5,287	0%	A	5162
E0557	\$128,700	3	23	\$5,596	0%	A	5061
E5026	\$245,000	4	43	\$5,698	N/A	H	5259
E5017	\$246,300	4	43	\$5,728	N/A	H	5259
E5048	\$141,600	4	23	\$6,157	N/A	A	5260
E5016	\$184,700	4	30	\$6,157	N/A	H	5259
E5074	\$358,400	4	57	\$6,288	N/A	A, B	5160, 5260, 5261
E5058	\$51,500	4	8	\$6,438	N/A	B	5261
E5002	\$320,100	4	48	\$6,669	N/A	H	5358
E5060	\$54,200	4	8	\$6,775	N/A	B	5261, 5262
E5065	\$772,800	4	111	\$6,962	N/A	B	5262
E5043	\$282,000	4	40	\$7,050	N/A	B	5361
E5114	\$261,800	4	37	\$7,076	N/A	A	5162
E0392	\$29,200	3	4	\$7,300	0%	B	5262
E5097	\$257,900	4	35	\$7,369	N/A	H	5159
E0906	\$386,700	3	52	\$7,437	100%	A	5162
E5172	\$1,795,000	5	236	\$7,606	N/A	A	4961
E5069	\$217,000	4	28	\$7,750	N/A	B	5262
E5109	\$1,003,000	4	128	\$7,836	N/A	B	5161
E5021	\$561,600	4	69	\$8,139	N/A	H	5259
E0160	\$212,000	3	25	\$8,480	96%	H	5259
E5059	\$59,800	4	7	\$8,543	N/A	B	5261
E5035	\$106,100	4	12	\$8,842	N/A	H	5360
E5008	\$359,000	4	40	\$8,975	N/A	H	5359, 5459
E5076	\$99,100	4	11	\$9,009	N/A	A, B	5260, 5261
E5179	\$281,300	4	31	\$9,074	N/A	A	4961
E5178	\$714,900	4	78	\$9,165	N/A	A	4961
E5150	\$150,800	4	16	\$9,425	N/A	A	5060
E5080	\$119,300	4	12	\$9,942	N/A	A, B	5261
E5086	\$775,500	4	77	\$10,071	N/A	B	5261
E5053	\$153,000	4	15	\$10,200	N/A	B	5261
E5182	\$74,100	4	7	\$10,586	N/A	A	4961
E5087	\$607,600	4	54	\$11,252	N/A	B	5261
E0560	\$794,400	3	70	\$11,349	3%	A	5061, 5062

TABLE 6E 2-YEAR COST – GROUP 4
WHITE OAK BAYOU

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addressees	Cost per Address	Percent of System Single Family	City Council District	Facet Number
E5050	\$297,300	4	23	\$12,926	N/A	B	5261, 5361
E5028	\$133,800	4	10	\$13,380	N/A	A	5259, 5260
E5024	\$70,000	4	5	\$14,000	N/A	H	5259
E5063	\$160,900	4	11	\$14,627	N/A	B	5262
E5034	\$444,600	4	28	\$15,879	N/A	H	5360
E5098	\$214,500	4	13	\$16,500	N/A	H	5159
E0512	\$561,900	3	34	\$16,526	0%	A	5161
E0736	\$83,700	3	5	\$16,740	0%	A	5061
E0731	\$1,775,100	3	105	\$16,906	90%	A	5060, 5061
E5187	\$1,658,300	4	98	\$16,921	N/A	A	4961, 5061
E5078	\$108,500	4	6	\$18,083	N/A	A, B	5260, 5261
E5084	\$543,300	5	30	\$18,110	N/A	B	5261
E5085	\$784,100	4	43	\$18,235	N/A	B	5261
E0735	\$641,700	3	35	\$18,334	34%	A	5060, 5061
E5147	\$183,700	4	10	\$18,370	N/A	A	5060
E5186	\$135,500	5	7	\$19,357	N/A	A	4961
E5161	\$802,900	4	41	\$19,583	N/A	A	4960
E0349	\$198,800	3	10	\$19,880	20%	B, H	5360
E0342	\$361,900	3	18	\$20,106	39%	H	5360
E5130	\$302,600	4	15	\$20,173	N/A	A	5160
E0763	\$1,034,200	3	50	\$20,684	46%	A	4960, 4961, 5060, 5061
E5139	\$418,100	5	20	\$20,905	N/A	A	5060
E5079	\$113,100	4	5	\$22,620	N/A	A, B	5261
E5137	\$253,200	4	11	\$23,018	N/A	A	5060
E5061	\$117,300	4	5	\$23,460	N/A	B	5262
E5126	\$731,700	4	30	\$24,390	N/A	A	5059
E5033	\$619,600	4	24	\$25,817	N/A	H	5360
E0236	\$2,016,000	3	77	\$26,182	21%	H	5159, 5160
E5145	\$341,500	5	13	\$26,269	N/A	A	5063, 5163
E0231	\$1,173,600	3	44	\$26,673	0%	H	5159, 5259
E5171	\$647,400	5	24	\$26,975	N/A	A	4961
E5162	\$85,200	4	3	\$28,400	N/A	A	4960
E5046	\$60,000	4	2	\$30,000	N/A	A	5260
E5184	\$90,800	5	3	\$30,267	N/A	A	4961
E5188	\$1,517,700	4	50	\$30,354	N/A	A	5061
E5000	\$578,900	4	18	\$32,161	N/A	H	5358
E5023	\$65,900	4	2	\$32,950	N/A	H	5259
E5185	\$101,800	5	3	\$33,933	N/A	A	4961
E0084	\$938,300	3	27	\$34,752	67%	A, H	5159, 5160, 5259
E0240	\$2,896,100	3	81	\$35,754	0%	H	5159

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addressees	Cost per Address	Percent of System Single Family	City Council District	Facet Number
E5117	\$536,600	4	15	\$35,773	N/A	A	5162
E5180	\$443,000	4	12	\$36,917	N/A	A	4961
E5192	\$1,119,700	5	30	\$37,323	N/A	A	5061
E5191	\$2,168,200	5	58	\$37,383	N/A	A	5061
E5083	\$540,000	5	14	\$38,571	N/A	B	5261
E5183	\$348,500	5	9	\$38,722	N/A	A	4961
E0073	\$1,574,700	3	39	\$40,377	18%	A, H	5159, 5259
E5027	\$484,600	4	12	\$40,383	N/A	H	5259
E0248	\$88,400	3	2	\$44,200	0%	A	5259, 5260
E5064	\$89,600	4	2	\$44,550	N/A	B	5262
E5168	\$1,076,200	4	24	\$44,842	N/A	A	4961, 5061
E0234	\$546,600	3	12	\$45,550	0%	H	5159
E5181	\$190,100	4	4	\$47,525	N/A	A	4961
E5169	\$1,484,200	5	31	\$47,877	N/A	A	4961
E5190	\$675,900	4	14	\$48,279	N/A	A	5061
E5101	\$145,000	5	3	\$48,333	N/A	A	5160
E0155	\$163,300	3	3	\$54,433	0%	H	5259
E5136	\$218,200	5	4	\$54,550	N/A	A	5160
E5146	\$450,300	4	8	\$56,288	N/A	A	5060
E0526	\$2,743,800	C.N.A.	48	\$57,163	0%	A	5061, 5161
E0909	\$174,200	3	3	\$58,067	0%	A	5162
E5141	\$121,500	4	2	\$60,750	N/A	A	5060, 5061
E5082	\$368,300	5	6	\$61,383	N/A	B	5261
E0762	\$1,401,100	3	20	\$70,055	0%	A	4960, 5060
E0743	\$1,298,400	3	18	\$72,133	0%	A	5059, 5060, 5159, 5160
E0004	\$72,400	3	1	\$72,400	0%	H, I	5457, 5458
E5118	\$315,000	5	4	\$78,750	N/A	B	5162
E5153	\$80,700	4	1	\$80,700	N/A	A	4960
E0764	\$3,645,500	3	44	\$82,852	0%	A	4961, 5060, 5061
E5105	\$8,244,100	5	95	\$86,780	N/A	A	5161
E5138	\$531,100	4	6	\$88,517	N/A	A	5060
E5129	\$195,600	5	2	\$97,800	N/A	A	5060
E0238	\$197,600	3	2	\$98,800	0%	H	5159
E5104	\$812,500	5	8	\$101,563	N/A	A	5161
E5170	\$1,225,900	5	12	\$102,158	N/A	A	4961
E0746	\$833,400	3	8	\$104,175	0%	A	5059
E5120	\$637,100	5	6	\$106,183	N/A	B	5162, 5163
E0733	\$488,300	3	4	\$122,075	0%	A	5060, 5061
E5081	\$133,300	5	1	\$133,300	N/A	B	5161, 5261
E5176	\$1,703,200	5	12	\$141,933	N/A	A	4961

TABLE 6E 2-YEAR COST – GROUP 4
WHITE OAK BAYOU

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addressees	Cost per Address	Percent of System Single Family	City Council District	Facet Number
E5206	\$149,100	4	1	\$149,100	N/A	B	5261
E0771	\$448,200	3	3	\$149,400	0%	A	4960
E5207	\$154,700	4	1	\$154,700	N/A	B	5261
E5175	\$1,130,100	5	7	\$161,443	N/A	A	4961
E5209	\$208,900	4	1	\$208,900	N/A	B	5261
E5140	\$230,800	4	1	\$230,800	N/A	A	5060
E5177	\$1,699,600	5	7	\$242,800	N/A	A	4961
E5203	\$283,700	4	1	\$283,700	N/A	B	5261
E5204	\$329,000	4	1	\$329,000	N/A	B	5261
E5121	\$371,900	4	1	\$371,900	N/A	A	5162
E5196	\$409,100	5	1	\$409,100	N/A	A	4961
E5208	\$421,400	4	1	\$421,400	N/A	B	5261
E5164	\$2,716,700	5	5	\$543,340	N/A	A	4960
E5211	\$1,140,000	4	1	\$1,140,000	N/A	A	5063
E5210	\$2,822,000	4	1	\$2,822,000	N/A	A	5063
TOTAL	\$98,262,300						

TABLE 7E 5-YEAR COST – GROUP 1
WHITE OAK BAYOU

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
Sorted by Additional for 5-Year Storm						
E0401	\$2,244,200	\$2,248,000	\$3,800	1	A	5260
E0101	\$61,700	\$66,800	\$5,100	1	A	5160
E0354	\$9,917,800	\$9,946,200	\$28,400	1	B, H	5361, 5362
E0302	\$204,200	\$234,800	\$30,600	1	H	5358, 5458
E5148	\$288,600	\$322,200	\$33,600	2	A	5060
E5151	\$399,400	\$457,200	\$57,800	2	A	5060
E0730	\$1,282,300	\$1,349,700	\$67,400	1	A	5060
E5110	\$596,900	\$694,700	\$97,800	2	A	5161, 5162
E0190	\$241,300	\$369,000	\$127,700	1	A	5260
E5056	\$1,310,900	\$1,449,700	\$138,800	2	B	5261, 5262
E0328	\$3,529,300	\$3,685,900	\$156,600	1	H	5359
E0738	\$2,017,200	\$2,206,300	\$189,100	1	A, H	5159, 5160
E5112	\$1,301,200	\$1,499,900	\$198,700	2	A	5162
E5195	\$1,481,600	\$1,692,300	\$210,700	2	B	5261, 5262
E5193	\$1,695,000	\$1,911,500	\$216,500	2	A	5062
E0086	\$486,100	\$703,500	\$217,400	1	A	5160, 5260
E0010	\$3,057,900	\$3,277,700	\$219,800	1	H	5458
E0157	\$686,300	\$912,800	\$226,500	1	A	5259
E0752	\$0	\$228,300	\$228,300	A	A	5059, 5060
E5066	\$2,189,400	\$2,419,000	\$229,600	2	B	5262
E0311	\$373,400	\$660,400	\$287,000	1	H	5458, 5459
E0539	\$2,552,700	\$2,863,300	\$310,600	1	A	5061
E5093	\$2,824,200	\$3,177,300	\$353,100	2	B	5161, 5261
E0380	\$6,060,200	\$6,428,300	\$368,100	1	B	5361, 5362
E0803	\$442,900	\$842,900	\$400,000	1	A	4959, 4960
E0146	\$7,972,200	\$8,390,100	\$417,900	1	A, H	5259, 5359
E0206	\$0	\$496,900	\$496,900	A	A	5062
E0347	\$3,023,800	\$3,596,100	\$572,300	1	H	5360

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
E0340	\$6,455,900	\$7,151,700	\$695,800	1	A, H	5359, 5360
E0714	\$2,340,800	\$3,058,300	\$717,500	1	A	5160
E0379	\$5,814,500	\$6,581,500	\$767,000	1	B	5261, 5262, 5361, 5362
E0776	\$358,700	\$1,185,000	\$826,300	1	A	5059, 5060
E0035	\$158,500	\$1,039,100	\$880,600	1	H	5358
E5039	\$6,601,500	\$7,517,600	\$916,100	2	A, B, H	5260, 5261, 5360, 5361
E0301	\$5,107,200	\$6,121,100	\$1,013,900	1	H	5358
E0058	\$2,499,300	\$3,860,800	\$1,361,500	1	A	5258, 5358
E0350	\$6,204,300	\$7,641,000	\$1,436,700	1	H	5360, 5361, 5460, 5461
E0082	\$9,578,500	\$11,185,700	\$1,607,200	1	A	5259, 5260
E0139	\$5,530,200	\$8,233,500	\$2,703,300	1	H	5358, 5359
E0346	\$10,765,100	\$13,616,300	\$2,851,200	1	A, H	5260, 5360
E0329	\$0	\$3,530,000	\$3,530,000	A	H	5359, 5459
E0369	\$23,604,500	\$27,256,900	\$3,652,400	1	B, H	5361, 5362
E0159	\$19,010,100	\$22,845,000	\$3,834,900	1	A	5259, 5260
E0312	\$18,185,000	\$22,668,900	\$4,483,900	1	H	5459
E0337	\$2,355,700	\$8,805,100	\$6,449,400	1	H	5359, 5459
E0344	\$25,496,400	\$32,052,600	\$6,556,200	1	H	5360, 5460
E0319	\$8,899,200	\$17,209,400	\$8,310,200	1	H	5358, 5359
TOTAL	\$215,206,100	\$273,690,300	\$58,484,200			

**TABLE 8E 5-YEAR COST - GROUP 2
WHITE OAKE BAYOU**

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
Sorted by Additional for 5-Year Storm						
E5018	\$144,500	\$161,200	\$16,700	2	H	5259
E5029	\$169,000	\$192,800	\$23,800	2	A	5259, 5260
E0096	\$201,200	\$227,700	\$26,500	1	A	5160
E5122	\$757,300	\$870,200	\$112,900	2	A	5162
E0046	\$0	\$140,700	\$140,700	A	H	5258
E5107	\$1,635,000	\$1,846,200	\$211,200	2	A	5161
E5015	\$1,233,500	\$1,445,200	\$211,700	2	H	5259
E0036	\$2,109,100	\$2,339,400	\$230,300	1	G, H	5258, 5358
E0742	\$580,400	\$966,800	\$386,400	1	A	5060, 5160
E0310	\$272,700	\$876,400	\$603,700	1	H	5458
E0729	\$6,287,800	\$6,929,400	\$641,600	1	A	5060, 5061
E0034	\$7,028,800	\$7,802,200	\$773,400	1	H	5358, 5359
E0348	\$3,440,200	\$4,376,600	\$936,400	1	A, H	5360, 5361
E0716	\$8,755,600	\$10,283,300	\$1,527,700	1	A, H	5159, 5160
E0907	\$1,371,800	\$8,887,600	\$7,515,800	1	H	5162, 5262
E0338	\$1,890,000	\$9,944,600	\$8,054,600	1	A, H	5259, 5260, 5359, 5360
E0756	\$0	\$8,552,300	\$8,552,300	A	A	5060
TOTAL	\$35,876,900	\$65,842,600	\$29,965,700			

**TABLE 9E 5-YEAR COST - GROUP 3
WHITE OAKE BAYOU**

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5 Year Storm	2-Year Category	City Council District	Facet Number
Sorted by Additional for 5-Year Storm						
E5031	\$130,100	\$141,600	\$11,500	2	A, H	5260
E0097	\$139,400	\$163,500	\$24,100	1	A	5160
E0195	\$44,600	\$76,000	\$31,400	1	B	5161
E0145	\$2,678,700	\$2,716,400	\$37,700	1	H	5258, 5259, 5358, 5359
E5075	\$349,500	\$393,400	\$43,900	2	A, B	5260, 5261
E5205	\$281,800	\$326,200	\$44,400	2	B	5262
E0314	\$599,000	\$643,900	\$44,900	1	H	5358, 5359
E0773	\$1,389,400	\$1,446,000	\$56,600	1	A	5059, 5060
E0789	\$130,600	\$188,900	\$58,300	1	A	4959, 4960
E0721	\$1,347,900	\$1,409,100	\$61,200	1	A	5160
E0777	\$202,200	\$264,400	\$62,200	1	A	5060

**TABLE 9E 5-YEAR COST - GROUP 3
WHITE OAK BAYOU**

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
E0787	\$0	\$62,700	\$62,700	A	A	4960, 5060
E0090	\$4,370,700	\$4,443,200	\$72,500	1	A	5160, 5260
E0409	\$271,900	\$348,000	\$76,100	1	A, B	5260, 5261
E0745	\$633,800	\$715,100	\$81,300	1	A	5059, 5159
E5090	\$718,400	\$806,900	\$88,500	2	B	5261
E0308	\$130,800	\$220,500	\$89,700	1	H	5458
E5011	\$548,700	\$650,100	\$101,400	2	H	5258, 5259
E0807	\$554,500	\$671,100	\$116,600	1	A	4959, 4960
E0810	\$0	\$117,600	\$117,600	A	A	4959, 4960
E0138	\$0	\$129,800	\$129,800	A	H	5358
E0782	\$415,000	\$548,500	\$133,500	1	A	5060
E5173	\$1,080,200	\$1,215,300	\$135,100	2	A	4961
E0085	\$0	\$150,200	\$150,200	A	A	5160, 5260
E5067	\$7,761,200	\$7,913,900	\$152,700	2	B	5162, 5262
E5133	\$1,097,500	\$1,266,600	\$169,100	2	A	5060, 5160
E0009	\$0	\$176,100	\$176,100	A	H	5458
E0767	\$892,900	\$1,071,400	\$178,500	1	A	4960, 5060
E0313	\$971,400	\$1,179,600	\$208,200	1	H	5459
E0790	\$1,464,400	\$1,675,700	\$211,300	1	A	4959, 4960
E5095	\$1,584,700	\$1,807,000	\$222,300	2	B	5261, 5262
E0049	\$10,982,100	\$11,220,300	\$238,200	1	A	5158, 5258
E0068	\$87,300	\$336,200	\$248,900	1	A	5259
E0748	\$0	\$279,200	\$279,200	A	A	5059, 5060
E0371	\$282,400	\$571,400	\$289,000	1	H	5360
E5062	\$2,058,400	\$2,365,400	\$307,000	2	B	5261, 5262
E0783	\$0	\$327,000	\$327,000	A	A	5060
E5091	\$1,445,000	\$1,803,300	\$358,300	2	B	5261
E0385	\$4,072,600	\$4,433,000	\$360,400	1	B	5261, 5262
E0901	\$1,353,700	\$1,960,300	\$606,600	1	A	5161, 5162
E0117	\$198,800	\$926,100	\$727,300	1	A	5161
E0147	\$5,772,100	\$6,507,000	\$734,900	1	H	5259, 5359
E0006	\$678,300	\$1,528,000	\$849,700	1	H	5458
E0041	\$653,200	\$1,779,100	\$1,125,900	1	H	5258, 5358
E0087	\$1,992,500	\$3,302,700	\$1,310,200	1	A	5160, 5260
E5037	\$4,350,300	\$5,715,400	\$1,365,100	2	A, H	5260, 5360
TOTAL	\$63,716,000	\$75,993,100	\$12,277,100			

TABLE 10E 5-YEAR COST – GROUP 4
WHITE OAK BAYOU

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
Sorted by Additional for 5-Year Storm						
E0069	\$48,800	\$54,400	\$5,600	3	A	5259
E5147	\$183,700	\$190,900	\$7,200	4	A	5060
E5023	\$65,900	\$77,300	\$11,400	4	H	5259
E5209	\$208,900	\$227,300	\$18,400	4	B	5261
E0512	\$561,900	\$581,100	\$19,200	3	A	5161
E0909	\$174,200	\$194,300	\$20,100	3	A	5162
E5061	\$117,300	\$137,600	\$20,300	4	B	5262
E0557	\$128,700	\$150,900	\$22,200	3	A	5061
E5101	\$145,000	\$179,000	\$25,000	5	A	5160
E5186	\$135,500	\$164,800	\$29,300	5	A	4961
E5179	\$281,300	\$318,400	\$37,100	4	A	4961
E5002	\$320,100	\$360,500	\$40,400	4	H	5358
E0342	\$363,900	\$403,600	\$41,700	3	H	5360
E0735	\$641,700	\$685,100	\$43,400	3	A	5060, 5061
E5118	\$315,000	\$360,200	\$45,200	5	B	5162
E5183	\$348,500	\$400,500	\$52,000	5	A	4961
E5074	\$358,400	\$411,300	\$52,900	4	A, B	5160, 5260, 5261
E0160	\$212,000	\$270,000	\$58,000	3	H	5259
E5196	\$409,100	\$468,200	\$59,100	5	A	4961
E5146	\$450,300	\$512,500	\$62,200	4	A	5060
E5121	\$371,500	\$434,300	\$62,800	4	A	5162
E5180	\$443,000	\$510,700	\$67,700	4	A	4961
E0233	\$0	\$69,100	\$69,100	A	H	5159, 5259
E0029	\$63,700	\$133,200	\$69,500	3	H	5358
E5005	\$437,600	\$508,000	\$70,400	4	H	5358
E0736	\$83,700	\$154,700	\$71,000	3	A	5061
E5085	\$784,100	\$855,300	\$71,200	4	B	5261
E0004	\$72,400	\$144,900	\$72,500	3	H, I	5457, 5458
E5166	\$829,500	\$910,000	\$80,500	4	A	4960, 4961
E5082	\$368,300	\$453,200	\$84,900	5	B	5261
E0928	\$491,700	\$585,300	\$93,600	3	A	5162
E5178	\$714,900	\$817,400	\$102,500	4	A	4961
E5086	\$775,500	\$882,700	\$107,200	4	B	5261
E5194	\$773,800	\$893,900	\$120,100	4	A, B	5162
E5161	\$802,900	\$926,600	\$123,700	4	A	4960
E0732	\$0	\$130,300	\$130,300	A	A	5060, 5061
E0731	\$1,775,100	\$1,906,500	\$131,400	3	A	5060, 5061
E5168	\$1,076,200	\$1,236,300	\$160,100	4	A	4961, 5061
E5116	\$1,115,500	\$1,288,500	\$173,000	5	A, B	5162
E5187	\$1,658,300	\$1,834,300	\$176,000	4	A	4961, 5061

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
E0130	\$229,800	\$412,600	\$182,800	3	A	5061, 5062, 5161, 5162
E0333	\$22,600	\$208,600	\$186,000	3	H	5359
E0560	\$794,400	\$986,200	\$191,800	3	A	5061, 5062
E0746	\$833,400	\$1,026,900	\$193,500	3	A	5059
E5188	\$1,517,700	\$1,721,300	\$203,600	4	A	5061
E0705	\$0	\$209,700	\$209,700	A	A	5160
E5172	\$1,795,000	\$2,017,500	\$222,500	5	A	4961
E0700	\$0	\$229,900	\$229,900	A	A	5160
E0796	\$0	\$248,700	\$248,700	A	A	4959, 4960
E0726	\$88,800	\$351,700	\$262,900	3	A	5060, 5160
E5177	\$1,699,600	\$1,993,600	\$294,000	5	A	4961
E0236	\$2,016,000	\$2,314,800	\$298,800	3	H	5159, 5160
E0063	\$192,100	\$536,100	\$344,000	3	A	5259
E0762	\$1,401,100	\$1,770,400	\$369,300	3	A	4960, 5060
E0073	\$1,574,700	\$1,983,500	\$408,800	3	A, H	5159, 5259
E0764	\$3,645,500	\$4,103,600	\$458,100	3	A	4961, 5060, 5061
E0240	\$2,896,100	\$3,399,300	\$503,200	3	H	5159
E0345	\$0	\$585,300	\$585,300	A	H	5360
E5105	\$8,244,100	\$9,202,400	\$958,300	5	A	5161
E0526	\$2,743,800	\$4,381,700	\$1,637,900	C.N.A.	A	5061, 5161
E0763	\$1,034,200	\$4,177,400	\$3,143,200	3	A	4960, 4961, 5060, 5061
TOTAL	\$48,834,800	\$62,675,300	\$13,840,500			

TABLE GLOSSARY

2-Year Analysis Status

- **Inadequate** – Storm sewer analysis program results indicate system is not adequate.
- **Adequate** – Storm sewer analysis program results indicate system is adequate.
- **Cannot Analyze** – System could not be analyzed with the storm sewer analysis program due to lack of information.

2-Year CIP Cost – Probable cost to meet 2-year design criteria

Additional for 5-Year – Additional cost for major thoroughfares criteria (5-year storm)

Group

- Group 1 Systems that have reported structure and street-related flooding complaints.
- Group 2 Systems that have reported structure flooding complaints only.
- Group 3 Systems that have reported street flooding complaints only.
- Group 4 Systems that have no reported flooding complaints. Group 4 costs types will be applicable for categories 3 and 4 only.

Category

- Category 1 Existing storm sewer systems that have been determined to be inadequate and where flooding complaints have been reported within drainage boundaries.
- Category 2 Converting existing open-ditch systems (non-storm sewer areas) to storm sewer systems where previous flooding complaints have been reported. Proposed storm sewer systems for this category type address the main trunk system requirements only.
- Category 3 Existing storm sewer systems that have been determined to be inadequate and where flooding complaints *have not* been reported.
- Category 4 Converting existing open-ditch systems (non-storm sewer areas) to storm sewer systems where previous flooding complaints *have not* been reported. Proposed storm sewer systems for this category type address the main trunk system requirements only.
- Category 5 Areas currently considered to be undeveloped and having no defined drainage system. For this category type, drainage areas and main (trunk) sewer systems were determined.
- Category A Existing storm sewer systems that have been determined to be adequate. These systems may or may not have reported flooding complaints.

Category C.N.A. – System that could not be analyzed due to lack of storm sewer information.

City Council District – City Council district within which storm sewer system is located.

Facet Number – Facet (system map) number sheet on which storm sewer system is located.

Number of Addresses – Total number of addresses that are located in storm sewer study drainage boundary.

Cost Per Address – 2-year CIP cost divided by number of addresses.

Percent of System Single Family – Percent of storm sewer system drainage area classified as a *Single-family land-use type*.

TABLE 1 – STORM SEWER UNIT COST RATES

Pipe Diameter (in)	Unit Cost Rate (\$/ln ft)	Equivalent Box Size (ft x ft)
24	\$240	
30	\$260	
36	\$290	
42	\$340	
48	\$370	
54	\$450	
60	\$480	
66	\$520	
72	\$550	
78	\$590	
84	\$620	
90	\$720	
96	\$760	8 x 7
102	\$810	
108	\$820	
114	\$890	
120	\$930	10 x 9
126	\$1,060	10 x 9
132	\$1,110	10 x 10
138	\$1,150	10 x 10
144	\$1,190	8 x 7 & 8 x 7
150	\$1,350	8 x 7 & 8 x 8
156	\$1,400	8 x 8 & 8 x 8
162	\$1,450	10 x 9 & 8 x 7
168	\$1,490	10 x 9 & 8 x 8
174	\$1,540	10 x 10 & 8 x 8
180	\$1,590	10 x 9 & 10 x 9
186	\$1,640	10 x 10 & 10 x 9
192	\$1,680	10 x 10 & 10 x 10
198	\$1,730	10 x 10 & 8 x 7 & 8 x 7
204	\$1,780	10 x 9 & 10 x 9 & 8 x 7
210	\$1,820	10 x 10 & 10 x 9 & 8 x 7
216	\$1,870	10 x 10 & 10 x 10 & 8 x 7
222	\$1,920	See Note 1
228	\$1,970	See Note 1
234	\$2,010	See Note 1
240	\$2,060	See Note 1
246	\$2,110	See Note 1
252	\$2,150	See Note 1
258	\$2,200	See Note 1

Pipe Diameter (in)	Unit Cost Rate (\$/ln ft)	Equivalent Box Size (ft x ft)
264	\$2,250	See Note 1
270	\$2,300	See Note 1
276	\$2,340	See Note 1
282	\$2,390	See Note 1
288	\$2,440	See Note 1
Unit Cost Rates were developed based on City of Houston Bid Tabs for storm sewer projects constructed during 1994 and 1998.		
Unit Cost Rates include the following:		
Removal of existing pipe and pavement		
Storm sewer pipe		
Manholes		
Inlets		
Replacement of pavement		
Dewatering		
Trench safety		
Traffic control		
Engineering and contingency (20 percent)		
Unit Cost Rates do not include the following:		
Relocation of existing utilities		
Acquisition of additional right-of-way		

Notes

1. Equivalent box sizes for pipe diameters 222 inches or greater were not determined. It may be more cost-effective to propose an open channel instead of a box.

TABLE 3 ALL
2-YEAR COST - GROUP 1

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
Sorted by 2-Year CIP Cost							
C0053	\$25,100	1	12	\$2,092	100%	E	5452
D0864	\$32,300	1	41	\$788	100%	C	5153
C1091	\$38,700	2	13	\$2,977	92%	E	5553
D5017	\$40,200	1	76	\$529	100%	C	5253
C0457	\$44,200	1	36	\$1,228	100%	E	5452
D0415	\$47,100	1	43	\$1,095	100%	C	5053
D0865	\$51,300	1	64	\$802	100%	C	5153
C0283	\$52,100	1	19	\$2,742	100%	E	5752
P0072	\$55,500	1	181	\$307	98.9%	B	5561
C0525	\$59,900	1	47	\$1,274	100%	D	5251
E0101	\$61,700	1	38	\$1,624	100%	A	5160
C0375	\$62,300	1	21	\$2,967	95%	E	5553
C0173	\$64,900	1	22	\$2,950	82%	E	5654
E0335	\$74,000	1	129	\$574	93%	H	5359
E0119	\$76,400	1	78	\$979	49%	A	5162
E5012	\$84,100	2	21	\$4,005	N/A	H	5258, 5259
C0281	\$85,200	1	204	\$418	100%	E	5752
C0563	\$86,400	1	28	\$3,086	100%	D	5251
C0147	\$86,500	1	117	\$739	97%	I	5554
C0659	\$99,600	1	25	\$3,984	100%	D	5151
C1086	\$100,300	2	15	\$6,687	93%	E	5553
E5077	\$105,300	2	8	\$13,163	N/A	A, B	5260, 5261
C0424	\$117,100	1	30	\$3,903	100%	D	5452
C0210	\$117,700	1	219	\$537	93%	I	5654
C0542	\$120,000	1	144	\$833	100%	D	5252
C0564	\$123,500	1	76	\$1,625	100%	D	5251
E5100	\$125,600	2	18	\$6,978	N/A	A	5160
D0398	\$126,600	1	108	\$1,172	100%	C	5152
D0175	\$133,000	1	18	\$7,389	100%	C	5253
D0140	\$133,100	1	32	\$4,159	100%	C	5254
D0229	\$134,700	1	86	\$1,566	100%	C	5153
D0325	\$144,600	1	282	\$513	99%	C	5153
W0010	\$145,800	1	179	\$815	100%	G	4857
D0631	\$148,300	1	80	\$1,854	100%	C	4953
P1112	\$148,600	1	176	\$844	83.0%	B	5561
C0557	\$154,100	1	40	\$3,853	100%	D	5251
P1113	\$155,800	1	59	\$2,641	98.3%	B	5561
H0001	\$158,100	1	234	\$676	93%	I	5757
E0035	\$158,500	1	509	\$315	98%	H	5358

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
C1043	\$162,400	2	259	\$627	47%	E	5753
E0370	\$162,500	1	98	\$1,658	99%	H	5360
D0804	\$163,600	1	123	\$1,330	4%	F	4854
D9027	\$164,200	1	99	\$1,659	51%	C	5253
C0469	\$168,600	1	52	\$3,242	100%	D	5452
D0241	\$173,200	1	77	\$2,249	96%	C	5152
C0076	\$176,200	1	147	\$1,199	98%	D	5251
C0031	\$179,200	1	169	\$1,060	100%	I	5554
P1164	\$179,200	1	126	\$1,422	100.0%	B	5562
C1082	\$180,200	2	24	\$7,508	67%	I	5654
C0166	\$193,200	1	82	\$2,356	100%	I	5655
D0135	\$194,800	1	114	\$1,709	100%	C	5254
D0519	\$198,600	1	84	\$2,364	100%	F	5054
C0430	\$199,500	1	103	\$1,937	100%	D	5451
P1117	\$201,100	1	124	\$1,622	94.4%	B	5561
C0386	\$201,700	1	90	\$2,241	99%	E	5454
D0316	\$201,800	1	50	\$4,036	100%	C	5154
E0302	\$204,200	1	12	\$17,017	0%	H	5358, 5458
E0122	\$205,700	1	47	\$4,377	100%	A	5162
C0219	\$207,500	1	41	\$5,061	73%	I	5653
E5042	\$209,000	2	1	\$209,000	N/A	B	5361
C1023	\$209,800	2	18	\$11,656	78%	I	5654
P1114	\$212,600	1	88	\$2,416	100.0%	B	5561
D0026	\$213,000	1	49	\$4,347	69%	I	5555
E5045	\$214,700	2	45	\$4,771	N/A	A	5260
P0100	\$220,500	1	113	\$1,951	85.8%	H	5462
W0566	\$222,900	1	57	\$3,911	93%	G	5156
D0478	\$225,500	1	99	\$2,278	72%	C	5052
D0701	\$226,200	1	363	\$623	66%	F	4855
C0088	\$229,000	1	62	\$3,694	98%	D	5151
C1196	\$232,000	2	135	\$1,719	73%	D	5250
E0753	\$236,500	1	79	\$2,994	87%	A	5060
C0067	\$239,700	1	104	\$2,305	100%	D	5251
E0126	\$240,400	1	101	\$2,380	99%	A	5162
E0190	\$241,300	1	80	\$3,016	6%	A	5260
E0709	\$243,300	1	140	\$1,738	11%	A	5160
C0415	\$244,800	1	56	\$4,371	100%	D	5452
D0129	\$245,800	1	60	\$4,097	100%	C	5255
D1353	\$251,900	1	116	\$2,172	99%	C	5254
C1233	\$255,400	2	98	\$2,606	58%	D	5151

TABLE 3 ALL
2-YEAR COST - GROUP 1

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
D0290	\$258,100	1	52	\$4,963	100%	C	5153
H0044	\$259,200	1	334	\$776	99%	I	5658
C0500	\$260,500	1	29	\$8,983	62%	D	5352
C0278	\$264,500	1	77	\$3,435	100%	E	5753
P0066	\$272,300	1	224	\$1,216	100.0%	B	5561
E5044	\$272,600	2	58	\$4,700	N/A	B, H	5361
D0155	\$273,200	1	32	\$8,538	94%	C	5254
D0388	\$285,900	1	202	\$1,415	99%	C	5152
D0831	\$288,300	1	78	\$3,696	91%	D	5455
E5148	\$288,600	2	135	\$2,138	N/A	A	5060
H0037	\$290,400	1	72	\$4,033	86%	I	5758
E5111	\$291,500	2	78	\$3,737	N/A	A	5161, 5162
D0465	\$296,000	1	130	\$2,277	68%	C	5052
C0468	\$300,900	1	94	\$3,201	99%	D	5452
W0600	\$305,000	1	296	\$1,030	9%	G	5157
C0039	\$312,300	1	491	\$636	63%	E	5553
E5011	\$317,300	1	94	\$3,376	100%	I	5556
P1157	\$333,100	1	92	\$3,621	100.0%	B	5362
D0152	\$349,900	1	98	\$3,570	100%	C	5254
C0503	\$358,500	1	154	\$2,328	97%	D	5252
E0776	\$358,700	1	109	\$3,291	94%	A	5059, 5060
D0208	\$372,900	1	101	\$3,692	98%	C	5154
E0758	\$373,200	1	180	\$2,073	100%	A	5060
E0311	\$373,400	1	947	\$394	89%	H	5458, 5459
C0096	\$380,400	1	103	\$3,693	100%	D	5151
P0093	\$384,200	1	241	\$1,594	87.1%	H	5461
D0807	\$393,200	1	320	\$1,229	50%	G	4856
C0028	\$398,000	1	131	\$3,038	2%	E	5654
D0134	\$399,200	1	339	\$1,178	89%	C	5254
E5151	\$399,400	2	88	\$4,539	N/A	A	5060
C1315	\$410,000	1	1	\$410,000	0%	E	5752
C0551	\$410,500	1	159	\$2,582	100%	D	5251
C0164	\$413,300	1	176	\$2,348	88%	I	5655
C0259	\$418,600	1	140	\$2,990	100%	E	5753
W1017	\$426,900	2	31	\$13,771	100%	G	4957
W1030	\$438,300	2	97	\$4,519	100%	H	5357
E0803	\$442,900	1	1	\$442,900	0%	A	4959, 4960
E5020	\$449,300	2	65	\$6,912	N/A	H	5259
E0812	\$450,500	1	43	\$10,477	100%	A	5160
C1208	\$452,300	2	1	\$452,300	0%	D	5150

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
D8001	\$457,600	1	105	\$4,358	99%	I	4755
D0432	\$464,500	1	245	\$1,896	22%	F	5054
P1104	\$469,500	1	74	\$6,345	90.5%	B	5561
C0134	\$472,000	1	723	\$653	76%	I	5555
E0057	\$474,000	1	213	\$2,225	99%	A	5258
D0761	\$479,200	1	173	\$2,770	100%	F	4853
C0387	\$479,700	1	96	\$4,997	94%	D	5454
E0086	\$486,100	1	270	\$1,800	100%	A	5160, 5260
E0080	\$489,800	1	232	\$2,111	41%	H	5159, 5259
P0067	\$492,200	1	108	\$4,557	75.0%	B	5661
C1160	\$494,300	2	124	\$3,986	100%	D	5352
C1102	\$506,000	2	54	\$9,370	83%	I	5553
C1193	\$509,000	2	346	\$1,471	61%	D	5251
D0801	\$513,500	1	206	\$2,493	30%	F	4854
E5052	\$518,600	2	150	\$3,457	N/A	B	5362
P1146	\$519,100	1	174	\$2,983	100.0%	B	5561
D0479	\$523,200	1	72	\$7,267	99%	C	5052
C1212	\$533,000	2	1	\$533,000	0%	D	5150
P1253	\$543,500	1	218	\$2,493	90.0%	H	5462
P1081	\$546,400	1	135	\$4,047	95.6%	B	5661
C0475	\$554,600	1	783	\$708	82%	D	5451
D7037	\$555,000	1	152	\$3,651	80%	C	5054
C0506	\$569,000	1	230	\$2,474	100%	D	5252
P1136	\$571,800	1	27	\$21,178	63.0%	B	5362
C0649	\$576,000	1	106	\$5,434	66%	D	5151
D0308	\$586,900	1	73	\$8,040	100%	C	5154
C0175	\$591,300	1	243	\$2,433	97%	E	5754
E5110	\$596,900	2	161	\$3,707	N/A	A	5161, 5162
E5125	\$601,000	2	120	\$5,008	N/A	A	5162
C0250	\$605,000	1	250	\$2,420	94%	E	5753
E5019	\$607,500	2	129	\$4,709	N/A	H	5259
D0736	\$615,400	1	181	\$3,400	96%	F	4854
H0023	\$620,500	1	193	\$3,215	44%	I	5758
W1016	\$621,600	2	49	\$12,686	100%	G	4957
P1143	\$623,600	1	210	\$2,970	97.6%	B	5362
D0306	\$624,300	1	101	\$6,181	73%	C	5154
P0033	\$625,000	1	330	\$1,894	19.7%	B	5060
D0718	\$643,700	1	112	\$5,747	85%	F	4853
P1130	\$646,600	1	219	\$2,953	91.8%	B	5462
D0823	\$653,600	1	210	\$3,112	98%	G	4756

**TABLE 3 ALL
2-YEAR COST - GROUP 1**

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
C0378	\$654,200	1	139	\$4,706	99%	E	5553
W0005	\$658,500	1	659	\$999	90%	G	4857
E0713	\$662,300	1	35	\$18,923	100%	A	5160
W0710	\$664,600	1	230	\$2,890	100%	G	5256
C0208	\$666,800	1	226	\$2,950	87%	I	5654
D0917	\$671,300	1	111	\$6,048	98%	F	4854
C1219	\$682,000	2	32	\$21,313	81%	D	5251
E0157	\$686,300	1	97	\$7,075	90%	A	5259
P0092	\$694,900	1	228	\$3,048	83.3%	H	5461
P1139	\$697,100	1	148	\$4,710	100.0%	B	5362
P0102	\$705,100	1	200	\$3,526	99.5%	B	5462
C0370	\$713,800	1	168	\$4,249	99%	E	5553
W1026	\$716,400	2	118	\$6,071	100%	A	5159
D0424	\$717,200	1	308	\$2,329	81%	F	5054
D0085	\$720,100	1	4	\$180,025	81%	D	5355
D0423	\$731,400	1	81	\$9,030	74%	C	5053
D0212	\$742,700	1	132	\$5,627	99%	C	5153
D0387	\$765,600	1	236	\$3,244	100%	C	5152
W0571	\$769,500	1	138	\$5,576	98%	G	5156
C0125	\$771,300	1	474	\$1,627	97%	I	5655
C0151	\$784,000	1	390	\$2,010	89%	I	5654
P1053	\$785,900	1	163	\$4,821	98.2%	B	5858
C1292	\$791,000	2	1	\$791,000	0%	D	5250
C0176	\$794,700	1	368	\$2,160	92%	E	5754
P1152	\$807,400	1	108	\$7,476	100.0%	H	5462
C1195	\$820,000	2	443	\$1,851	26%	D	5250
E0078	\$831,600	1	246	\$3,380	100%	A	5259
P1059	\$839,800	1	111	\$7,566	84.7%	I	5759
P1116	\$846,600	1	83	\$10,200	98.8%	B	5561
E5041	\$851,600	2	86	\$9,902	N/A	B, H	5360, 5361
P1125	\$855,900	1	157	\$5,452	91.5%	H	5462
C1293	\$857,000	2	1	\$857,000	0%	D	5250
D0503	\$864,400	1	193	\$4,479	97%	C	5052
C0379	\$869,400	1	289	\$3,008	100%	E	5553
C0040	\$873,800	1	441	\$1,981	78%	I	5553
P1128	\$882,600	1	147	\$6,004	85.0%	B	5461
E5149	\$885,100	2	168	\$5,268	N/A	A	5060
P1106	\$886,600	1	113	\$7,846	90.3%	B	5561
C0546	\$892,600	1	410	\$2,177	100%	D	5252
W1041	\$910,600	2	153	\$5,952	0%	C	5156

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
C0192	\$913,200	1	435	\$2,099	97%	E	5754
C1055	\$924,600	2	224	\$4,128	81%	E	5652
D0602	\$930,600	1	276	\$3,372	100%	F	5054
W0682	\$946,000	1	548	\$1,726	96%	D	5357
W0704	\$952,200	1	171	\$5,568	66%	H	5457
C0646	\$954,600	1	218	\$4,379	100%	D	5252
W1014	\$964,300	2	164	\$5,880	74%	A	4958
P0083	\$967,500	1	249	\$3,886	99.6%	B	5562
D0323	\$968,300	1	133	\$7,280	99%	C	5153
D0056	\$975,400	1	205	\$4,758	100%	D	5455
P1080	\$978,700	1	108	\$9,062	89.8%	B	5661
P1159	\$1,014,400	1	59	\$17,193	91.5%	H	5462
C0355	\$1,020,100	1	601	\$1,697	91%	E	5653
C0315	\$1,029,100	1	461	\$2,232	95%	E	5852
C0655	\$1,044,100	1	204	\$5,118	88%	D	5151
W0711	\$1,048,100	1	418	\$2,507	100%	G	5257
D0425	\$1,067,200	1	271	\$3,938	100%	F	5054
P1088	\$1,071,600	1	240	\$4,465	94.6%	I	5660
P0044	\$1,074,500	1	218	\$4,929	98.6%	I	5661
P1135	\$1,075,300	1	135	\$7,965	98.5%	B	5362
P1127	\$1,083,400	1	199	\$5,444	91.5%	H	5461
W0564	\$1,087,500	1	215	\$5,058	94%	G	5056
W0624	\$1,092,600	1	33	\$33,109	0%	G	5156
D0192	\$1,092,700	1	95	\$11,502	99%	C	5153
C1185	\$1,114,000	2	50	\$22,280	60%	D	5251
P1150	\$1,116,300	1	158	\$7,065	100.0%	B	5858
C0509	\$1,127,900	1	250	\$4,512	100%	D	5252
C0155	\$1,136,000	1	384	\$2,958	92%	I	5655
D0660	\$1,142,400	1	206	\$5,546	92%	F	4952
C0380	\$1,154,000	1	250	\$4,616	98%	E	5454
P1109	\$1,155,900	1	344	\$3,360	100.0%	B	5561
P1085	\$1,173,400	1	131	\$8,957	88.5%	B	5660
P1115	\$1,185,100	1	314	\$3,774	85.7%	B	5561
C0413	\$1,195,600	1	227	\$5,267	100%	D	5452
P1107	\$1,197,000	1	256	\$4,676	99.6%	B	5561
P1082	\$1,199,600	1	248	\$4,837	100.0%	B	5661
E0520	\$1,215,000	1	383	\$3,172	95%	A	5160, 5161
D0663	\$1,229,900	1	321	\$3,831	99%	F	4952
P1151	\$1,232,100	1	115	\$10,714	91.3%	H	5462
C0363	\$1,232,400	1	219	\$5,627	99%	E	5553

**TABLE 3 ALL
2-YEAR COST - GROUP 1**

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
W1012	\$1,248,500	2	326	\$3,830	96%	A	4958
C0561	\$1,252,200	1	312	\$4,013	95%	D	5251
P1126	\$1,273,500	1	185	\$6,884	86.5%	H	5461
D0735	\$1,273,800	1	186	\$6,848	92%	F	4854
E0730	\$1,282,300	1	24	\$53,429	0%	A	5060
P1125	\$1,298,400	1	390	\$3,329	98.5%	H	5462
D0382	\$1,298,900	1	241	\$5,390	100%	C	5153
E5112	\$1,301,200	2	339	\$3,838	N/A	A	5162
D0320	\$1,307,300	1	244	\$5,358	98%	C	5153
E5056	\$1,310,900	2	561	\$2,337	N/A	B	5261, 5262
C0141	\$1,316,600	1	431	\$3,055	84%	I	5554
W1015	\$1,316,700	2	72	\$18,288	100%	G	4957
W1011	\$1,330,700	2	159	\$8,369	100%	A	4958
P0086	\$1,352,100	1	1273	\$1,062	87.6%	B	5561
C0094	\$1,360,500	1	204	\$6,669	99%	D	5151
W1021	\$1,394,000	2	118	\$11,814	90%	A	5058
D0367	\$1,395,800	1	458	\$3,048	99%	F	5054
D0753	\$1,412,100	1	252	\$5,604	96%	F	4853
W0197	\$1,431,100	1	360	\$3,975	100%	G	4857
D0643	\$1,433,600	1	216	\$6,637	100%	C	4952
W1010	\$1,456,200	2	195	\$7,468	100%	A	4959
P1099	\$1,474,100	1	319	\$4,621	90.3%	B	5661
E5195	\$1,481,600	2	341	\$4,345	N/A	B	5261, 5262
D0899	\$1,492,600	1	296	\$5,043	63%	F	4854
P1100	\$1,503,800	1	375	\$4,010	100.0%	B	5661
W1003	\$1,523,500	2	301	\$5,061	100%	A	4858
P0076	\$1,549,400	1	375	\$4,132	95.2%	B	5561
P1132	\$1,646,100	1	316	\$5,209	92.7%	B	5462
C1314	\$1,656,000	2	1	\$1,656,000	0%	E	5752
E5193	\$1,695,000	2	318	\$5,330	N/A	A	5062
P1161	\$1,764,600	1	254	\$6,947	96.5%	B	5562
W0804	\$1,780,800	1	991	\$1,797	88%	I	5556
P1131	\$1,784,800	1	75	\$23,797	80.0%	B	5462
P1122	\$1,785,800	1	330	\$5,412	95.5%	H	5461
E0704	\$1,791,900	1	284	\$6,310	8%	A, H	5160
D0428	\$1,796,100	1	387	\$4,641	82%	C, F	5054
H0013	\$1,826,600	1	192	\$9,514	19%	I	5758
C0149	\$1,836,400	1	235	\$7,814	75%	I	5554
P1105	\$1,841,900	1	434	\$4,244	100.0%	B	5561
H1002	\$1,884,600	2	198	\$9,518	97%	H	5460

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
E0738	\$2,017,200	1	167	\$12,079	68%	A, H	5159, 5160
P1162	\$2,027,500	1	333	\$6,089	98.2%	B	5562
P1166	\$2,087,200	1	265	\$7,876	98.9%	B	5562
P1134	\$2,118,200	1	224	\$9,456	85.7%	B	5362
W1024	\$2,139,700	2	258	\$8,293	88%	A	5159
D0220	\$2,140,400	1	293	\$7,305	96%	C	5153
W0558	\$2,142,800	1	363	\$5,903	72%	G	5156
D0021	\$2,181,100	1	584	\$3,735	83%	I	5555
E5066	\$2,189,400	2	654	\$3,348	N/A	B	5262
P0103	\$2,210,100	1	20	\$110,505	70.0%	B	5464
C0052	\$2,216,200	1	920	\$2,409	96%	E	5452
E0401	\$2,244,200	1	120	\$18,702	63%	A	5260
D0518	\$2,337,800	1	507	\$4,611	99%	F	5054
E0714	\$2,340,800	1	568	\$4,121	95%	A	5160
D0113	\$2,355,200	1	483	\$4,876	99%	C	5254
E0337	\$2,355,700	1	983	\$2,396	93%	H	5359, 5459
P1133	\$2,467,000	1	68	\$36,279	36.8%	B	5362
E0058	\$2,499,300	1	341	\$7,329	98%	A	5258, 5358
W0678	\$2,542,700	1	326	\$7,800	100%	G	5257
E0539	\$2,552,700	1	257	\$9,933	34%	A	5061
D0189	\$2,722,600	1	519	\$5,246	100%	C	5153
D0338	\$2,734,100	1	413	\$6,620	99%	C	5153
P1155	\$2,743,400	1	255	\$10,758	96.9%	B	5562
D0188	\$2,757,600	1	461	\$5,982	100%	C	5153
P1052	\$2,804,100	1	451	\$6,218	100.0%	B	5858
E5093	\$2,824,200	2	572	\$4,937	N/A	B	5161, 5261
C1054	\$2,913,600	2	244	\$11,941	54%	E	5752
W0014	\$2,921,200	1	3,335	\$876	69%	G	4856
E0347	\$3,023,800	1	572	\$5,286	84%	H	5360
P1118	\$3,039,400	1	1023	\$2,971	99.6%	B	5562
E0010	\$3,057,900	1	606	\$5,046	89%	H	5458
C0385	\$3,069,000	1	523	\$5,846	99%	D	5453
W0245	\$3,115,700	1	535	\$5,824	93%	G	4958
W1005	\$3,115,700	2	249	\$12,513	95%	A	4859
C0174	\$3,137,900	1	878	\$3,574	95%	E	5755
P1069	\$3,222,300	1	110	\$29,294	89.1%	I	5760
P1129	\$3,288,700	1	312	\$10,541	95.5%	B	5461
P1050	\$3,382,400	1	129	\$26,220	79.1%	I	5858
C0358	\$3,390,900	1	860	\$3,943	99%	E	5553
P1075	\$3,413,000	1	218	\$15,656	96.8%	B	5562

**TABLE 3 ALL
2-YEAR COST - GROUP 1**

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
C0041	\$3,439,600	1	292	\$11,779	96%	E	5553
P1121	\$3,455,000	1	430	\$8,035	98.8%	B	5562
P1051	\$3,508,500	1	161	\$21,792	37.9%	I	5858
E0328	\$3,529,300	1	546	\$6,464	86%	H	5359
H1001	\$3,571,600	2	279	\$12,801	87%	H	5460
D0840	\$3,581,200	1	680	\$5,266	87%	D	5454
P0053	\$3,595,900	1	757	\$4,750	91.1%	B	5661
D0037	\$3,600,100	1	444	\$8,108	81%	I	5556
C1228	\$3,620,100	2	81	\$44,693	60%	D	5152
W0699	\$3,624,400	1	1,297	\$2,794	33%	C	5156
W0706	\$3,848,100	1	470	\$8,187	75%	H	5457
W0224	\$3,932,200	1	572	\$6,874	91%	G	4858
C0043	\$3,986,100	1	1116	\$3,572	67%	I	5554
D0180	\$4,006,100	1	462	\$8,671	91%	C	5253
W0574	\$4,084,500	1	1,365	\$2,992	23%	G	5157
W0213	\$4,190,000	1	529	\$7,921	94%	G	4858
P0035	\$4,248,100	1	1064	\$3,993	94.4%	B	5560
W0697	\$4,436,300	1	1,557	\$2,849	27%	G	5156
C0140	\$4,598,300	1	476	\$9,660	10%	I	5554
C0054	\$4,689,100	1	547	\$8,572	76%	D	5453
E0301	\$5,107,200	1	1089	\$4,690	91%	H	5358
H1010	\$5,325,700	2	419	\$12,711	81%	H	5460
W0595	\$5,505,300	1	665	\$8,279	74%	G	5157
E0139	\$5,530,200	1	1480	\$3,737	94%	H	5358, 5359
D0072	\$5,596,000	1	1,375	\$4,070	83%	D	5455
C0034	\$5,732,800	1	449	\$12,768	60%	E	5653
E0379	\$5,814,500	1	752	\$7,732	69%	B	5261, 5262, 5361, 5362
D0876	\$5,872,000	1	3,815	\$1,539	91%	I	5456
E0380	\$6,060,200	1	845	\$7,172	92%	B	5361, 5362
E0089	\$6,123,600	1	857	\$7,145	99%	A	5160
E0350	\$6,204,300	1	1096	\$5,661	87%	H	5360, 5361, 5460, 5461
E0340	\$6,455,900	1	1596	\$4,045	97%	A, H	5359, 5360
E5039	\$6,601,500	2	359	\$18,389	N/A	A, B, H	5260, 5261, 5360, 5361
P0097	\$7,002,300	1	310	\$22,588	98.4%	H	5461
C0051	\$7,030,400	1	992	\$7,087	96%	E	5453
C0035	\$7,800,700	1	1073	\$7,270	78%	I	5553
E0146	\$7,972,200	1	806	\$9,891	77%	A, H	5259, 5359

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
P1058	\$8,063,700	1	265	\$30,429	82.3%	I	5759
W0611	\$8,186,300	1	842	\$9,722	51%	G	5156
W0679	\$8,219,600	1	1,706	\$4,818	87%	G	5257
P0095	\$8,257,500	1	839	\$9,842	74.4%	H	5461
E0319	\$8,899,200	1	3919	\$2,271	92%	H	5358, 5359
E0082	\$9,578,500	1	1689	\$5,671	96%	A	5259, 5260
E0354	\$9,917,800	1	877	\$11,309	88%	B, H	5361, 5362
P0096	\$10,161,100	1	1210	\$8,398	91.7%	H	5461
E0346	\$10,765,100	1	1543	\$6,977	94%	A, H	5260, 5360
C1139	\$12,693,200	2	1377	\$9,218	58%	D	5453
E0059	\$13,891,900	1	682	\$20,369	91%	A	5258, 5358
C0384	\$14,220,800	1	1797	\$7,914	87%	D	5353
W0573	\$14,421,500	1	2,807	\$5,138	20%	G	5156
E0312	\$18,185,000	1	2300	\$7,907	93%	H	5459
C1147	\$18,277,000	2	247	\$73,996	36%	D	5451
E0159	\$19,010,100	1	2580	\$7,368	94%	A	5259, 5260
C1111	\$20,179,700	2	177	\$114,010	64%	E	5552
C0383	\$22,750,800	1	1916	\$11,874	89%	D	5453
W0686	\$23,419,000	1	4,103	\$5,708	50%	I	5357
E0369	\$23,604,500	1	2851	\$8,279	90%	B, H	5361, 5362
E0344	\$25,496,400	1	2004	\$12,723	94%	H	5360, 5460
TOTAL	\$779,780,700						

TABLE 4 ALL
2-YEAR COST - GROUP 2

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
Sorted by 2-Year CIP Cost							
W0563	\$16,800	1	86	\$195	91%	G	5056
H0105	\$28,100	1	46	\$611	96%	B	5559
E0033	\$55,400	1	92	\$602	91%	H	5358
C0553	\$67,100	1	80	\$839	100%	D	5251
E0711	\$73,300	1	22	\$3,333	100%	A	5160
H1048	\$108,400	2	17	\$6,376	65%	B	5559
C0007	\$111,000	1	310	\$358	23%	E	5654
W0307	\$126,400	1	100	\$1,264	88%	A	4959
E0123	\$128,800	1	54	\$2,386	93%	A	5161, 5162
E5018	\$144,500	2	17	\$8,502	N/A	H	5259
E5029	\$169,000	2	14	\$12,070	N/A	A	5259, 5260
D0438	\$169,200	1	123	\$1,376	0%	F	5053
E0096	\$201,200	1	80	\$2,515	99%	A	5160
E5047	\$202,700	2	36	\$5,631	N/A	A	5260
W0201	\$207,100	1	187	\$1,107	100%	G	4857
E0227	\$211,400	1	369	\$573	99%	H	5358
W0343	\$221,000	1	99	\$2,232	100%	A	5059
H0080	\$222,700	1	220	\$1,012	90%	I	5657
E0918	\$240,600	1	101	\$2,383	100%	A	5162
E5131	\$241,600	2	23	\$10,503	N/A	A	5160
H1060	\$247,200	2	179	\$1,381	89%	B	5459
C0006	\$251,200	1	116	\$2,166	19%	E	5654
H1037	\$266,300	2	117	\$2,276	100%	B	5459
W1009	\$269,800	2	58	\$4,652	100%	A	5959
E0310	\$272,700	1	687	\$397	92%	H	5458
E5049	\$319,900	2	20	\$15,996	N/A	A	5260
H1052	\$338,400	2	121	\$2,797	99%	B	5559
W0196	\$341,800	1	125	\$2,734	100%	G	4857
C1008	\$350,900	2	92	\$3,814	70%	E	5655
H0094	\$355,900	1	1043	\$341	95%	B	5560
C0020	\$356,500	1	53	\$6,726	83%	J	5654
E5032	\$368,200	2	399	\$923	N/A	H	5360
W1046	\$375,800	2	64	\$5,872	100%	G	5157
C0212	\$390,700	1	130	\$3,005	73%	E	5654
E0026	\$447,800	1	139	\$3,221	91%	H	5358
E0241	\$462,100	1	48	\$9,627	96%	H	5159
W0359	\$464,800	1	101	\$4,602	88%	A	5059
E5134	\$478,500	2	128	\$3,738	N/A	A	5060
W1025	\$546,400	2	32	\$17,075	100%	A	5159

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
C1255	\$553,000	2	112	\$4,938	68%	C	5051
E0742	\$580,400	1	302	\$1,922	98%	A	5060, 5160
W1013	\$590,800	2	97	\$6,091	100%	A	4958
C1217	\$646,800	2	40	\$16,170	85%	D	5251
E5103	\$726,700	2	163	\$4,458	N/A	A	5160, 5161
W1029	\$732,900	2	146	\$5,020	100%	A	5159
E5122	\$757,300	2	103	\$7,352	N/A	A	5162
E0406	\$779,700	1	140	\$5,569	99%	B	5261
W0578	\$786,700	1	152	\$5,176	97%	G	5157
E5022	\$957,300	2	216	\$4,432	N/A	H	5259
E0403	\$1,041,500	1	164	\$6,351	98%	A	5260
C1149	\$1,074,000	2	133	\$8,075	44%	D	5451
W0488	\$1,101,900	1	139	\$7,927	97%	A	5059
P1090	\$1,141,500	1	192	\$5,945	99.5%	B	5662
W0153	\$1,168,000	1	283	\$4,127	100%	G	4757
C0476	\$1,205,500	1	60	\$20,092	87%	D	5452
W0474	\$1,218,600	1	265	\$4,598	78%	H	5457
W1027	\$1,228,200	2	221	\$5,557	84%	A	5159
E5015	\$1,233,500	2	152	\$8,115	N/A	H	5259
W1001	\$1,250,200	2	85	\$14,708	100%	G	4857
H0092	\$1,259,500	1	1795	\$702	97%	B	5659
H0096	\$1,350,700	1	233	\$5,797	84%	B	5559
E0132	\$1,352,300	1	261	\$5,181	99%	A	5062
E0907	\$1,371,800	1	917	\$1,496	74%	B	5162, 5262
W0492	\$1,452,100	1	46	\$31,567	0%	I	5557
W0530	\$1,575,700	1	315	\$5,002	90%	H	5357
E5102	\$1,609,200	2	93	\$17,303	N/A	A	5160
W0174	\$1,610,400	1	240	\$6,710	51%	G	4857
W0263	\$1,812,700	1	597	\$3,036	39%	G	4957
E0338	\$1,890,000	1	512	\$3,691	91%	A, H	5259, 5260, 5359, 5360
E5152	\$1,891,200	2	130	\$14,548	N/A	A	5060
E0036	\$2,109,100	1	710	\$2,971	88%	G, H	5258, 5358
C1174	\$2,327,700	2	15	\$155,180	0%	D	5352
W0294	\$2,797,700	1	420	\$6,661	45%	G	4958
W0195	\$2,994,500	1	56	\$53,473	41%	G	4857
E0348	\$3,440,200	1	358	\$9,609	76%	A, H	5360, 5361
W1019	\$3,460,300	2	212	\$16,322	100%	G	5059
W0091	\$4,197,300	1	122	\$34,404	25%	C	5056
H0093	\$4,252,300	1	565	\$7,526	95%	B	5560

TABLE 4 ALL
2-YEAR COST - GROUP 2

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
H1005	\$4,609,000	2	1	\$4,609,000	0%	H	5460
E0012	\$5,211,900	1	543	\$9,598	78%	H	5258, 5358
W0402	\$5,906,700	1	753	\$7,844	69%	A	5059
E0729	\$6,287,800	1	229	\$27,458	32%	A	5060, 5061
W0392	\$6,312,900	1	590	\$10,700	54%	A	4959
E0034	\$7,028,800	1	1181	\$5,952	94%	H	5358, 5359
E0716	\$8,755,600	1	255	\$34,336	4%	A, H	5159, 5160
W0404	\$10,200,300	1	1,445	\$7,059	69%	A	5159
W0479	\$15,304,400	1	3,060	\$5,001	95%	I	5558
W0403	\$25,267,900	1	2,005	\$12,602	75%	A	5159
TOTAL	\$166,265,700						

**TABLE 5 ALL
2-YEAR COST - GROUP 3**

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
Sorted by 2-Year Cost							
D0305	\$11,800	L	15	\$787	100%	C	5154
D5038	\$14,600	L	22	\$664	100%	G	4855
C0279	\$18,200	L	9	\$2,022	78%	E	5752
D0128	\$27,500	L	36	\$764	97%	C	5254
C0454	\$33,200	L	13	\$2,554	100%	D	5453
D0550	\$33,600	L	18	\$1,867	100%	F	5054
C0533	\$35,200	L	21	\$1,676	100%	D	5252
D0182	\$35,300	L	25	\$1,412	100%	C	5253
C0656	\$35,900	L	9	\$3,989	100%	D	5151
C0438	\$36,100	L	19	\$1,900	100%	E	5453
C0499	\$37,200	L	32	\$1,163	91%	D	5351
C0450	\$38,100	L	24	\$1,588	92%	D	5453
D0575	\$38,600	L	40	\$965	100%	F	4955
E0195	\$44,600	I	234	\$191	100%	B	5161
W0602	\$45,700	L	101	\$452	23%	G	5157
D0860	\$46,000	I	217	\$212	99%	I	5556
C0455	\$46,000	I	57	\$807	100%	E	5452
D0142	\$48,800	L	32	\$1,525	100%	C	5254
C0284	\$51,900	I	20	\$2,595	100%	E	5752
C0555	\$56,700	L	49	\$1,157	100%	D	5251
P1103	\$57,100	L	34	\$1,679	100.0%	B	5561
H1125	\$62,000	2	18	\$3,444	89%	I	5758
C0422	\$62,700	L	51	\$1,229	100%	D	5452
P0037	\$67,100	L	40	\$1,678	90.0%	I	5661
W0695	\$67,300	L	86	\$783	93%	C	5156
D0697	\$69,200	L	65	\$1,065	100%	F	4854
C0485	\$70,300	L	88	\$799	98%	D	5352
W0603	\$71,600	L	87	\$823	74%	G	5157
E0722	\$72,200	L	55	\$1,313	98%	A	5160
C0276	\$73,700	L	17	\$4,335	100%	E	5753
D0243	\$76,600	L	37	\$2,070	73%	C	5152
C0184	\$77,800	L	71	\$1,096	100%	E	5754
C0093	\$78,900	L	11	\$7,173	100%	D	5151
C0011	\$80,500	L	79	\$1,019	97%	E	5654
E5099	\$83,500	2	24	\$3,479	N/A	A	5160
E0257	\$83,700	L	76	\$1,101	100%	B	5261
E0068	\$87,300	L	146	\$598	100%	A	5259
D0516	\$95,700	L	39	\$2,454	100%	F	5054
C0299	\$96,100	I	28	\$3,432	100%	E	5752
D0139	\$98,600	I	36	\$2,744	100%	C	5254

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
E0517	\$101,000	E	123	\$821	100%	A	5161
P0081	\$103,100	L	132	\$781	93.9%	B	5561
C0047	\$104,400	L	150	\$696	100%	E	5553
C0092	\$105,300	L	25	\$4,212	100%	D	5151
C0197	\$105,900	L	107	\$990	99%	E	5754
H0006	\$106,100	L	89	\$1,192	98%	I	5757
D0517	\$106,200	L	39	\$2,723	100%	F	5054
C0196	\$109,400	L	69	\$1,586	97%	E	5754
C0662	\$111,300	L	24	\$4,638	100%	D	5151
E0717	\$114,500	L	48	\$2,385	98%	A	5160
C0661	\$115,100	L	24	\$4,796	100%	D	5151
C0524	\$117,100	L	83	\$1,411	98%	D	5251
D0047	\$119,900	L	133	\$902	94%	I	5555
D0592	\$123,400	L	96	\$1,285	88%	F	4954
P0038	\$126,400	L	34	\$3,718	100.0%	I	5661
C0270	\$128,100	L	32	\$4,003	97%	E	5753
E5031	\$130,100	2	30	\$4,337	N/A	A, H	5260
E0789	\$130,600	L	3	\$43,533	0%	A	4959, 4960
E0308	\$130,800	L	132	\$991	82%	H	5458
D0351	\$132,800	L	52	\$2,554	98%	C	5154
D0029	\$135,400	L	108	\$1,254	54%	I	5556
P0069	\$136,300	L	57	\$2,391	87.7%	B	5661
C0429	\$138,100	L	106	\$1,303	100%	D	5451
D0553	\$138,800	L	104	\$1,335	100%	F	5055
E0097	\$139,400	L	38	\$3,668	100%	A	5160
E0811	\$141,400	L	16	\$8,838	100%	A	4960
C0504	\$142,700	I	76	\$1,878	100%	D	5252
C1089	\$146,400	2	41	\$3,571	100%	E	5553
D0319	\$147,000	I	6	\$24,500	0%	C	5154
C0138	\$151,900	I	40	\$3,798	88%	I	5554
D0706	\$153,300	I	61	\$2,513	100%	F	4855
E5030	\$156,800	2	80	\$1,960	N/A	A	5260
C0044	\$163,800	I	49	\$3,343	100%	E	5553
D1391	\$164,500	I	60	\$2,742	100%	G	4756
D0903	\$167,900	I	50	\$3,358	68%	I	5556
D0577	\$170,100	I	13	\$13,085	31%	F	4955
C0275	\$172,400	I	77	\$2,239	100%	E	5753
C0198	\$173,900	I	72	\$2,415	100%	E	5754
C0436	\$183,400	I	91	\$2,015	100%	D	5453
D8031	\$185,000	I	10	\$18,500	0%	F	4855
D0149	\$188,200	I	111	\$1,695	95%	C	5254

**TABLE 5 ALL
2-YEAR COST - GROUP 3**

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
C0540	\$191,600	1	25	\$7,664	92%	D	5252
D0869	\$195,500	1	117	\$1,671	99%	F	4952
E0117	\$198,800	1	83	\$2,395	40%	A	5161
D0889	\$200,200	1	131	\$1,528	82%	D	5354
D0601	\$201,600	1	60	\$3,360	97%	F	4954
E0777	\$202,200	1	36	\$5,617	100%	A	5060
E0739	\$204,100	1	35	\$5,831	91%	A	5160
H1023	\$205,900	2	230	\$895	92%	H	5459
E5040	\$207,600	2	6	\$34,600	N/A	B, H	5360, 5361
D0419	\$215,000	1	94	\$2,287	100%	C	5053
D0001	\$215,600	1	30	\$7,187	17%	I	5655
E0760	\$226,500	1	99	\$2,288	100%	A	5060
D0764	\$231,500	1	85	\$2,724	100%	F	4853
D0417	\$233,800	1	96	\$2,435	100%	C	5053
W1032	\$233,800	2	65	\$3,597	100%	B	5458
W0580	\$234,300	1	47	\$4,985	100%	G	5157
C0049	\$236,100	1	95	\$2,485	100%	E	5452
D0904	\$236,800	1	186	\$1,273	98%	I	5556
C0343	\$242,100	1	25	\$9,684	84%	E	5653
C1232	\$246,600	2	18	\$13,700	33%	D	5151
D0579	\$247,600	1	188	\$1,317	91%	F	4954
C0470	\$251,000	1	86	\$2,919	98%	D	5452
C0153	\$253,000	1	76	\$3,329	87%	I	5654
E5201	\$257,000	2	1	\$257,000	N/A	B	5261
D0744	\$261,300	1	128	\$2,041	98%	F	4854
C0165	\$267,600	1	77	\$3,475	91%	I	5655
D0249	\$269,300	1	108	\$2,494	100%	C	5153
W0596	\$270,000	1	50	\$5,400	100%	G	5157
P1145	\$271,200	1	104	\$2,608	92.3%	B	5561
E0409	\$271,900	1	28	\$9,711	75%	A, B	5260, 5261
C0573	\$273,200	1	104	\$2,627	100%	D	5251
D0504	\$273,300	1	108	\$2,531	96%	C	5052
P1173	\$275,500	1	20	\$13,775	95.0%	B	5662
E5205	\$281,800	2	1	\$281,800	N/A	B	5262
E0371	\$282,400	1	126	\$2,241	100%	H	5360
D0799	\$285,800	1	10	\$28,580	0%	G	4855
E5202	\$290,400	2	1	\$290,400	N/A	B	5261
P1165	\$291,100	1	161	\$1,808	98.1%	B	5562
C1323	\$296,000	2	1	\$296,000	0%	E	5552
P1110	\$299,200	1	162	\$1,847	84.0%	B	5561
D0585	\$299,500	1	116	\$2,582	100%	F	4954

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
D0603	\$303,900	1	128	\$2,374	93%	F	4954
W1031	\$305,000	2	107	\$2,850	100%	B	5458
D0925	\$309,400	1	55	\$5,625	98%	G	4756
C0090	\$313,400	1	61	\$5,138	100%	D	5151
D0144	\$317,300	1	152	\$2,088	93%	C	5255
D0810	\$324,900	1	31	\$10,481	100%	G	4855
C0095	\$329,400	1	36	\$9,150	100%	D	5151
D0646	\$329,700	1	72	\$4,579	99%	C	4952
D0713	\$329,800	1	129	\$2,557	5%	F	4853
C1322	\$333,000	2	1	\$333,000	0%	E	5552
C0498	\$334,600	1	92	\$3,637	100%	D	5351
D0580	\$338,100	1	116	\$2,915	100%	F	4954
D0473	\$340,700	1	279	\$1,221	48%	C	5052
E0210	\$342,500	1	61	\$5,615	98%	A	5062
C0188	\$343,900	1	36	\$9,553	94%	E	5754
D0833	\$345,000	1	188	\$1,835	100%	D	5455
W1037	\$345,300	2	127	\$2,719	0%	G	4857
D0362	\$345,400	1	86	\$4,016	94%	C	5154
C0336	\$346,800	1	83	\$4,178	99%	I	5653
E5075	\$349,500	2	48	\$7,281	N/A	A, B	5260, 5261
D0537	\$350,100	1	40	\$8,753	0%	C, F	5055
P0080	\$352,400	1	76	\$4,637	96.1%	B	5561
C0539	\$358,300	1	100	\$3,583	96%	D	5252
D0390	\$359,900	1	101	\$3,563	100%	C	5152
C0651	\$365,300	1	65	\$5,620	92%	D	5151
P1158	\$368,300	1	113	\$3,259	98.2%	B	5362
P0075	\$372,800	1	166	\$2,246	100.0%	B	5561
E5006	\$377,500	2	77	\$4,903	N/A	H	5458
C0648	\$378,200	1	91	\$4,156	100%	D	5151
H1031	\$389,600	2	97	\$4,016	94%	H	5459
D0370	\$397,600	1	125	\$3,181	100%	C	5053
C0089	\$404,900	1	71	\$5,703	92%	D	5151
E0782	\$415,000	1	77	\$5,390	97%	A	5060
C0411	\$416,400	1	80	\$5,205	96%	D	5452
C0650	\$416,600	1	58	\$7,183	95%	D	5151
W1002	\$420,100	2	125	\$3,361	99%	A	4858
C0029	\$422,300	1	264	\$1,600	98%	I	5554
C0528	\$422,500	1	174	\$2,428	99%	D	5251
H0034	\$428,300	1	153	\$2,799	100%	I	5758
P0073	\$429,100	1	184	\$2,332	100.0%	B	5561
D0122	\$432,000	1	102	\$4,235	100%	C	5254

**TABLE 5 ALL
2-YEAR COST - GROUP 3**

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
H0066	\$438,900	1	756	\$581	58%	I	5657
D0491	\$444,900	1	347	\$1,282	93%	C	5053
D0551	\$449,800	1	103	\$4,367	99%	F	5054
W0582	\$453,100	1	133	\$3,407	100%	G	5157
E5009	\$456,400	2	109	\$4,187	N/A	H	5359
D0907	\$462,400	1	115	\$4,021	90%	D	5435
D0049	\$466,100	1	224	\$2,081	95%	I	5555
D0255	\$468,600	1	106	\$4,421	100%	C	5153
D0781	\$475,400	1	107	\$4,443	77%	F	4854
D0315	\$475,800	1	50	\$9,516	92%	C	5154
W1023	\$491,700	2	66	\$7,450	67%	A	5059
W0598	\$493,200	1	266	\$1,854	33%	G	5157
D0348	\$497,900	1	248	\$2,008	99%	C	5053
P0065	\$508,200	1	198	\$2,567	33.3%	B	5661
D0698	\$511,400	1	150	\$3,409	100%	F	4854
W1004	\$514,900	2	76	\$6,775	100%	A	4859
E0913	\$519,600	1	84	\$6,186	100%	A	5162
W0669	\$524,700	1	30	\$17,490	0%	H	5557
D0583	\$530,400	1	135	\$3,929	100%	F	4954
W0627	\$541,500	1	272	\$1,991	46%	G	5156
E5011	\$548,700	2	143	\$3,837	N/A	H	5258, 5259
D0195	\$549,300	1	6	\$91,550	0%	C	5154
E0807	\$554,500	1	1	\$554,500	0%	A	4959, 4960
C0127	\$555,400	1	816	\$681	95%	I	5555
C0189	\$564,100	1	135	\$4,179	100%	E	5754
C1218	\$568,500	2	35	\$16,243	94%	D	5251
D1380	\$570,500	1	182	\$3,135	91%	F	4954
C1027	\$576,000	2	72	\$8,000	81%	I	5654
C1226	\$576,000	2	199	\$2,894	91%	D	5152
C1040	\$581,600	2	117	\$4,971	97%	I	5654
D0365	\$582,500	1	130	\$4,481	65%	C	5154
D0311	\$588,500	1	99	\$5,944	100%	C	5154
C0213	\$594,300	1	359	\$1,655	96%	E	5654
D0573	\$594,400	1	32	\$18,575	66%	F	4955
C0423	\$595,900	1	153	\$3,895	97%	D	5452
E0314	\$599,000	1	119	\$5,034	85%	H	5358, 5359
W1020	\$603,600	2	75	\$8,048	100%	A	5059
H0076	\$611,200	1	565	\$1,082	99%	I	5656
D0581	\$615,200	1	176	\$3,495	100%	F	4954
C0428	\$620,600	1	134	\$4,631	100%	D	5451
E0745	\$633,800	1	8	\$79,225	0%	A	5059, 5159

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
E5115	\$637,300	2	214	\$2,978	N/A	A	5162
D0952	\$637,400	1	134	\$4,757	95%	I	5556
D0678	\$641,500	1	425	\$1,509	34%	F	4954
E0511	\$642,900	1	86	\$7,476	94%	A	5160, 5161
D0157	\$644,600	1	8	\$80,575	0%	C	5254
E0041	\$653,200	1	72	\$9,072	67%	H	5258, 5358
P1091	\$656,500	1	174	\$3,773	100.0%	B	5661
E0378	\$658,900	1	19	\$34,679	53%	B	5261, 5361
E0740	\$662,400	1	218	\$3,039	99%	A	5160
E5051	\$663,600	2	171	\$3,881	N/A	B	5261, 5361
D0645	\$664,300	1	136	\$4,885	96%	C	4952
E0006	\$678,300	1	291	\$2,331	83%	H	5458
D0830	\$687,900	1	289	\$2,380	96%	D	5455
H1011	\$688,300	2	131	\$5,254	97%	H	5460
D0420	\$689,100	1	133	\$5,181	95%	C	5053
C0418	\$693,600	1	155	\$4,475	100%	D	5452
C1317	\$694,000	2	1	\$694,000	0%	E	5652
D0341	\$700,700	1	132	\$5,308	99%	C	5154
C1015	\$705,400	2	110	\$6,413	99%	E	5754
E5090	\$718,400	2	206	\$3,487	N/A	B	5261
H1142	\$719,700	2	148	\$4,863	78%	B	5657
C0560	\$726,500	1	205	\$3,544	100%	D	5251
D0734	\$729,900	1	118	\$6,186	97%	F	4854
D0600	\$738,800	1	234	\$3,157	96%	F	4954
E0792	\$741,600	1	1	\$741,600	0%	A	4959, 4960
E5108	\$742,200	2	161	\$4,610	N/A	A	5161
E5124	\$742,500	2	85	\$8,735	N/A	A	5162
D0881	\$751,500	1	186	\$4,040	78%	I	5556
D0595	\$754,000	1	189	\$3,989	100%	F	4954
D0493	\$780,100	1	154	\$5,066	59%	C	5053
C1090	\$782,900	2	75	\$10,439	97%	E	5553
W1022	\$793,800	2	192	\$4,134	85%	A	5059
D0097	\$805,000	1	141	\$5,709	77%	C	5355
P1094	\$812,900	1	131	\$6,205	100.0%	B	5662
E5054	\$832,100	2	191	\$4,357	N/A	B	5261
E0221	\$838,400	1	178	\$4,710	99%	A	5062
E0189	\$849,500	1	150	\$5,663	97%	A	5260
H0033	\$853,200	1	222	\$3,843	100%	I	5758
C0161	\$853,300	1	108	\$7,901	65%	I	5654
P0042	\$866,100	1	245	\$3,535	95.5%	I	5661
E0767	\$892,900	1	150	\$5,953	89%	A	4960, 5060

**TABLE 5 ALL
2-YEAR COST - GROUP 3**

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
E5174	\$894,200	2	163	\$5,486	N/A	A	4961
C0426	\$894,300	1	139	\$6,434	97%	D	5452
W0681	\$895,900	1	272	\$3,294	94%	D	5357
C1137	\$900,000	2	60	\$15,000	97%	D	5453
C1144	\$913,000	2	320	\$2,853	98%	E	5452
D0630	\$913,500	1	205	\$4,456	72%	C	5053
D1381	\$940,400	1	156	\$6,028	94%	F	5054
C1319	\$942,000	2	1	\$942,000	0%	E	5652
P1049	\$946,600	1	119	\$7,955	84.0%	B	5857
D0446	\$959,800	1	25	\$38,392	96%	C	5053
E0313	\$971,400	1	312	\$3,113	86%	H	5459
C0419	\$973,700	1	265	\$3,674	97%	D	5452
E0712	\$974,100	1	228	\$4,272	80%	A	5160
D0839	\$979,200	1	214	\$4,576	97%	D	5454
C1084	\$988,600	2	139	\$7,112	99%	I	5654
C0280	\$997,300	1	360	\$2,770	100%	E	5752
C1158	\$1,000,300	2	188	\$5,321	94%	D	5353
D8020	\$1,003,300	1	83	\$12,088	72%	F	4855
W1043	\$1,011,600	2	130	\$7,782	100%	G	5157
E5123	\$1,027,900	2	252	\$4,079	N/A	A	5162
H0009	\$1,040,100	1	119	\$8,740	93%	I	5758
D0937	\$1,045,500	1	413	\$2,531	0%	C	5254
D0022	\$1,054,100	1	172	\$6,128	86%	I	5556
P0074	\$1,054,300	1	269	\$3,919	100.0%	B	5561
D0093	\$1,060,100	1	44	\$24,093	86%	D	5355
D0642	\$1,060,700	1	143	\$7,417	97%	C	5052
P0055	\$1,075,800	1	257	\$4,186	99.2%	B	5661
E5173	\$1,080,200	2	165	\$6,547	N/A	A	4961
E5010	\$1,080,700	5	63	\$17,154	N/A	A, H	5258
P0056	\$1,081,100	1	76	\$14,225	78.9%	B	5661
P1137	\$1,083,900	1	54	\$20,072	70.4%	B	5362
D0358	\$1,084,500	1	181	\$5,992	99%	C	5154
E5133	\$1,097,500	2	199	\$5,515	N/A	A	5060, 5160
P0082	\$1,102,500	1	87	\$12,672	89.7%	B	5562
D0124	\$1,103,200	1	206	\$5,355	100%	C	5254
D0914	\$1,120,200	1	138	\$8,117	49%	F	5055
C0702	\$1,133,800	1	245	\$4,628	97%	E	5453
P1168	\$1,138,000	1	159	\$7,157	99.4%	B	5662
W1008	\$1,153,300	2	245	\$4,707	97%	A	4959
P1153	\$1,163,000	1	371	\$3,135	98.4%	B	5562
D0621	\$1,177,200	1	608	\$1,936	8%	C	5053

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
C0247	\$1,185,200	1	188	\$6,304	97%	E	5752
C0003	\$1,188,700	1	217	\$5,478	97%	E	5654
W1040	\$1,209,600	2	67	\$18,054	100%	G	5056
H1144	\$1,227,100	2	20	\$61,355	80%	I	5757
D0849	\$1,227,700	1	87	\$14,111	77%	D	5455
P1167	\$1,233,400	1	147	\$8,390	95.2%	B	5562
D0363	\$1,263,000	1	115	\$10,983	89%	F	5154
C0579	\$1,266,300	1	157	\$8,066	99%	D	5250
H1012	\$1,292,100	2	312	\$4,141	88%	H	5460
C1328	\$1,296,000	2	1	\$1,296,000	0%	E	5551
P1093	\$1,314,300	1	220	\$5,974	100.0%	B	5661
P1108	\$1,318,300	1	270	\$4,883	81.1%	B	5561
C1065	\$1,332,000	2	731	\$1,822	63%	E	5652
E0721	\$1,347,900	1	225	\$5,991	99%	A	5160
E0901	\$1,353,700	1	287	\$4,717	48%	A	5161, 5162
D0069	\$1,360,600	1	123	\$11,062	99%	D	5455
W0676	\$1,387,500	1	355	\$3,908	0%	G	5156
E0773	\$1,389,400	1	223	\$6,230	79%	A	5059, 5060
E5094	\$1,395,700	2	269	\$5,188	N/A	A, B	5161, 5162
W0141	\$1,401,900	1	58	\$24,171	9%	C	5055
D0578	\$1,404,000	1	248	\$5,661	98%	F	5054
W1006	\$1,407,900	2	205	\$6,868	98%	A	4960
E5091	\$1,445,000	2	1	\$1,445,000	N/A	B	5261
E0790	\$1,464,400	1	6	\$244,067	0%	A	4959, 4960
W0709	\$1,468,300	1	84	\$17,480	71%	G	5156
D0526	\$1,511,300	1	247	\$6,119	0%	F	5055
E0198	\$1,543,400	1	213	\$7,246	100%	A, H	5159, 5259
E0014	\$1,581,400	1	463	\$3,416	76%	H, I	5258, 5358, 5458
E5095	\$1,584,700	2	475	\$3,336	N/A	B	5261, 5262
D0369	\$1,622,500	1	224	\$7,243	99%	C	5053
D0534	\$1,638,800	1	488	\$3,358	0%	F	5055
D0684	\$1,642,100	1	124	\$13,243	90%	F	4955
P1079	\$1,653,700	1	48	\$34,452	68.8%	I	5660
P0036	\$1,665,400	1	341	\$4,884	92.4%	I	5661
D0548	\$1,676,300	1	252	\$6,652	100%	F	5054
E0200	\$1,728,500	1	352	\$4,911	99%	A	5062, 5162
D0632	\$1,773,400	1	230	\$7,710	100%	C	4953
D0725	\$1,852,700	1	267	\$6,939	97%	F	4853
P1160	\$1,877,100	1	131	\$14,329	98.5%	B	5561
D0514	\$1,883,900	1	394	\$4,781	0%	F	5055

**TABLE 5 ALL
2-YEAR COST - GROUP 3**

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
W0552	\$1,904,700	1	101	\$18,858	3%	C	5156
W1045	\$1,926,600	2	424	\$4,544	93%	I	5656
D0046	\$1,950,300	1	307	\$6,353	82%	I	5555
P1054	\$1,958,700	1	209	\$9,372	98.1%	B	5858
E0087	\$1,992,500	1	583	\$3,418	99%	A	5160, 5260
C1320	\$2,008,000	2	1	\$2,008,000	0%	E	5652
C1063	\$2,024,200	2	291	\$6,956	71%	E	5652
E0150	\$2,052,800	1	346	\$5,933	90%	H	5259
E5062	\$2,058,400	2	332	\$6,200	N/A	B	5261, 5262
C1242	\$2,061,000	2	323	\$6,381	93%	D	5151
E0143	\$2,194,400	1	621	\$3,534	95%	H	5258
E0237	\$2,393,400	1	24	\$99,725	0%	H	5159
C0058	\$2,495,800	1	570	\$4,379	71%	D	5452
P1078	\$2,528,400	1	77	\$32,836	37.7%	I	5660
D0485	\$2,566,000	1	173	\$14,832	40%	C	5053
E0145	\$2,678,700	1	560	\$4,783	89%	H	5258, 5259, 5358, 5359
P1144	\$2,755,100	1	150	\$18,367	88.7%	B	5462
P1060	\$2,765,700	1	74	\$37,374	90.5%	I	5759
P1163	\$2,868,300	1	226	\$12,692	92.5%	B	5662
D0755	\$2,926,100	1	477	\$6,134	85%	F	4853
E0548	\$3,043,200	1	100	\$30,432	45%	A	4961
C1014	\$3,044,000	2	675	\$4,510	97%	E	5754
C0030	\$3,072,200	1	404	\$7,604	77%	I	5554
W1018	\$3,136,000	2	13	\$241,231	100%	G	5059
E0509	\$3,215,600	1	306	\$10,508	69%	A	5160, 5161
W0698	\$3,350,800	1	155	\$21,618	60%	C	5156
C1159	\$3,706,200	2	511	\$7,253	98%	D	5352
P1092	\$3,824,000	1	183	\$20,896	96.7%	B	5661
E0385	\$4,072,600	1	623	\$6,537	95%	B	5261, 5262
W0705	\$4,228,300	1	533	\$7,933	61%	I	5457
E5037	\$4,350,300	2	144	\$30,210	N/A	A, H	5260, 5360
E0090	\$4,370,700	1	846	\$5,166	97%	A	5160, 5260
P1119	\$4,606,500	1	106	\$43,458	93.4%	B	5562
C1113	\$4,905,900	2	80	\$61,324	29%	E	5552
P1086	\$5,319,200	1	155	\$34,317	65.8%	B	5660
E0147	\$5,772,100	1	642	\$8,991	58%	H	5259, 5359
E5067	\$7,761,200	2	638	\$12,165	N/A	B	5162, 5262
E0049	\$10,982,100	1	177	\$62,046	51%	A	5158, 5258
D0108	\$14,749,200	1	227	\$64,974	0%	C	5254, 5354
C1182	\$15,986,000	2	759	\$61,722	9%	D	5252

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
TOTAL	\$345,088,700						

TABLE 6 ALL
2-YEAR COST - GROUP 4

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
Sorted by 2-Year CIP Cost							
P0130	\$4,900	3	1	\$4,900	0.0%	B	5262
P0129	\$5,500	3	1	\$5,500	0.0%	B	5262
D0556	\$10,100	3	2	\$5,050	0%	F	5055
C0670	\$10,700	3	1	\$10,700	0%	C	5151
D0557	\$11,800	3	5	\$2,360	0%	F	5055
P0023	\$12,500	3	11	\$1,136	100.0%	B	5858
W0157	\$13,100	3	41	\$320	0%	G	4758
P0002	\$13,300	3	2	\$6,650	0.0%	E	5858
P0021	\$15,700	3	43	\$365	100.0%	B	5858
H0081	\$16,100	3	591	\$27	70%	I	5657
W0375	\$16,300	3	43	\$379	100%	A	5059
P0218	\$17,700	3	1	\$17,700	0.0%	A	4965
W0274	\$17,900	3	4	\$4,475	100%	G	5057
C0427	\$18,600	3	37	\$503	97%	D	5452
D0716	\$20,000	3	54	\$370	74%	F	4853
P0156	\$21,200	3	1	\$21,200	0.0%	B	5365
D0809	\$21,400	3	21	\$1,019	100%	G	4855
E0333	\$22,600	3	53	\$426	72%	H	5359
W0281	\$24,900	3	51	\$488	100%	G	4957
W0301	\$26,800	3	2	\$13,400	0%	A	4959
W0277	\$28,100	3	108	\$260	100%	G	4957
E0392	\$29,200	3	4	\$7,300	0%	B	5262
D0301	\$29,400	3	45	\$653	100%	C	5154
D0030	\$29,900	3	10	\$2,990	50%	I	5556
E5135	\$30,600	5	15	\$2,040	N/A	A	5160
H1124	\$31,800	4	3	\$10,600	100%	I	5758
D0705	\$33,000	3	3	\$11,000	0%	F	4855
C0465	\$33,100	3	26	\$1,273	100%	E	5452
W0360	\$35,200	3	204	\$173	100%	A	5059
C0453	\$35,400	3	12	\$2,950	100%	D	5453
D0213	\$35,700	3	6	\$5,950	100%	C	5154
C0452	\$36,900	3	20	\$1,845	100%	D	5453
P0231	\$38,400	3	1	\$38,400	0.0%	B	5365
P1183	\$38,700	4	1	\$38,700	0.0%	I	5759
W0152	\$38,700	3	42	\$921	100%	G	4757
D0183	\$39,200	3	4	\$9,800	0%	C	5253
C0675	\$39,200	4	51	\$769	100%	D	5051
E5071	\$39,800	5	21	\$1,895	N/A	A	5160
E5144	\$39,800	5	33	\$1,206	N/A	A	5162

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
W0179	\$40,000	3	1	\$40,000	0%	G	4858
W0494	\$40,200	3	1	\$40,200	100%	A	5158
P0153	\$40,400	3	1	\$40,400	0.0%	B	5365
P0215	\$40,800	3	1	\$40,800	0.0%	A	4965
P0014	\$41,300	3	66	\$626	100.0%	B	5858
D0427	\$41,600	3	28	\$1,486	61%	F	5054
P0143	\$41,700	3	1	\$41,700	0.0%	B	5264
H1045	\$46,000	4	7	\$6,571	100%	B	5459
P0025	\$46,800	3	1	\$46,800	0.0%	I	5760
W0246	\$47,900	3	10	\$4,790	100%	G	4958
E0069	\$48,800	3	37	\$1,319	100%	A	5259
E0077	\$49,700	3	42	\$1,183	69%	I	5656
P0125	\$50,000	3	1	\$50,000	0.0%	B	5262
H1040	\$51,000	4	12	\$4,250	92%	B	5459
E5058	\$51,500	4	8	\$6,438	N/A	B	5261
C0543	\$52,700	3	8	\$6,588	88%	D	5252
H1044	\$52,900	4	12	\$4,408	92%	B	5459
C0404	\$53,200	3	21	\$2,533	24%	D	5453
E5060	\$54,200	4	8	\$6,775	N/A	B	5261, 5262
P0228	\$54,500	3	1	\$54,500	0.0%	A	4965
W0455	\$54,500	3	2	\$27,250	0%	H	5357
W0232	\$54,600	3	19	\$2,874	100%	G	4957
C0549	\$56,700	3	59	\$961	85%	D	5251
W0408	\$56,900	3	2	\$28,450	0%	A	5158
E5057	\$57,300	4	12	\$4,775	N/A	B	5261
H1061	\$57,900	4	4	\$14,475	75%	B	5559
W0401	\$58,100	3	43	\$1,351	100%	A	5059
W0296	\$58,600	3	6	\$9,767	0%	G	4958
W0289	\$59,100	3	3	\$19,700	100%	G	4958
C0519	\$59,800	3	2	\$29,900	0%	D	5251
E5059	\$59,800	4	7	\$8,543	N/A	B	5261
H1039	\$59,900	4	12	\$4,992	100%	B	5459
E5046	\$60,000	4	2	\$30,000	N/A	A	5260
C0677	\$61,100	3	54	\$1,131	100%	D	5051
W0330	\$61,500	3	25	\$2,460	100%	A	4959
P0012	\$62,900	3	36	\$1,747	83.3%	I	5758
H1038	\$63,700	4	13	\$4,900	92%	H	5459
H1056	\$63,700	4	16	\$3,981	94%	B	5559
E0029	\$63,700	3	28	\$2,275	93%	H	5358
D0031	\$63,800	3	20	\$3,190	45%	I	5556

TABLE 6 ALL
2-YEAR COST - GROUP 4

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
P0011	\$65,100	3	13	\$5,008	61.5%	B	5858
W0413	\$65,200	3	10	\$6,520	100%	G	5158
H1041	\$65,300	4	16	\$4,081	100%	B	5459
P0116	\$65,300	3	1	\$65,300	0.0%	B	5565
E5023	\$65,900	4	2	\$32,950	N/A	H	5259
W0357	\$66,900	3	28	\$2,389	100%	A	5059
W0314	\$67,000	3	15	\$4,467	100%	A	4959
C0663	\$67,100	3	17	\$3,947	100%	D	5151
W0399	\$67,100	3	20	\$3,355	100%	A	4959
P0132	\$67,800	3	1	\$67,800	0.0%	B	5262
P0205	\$68,000	3	1	\$68,000	0.0%	B	5265
H1062	\$68,100	4	11	\$6,191	82%	B	5559
H0085	\$68,800	3	4	\$17,200	0%	B	5658
C1032	\$68,900	4	5	\$13,780	0%	E	5754
P0164	\$69,500	3	1	\$69,500	0.0%	B	5265
E5024	\$70,000	4	5	\$14,000	N/A	H	5259
E0416	\$70,500	3	18	\$3,917	100%	B	5361
E5014	\$70,600	4	17	\$4,153	N/A	H	5259
P0174	\$71,700	3	1	\$71,700	0.0%	B	5265
C1220	\$71,800	4	3	\$23,933	0%	D	5252
E0004	\$72,400	3	1	\$72,400	0%	H, I	5457, 5458
C0442	\$72,900	3	15	\$4,860	100%	E	5453
H1035	\$73,400	4	4	\$18,350	50%	H	5459
C0488	\$73,800	3	3	\$24,600	0%	D	5352
E5182	\$74,100	4	7	\$10,586	N/A	A	4961
H1046	\$74,300	4	12	\$6,192	83%	B	5559
W0283	\$75,300	3	89	\$846	100%	G	4957
E5055	\$77,200	4	16	\$4,825	N/A	B	5261
C1033	\$77,900	4	7	\$11,129	0%	E	5754
W0247	\$78,800	3	10	\$7,880	100%	G	4958
E5153	\$80,700	4	1	\$80,700	N/A	A	4960
C0460	\$81,100	3	16	\$5,069	100%	E	5452
W0501	\$82,700	3	8	\$10,338	0%	H	5457
C0183	\$82,900	3	25	\$3,316	100%	E	5754
E0736	\$83,700	3	5	\$16,740	0%	A	5061
P0162	\$84,300	3	1	\$84,300	0.0%	B	5365
E5162	\$85,200	4	3	\$28,400	N/A	A	4960
H1050	\$86,300	4	16	\$5,394	100%	B	5559
C1098	\$86,700	4	52	\$1,667	69%	I	5654
W0332	\$87,900	3	24	\$3,663	100%	A	4959

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
W0333	\$88,200	3	23	\$3,835	100%	A	4959
W0265	\$88,300	3	109	\$810	100%	G	4957
E0248	\$88,400	3	2	\$44,200	0%	A	5259, 5260
E0726	\$88,800	3	51	\$1,741	92%	A	5060, 5160
H1047	\$89,100	4	15	\$5,940	100%	B	5559
E5064	\$89,100	4	2	\$44,550	N/A	B	5262
E5184	\$90,800	5	3	\$30,267	N/A	A	4961
W0397	\$90,900	3	26	\$3,496	100%	A	4959
W0358	\$91,800	3	44	\$2,086	100%	A	5059
P0005	\$92,300	3	11	\$8,391	72.7%	B	5858
P0019	\$93,100	3	88	\$1,058	100.0%	B	5858
C1022	\$93,500	4	10	\$9,350	60%	I	5654
W0150	\$94,600	3	13	\$7,277	0%	G	4758
E0320	\$94,900	3	18	\$5,272	33%	H	5359
W0328	\$95,200	3	24	\$3,967	100%	A	4959
C0086	\$96,100	3	44	\$2,184	43%	D	5151
H1143	\$96,500	4	23	\$4,196	100%	B	5559
H1026	\$97,500	4	30	\$3,250	100%	B	5360
H1051	\$98,200	4	8	\$12,275	100%	B	5559
H1126	\$98,600	4	2	\$49,300	0%	I	5758
E5076	\$99,100	4	11	\$9,009	N/A	A, B	5260, 5261
C0474	\$99,900	3	2	\$49,950	0%	D	5452
C0109	\$100,500	3	61	\$1,648	90%	C	5051
D0535	\$101,000	3	3	\$33,667	0%	C, F	5055
C1078	\$101,300	4	25	\$4,052	52%	I	5654
H1063	\$101,300	4	12	\$8,442	100%	B	5559
E5185	\$101,800	5	3	\$33,933	N/A	A	4961
C0660	\$102,300	3	16	\$6,394	100%	D	5151
W0395	\$103,800	3	50	\$2,076	100%	A	4958
H0139	\$104,500	3	11	\$9,500	0%	H	5459
D1301	\$105,700	3	243	\$435	0%	D	5354
E5035	\$106,100	4	12	\$8,842	N/A	H	5360
D0457	\$107,700	3	2	\$53,850	0%	C	5053
H1034	\$107,700	4	6	\$17,950	0%	H	5459
W0383	\$108,000	3	35	\$3,086	0%	A	4959
W0295	\$108,400	3	48	\$2,258	100%	G	4958
E5078	\$108,500	4	6	\$18,083	N/A	A, B	5260, 5261
E5013	\$108,600	4	22	\$4,936	N/A	H	5259
E5073	\$108,900	5	35	\$3,111	N/A	A	5260
D0582	\$109,400	3	35	\$3,126	100%	F	4954

TABLE 6 ALL
2-YEAR COST - GROUP 4

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
C0633	\$109,600	3	51	\$2,149	100%	D	5150
H0097	\$111,300	3	22	\$5,059	0%	B	5559
C1080	\$111,600	4	1	\$111,600	0%	I	5654
D5002	\$112,200	3	1	\$112,200	0%	G	4955
W0313	\$112,900	3	12	\$9,408	100%	A	4959
D0652	\$113,100	3	5	\$22,620	0%	F	4954
E5079	\$113,100	4	5	\$22,620	N/A	A, B	5261
C0435	\$114,200	3	39	\$2,928	97%	D	5453
W0319	\$115,900	3	27	\$4,293	100%	A	4959
W0336	\$116,700	3	27	\$4,322	100%	A	4959
H1057	\$117,000	4	48	\$2,438	100%	B	5559
E5061	\$117,300	4	5	\$23,460	N/A	B	5262
D0017	\$118,500	3	113	\$1,049	100%	I	5556
P0026	\$119,200	3	1	\$119,200	0.0%	I	5660
E5080	\$119,300	4	12	\$9,942	N/A	A, B	5261
H1025	\$119,800	4	17	\$7,047	100%	B	5560
C1088	\$120,400	4	12	\$10,033	100%	E	5553
P1169	\$120,400	4	1	\$120,400	0.0%	B	5561
P1083	\$121,000	4	1	\$121,000	87.0%	B	5560
P1250	\$121,000	4	1	\$121,000	72.0%	I	5858
E5141	\$121,500	4	2	\$60,750	N/A	A	5060, 5061
H0098	\$123,000	3	7	\$17,571	0%	B	5559
C1038	\$123,200	4	29	\$4,248	59%	I	5654
H1007	\$124,500	4	50	\$2,490	94%	B	5460
P1252	\$125,900	4	1	\$125,900	65.0%	H	5561
W0516	\$127,200	3	52	\$2,446	23%	G	4757
P0204	\$127,700	3	1	\$127,700	0.0%	B	5265
E0557	\$128,700	3	23	\$5,596	0%	A	5061
H0073	\$129,900	3	4	\$32,475	0%	B	5657
P0150	\$130,700	3	1	\$130,700	0.0%	B	5365
W0377	\$131,100	3	113	\$1,160	94%	A	5058
C0689	\$132,100	3	1	\$132,100	0%	D	5050
C0115	\$133,300	3	1	\$133,300	0%	I	5655
E5081	\$133,300	5	1	\$133,300	N/A	B	5161, 5261
E0532	\$133,300	3	93	\$1,433	100%	A	5061
E5028	\$133,800	4	10	\$13,380	N/A	A	5259, 5260
P0225	\$134,300	3	1	\$134,300	0.0%	A	4965
E5186	\$135,500	5	7	\$19,357	N/A	A	4961
D0731	\$135,800	3	5	\$27,160	40%	F	4854
H1033	\$136,200	4	34	\$4,006	65%	H	5459

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
D0459	\$138,800	3	1	\$138,800	0%	C	5053
E5132	\$140,000	4	37	\$3,784	N/A	A	5160
E5048	\$141,600	4	23	\$6,157	N/A	A	5260
H1042	\$142,000	4	17	\$8,353	94%	B	5459
P0224	\$142,800	3	1	\$142,800	0.0%	A	4965
C0556	\$143,600	3	44	\$3,264	93%	D	5251
W0211	\$144,800	3	67	\$2,161	100%	G	4857
E5101	\$145,000	5	3	\$48,333	N/A	A	5160
W0216	\$145,300	3	118	\$1,231	52%	A	4858
W0363	\$145,700	3	3	\$48,567	0%	A	5059
D0936	\$145,900	3	225	\$648	0%	C	5254
P1042	\$147,200	4	1	\$147,200	0.0%	B	5262
E0718	\$147,500	3	37	\$3,986	97%	A	5160
E5004	\$147,500	4	39	\$3,782	N/A	H	5358
D0901	\$148,000	3	9	\$16,444	56%	F	4855
C0698	\$148,000	3	10	\$14,800	0%	E	5453
C1037	\$149,100	4	1	\$149,100	0%	E	5654
E5206	\$149,100	4	1	\$149,100	N/A	D	5261
W0206	\$149,500	3	18	\$8,306	100%	G	4857
E5150	\$150,800	4	16	\$9,425	N/A	A	5060
E5972	\$152,300	5	37	\$4,116	N/A	A	5260
E5053	\$153,000	4	15	\$10,200	N/A	B	5261
D0033	\$154,300	3	23	\$6,709	87%	I	5556
E5207	\$154,700	4	1	\$154,700	N/A	B	5261
H1049	\$156,300	4	29	\$5,390	62%	B	5559
H1083	\$158,400	4	12	\$13,200	8%	I	5659
W0331	\$159,500	3	70	\$2,279	0%	A	4958
H1134	\$160,000	4	1	\$160,000	0%	I	5757
E5063	\$160,900	4	11	\$14,627	N/A	B	5262
E0155	\$163,300	3	3	\$54,433	0%	H	5259
W0154	\$164,000	3	46	\$3,565	100%	G	4757
W0490	\$164,600	3	10	\$16,460	0%	H	5458
W1028	\$165,500	4	33	\$5,015	100%	A	5159
W0266	\$166,100	3	32	\$5,191	100%	G	4957
W0441	\$167,300	3	250	\$669	80%	G	5257
P1044	\$169,900	4	1	\$169,900	0.0%	B	5262
D0499	\$172,700	3	76	\$2,272	50%	C	5052
E0909	\$174,200	3	3	\$58,067	0%	A	5162
D0045	\$174,500	3	10	\$17,450	50%	I	5555
C1009	\$175,400	4	48	\$3,654	92%	E	5755

TABLE 6 ALL
2-YEAR COST - GROUP 4

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
E5025	\$176,100	4	41	\$4,295	N/A	H	5259
W0335	\$176,500	3	25	\$7,060	100%	A	4959
C0599	\$177,200	3	77	\$2,301	100%	D	5150
P1111	\$177,500	4	1	\$177,500	0.0%	B	5661
W0273	\$180,600	3	224	\$806	0%	G	5056
P0161	\$183,600	3	1	\$183,600	0.0%	B	5365
C1028	\$183,700	4	25	\$7,348	92%	E	5654
E5147	\$183,700	4	10	\$18,370	N/A	A	5060
P1176	\$184,400	3	14	\$13,171	71.4%	B	5661
E5016	\$184,700	4	30	\$6,157	N/A	H	5259
P1238	\$185,000	4	1	\$185,000	0.0%	B	5567
C0657	\$185,900	3	45	\$4,131	100%	D	5151
P1084	\$186,200	4	1	\$186,200	29.0%	B	5560
P1251	\$186,200	4	1	\$186,200	96.0%	I	5858
P0158	\$186,900	3	1	\$186,900	0.0%	B	5365
D0584	\$187,300	3	28	\$6,689	96%	F	4954
H1022	\$187,500	4	38	\$4,934	79%	B	5560
P1043	\$188,500	4	1	\$188,500	0.0%	B	5262
C1068	\$188,600	4	2	\$94,300	0%	E	5653
E5181	\$190,100	4	4	\$47,525	N/A	A	4961
P1036	\$190,300	4	1	\$190,300	0.0%	B	5265
W0309	\$190,800	3	67	\$2,848	46%	A	4959
C1062	\$192,000	4	7	\$27,429	0%	E	5652
E0063	\$192,100	3	217	\$885	72%	A	5259
H1021	\$195,200	4	43	\$4,540	84%	B	5560
E5129	\$195,600	5	2	\$97,800	N/A	A	5060
W0350	\$196,500	3	18	\$10,917	0%	A	5058
E0238	\$197,600	3	2	\$98,800	0%	H	5159
E0349	\$198,800	3	10	\$19,880	20%	B, H	5360
P1142	\$202,300	3	52	\$3,890	63.5%	B	5462
H1111	\$204,400	4	1	\$204,400	0%	I	5758
P0137	\$205,500	3	1	\$205,500	0.0%	B	5263
W0293	\$206,000	3	38	\$5,421	18%	G	4958
D0487	\$208,000	3	3	\$69,333	0%	C	5053
E5209	\$208,900	4	1	\$208,900	N/A	B	5261
P0059	\$209,400	3	1	\$209,400	0.0%	B	5661
P0060	\$209,400	3	24	\$8,725	83.3%	B	5661
E0160	\$212,000	3	25	\$8,480	96%	H	5259
P1046	\$212,500	4	1	\$212,500	0.0%	B	5262
W0221	\$214,500	3	131	\$1,637	77%	A	4858

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
E5098	\$214,500	4	13	\$16,500	N/A	H	5159
P1193	\$214,600	4	1	\$214,600	0.0%	B	5165
W0287	\$215,600	3	28	\$7,700	96%	G	4958
P1035	\$216,000	4	1	\$216,000	0.0%	B	5567
E5069	\$217,000	4	28	\$7,750	N/A	B	5262
E5136	\$218,200	5	4	\$54,550	N/A	A	5160
C0402	\$219,400	3	1	\$219,400	0%	D	5353
H1020	\$219,600	4	54	\$4,067	89%	B	5560
W0271	\$219,600	3	3	\$73,200	0%	G	5056
D0086	\$219,700	3	1	\$219,700	0%	D	5355
P0077	\$220,700	3	1	\$220,700	0.0%	B	5561
H1019	\$221,600	4	63	\$3,517	89%	B	5560
C0699	\$223,700	3	76	\$2,943	97%	E	5453
P1224	\$225,600	4	1	\$225,600	0.0%	B	5567
C0463	\$226,800	3	62	\$3,658	100%	E	5452
C0520	\$228,700	3	9	\$25,411	0%	D	5251
W1033	\$228,800	4	42	\$5,448	100%	H	5558
P1026	\$228,900	4	1	\$228,900	0.0%	B	5565
E0130	\$229,800	3	79	\$2,909	53%	A	5061, 5062, 5161, 5162
E5140	\$230,800	4	1	\$230,800	N/A	A	5060
W0238	\$232,300	3	129	\$1,801	100%	G	4957
C0639	\$234,800	3	103	\$2,280	100%	D	5050
H1116	\$235,400	4	22	\$10,700	77%	I	5758
D0020	\$240,800	3	54	\$4,459	98%	I	5556
P0087	\$241,100	3	11	\$21,918	100.0%	B	5562
E5026	\$245,000	4	43	\$5,698	N/A	H	5259
C0619	\$245,800	3	27	\$9,104	100%	D	5150
E5017	\$246,300	4	43	\$5,728	N/A	H	5259
D0347	\$246,800	3	61	\$4,046	0%	C	5153
H1089	\$247,100	4	30	\$8,237	97%	I	5659
D0158	\$248,100	3	11	\$22,555	0%	C	5154
P0146	\$249,200	3	1	\$249,200	0.0%	B	5264
P1154	\$249,500	3	27	\$9,241	100.0%	B	5562
W0243	\$250,300	3	128	\$1,955	94%	G	4957
E5137	\$253,200	4	11	\$23,018	N/A	A	5060
W0212	\$253,800	3	68	\$3,732	100%	G	4857
P0127	\$255,700	3	1	\$255,700	0.0%	B	5262
P1014	\$255,700	4	1	\$255,700	0.0%	B	5565
H1032	\$256,600	4	19	\$13,505	42%	H	5459

TABLE 6 ALL
2-YEAR COST - GROUP 4

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
P1047	\$257,800	4	1	\$257,800	0.0%	B	5262
E5097	\$257,900	4	35	\$7,369	N/A	H	5159
H1029	\$258,400	4	34	\$7,600	100%	B	5560
W0151	\$261,200	3	15	\$17,413	27%	G	4758
E5114	\$261,800	4	37	\$7,076	N/A	A	5162
W0297	\$265,900	3	5	\$53,180	0%	G	4958
C1010	\$267,400	4	51	\$5,243	75%	E	5755
P1123	\$272,000	3	124	\$2,194	99.2%	B	5461
W0327	\$273,700	3	1	\$273,700	1%	A	4958
D0921	\$276,700	3	279	\$992	0%	G	4756
H1017	\$276,700	4	41	\$6,749	100%	B	5460
P1194	\$276,900	4	1	\$276,900	0.0%	B	5265
W0475	\$278,600	3	62	\$4,494	97%	B	5457
C0403	\$278,700	3	1	\$278,700	0%	D	5353
H1036	\$280,500	4	73	\$3,842	86%	B	5459
C1011	\$280,600	4	27	\$10,393	33%	E	5755
E5179	\$281,300	4	31	\$9,074	N/A	A	4961
C0405	\$281,800	3	1	\$281,800	0%	D	5453
E5043	\$282,000	4	40	\$7,050	N/A	B	5361
E5203	\$283,700	4	1	\$283,700	N/A	B	5261
H0129	\$284,400	3	304	\$936	94%	B	5459
C1046	\$289,400	4	19	\$15,232	0%	E	5753
D0416	\$291,200	3	2	\$145,600	0%	C	5053
W1034	\$291,600	4	69	\$4,226	100%	H	5558
P1204	\$293,400	4	1	\$293,400	0.0%	B	5565
C1026	\$293,700	4	6	\$48,950	0%	I	5654
H1122	\$295,900	4	6	\$49,317	0%	I	5658
H1027	\$296,000	4	46	\$6,435	100%	B	5560
E5050	\$297,300	4	23	\$12,926	N/A	B	5261, 5361
C1036	\$297,600	4	3	\$99,200	0%	E	5654
D7044	\$300,600	3	17	\$17,682	0%	F	4955
C0332	\$302,000	3	24	\$12,583	92%	J	5654
H1073	\$302,400	4	5	\$60,480	0%	I	5659
D0486	\$302,500	3	4	\$75,625	0%	C	5053
E5130	\$302,600	4	15	\$20,173	N/A	A	5160
W0299	\$303,700	3	10	\$30,370	0%	A	4958
C0407	\$305,700	3	3	\$101,900	0%	D	5453
P1040	\$306,100	4	1	\$306,100	0.0%	B	5365
H0064	\$307,700	3	6	\$51,283	0%	B	5658
C0574	\$308,400	3	105	\$2,937	100%	D	5251

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
W0460	\$308,500	3	79	\$3,905	0%	H	5357
H1087	\$310,700	4	20	\$15,535	0%	I	5659
D0596	\$310,800	3	134	\$2,319	0%	F	4954
P1205	\$311,500	4	1	\$311,500	0.0%	B	5565
D0048	\$313,200	3	53	\$5,909	72%	I	5555
C1025	\$313,800	4	4	\$78,450	0%	I	5654
E5118	\$315,000	5	4	\$78,750	N/A	B	5162
D0741	\$316,600	3	163	\$1,942	0%	F	4854
W0430	\$317,300	3	59	\$5,378	14%	G	5158
E5002	\$320,100	4	48	\$6,669	N/A	H	5358
H1136	\$320,400	4	1	\$320,400	0%	I	5757
C1337	\$322,000	4	1	\$322,000	0%	D	5353
C1338	\$322,000	4	1	\$322,000	0%	D	5353
P0227	\$324,200	3	1	\$324,200	0.0%	A	4965
H0018	\$324,300	3	1	\$324,300	0%	I	5758
H1024	\$326,800	4	70	\$4,669	99%	B	5560
H1099	\$327,600	4	16	\$20,475	0%	I	5658
E5204	\$329,000	4	1	\$329,000	N/A	B	5261
P1041	\$329,600	4	1	\$329,600	0.0%	B	5365
C0487	\$332,300	3	1	\$332,300	0%	D	5352
E5155	\$332,800	4	148	\$2,249	N/A	A	4960
W1036	\$333,000	4	115	\$2,896	84%	G	4857
W0349	\$334,000	3	76	\$4,395	0%	A	5058
C1035	\$336,800	4	4	\$84,200	0%	E	5754
W0367	\$336,800	3	43	\$7,833	0%	A	5059
W0172	\$337,700	3	130	\$2,598	100%	G	4750
C1210	\$338,100	4	92	\$3,675	99%	D	5150
P1097	\$341,400	4	1	\$341,400	1.0%	B	5662
E5145	\$341,500	5	13	\$26,269	N/A	A	5063, 5163
P1120	\$342,100	3	52	\$6,579	84.6%	B	5562
W0133	\$346,500	3	249	\$1,392	0%	C	5056
H1018	\$348,400	4	53	\$6,574	92%	B	5460
E5183	\$348,500	5	9	\$38,722	N/A	A	4961
H0115	\$349,600	3	86	\$4,065	84%	B	5560
W0324	\$351,900	3	30	\$11,730	97%	A	4959
D0586	\$354,900	3	103	\$3,446	0%	F	4954
W0434	\$355,400	3	219	\$1,623	94%	G	5158
C1249	\$358,000	4	44	\$8,136	43%	C	5052
E5074	\$358,400	4	57	\$6,288	N/A	A, B	5160, 5260, 5261

TABLE 6 ALL
2-YEAR COST - GROUP 4

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
E5008	\$359,000	4	40	\$8,975	N/A	H	5359, 5459
C0300	\$359,400	3	25	\$14,376	4%	E	5752
E0342	\$361,900	3	18	\$20,106	39%	H	5360
P1208	\$362,300	4	1	\$362,300	0.0%	B	5565
H1059	\$364,600	4	51	\$7,149	61%	B	5459
H0054	\$366,200	3	175	\$2,093	87%	I	5659
E5082	\$368,300	5	6	\$61,383	N/A	B	5261
D0488	\$368,500	3	6	\$61,417	0%	C	5053
P1015	\$369,300	4	1	\$369,300	0.0%	B	5565
C1214	\$370,000	4	30	\$12,333	73%	D	5150
E5121	\$371,900	4	1	\$371,900	N/A	A	5162
P1190	\$374,500	4	1	\$374,500	0.0%	A	4965
H1054	\$375,100	4	58	\$6,467	88%	B	5559
P1242	\$380,700	4	1	\$380,700	96.0%	B	5563
P1022	\$380,900	4	1	\$380,900	0.0%	B	5565
P1021	\$382,400	4	1	\$382,400	0.0%	B	5565
W0180	\$383,500	3	18	\$21,306	17%	G	4858
E0906	\$386,700	3	52	\$7,437	100%	A	5162
W0380	\$388,600	3	73	\$5,323	97%	A	5058
W0619	\$389,200	3	209	\$1,862	9%	G	5157
D0014	\$390,200	3	5	\$78,040	20%	I	5556
P0126	\$392,000	3	1	\$392,000	0.0%	B	5262
W0135	\$393,600	3	90	\$4,373	1%	C	5056
P1206	\$393,900	4	1	\$393,900	0.0%	B	5565
C0600	\$399,500	3	126	\$3,171	100%	D	5150
W0523	\$403,600	3	31	\$13,019	35%	A	5058
D0850	\$404,700	3	19	\$21,300	0%	D	5455
E5154	\$404,800	4	132	\$3,067	N/A	A	4960
W0268	\$405,000	3	178	\$2,275	6%	G	4957
P1197	\$408,300	4	1	\$408,300	0.0%	B	5263
E5196	\$409,100	5	1	\$409,100	N/A	A	4961
P1192	\$411,500	4	1	\$411,500	0.0%	A	5165
E5139	\$418,100	5	20	\$20,905	N/A	A	5060
P1175	\$419,200	4	1	\$419,200	0.0%	B	5662
E5208	\$421,400	4	1	\$421,400	N/A	B	5261
P0167	\$422,500	3	1	\$422,500	0.0%	B	5265
P1038	\$426,600	4	1	\$426,600	0.0%	B	5365
W0465	\$428,400	3	41	\$10,449	0%	I	5357
D0056	\$430,100	3	423	\$1,017	4%	F	4854
P0063	\$433,300	3	1	\$433,300	0.0%	B	5662

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
E5070	\$434,000	4	112	\$3,875	N/A	B	5262
E5005	\$437,600	4	85	\$5,148	N/A	H	5358
E5180	\$443,000	4	12	\$36,917	N/A	A	4961
E5034	\$444,600	4	28	\$15,879	N/A	H	5360
W0369	\$444,900	3	126	\$3,531	99%	A	5059
H1015	\$447,500	4	52	\$8,606	92%	B	5460
P1096	\$447,800	4	1	\$447,800	0.0%	B	5662
E0771	\$448,200	3	3	\$149,400	0%	A	4960
E5001	\$448,400	4	114	\$3,933	N/A	H	5358
E5146	\$450,300	4	8	\$56,288	N/A	A	5060
W1042	\$450,400	4	1	\$450,400	1%	G	5157
H1058	\$460,700	4	16	\$28,794	0%	H	5459
D0024	\$464,000	3	93	\$4,989	69%	I	5556
P1020	\$467,100	4	1	\$467,100	0.0%	B	5565
C1330	\$468,000	4	1	\$468,000	0%	E	5552
W0476	\$468,000	3	196	\$2,388	79%	B	5457
P1029	\$471,200	4	1	\$471,200	0.0%	B	5567
D0091	\$474,800	3	5	\$94,960	0%	D	5355
D0039	\$481,000	3	51	\$9,431	41%	I	5555
P0131	\$482,100	3	1	\$482,100	0.0%	B	5262
W0428	\$483,700	3	365	\$1,325	4%	G	5158
E5027	\$484,600	4	12	\$40,383	N/A	H	5259
W0329	\$485,000	3	9	\$53,889	0%	A	4958
E0733	\$488,300	3	4	\$122,075	0%	A	5060, 5061
E0928	\$491,700	3	93	\$5,287	0%	A	5162
E0245	\$498,200	3	98	\$5,084	97%	H	5259
E5068	\$500,100	4	220	\$2,273	N/A	B	5262
H0082	\$502,800	3	5	\$100,560	0%	B	5658
D0892	\$503,700	3	8	\$62,963	0%	D	5354
H0065	\$505,400	3	69	\$7,325	0%	B	5658
P1007	\$505,500	4	1	\$505,500	0.0%	B	5165
W0253	\$506,400	3	294	\$1,722	0%	G	4958
D0597	\$507,100	3	21	\$24,148	33%	F	4954
W0477	\$511,900	3	30	\$17,063	0%	I	5557
W0464	\$512,300	3	114	\$4,494	38%	I	5357
W0193	\$513,500	3	142	\$3,616	100%	G	4857
P0147	\$522,800	3	1	\$522,800	0.0%	B	5365
W0379	\$522,800	3	221	\$2,366	99%	A	5058
W0215	\$524,700	3	23	\$22,813	48%	A	4858
P1189	\$526,800	4	1	\$526,800	0.0%	A	4965

TABLE 6 ALL
2-YEAR COST - GROUP 4

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
E5119	\$527,400	4	319	\$1,653	N/A	B	5162
W0214	\$527,700	3	21	\$25,129	0%	A	4858
P1018	\$528,000	4	1	\$528,000	0.0%	B	5565
P0119	\$528,700	3	1	\$528,700	0.0%	B	5565
E5138	\$531,100	4	6	\$88,517	N/A	A	5060
C0665	\$531,700	3	7	\$75,957	0%	C	5152
E5117	\$536,600	4	15	\$35,773	N/A	A	5162
E5083	\$540,000	5	14	\$38,571	N/A	B	5261
E5084	\$543,300	5	30	\$18,110	N/A	B	5261
W0269	\$543,800	3	135	\$4,028	0%	G	4957
H1028	\$546,100	4	89	\$6,136	100%	B	5560
E0234	\$546,600	3	12	\$45,550	0%	H	5159
D0787	\$547,000	3	12	\$45,583	0%	F	4855
P1037	\$553,900	4	1	\$553,900	0.0%	B	5365
D0007	\$561,400	3	221	\$2,540	57%	I	5656
E5021	\$561,600	4	69	\$8,139	N/A	H	5259
E0512	\$561,900	3	34	\$16,526	0%	A	5161
D1303	\$562,000	3	17	\$33,059	24%	D	5455
C1056	\$570,300	4	19	\$30,016	5%	E	5653
D0511	\$573,300	3	7	\$81,900	0%	F	5155
C1173	\$576,200	4	10	\$57,620	0%	D	5352
W0656	\$577,900	3	2,222	\$260	91%	I	5557
E5000	\$578,900	4	18	\$32,161	N/A	H	5358
C0478	\$594,300	3	2	\$297,150	50%	E	5552
P0151	\$595,100	3	1	\$595,100	0.0%	B	5365
P1023	\$603,000	4	1	\$603,000	0.0%	B	5565
D0932	\$605,100	3	11	\$55,009	18%	F	4952
W0138	\$606,100	3	65	\$9,325	2%	C	5056
E5087	\$607,600	4	54	\$11,252	N/A	B	5261
H1108	\$608,800	4	2	\$304,400	0%	I	5758
C0480	\$611,000	3	4	\$152,750	0%	E	5553
C1006	\$613,600	4	3	\$204,533	0%	I	5655
W0486	\$614,700	3	429	\$1,433	39%	H	5458
C1105	\$619,600	4	22	\$28,164	0%	E	5554
E5033	\$619,600	4	24	\$25,817	N/A	H	5360
P1101	\$623,700	4	1	\$623,700	88.0%	B	5561
D0114	\$625,000	3	97	\$6,443	2%	C	5255
H1130	\$626,800	4	12	\$52,233	0%	B	5658
P0149	\$632,200	3	1	\$632,200	0.0%	B	5365
E5120	\$637,100	5	6	\$106,183	N/A	B	5162, 5163

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
D0536	\$637,800	3	327	\$1,950	0%	C, F	5055
W0703	\$641,600	3	41	\$15,649	0%	I	5457
E0735	\$641,700	3	35	\$18,334	34%	A	5060, 5061
E5171	\$647,400	5	24	\$26,975	N/A	A	4961
E5088	\$649,000	4	478	\$1,358	N/A	B	5261
W0282	\$659,300	3	73	\$9,032	100%	G	4957
P1016	\$664,200	4	1	\$664,200	0.0%	B	5565
P0148	\$669,100	3	1	\$669,100	0.0%	B	5365
W0385	\$669,100	3	108	\$6,195	100%	G	4959
E5190	\$675,900	4	14	\$48,279	N/A	A	5061
H0019	\$679,300	3	26	\$26,127	31%	I	5758
C1058	\$684,400	4	27	\$25,348	0%	I	5653
E5167	\$684,400	4	187	\$3,660	N/A	A	4960, 4961
D0880	\$690,200	3	83	\$8,316	49%	I	5556
W0320	\$691,100	3	72	\$9,599	100%	A	4959
P1009	\$691,300	4	1	\$691,300	0.0%	B	5465
W1044	\$696,000	4	20	\$34,800	100%	G	5257
C1042	\$705,700	4	63	\$11,202	0%	E	5653
W0191	\$706,000	3	148	\$4,770	97%	G	4857
D0467	\$709,300	3	345	\$2,056	0%	C	5052
E5178	\$714,900	4	78	\$9,165	N/A	A	4961
P0104	\$725,400	3	1	\$725,400	0.0%	B	5465
E5126	\$731,700	4	30	\$24,390	N/A	A	5059
P0001	\$741,800	3	11	\$67,436	0.0%	I	5858
W0259	\$743,800	3	21	\$35,419	0%	G	4958
C1142	\$744,400	4	29	\$25,669	62%	E	5452
H0046	\$744,500	3	44	\$16,920	20%	I	5659
P1017	\$745,300	4	1	\$745,300	0.0%	B	5565
P0058	\$751,400	3	231	\$3,253	97.0%	B	5661
H1138	\$761,100	4	22	\$34,595	0%	B	5657
D0456	\$767,600	3	240	\$3,198	0%	C	5053
P0091	\$769,600	3	39	\$19,733	61.5%	B	5562
E5065	\$772,800	4	111	\$6,962	N/A	B	5262
E5194	\$773,800	4	273	\$2,834	N/A	A, B	5162
E5113	\$774,400	5	272	\$2,847	N/A	A	5162
E5086	\$775,500	4	77	\$10,071	N/A	B	5261
W0220	\$779,500	3	434	\$1,796	41%	A	4858
W0310	\$780,800	3	162	\$4,820	83%	A	4959
E5085	\$784,100	4	43	\$18,235	N/A	B	5261
P0031	\$785,300	3	1	\$785,300	0.0%	I	5660

**TABLE 6 ALL
2-YEAR COST - GROUP 4**

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
P1001	\$785,500	4	1	\$785,500	0.0%	B	5566
C1031	\$787,000	4	236	\$3,335	68%	E	5754
P0139	\$788,800	3	1	\$788,800	0.0%	B	5264
E0560	\$794,400	3	70	\$11,349	3%	A	5061, 5062
D0240	\$800,500	3	155	\$5,165	60%	C	5152
E5161	\$802,900	4	41	\$19,583	N/A	A	4960
P0165	\$805,000	3	1	\$805,000	0.0%	B	5265
E5104	\$812,500	5	8	\$101,563	N/A	A	5161
C0603	\$815,700	3	347	\$2,351	96%	D	5150
P1203	\$817,700	4	1	\$817,700	0.0%	B	5465
W0618	\$818,400	3	98	\$8,351	0%	G	5157
C1199	\$820,000	4	136	\$6,029	40%	D	5150
W0438	\$822,700	3	991	\$830	100%	G	5257
P0032	\$824,100	3	1	\$824,100	0.0%	I	5660
P1184	\$824,600	4	1	\$824,600	0.0%	I	4965
E5166	\$829,500	4	248	\$3,345	N/A	A	4960, 4961
E0746	\$833,400	3	8	\$104,175	0%	A	5059
P1235	\$836,400	4	1	\$836,400	0.0%	B	5567
C0621	\$843,900	3	122	\$6,917	99%	D	5150
W0487	\$844,800	3	80	\$10,560	31%	H	5457
W0315	\$848,300	3	144	\$5,891	78%	A	4959
E0525	\$848,400	3	161	\$5,270	53%	A	5061, 5161
C0583	\$850,100	3	4	\$212,525	100%	D	5150
P1179	\$858,700	3	3	\$286,233	33.3%	I	5661
W0429	\$859,000	3	220	\$3,905	0%	G	5158
H1069	\$864,600	4	9	\$96,067	0%	B	5559
P1068	\$870,500	3	12	\$72,542	91.7%	I	5760
W0223	\$874,700	3	152	\$5,755	100%	G	4857
P1149	\$879,400	3	48	\$18,321	100.0%	I	5758
P1028	\$887,900	4	1	\$887,900	0.0%	B	5567
W0219	\$893,500	3	1	\$893,500	1%	A	4858
P0006	\$894,200	3	312	\$2,866	91.0%	B	5858
W0218	\$901,900	3	1	\$901,900	0%	A	4858
P1030	\$904,100	4	1	\$904,100	0.0%	B	5567
D7045	\$910,400	3	11	\$82,764	0%	F	4955
H1070	\$936,800	4	2	\$468,400	0%	B	5559
E0084	\$938,300	3	27	\$34,752	67%	A, H	5159, 5160, 5259
D0779	\$938,900	3	110	\$8,535	36%	F	4854
P1223	\$940,400	4	1	\$940,400	0.0%	B	5262

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
P1003	\$942,800	4	1	\$942,800	0.0%	B	5565
H1141	\$943,600	4	1	\$943,600	0%	I	5657
C0587	\$945,000	3	301	\$3,140	76%	D	5250
P1019	\$945,400	4	1	\$945,400	0.0%	B	5565
D0891	\$951,700	3	13	\$73,208	0%	D	5354
W0252	\$964,800	3	188	\$5,132	97%	G	4958
C1116	\$965,500	4	14	\$68,964	43%	E	5552
P1087	\$967,500	3	92	\$10,516	84.8%	I	5660
W0217	\$969,400	3	147	\$6,595	54%	A	4858
P1171	\$975,400	4	1	\$975,400	0.0%	B	5661
W0364	\$977,700	3	86	\$11,369	100%	A	5059
W0454	\$979,000	3	119	\$8,227	71%	H	5357
H1072	\$982,900	4	48	\$20,477	0%	B	5659
D0625	\$987,400	3	99	\$9,974	0%	C	5053
C0623	\$1,000,100	3	130	\$7,693	98%	D	5150
D0558	\$1,002,000	3	264	\$3,795	4%	F	5055
P1140	\$1,002,200	3	19	\$52,747	63.2%	B	5363
E5109	\$1,003,000	4	128	\$7,836	N/A	B	5161
E0763	\$1,034,200	3	50	\$20,684	46%	A	4960, 4961, 5060, 5061
C1141	\$1,036,100	4	42	\$24,669	19%	E	5452
P1209	\$1,039,100	4	1	\$1,039,100	0.0%	B	5565
W0451	\$1,040,100	3	116	\$8,966	34%	H	5357
W0457	\$1,042,400	3	168	\$6,205	30%	H	5357
H1013	\$1,048,000	4	188	\$5,574	99%	B	5460
P0134	\$1,057,900	3	1	\$1,057,900	0.0%	B	5262
W0225	\$1,058,800	3	183	\$5,786	92%	G	4857
W0549	\$1,063,600	3	32	\$33,238	0%	C	5156
W0239	\$1,064,500	3	224	\$4,752	100%	G	4957
P0089	\$1,069,100	3	76	\$14,067	59.2%	B	5563
P1005	\$1,070,300	4	1	\$1,070,300	0.0%	B	5565
E5168	\$1,076,200	4	24	\$44,842	N/A	A	4961, 5061
H1055	\$1,076,700	4	193	\$5,579	96%	B	5559
C0617	\$1,078,600	3	10	\$107,860	100%	D	5150
C0625	\$1,083,400	3	162	\$6,688	99%	D	5150
W0550	\$1,091,400	3	21	\$51,971	0%	C	5156
C1222	\$1,096,000	4	17	\$64,471	0%	D	5251
C1191	\$1,098,200	4	6	\$183,033	0%	D	5351
E5116	\$1,115,500	5	374	\$2,983	N/A	A, B	5162
H1053	\$1,119,400	4	16	\$69,963	25%	B	5559

**TABLE 6 ALL
2-YEAR COST - GROUP 4**

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
E5192	\$1,119,700	5	30	\$37,323	N/A	A	5061
P0201	\$1,121,300	3	1	\$1,121,300	0.0%	B	5265
E5163	\$1,122,900	4	219	\$5,127	N/A	A	4960
H1074	\$1,123,900	4	27	\$41,626	7%	I	5659
E5175	\$1,130,100	5	7	\$161,443	N/A	A	4961
E5211	\$1,140,000	4	1	\$1,140,000	N/A	A	5063
D0087	\$1,147,600	3	6	\$191,267	0%	D	5355
D0740	\$1,165,400	3	161	\$7,239	2%	F	4854
E0231	\$1,173,600	3	44	\$26,673	0%	H	5159, 5259
P0222	\$1,176,400	3	1	\$1,176,400	0.0%	A	4965
P1195	\$1,199,800	4	1	\$1,199,800	0.0%	B	5262
C1206	\$1,211,700	4	9	\$134,633	67%	D	5150
E5170	\$1,225,900	5	12	\$102,158	N/A	A	4961
W0352	\$1,230,300	3	124	\$9,922	7%	A	5058
O0531	\$1,231,000	3	17	\$72,412	59%	D	5252
C1019	\$1,236,300	4	60	\$20,605	3%	I	5655
W0551	\$1,241,600	3	264	\$4,703	0%	C	5156
H1016	\$1,264,600	4	267	\$4,736	99%	B	5460
H1065	\$1,274,400	4	249	\$5,118	90%	H	5559
E0743	\$1,298,400	3	18	\$72,133	0%	A	5059, 5060, 5159, 5160
P1156	\$1,307,800	4	1	\$1,307,800	0.0%	B	5662
P1202	\$1,331,700	4	1	\$1,331,700	0.0%	B	5465
P0159	\$1,331,900	3	1	\$1,331,900	0.0%	B	5365
C1313	\$1,332,000	4	1	\$1,332,000	0%	E	5751
P1045	\$1,355,300	4	1	\$1,355,300	0.0%	B	5262
W0507	\$1,396,100	3	71	\$19,663	24%	G	5158
E0762	\$1,401,100	3	20	\$70,055	0%	A	4960, 5060
W0449	\$1,405,000	3	455	\$3,088	100%	G	5257
P1089	\$1,420,300	4	1	\$1,420,300	13.0%	I	5660
P1027	\$1,425,500	4	1	\$1,425,500	0.0%	B	5567
C0001	\$1,435,600	3	30	\$47,853	27%	I	5655
P1008	\$1,448,600	4	1	\$1,448,600	0.0%	B	5465
E5169	\$1,484,200	5	31	\$47,877	N/A	A	4961
P1186	\$1,490,800	4	1	\$1,490,800	0.0%	A	4965
W0491	\$1,495,800	3	1	\$1,495,800	1%	H	5459
P0007	\$1,503,000	3	362	\$4,152	85.6%	B	5859
H1077	\$1,507,400	4	12	\$125,617	0%	I	5659
E5188	\$1,517,700	4	50	\$30,354	N/A	A	5061
O0023	\$1,522,800	3	165	\$9,229	67%	I	5654

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
H1009	\$1,543,100	4	511	\$3,020	99%	B	5560
W0427	\$1,543,700	3	13	\$118,746	0%	G	5158
C0002	\$1,547,300	3	565	\$2,739	91%	E	5655
W0443	\$1,557,200	3	555	\$2,806	100%	G	5257
W0365	\$1,572,800	3	44	\$35,745	20%	A	5059
E0073	\$1,574,700	3	39	\$40,377	18%	A, H	5159, 5259
W0480	\$1,587,700	3	793	\$2,002	91%	I	5558
H1004	\$1,592,900	4	191	\$8,340	98%	H	5460
W0386	\$1,594,200	3	324	\$4,920	96%	G	4959
P0152	\$1,595,800	3	1	\$1,595,800	0.0%	B	5365
H1066	\$1,606,400	4	1	\$1,606,400	0%	H	5458
H0103	\$1,631,500	3	834	\$1,956	94%	H	5558
C1240	\$1,636,500	4	143	\$11,444	73%	D	5151
H1076	\$1,648,100	4	122	\$13,509	58%	I	5659
H0138	\$1,656,700	3	45	\$36,816	16%	H	5459
E5187	\$1,658,300	4	98	\$16,921	N/A	A	4961, 5061
H1064	\$1,667,700	4	313	\$5,328	97%	B	5559
P0142	\$1,687,400	3	1	\$1,687,400	0.0%	B	5264
E5177	\$1,699,600	5	7	\$242,800	N/A	A	4961
C1109	\$1,702,600	4	1	\$1,702,600	0%	E	5553
E5176	\$1,703,200	5	12	\$141,933	N/A	A	4961
H1082	\$1,710,900	4	16	\$106,931	56%	I	5759
C0631	\$1,715,900	3	171	\$10,035	99%	D	5150
W0257	\$1,716,200	3	1	\$1,716,200	1%	G	4958
E0731	\$1,775,100	3	105	\$16,906	90%	A	5060, 5061
W0325	\$1,777,500	3	90	\$19,750	46%	A	4959
H1091	\$1,791,100	4	29	\$61,762	10%	B	5659
E5172	\$1,795,000	5	236	\$7,606	N/A	A	4961
P0206	\$1,813,000	3	1	\$1,813,000	0.0%	B	5266
D0559	\$1,826,300	3	69	\$26,468	0%	F	5055
W0450	\$1,836,400	3	267	\$6,878	86%	H	5357
H1003	\$1,838,000	4	155	\$11,858	63%	H	5460
P1004	\$1,878,500	4	1	\$1,878,500	0.0%	B	5565
P0136	\$1,898,500	3	1	\$1,898,500	0.0%	B	5263
P1234	\$1,901,400	4	1	\$1,901,400	0.0%	B	5567
D8042	\$1,904,800	3	50	\$38,096	39%	F, G	4855
C0593	\$1,906,100	3	317	\$6,013	96%	D	5150
P1006	\$1,910,100	4	1	\$1,910,100	0.0%	B	5565
W0435	\$1,931,300	3	48	\$40,235	0%	G	5258
C1287	\$1,962,400	4	1	\$1,962,400	0%	E	5852

TABLE 6 ALL
2-YEAR COST - GROUP 4

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
W0353	\$1,981,200	3	230	\$8,614	73%	A	5058
H1100	\$1,983,600	4	39	\$50,862	44%	I	5659
C1114	\$2,015,000	4	68	\$29,632	21%	D	5551
E0236	\$2,016,000	3	77	\$26,182	21%	H	5159, 5160
W0423	\$2,092,900	3	323	\$6,480	61%	G	5157
C1017	\$2,111,200	4	4	\$527,800	0%	E	5655
C1179	\$2,113,100	4	209	\$10,111	89%	D	5252
C1294	\$2,141,000	2	1	\$2,141,000	0%	D	5251
E5191	\$2,168,200	5	58	\$37,383	N/A	A	5061
P1201	\$2,179,200	4	1	\$2,179,200	0.0%	B	5465
C1277	\$2,182,800	4	64	\$34,106	8%	D	5150
P1236	\$2,198,100	4	1	\$2,198,100	0.0%	B	5567
C1327	\$2,264,000	4	1	\$2,264,000	0%	E	5552
P1072	\$2,311,800	4	1	\$2,311,800	0.0%	I	5761
W0387	\$2,327,200	3	143	\$16,274	57%	G	4959
W0302	\$2,332,200	3	273	\$8,543	0%	A	4959
P1031	\$2,391,600	4	1	\$2,391,600	0.0%	B	5567
W0155	\$2,431,900	3	674	\$3,608	70%	G	4758
C1052	\$2,433,000	4	227	\$10,718	8%	E	5752
P1010	\$2,442,200	4	1	\$2,442,200	0.0%	B	5465
H1067	\$2,497,500	4	570	\$4,382	98%	B	5458
W0469	\$2,545,500	3	673	\$3,782	74%	H	5458
P1011	\$2,629,600	4	1	\$2,629,600	0.0%	B	5465
W0312	\$2,633,000	3	180	\$14,628	26%	A	4959
W0436	\$2,660,600	3	428	\$6,216	71%	G	5257
E5164	\$2,716,700	5	5	\$543,340	N/A	A	4960
E0526	\$2,743,800	C.N.A.	48	\$57,163	0%	A	5062, 5161
E5210	\$2,822,000	4	1	\$2,822,000	N/A	A	5063
W0614	\$2,842,600	3	152	\$18,701	1%	G	5157
H1140	\$2,864,200	4	2	\$1,432,100	0%	I	5657
E0240	\$2,896,100	3	81	\$35,754	0%	H	5159
H1014	\$2,983,600	4	544	\$5,485	98%	H	5460
W0478	\$3,046,700	3	83	\$36,707	0%	I	5557
W0210	\$3,134,200	3	373	\$8,403	9%	G	4857
H1137	\$3,197,400	4	16	\$199,838	13%	B	5657
H1030	\$3,536,800	4	270	\$13,099	99%	B	5560
E0764	\$3,645,500	3	44	\$82,852	0%	A	4961, 5060, 5061
P1013	\$3,685,200	4	1	\$3,685,200	0.0%	B	5465
P1196	\$3,712,500	4	1	\$3,712,500	0.0%	B	5263

Outfall System ID	2-Year CIP Cost	2-Year Category	Number of Addresses	Cost per Address	Percent of System Single Family	City Council District	Facet Number
C1096	\$3,745,200	4	35	\$107,006	6%	E	5652
W1035	\$3,836,200	4	111	\$34,560	0%	G	4757
P1098	\$3,853,700	4	1	\$3,853,700	0.0%	B	5662
C0019	\$3,942,000	3	67	\$58,836	10%	I	5653
H0086	\$3,949,000	3	859	\$4,597	89%	B	5558
C1007	\$4,086,700	4	8	\$510,838	0%	E	5655
P1215	\$4,284,800	4	1	\$4,284,800	0.0%	B	5566
H1008	\$4,969,600	4	562	\$8,843	88%	B	5560
P1124	\$5,295,200	4	709	\$7,469	77.6%	H	5461
W0489	\$5,464,500	3	41	\$133,280	0%	A	5158
W0391	\$5,651,100	3	352	\$16,054	59%	A	4959
W0322	\$6,323,600	3	572	\$11,055	65%	A	4959
C1207	\$6,814,400	4	101	\$67,469	59%	D	5251
W0381	\$7,090,300	3	1,329	\$5,335	71%	A	4959
C1223	\$7,491,000	4	47	\$159,383	0%	D	5252
E5105	\$8,244,100	5	95	\$86,780	N/A	A	5161
W0484	\$8,450,400	3	1,704	\$4,959	96%	I	5558
W0209	\$8,814,800	3	1,238	\$7,120	8%	G	4858
C1097	\$9,802,400	4	47	\$208,562	43%	E	5552
W0485	\$9,958,800	3	3,695	\$2,695	96%	I	5458
TOTAL	\$565,008,200						

TABLE 7 ALL
5-YEAR COST - GROUP 1

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
Sorted by Additional for 5-Year Storm						
P0067	\$492,200	\$493,700	\$1,500	1	B	566E
E0401	\$2,244,200	\$2,248,000	\$3,800	1	A	5260
E0101	\$61,700	\$66,800	\$5,100	1	A	5160
H0001	\$158,100	\$165,300	\$7,200	1	I	5757
P1081	\$546,400	\$555,800	\$9,400	1	B	5661
D0316	\$201,800	\$211,800	\$10,000	1	C	5154
H0044	\$259,200	\$270,200	\$11,000	1	I	5658
D0155	\$273,200	\$285,500	\$12,300	1	C	5254
C0500	\$260,500	\$273,200	\$12,700	1	D	5352
P1080	\$978,700	\$995,600	\$16,900	1	B	5661
D0212	\$742,700	\$761,800	\$19,100	1	C	5153
D0241	\$173,200	\$193,200	\$20,000	1	C	5152
C1043	\$162,400	\$182,600	\$20,200	2	E	5753
P1112	\$148,600	\$170,200	\$21,600	1	B	5561
W1021	\$1,394,000	\$1,418,900	\$24,900	2	A	5058
E0354	\$9,917,800	\$9,946,200	\$28,400	1	B, H	5361, 5362
E0302	\$204,200	\$234,800	\$30,600	1	H	5358, 5458
E5148	\$288,600	\$322,200	\$33,600	2	A	5060
P0100	\$220,500	\$255,000	\$34,500	1	H	5462
D0290	\$258,100	\$292,900	\$34,800	1	C	5153
C1212	\$533,000	\$568,600	\$35,600	2	D	5150
P0093	\$384,200	\$419,900	\$35,700	1	H	5461
P1157	\$333,100	\$369,900	\$36,800	1	B	5362
P1164	\$179,200	\$217,900	\$38,700	1	B	5562
W0197	\$1,431,100	\$1,472,500	\$41,400	1	G	4857
C0219	\$207,500	\$249,800	\$42,300	1	I	5653
D0085	\$720,100	\$764,900	\$44,800	1	D	5355
W0704	\$952,200	\$997,000	\$44,800	1	H	5457
P0033	\$625,000	\$678,100	\$53,100	1	B	5660
P0044	\$1,074,500	\$1,128,700	\$54,200	1	I	5661
W1030	\$438,300	\$495,500	\$57,200	2	H	5357
E5151	\$399,400	\$457,200	\$57,800	2	A	5060
C0174	\$3,137,900	\$3,195,800	\$57,900	1	E	5755
P1139	\$697,100	\$755,300	\$58,200	1	B	5362
D0917	\$671,300	\$730,200	\$58,900	1	F	4854
W1026	\$716,400	\$776,100	\$59,700	2	A	5159
P1113	\$155,800	\$218,900	\$63,100	1	B	5561
P1116	\$846,600	\$909,700	\$63,100	1	B	5561
P1143	\$623,600	\$688,300	\$64,700	1	B	5362
P0071	\$0	\$65,700	\$65,700	A	B	5561

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
E0730	\$1,282,300	\$1,349,700	\$67,400	1	A	5060
C0176	\$794,700	\$862,700	\$68,000	1	E	5754
W0600	\$305,000	\$374,100	\$69,100	1	G	5157
C0155	\$1,136,000	\$1,206,400	\$70,400	1	I	5655
W0107	\$0	\$74,500	\$74,500	A	C	5056
P1126	\$1,273,500	\$1,348,600	\$75,100	1	H	5461
C0149	\$1,836,400	\$1,915,800	\$79,400	1	I	5554
P0102	\$705,100	\$786,200	\$81,100	1	B	5462
W0682	\$946,000	\$1,028,600	\$82,600	1	D	5357
C1208	\$452,300	\$536,200	\$83,900	2	D	5150
P1114	\$212,600	\$298,700	\$86,100	1	B	5561
W0077	\$0	\$87,100	\$87,100	A	G	5056
D0660	\$1,142,400	\$1,230,800	\$88,400	1	F	4952
D1353	\$251,900	\$341,200	\$89,300	1	C	5254
P0066	\$272,300	\$364,500	\$92,200	1	B	5561
W0001	\$0	\$92,900	\$92,900	A	G	4757
W0624	\$1,092,600	\$1,188,900	\$96,300	1	G	5156
E5110	\$596,900	\$694,700	\$97,800	2	A	5161, 5162
C0264	\$0	\$102,400	\$102,400	A	E	5752
D0320	\$1,307,300	\$1,413,100	\$105,800	1	C	5153
D0056	\$975,400	\$1,083,200	\$107,800	1	D	5455
W1014	\$964,300	\$1,072,600	\$108,300	2	A	4958
C0546	\$892,600	\$1,004,400	\$111,800	1	D	5252
P1115	\$1,185,100	\$1,297,500	\$112,400	1	B	5561
D0323	\$968,300	\$1,080,800	\$112,500	1	C	5153
C0043	\$3,986,100	\$4,100,300	\$114,200	1	I	5554
P1130	\$646,600	\$762,000	\$115,400	1	B	5462
P0092	\$694,900	\$814,800	\$119,900	1	H	5461
P0076	\$1,549,400	\$1,670,600	\$121,200	1	B	5561
P1132	\$1,646,100	\$1,770,200	\$124,100	1	B	5462
D0398	\$126,600	\$253,100	\$126,500	1	C	5152
E0190	\$241,300	\$369,000	\$127,700	1	A	5260
P0083	\$967,500	\$1,100,500	\$133,000	1	B	5562
W1041	\$910,600	\$1,045,000	\$134,400	2	C	5156
C0525	\$59,900	\$194,400	\$134,500	1	D	5251
E5056	\$1,310,900	\$1,449,700	\$138,800	2	B	5261, 5262
C0655	\$1,044,100	\$1,185,400	\$141,300	1	D	5151
D0735	\$1,273,800	\$1,415,400	\$141,600	1	F	4854
P1128	\$882,600	\$1,030,500	\$147,900	1	B	5461
C0355	\$1,020,100	\$1,175,400	\$155,300	1	E	5653
E0328	\$3,529,300	\$3,685,900	\$156,600	1	H	5359

**TABLE 7 ALL
5-YEAR COST - GROUP 1**

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
D0382	\$1,298,900	\$1,455,700	\$156,800	1	C	5153
C0430	\$199,500	\$362,000	\$162,500	1	D	5451
P1127	\$1,083,400	\$1,262,700	\$179,300	1	H	5461
P1134	\$2,118,200	\$2,300,900	\$182,700	1	B	5362
D0899	\$1,492,600	\$1,678,200	\$185,600	1	F	4854
P1131	\$1,784,800	\$1,971,200	\$186,400	1	B	5462
E0738	\$2,017,200	\$2,206,300	\$189,100	1	A, H	5159, 5160
W0710	\$664,600	\$854,500	\$189,900	1	G	5256
P1075	\$3,413,000	\$3,606,200	\$193,200	1	B	5562
D0503	\$864,400	\$1,058,400	\$194,000	1	C	5052
D0113	\$2,355,200	\$2,552,600	\$197,400	1	C	5254
P0103	\$2,210,100	\$2,408,300	\$198,200	1	B	5464
E5112	\$1,301,200	\$1,499,900	\$198,700	2	A	5162
H1002	\$1,884,600	\$2,089,800	\$205,200	2	H	5460
E5195	\$1,481,600	\$1,692,300	\$210,700	2	B	5261, 5262
P1099	\$1,474,100	\$1,687,100	\$213,000	1	B	5661
D0718	\$643,700	\$859,800	\$216,100	1	F	4853
E5193	\$1,695,000	\$1,911,500	\$216,500	2	A	5062
C0649	\$576,000	\$793,100	\$217,100	1	D	5151
E0086	\$486,100	\$703,500	\$217,400	1	A	5160, 5260
E0010	\$3,057,900	\$3,277,700	\$219,800	1	H	5458
C0140	\$4,598,300	\$4,818,300	\$220,000	1	I	5554
W1024	\$2,139,700	\$2,361,200	\$221,500	2	A	5159
D0338	\$2,734,100	\$2,958,200	\$224,100	1	C	5153
E0157	\$686,300	\$912,800	\$226,500	1	A	5259
E0752	\$0	\$228,300	\$228,300	A	A	5059, 5060
E5066	\$2,189,400	\$2,419,000	\$229,600	2	B	5262
D0425	\$1,067,200	\$1,301,600	\$234,400	1	F	5054
W0804	\$1,780,800	\$2,018,300	\$237,500	1	I	5556
C0034	\$5,732,800	\$5,976,900	\$244,100	1	E	5653
W0708	\$0	\$246,100	\$246,100	A	G	5157
D0643	\$1,433,600	\$1,685,500	\$251,900	1	C	4952
P0072	\$55,500	\$311,600	\$256,100	1	B	5561
C0509	\$1,127,900	\$1,384,600	\$256,700	1	D	5252
P1122	\$1,785,800	\$2,043,500	\$257,700	1	H	5461
D0220	\$2,140,400	\$2,399,100	\$258,700	1	C	5153
D0192	\$1,092,700	\$1,361,400	\$268,700	1	C	5153
C0148	\$0	\$276,800	\$276,800	A	I	5554
E0311	\$373,400	\$660,400	\$287,000	1	H	5458, 5459
P1166	\$2,087,200	\$2,374,800	\$287,600	1	B	5562
D0188	\$2,757,600	\$3,047,200	\$289,600	1	C	5153

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
W0678	\$2,542,700	\$2,832,600	\$289,900	1	G	5257
E0539	\$2,552,700	\$2,863,300	\$310,600	1	A	5061
P1133	\$2,467,000	\$2,778,700	\$311,700	1	B	5362
P1162	\$2,027,500	\$2,346,200	\$318,700	1	B	5562
C0175	\$591,300	\$912,200	\$320,900	1	E	5754
C0054	\$4,689,100	\$5,016,000	\$326,900	1	D	5453
P0086	\$1,352,100	\$1,684,800	\$332,700	1	B	5561
H1001	\$3,571,600	\$3,910,700	\$339,100	2	H	5460
P1121	\$3,455,000	\$3,798,700	\$343,700	1	B	5562
E5093	\$2,824,200	\$3,177,300	\$353,100	2	B	5161, 5261
E0380	\$6,060,200	\$6,428,300	\$368,100	1	B	5361, 5362
D0756	\$0	\$372,900	\$372,900	A	F	4853
C1228	\$3,620,100	\$3,996,200	\$376,100	2	D	5152
D0807	\$393,200	\$775,900	\$382,700	1	G	4856
D0840	\$3,581,200	\$3,966,900	\$385,700	1	D	5454
W0108	\$0	\$387,700	\$387,700	A	C	5056
E0803	\$442,900	\$842,900	\$400,000	1	A	4959, 4960
W0224	\$3,932,200	\$4,339,200	\$407,000	1	G	4858
C1054	\$2,913,600	\$3,325,400	\$411,800	2	E	5752
D0180	\$4,006,100	\$4,419,200	\$413,100	1	C	5253
E0146	\$7,972,200	\$8,390,100	\$417,900	1	A, H	5259, 5359
D0518	\$2,337,800	\$2,757,100	\$419,300	1	F	5054
C0134	\$472,000	\$906,700	\$434,700	1	I	5555
P0053	\$3,595,900	\$4,039,600	\$443,700	1	B	5661
P1069	\$3,222,300	\$3,675,200	\$452,900	1	I	5760
C0125	\$771,300	\$1,244,700	\$473,400	1	I	5655
P0035	\$4,248,100	\$4,732,000	\$483,900	1	B	5560
W0148	\$0	\$491,500	\$491,500	A	G	4957
E0206	\$0	\$496,900	\$496,900	A	A	5062
D0134	\$399,200	\$916,100	\$516,900	1	C	5254
P1118	\$3,039,400	\$3,558,700	\$519,300	1	B	5562
C0315	\$1,029,100	\$1,548,900	\$519,800	1	E	5852
D0388	\$285,900	\$817,800	\$531,900	1	C	5152
C0055	\$0	\$547,700	\$547,700	A	D	5452
E0347	\$3,023,800	\$3,596,100	\$572,300	1	H	5360
P1051	\$3,508,500	\$4,113,700	\$605,200	1	I	5858
P1059	\$839,800	\$1,447,600	\$607,800	1	I	5759
C0035	\$7,800,700	\$8,409,500	\$608,800	1	I	5553
C0561	\$1,252,200	\$1,905,700	\$653,500	1	D	5251
H1010	\$5,325,700	\$5,984,700	\$659,000	2	H	5460
W0044	\$0	\$661,900	\$661,900	A	G	4957

**TABLE 7 ALL
5-YEAR COST - GROUP 1**

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
C0051	\$7,030,400	\$7,693,900	\$663,500	I	E	5453
W0711	\$1,048,100	\$1,716,100	\$668,000	I	G	5257
W0697	\$4,436,300	\$5,128,700	\$692,400	I	G	5156
W0699	\$3,624,400	\$4,317,500	\$693,100	I	C	5156
E0340	\$6,455,900	\$7,151,700	\$695,800	I	A, H	5359, 5360
C0409	\$0	\$713,800	\$713,800	A	D	5452
E0714	\$2,340,800	\$3,058,300	\$717,500	I	A	5160
W0667	\$0	\$724,200	\$724,200	A	H	5557
W0595	\$5,505,300	\$6,232,700	\$727,400	I	G	5157
D0037	\$3,600,100	\$4,353,600	\$753,500	I	I	5556
P1155	\$2,743,400	\$3,502,800	\$759,400	I	B	5562
E0379	\$5,814,500	\$6,581,500	\$767,000	I	B	5261, 5262, 5361, 5362
W0030	\$0	\$773,700	\$773,700	A	G	4957
D0549	\$0	\$782,300	\$782,300	A	F	5055
C0358	\$3,390,900	\$4,180,700	\$789,800	I	E	5553
H0013	\$1,826,600	\$2,638,100	\$811,500	I	I	5758
W0706	\$3,848,100	\$4,671,600	\$823,500	I	H	5457
E0776	\$358,700	\$1,185,000	\$826,300	I	A	5059, 5060
C0141	\$1,316,600	\$2,143,100	\$826,500	I	I	5554
E0035	\$158,500	\$1,039,100	\$880,600	I	H	5358
W0213	\$4,190,000	\$5,077,400	\$887,400	I	G	4858
W0245	\$3,115,700	\$4,005,000	\$889,300	I	G	4958
W0558	\$2,142,800	\$3,036,400	\$893,600	I	G	5156
E5039	\$6,601,500	\$7,517,600	\$916,100	2	A, B, H	5260, 5261, 5360, 5361
P1129	\$3,288,700	\$4,249,400	\$960,700	I	B	5461
D0876	\$5,872,000	\$6,842,300	\$970,300	I	I	5456
E0301	\$5,107,200	\$6,121,100	\$1,013,900	I	H	5358
W0010	\$145,800	\$1,242,200	\$1,096,400	I	G	4857
W0574	\$4,084,500	\$5,203,700	\$1,119,200	I	G	5157
W0032	\$0	\$1,194,200	\$1,194,200	A	G	4956
W0109	\$0	\$1,223,000	\$1,223,000	A	G	5056
C0151	\$784,000	\$2,037,500	\$1,253,500	I	I	5654
D0460	\$0	\$1,332,900	\$1,332,900	A	C	5052
E0058	\$2,499,300	\$3,860,800	\$1,361,500	I	A	5258, 5358
P1058	\$8,063,700	\$9,491,600	\$1,427,900	I	I	5759
E0350	\$6,204,300	\$7,641,000	\$1,436,700	I	H	5360, 5361, 5460, 5461
P0096	\$10,761,100	\$11,612,400	\$1,451,300	I	H	5461
C1139	\$12,693,200	\$14,159,400	\$1,466,200	2	D	5453

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
P0095	\$8,257,500	\$9,756,700	\$1,499,200	I	H	5461
C0475	\$554,600	\$2,076,100	\$1,521,500	I	D	5451
E0082	\$9,578,500	\$11,185,700	\$1,607,200	I	A	5259, 5260
C0052	\$2,216,200	\$3,840,300	\$1,624,100	I	E	5452
W0147	\$0	\$1,666,900	\$1,666,900	A	G	4956
W0047	\$0	\$1,910,700	\$1,910,700	A	G	4957
W0056	\$0	\$1,928,000	\$1,928,000	A	C	5055
W0117	\$0	\$1,949,400	\$1,949,400	A	C	5056
P0097	\$7,002,300	\$9,100,300	\$2,098,000	I	H	5461
C1111	\$20,179,700	\$22,534,100	\$2,354,400	2	E	5552
E0139	\$5,530,200	\$8,233,500	\$2,703,300	I	H	5358, 5359
C0383	\$22,750,800	\$25,467,000	\$2,716,200	I	D	5453
E0346	\$10,765,100	\$13,616,300	\$2,851,200	I	A, H	5260, 5360
W0626	\$0	\$2,938,500	\$2,938,500	A	G	5156
E0329	\$0	\$3,530,000	\$3,530,000	A	H	5359, 5459
E0369	\$23,604,500	\$27,256,900	\$3,652,400	I	B, H	5361, 5362
E0159	\$19,010,100	\$22,845,000	\$3,834,900	I	A	5259, 5260
W0005	\$658,500	\$4,504,600	\$3,846,100	I	G	4857
W0632	\$0	\$4,278,400	\$4,278,400	A	G	5256
E0312	\$18,185,000	\$22,668,900	\$4,483,900	I	H	5459
W0611	\$8,186,300	\$13,244,200	\$5,057,900	I	G	5156
E0337	\$2,355,700	\$8,805,100	\$6,449,400	I	H	5359, 5459
E0344	\$25,496,400	\$32,052,600	\$6,556,200	I	H	5360, 5460
W0573	\$14,421,500	\$21,488,700	\$7,067,200	I	G	5156
W0089	\$0	\$7,099,900	\$7,099,900	A	C	5056
W0686	\$23,419,000	\$31,010,100	\$7,591,100	I	I	5357
E0319	\$8,899,200	\$17,209,400	\$8,310,200	I	H	5358, 5359
W0014	\$2,921,200	\$25,589,300	\$22,668,100	I	G	4856
TOTAL	\$600,071,300	\$793,019,000	\$192,947,700			

**TABLE 8 ALL
5-YEAR COST - GROUP 2**

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
Sorted by Additional for 5-Year Storm						
H0112	\$0	\$1,100	\$1,100	A	B	5560
E5018	\$144,500	\$161,200	\$16,700	2	H	5259
E5029	\$169,000	\$192,800	\$23,800	2	A	5259, 5260
E0096	\$201,200	\$227,700	\$26,500	1	A	5160
H1060	\$247,200	\$288,900	\$41,700	2	B	5459
H1037	\$266,300	\$312,200	\$45,900	2	B	5459
H1052	\$338,400	\$395,300	\$56,900	2	B	5559
C0020	\$356,500	\$429,800	\$73,300	1	I	5654
H0094	\$355,900	\$432,700	\$76,800	1	B	5560
W1019	\$3,460,300	\$3,548,300	\$88,000	2	G	5059
W1029	\$732,900	\$834,000	\$101,100	2	A	5159
E5122	\$757,300	\$870,200	\$112,900	2	A	5162
H1006	\$1,402,000	\$1,515,800	\$113,800	2	H	5460
W0195	\$2,994,500	\$3,108,500	\$114,000	1	G	4857
H0092	\$1,259,500	\$1,374,200	\$114,700	1	B	5659
W0492	\$1,452,100	\$1,568,700	\$116,600	1	I	5557
W1025	\$546,400	\$664,600	\$118,200	2	A	5159
W0488	\$1,101,900	\$1,226,700	\$124,800	1	A	5059
W1027	\$1,228,200	\$1,363,500	\$135,300	2	A	5159
E0046	\$0	\$140,700	\$140,700	A	H	5258
W0474	\$1,218,600	\$1,411,000	\$192,400	1	H	5457
P1090	\$1,141,500	\$1,348,900	\$207,400	1	B	5662
E5107	\$1,635,000	\$1,846,200	\$211,200	2	A	5161
E5015	\$1,233,500	\$1,445,200	\$211,700	2	H	5259
E0036	\$2,109,100	\$2,339,400	\$230,300	1	G, H	5258, 5358
H0096	\$1,350,700	\$1,646,900	\$296,200	1	B	5559
W0174	\$1,610,400	\$1,934,800	\$324,400	1	G	4857
W0196	\$341,800	\$693,900	\$352,100	1	G	4857
W0530	\$1,575,700	\$1,955,100	\$379,400	1	H	5357
E0742	\$580,400	\$966,800	\$386,400	1	A	5060, 5160
W0019	\$0	\$386,500	\$386,500	A	G	4957
W0153	\$1,168,000	\$1,580,400	\$412,400	1	G	4757
E0310	\$272,700	\$876,400	\$603,700	1	H	5458
E0729	\$6,287,800	\$6,929,400	\$641,600	1	A	5060, 5061
E0034	\$7,028,800	\$7,802,200	\$773,400	1	H	5358, 5359
W0392	\$6,312,900	\$7,099,700	\$786,800	1	A	4959
C0476	\$1,205,500	\$2,014,100	\$808,600	1	D	5452
E0348	\$3,440,200	\$4,376,600	\$936,400	1	A, H	5360, 5361
W0033	\$0	\$1,379,200	\$1,379,200	A	G	4956
W0402	\$5,906,700	\$7,420,200	\$1,513,500	1	A	5059

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
E0716	\$8,755,600	\$10,283,300	\$1,527,700	1	A, H	5159, 5160
W0008	\$0	\$1,559,400	\$1,559,400	A	G	4857
W0263	\$1,812,700	\$4,215,300	\$2,402,600	1	G	4957
H0093	\$4,252,300	\$6,838,900	\$2,586,600	1	B	5560
W0479	\$15,304,400	\$18,366,200	\$3,061,800	1	I	5558
W0294	\$2,797,700	\$6,847,800	\$4,050,100	1	G	4958
W0403	\$25,267,900	\$29,997,700	\$4,729,800	1	A	5159
W0091	\$4,197,300	\$11,122,800	\$6,925,500	1	C	5056
E0907	\$1,371,800	\$8,887,600	\$7,515,800	1	B	5162, 5262
E0338	\$1,890,000	\$9,944,600	\$8,054,600	1	A, H	5259, 5260, 5359, 5360
E0756	\$0	\$8,552,300	\$8,552,300	A	A	5060
W0404	\$10,200,300	\$23,440,800	\$13,240,500	1	A	5159
TOTAL	\$137,283,400	\$214,166,500	\$76,883,100			

TABLE 9 ALL
5-YEAR COST - GROUP 3

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
Sorted by Additional for 5-Year Storm						
C0499	\$37,200	\$40,300	\$3,100	1	D	5351
C0524	\$117,100	\$121,200	\$4,100	1	D	5251
W0964	\$0	\$4,800	\$4,800	A	G	5157
E0331	\$130,100	\$141,600	\$11,500	2	A, H	5260
D0903	\$167,900	\$179,500	\$11,600	1	I	5556
C0411	\$416,400	\$428,700	\$12,300	1	D	5452
P0080	\$352,400	\$366,300	\$13,900	1	B	5561
D0810	\$324,900	\$338,900	\$14,000	1	G	4855
H1023	\$205,900	\$220,900	\$15,000	2	H	5459
D0341	\$700,700	\$715,900	\$15,200	1	C	5154
P1145	\$271,200	\$289,300	\$18,100	1	B	5561
P1173	\$275,500	\$293,900	\$18,400	1	B	5662
P1094	\$812,900	\$831,600	\$18,700	1	B	5662
P1165	\$291,100	\$310,500	\$19,400	1	B	5562
E0097	\$139,400	\$163,500	\$24,100	1	A	5160
P0073	\$429,100	\$453,200	\$24,100	1	B	5561
P1158	\$368,300	\$392,800	\$24,500	1	B	5362
W1031	\$305,000	\$332,000	\$27,000	2	B	5458
E0195	\$44,600	\$76,000	\$31,400	1	B	5161
D8031	\$185,000	\$216,900	\$31,900	1	F	4855
H0002	\$0	\$33,400	\$33,400	A	I	5757
E0145	\$2,678,700	\$2,716,400	\$37,700	1	H	5258, 5259, 5358, 5359
C0648	\$378,200	\$417,200	\$39,000	1	D	5151
W1032	\$233,800	\$274,100	\$40,300	2	B	5458
P1110	\$299,200	\$339,500	\$40,300	1	B	5561
W1037	\$345,300	\$386,400	\$41,100	2	G	4857
W0046	\$0	\$43,400	\$43,400	A	G	4957
E5075	\$349,500	\$393,400	\$43,900	2	A, B	5260, 5261
E5205	\$281,800	\$326,200	\$44,400	2	B	5262
E0314	\$599,000	\$643,900	\$44,900	1	H	5358, 5359
D0907	\$462,400	\$508,300	\$45,900	1	D	5435
H1011	\$688,300	\$742,000	\$53,700	2	H	5460
E0773	\$1,389,400	\$1,446,000	\$56,600	1	A	5059, 5060
E0789	\$130,600	\$188,900	\$58,300	1	A	4959, 4960
D0365	\$582,500	\$643,000	\$60,500	1	C	5154
E0721	\$1,347,900	\$1,409,100	\$61,200	1	A	5160
C1144	\$913,000	\$975,000	\$62,000	2	E	5452
E0777	\$202,200	\$264,400	\$62,200	1	A	5060
E0787	\$0	\$62,700	\$62,700	A	A	4960, 5060

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
P0065	\$508,200	\$571,700	\$63,500	1	B	5661
P0074	\$1,054,300	\$1,119,200	\$64,900	1	B	5561
H1142	\$719,700	\$784,700	\$65,000	2	B	5657
P0056	\$1,081,100	\$1,146,600	\$65,500	1	B	5661
D0839	\$979,200	\$1,045,700	\$66,500	1	D	5454
D0869	\$195,500	\$264,600	\$69,100	1	F	4952
D0093	\$1,060,100	\$1,130,700	\$70,600	1	D	5355
D0937	\$1,045,500	\$1,117,800	\$72,300	1	C	5254
E0090	\$4,370,700	\$4,443,200	\$72,500	1	A	5160, 5260
D8020	\$1,003,300	\$1,078,300	\$75,000	1	F	4855
E0409	\$271,900	\$348,000	\$76,100	1	A, B	5260, 5261
C0161	\$853,300	\$934,500	\$81,200	1	I	5654
E0745	\$633,800	\$715,100	\$81,300	1	A	5059, 5159
D0849	\$1,227,700	\$1,309,400	\$81,700	1	D	5455
H1144	\$1,227,100	\$1,311,300	\$84,200	2	I	5757
D0358	\$1,084,500	\$1,172,000	\$87,500	1	C	5154
P1091	\$656,500	\$745,000	\$88,500	1	B	5661
E5090	\$718,400	\$806,900	\$88,500	2	B	5261
E0308	\$130,800	\$220,500	\$89,700	1	H	5458
D0399	\$0	\$89,900	\$89,900	A	C	5152
H1012	\$1,292,100	\$1,383,900	\$91,800	2	H	5460
C0426	\$894,300	\$987,100	\$92,800	1	D	5452
D0713	\$329,800	\$428,900	\$99,100	1	F	4853
E5011	\$548,700	\$650,100	\$101,400	2	H	5258, 5259
P1167	\$1,233,400	\$1,335,400	\$102,000	1	B	5562
C0528	\$422,500	\$525,900	\$103,400	1	D	5251
P0082	\$1,102,500	\$1,213,700	\$111,200	1	B	5562
C0382	\$0	\$114,700	\$114,700	A	D	5453
E0807	\$554,500	\$671,100	\$116,600	1	A	4959, 4960
E0810	\$0	\$117,600	\$117,600	A	A	4959, 4960
D0491	\$444,900	\$564,100	\$119,200	1	C	5053
D0914	\$1,120,200	\$1,240,600	\$120,400	1	F	5055
P1168	\$1,138,000	\$1,258,400	\$120,400	1	B	5662
C0702	\$1,133,800	\$1,254,500	\$120,700	1	E	5453
W0709	\$1,468,300	\$1,589,100	\$120,800	1	G	5156
W0676	\$1,387,500	\$1,512,500	\$125,000	1	G	5156
W0582	\$453,100	\$578,500	\$125,400	1	G	5157
E0138	\$0	\$129,800	\$129,800	A	H	5358
E0782	\$415,000	\$548,500	\$133,500	1	A	5060
E5173	\$1,080,200	\$1,215,300	\$135,100	2	A	4961
W0027	\$0	\$135,900	\$135,900	A	G	4957

TABLE 9 ALL
5-YEAR COST - GROUP 3

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
D0548	\$1,676,300	\$1,818,300	\$142,000	1	F	5054
E0085	\$0	\$150,200	\$150,200	A	A	5160, 5260
E5067	\$7,761,200	\$7,913,900	\$152,700	2	B	5162, 5262
D0195	\$549,300	\$712,500	\$163,200	1	C	5154
D0603	\$303,900	\$469,100	\$165,200	1	F	4954
E5133	\$1,097,500	\$1,266,600	\$169,100	2	A	5060, 5160
D0363	\$1,263,000	\$1,434,100	\$171,100	1	F	5154
W1045	\$1,926,600	\$2,102,000	\$175,400	2	I	5656
C0003	\$1,188,700	\$1,364,700	\$176,000	1	E	5654
E0009	\$0	\$176,100	\$176,100	A	H	5458
D1380	\$570,500	\$747,300	\$176,800	1	F	4954
E0767	\$892,900	\$1,071,400	\$178,500	1	A	4960, 5060
D0577	\$170,100	\$356,600	\$186,500	1	F	4955
P1137	\$1,083,900	\$1,274,500	\$190,600	1	B	5362
C0037	\$0	\$195,000	\$195,000	A	I	5553
P1108	\$1,318,300	\$1,518,000	\$199,700	1	B	5561
C0047	\$104,400	\$308,400	\$204,000	1	E	5553
D0734	\$729,900	\$934,000	\$204,100	1	F	4854
E0313	\$971,400	\$1,179,600	\$208,200	1	H	5459
D0311	\$588,500	\$797,300	\$208,800	1	C	5154
W1018	\$3,136,000	\$3,345,400	\$209,400	2	G	5059
E0790	\$1,464,400	\$1,675,700	\$211,300	1	A	4959, 4960
W0670	\$0	\$212,600	\$212,600	A	I	5557
W0061	\$0	\$213,100	\$213,100	A	G	4956
D0725	\$1,852,700	\$2,065,800	\$213,100	1	F	4853
E5095	\$1,584,700	\$1,807,000	\$222,300	2	B	5261, 5262
P1060	\$2,765,700	\$2,995,400	\$229,700	1	I	5759
W0062	\$0	\$231,000	\$231,000	A	G	4956
D0573	\$594,400	\$828,700	\$234,300	1	F	4955
P0055	\$1,075,800	\$1,312,600	\$236,800	1	B	5661
E0049	\$10,982,100	\$11,220,300	\$238,200	1	A	5158, 5258
C0429	\$138,100	\$378,600	\$240,500	1	D	5451
W0639	\$0	\$245,600	\$245,600	A	D	5357
E0068	\$87,300	\$336,200	\$248,900	1	A	5259
C0030	\$3,072,200	\$3,321,300	\$249,100	1	E	5554
D0364	\$0	\$251,800	\$251,800	A	C	5154
D0022	\$1,054,100	\$1,311,900	\$257,800	1	I	5556
W0039	\$0	\$260,400	\$260,400	A	G	4956
P1160	\$1,877,100	\$2,140,200	\$263,100	1	B	5561
D0485	\$2,566,000	\$2,830,500	\$264,500	1	C	5053
D0097	\$805,000	\$1,084,100	\$279,100	1	C	5155

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
E0748	\$0	\$279,200	\$279,200	A	A	5059, 5060
E0371	\$282,400	\$571,400	\$289,000	1	H	5360
P0036	\$1,665,400	\$1,968,500	\$303,100	1	I	5661
W0698	\$3,350,800	\$3,655,700	\$304,900	1	C	5156
E5062	\$2,058,400	\$2,365,400	\$307,000	2	B	5261, 5262
P0081	\$103,100	\$411,200	\$308,100	1	B	5561
D0579	\$247,600	\$569,600	\$322,000	1	F	4954
E0783	\$0	\$327,000	\$327,000	A	A	5060
D0001	\$215,600	\$550,600	\$335,000	1	I	5655
W0598	\$493,200	\$834,400	\$341,200	1	G	5157
C0029	\$422,300	\$769,200	\$346,900	1	I	5554
E5091	\$1,445,000	\$1,803,300	\$358,300	2	B	5261
E0385	\$4,072,600	\$4,433,000	\$360,400	1	B	5261, 5262
W0071	\$0	\$372,600	\$372,600	A	G	5056
D0492	\$0	\$383,000	\$383,000	A	C	5053
C0058	\$2,495,800	\$2,882,200	\$386,400	1	D	5452
W0037	\$0	\$389,400	\$389,400	A	G	4956
W0036	\$0	\$394,600	\$394,600	A	G	4956
D0684	\$1,642,100	\$2,041,400	\$399,300	1	F	4955
C0133	\$0	\$468,000	\$468,000	A	I	5555
C1158	\$1,000,300	\$1,497,900	\$497,600	2	D	5353
D0381	\$0	\$527,600	\$527,600	A	C	5153
P1163	\$2,868,300	\$3,419,800	\$551,500	1	B	5662
P1144	\$2,755,100	\$3,318,300	\$563,200	1	B	5462
W0633	\$0	\$603,300	\$603,300	A	G	5257
P1078	\$2,528,400	\$3,134,700	\$606,300	1	I	5660
E0901	\$1,353,700	\$1,960,300	\$606,600	1	A	5161, 5162
P1119	\$4,606,500	\$5,243,700	\$637,200	1	B	5562
P1092	\$3,824,000	\$4,471,300	\$647,300	1	B	5661
D0473	\$340,700	\$1,020,400	\$679,700	1	C	5052
E0117	\$198,800	\$926,100	\$727,300	1	A	5161
E0147	\$5,772,100	\$6,507,000	\$734,900	1	H	5259, 5359
W0552	\$1,904,700	\$2,676,200	\$771,500	1	C	5156
C1113	\$4,905,900	\$5,708,400	\$802,500	2	E	5552
W0672	\$0	\$835,900	\$835,900	A	G	5157
E0006	\$678,300	\$1,528,000	\$849,700	1	H	5458
P1086	\$5,319,200	\$6,215,000	\$895,800	1	B	5660
D0830	\$687,900	\$1,595,000	\$907,100	1	D	5455
P1147	\$10,472,900	\$11,493,200	\$1,020,300	1	I	5759
W0669	\$524,700	\$1,573,500	\$1,048,800	1	H	5557
W0705	\$4,228,300	\$5,278,700	\$1,050,400	1	I	5457

TABLE 9 ALL
5-YEAR COST - GROUP 3

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
C0127	\$555,400	\$1,638,000	\$1,082,600	1	I	5555
E0041	\$653,200	\$1,779,100	\$1,125,900	1	H	5258, 5358
D0437	\$0	\$1,196,500	\$1,196,500	A	C, F	5054
E0087	\$1,992,500	\$3,302,700	\$1,310,200	1	A	5160, 5260
E5037	\$4,350,300	\$5,715,400	\$1,365,100	2	A, H	5260, 5360
W0627	\$541,500	\$1,921,800	\$1,380,300	1	G	5156
D0348	\$497,900	\$1,899,700	\$1,401,800	1	C	5053
C1182	\$15,986,000	\$17,509,900	\$1,523,900	2	D	5252
W0141	\$1,401,900	\$4,539,800	\$3,137,900	1	C	5055
D0108	\$14,749,200	\$18,386,400	\$3,637,200	1	C	5254, 5354
W0006	\$0	\$13,923,900	\$13,923,900	A	G	4856
TOTAL	\$218,740,900	\$286,216,800	\$67,475,900			

TABLE 10 ALL
5-YEAR COST - GROUP 4

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
Sorted by Additional for 5-Year Storm						
P0023	\$12,500	\$13,500	\$1,000	3	B	5858
D0559	\$1,826,300	\$1,827,300	\$1,000	3	F	5055
D0556	\$10,100	\$11,300	\$1,200	3	F	5055
P0012	\$62,900	\$64,100	\$1,200	3	I	5758
D0557	\$11,800	\$13,200	\$1,400	3	F	5055
P0021	\$15,700	\$17,100	\$1,400	3	B	5858
W0206	\$149,500	\$151,200	\$1,700	3	G	4857
P0147	\$522,800	\$524,600	\$1,800	3	B	5365
D0030	\$29,900	\$32,500	\$2,600	3	I	5556
H1045	\$46,000	\$49,800	\$3,800	4	B	5459
P0077	\$220,700	\$224,800	\$4,100	3	B	5561
H1044	\$52,900	\$57,300	\$4,400	4	B	5459
W0494	\$40,200	\$44,800	\$4,600	3	A	5158
H1061	\$57,900	\$62,800	\$4,900	4	B	5559
W0408	\$56,900	\$61,900	\$5,000	3	A	5158
P0014	\$41,300	\$46,400	\$5,100	3	B	5858
P1041	\$329,600	\$334,800	\$5,200	4	B	5365
H1124	\$31,800	\$37,200	\$5,400	4	I	5758
H1041	\$65,300	\$70,700	\$5,400	4	B	5459
E0069	\$48,800	\$54,400	\$5,600	3	A	5259
H0098	\$123,000	\$128,900	\$5,900	3	B	5559
H1046	\$74,300	\$80,500	\$6,200	4	B	5559
P0087	\$241,100	\$247,400	\$6,300	3	B	5562
H1050	\$86,300	\$93,500	\$7,200	4	B	5559
E5147	\$183,700	\$190,900	\$7,200	4	A	5060
C0574	\$308,400	\$315,600	\$7,200	3	D	5251
H1056	\$63,700	\$71,100	\$7,400	4	B	5559
W0193	\$513,500	\$521,000	\$7,500	3	G	4857
P0019	\$93,100	\$100,900	\$7,800	3	B	5858
D0014	\$390,200	\$398,200	\$8,000	3	I	5556
W0265	\$88,300	\$98,500	\$10,200	3	G	4957
D0554	\$0	\$10,500	\$10,500	A	F	5055
C1038	\$123,200	\$134,000	\$10,800	4	I	5654
D0596	\$310,800	\$321,900	\$11,100	3	F	4954
E5023	\$65,900	\$77,300	\$11,400	4	H	5259
P0127	\$255,700	\$267,100	\$11,400	3	B	5262
P0153	\$40,400	\$52,000	\$11,600	3	B	5365
P0174	\$71,700	\$83,300	\$11,600	3	B	5265
H1059	\$364,600	\$376,700	\$12,100	4	B	5459
C0619	\$245,800	\$258,200	\$12,400	3	D	5150
W0150	\$94,600	\$108,400	\$13,800	3	G	4758
P0116	\$65,300	\$79,400	\$14,100	3	B	5565

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
W0301	\$26,800	\$41,200	\$14,400	3	A	4959
H1015	\$447,500	\$462,200	\$14,700	4	B	5460
P0164	\$69,500	\$84,600	\$15,100	3	B	5265
P0059	\$209,400	\$224,500	\$15,100	3	B	5661
H1089	\$247,100	\$262,400	\$15,300	4	I	5659
C0115	\$133,300	\$148,700	\$15,400	3	I	5655
C0698	\$148,000	\$163,400	\$15,400	3	E	5453
H1033	\$136,200	\$151,900	\$15,700	4	II	5459
P0161	\$183,600	\$199,800	\$16,200	3	B	5365
C0086	\$96,100	\$112,600	\$16,500	3	D	5151
W0214	\$527,700	\$545,500	\$17,800	3	A	4858
H1049	\$156,300	\$174,300	\$18,000	4	B	5559
W0324	\$351,900	\$369,900	\$18,000	3	A	4959
H1111	\$204,400	\$222,500	\$18,100	4	I	5758
E5209	\$208,900	\$227,300	\$18,400	4	B	5261
W0383	\$108,000	\$126,600	\$18,600	3	A	4959
C0487	\$332,300	\$351,000	\$18,700	3	D	5352
E0512	\$561,900	\$581,100	\$19,200	3	A	5161
P0204	\$127,700	\$147,000	\$19,300	3	B	5265
D5002	\$112,200	\$131,600	\$19,400	3	G	4955
H0048	\$0	\$19,600	\$19,600	A	I	5658
H1122	\$295,900	\$315,600	\$19,700	4	I	5658
W0464	\$512,300	\$532,200	\$19,900	3	I	5357
E0909	\$174,200	\$194,300	\$20,100	3	A	5162
E5061	\$117,300	\$137,600	\$20,300	4	B	5262
H1136	\$320,400	\$341,800	\$21,400	4	I	5757
P0026	\$119,200	\$140,800	\$21,600	3	I	5660
D0158	\$248,100	\$270,000	\$21,900	3	C	5154
P0126	\$392,000	\$414,100	\$22,100	3	B	5262
E0557	\$128,700	\$150,900	\$22,200	3	A	5061
H1021	\$195,200	\$217,700	\$22,500	4	B	5560
H0053	\$0	\$22,700	\$22,700	A	I	5659
H1017	\$276,700	\$299,700	\$23,000	4	B	5460
W0297	\$265,900	\$289,400	\$23,500	3	G	4958
P0139	\$788,800	\$812,300	\$23,500	3	B	5264
W0502	\$0	\$23,600	\$23,600	A	B	5458
W0271	\$219,600	\$243,800	\$24,200	3	G	5056
E5101	\$145,000	\$170,000	\$25,000	5	A	5160
D0416	\$291,200	\$316,900	\$25,700	3	C	5053
P1096	\$447,800	\$473,600	\$25,800	4	B	5662
W0367	\$336,800	\$363,700	\$26,900	3	A	5059
W0460	\$308,500	\$335,500	\$27,000	3	II	5357
H1024	\$326,800	\$354,000	\$27,200	4	B	5560

TABLE 10 ALL
5-YEAR COST - GROUP 4

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
C1025	\$313,800	\$341,500	\$27,700	4	I	5654
P1252	\$125,900	\$153,800	\$27,900	4	H	5561
W1028	\$165,500	\$194,000	\$28,500	4	A	5159
E5186	\$135,500	\$164,800	\$29,300	5	A	4961
W1036	\$333,000	\$362,400	\$29,400	4	G	4857
C1035	\$336,800	\$366,600	\$29,800	4	E	5754
P1184	\$824,600	\$854,900	\$30,300	4	I	4965
P1046	\$212,500	\$242,900	\$30,400	4	B	5262
W0454	\$979,000	\$1,009,700	\$30,700	3	H	5357
P0150	\$130,700	\$162,500	\$31,800	3	B	5365
W0413	\$65,200	\$97,100	\$31,900	3	G	5158
W0380	\$388,600	\$422,900	\$34,300	3	A	5058
W0648	\$0	\$34,600	\$34,600	A	I	5357
H1070	\$936,800	\$971,600	\$34,800	4	D	5559
W0523	\$403,600	\$439,600	\$36,000	3	A	5058
E5179	\$281,300	\$318,400	\$37,100	4	A	4961
C0445	\$0	\$37,300	\$37,300	A	E	5453
H1019	\$221,600	\$259,800	\$38,200	4	B	5560
P1111	\$177,500	\$215,900	\$38,400	4	B	5661
W1033	\$228,800	\$268,200	\$39,400	4	H	5558
H1027	\$296,000	\$336,100	\$40,100	4	B	5560
E5002	\$320,100	\$360,500	\$40,400	4	H	5358
H1116	\$235,400	\$276,000	\$40,600	4	I	5758
H1058	\$460,700	\$501,400	\$40,700	4	H	5459
H1028	\$546,100	\$587,600	\$41,500	4	B	5560
E0342	\$361,900	\$403,600	\$41,700	3	H	5360
E0735	\$641,700	\$685,100	\$43,400	3	A	5060, 5061
E5118	\$315,000	\$360,200	\$45,200	5	B	5162
C0600	\$399,500	\$444,700	\$45,200	3	D	5150
P1208	\$362,300	\$409,600	\$47,300	4	B	5565
P0137	\$205,500	\$252,900	\$47,400	3	B	5263
H1099	\$327,600	\$375,800	\$48,200	4	I	5658
C1249	\$358,000	\$406,200	\$48,200	4	C	5052
H1087	\$310,700	\$359,000	\$48,300	4	I	5659
P0063	\$433,300	\$481,800	\$48,500	3	B	5662
P0159	\$1,331,900	\$1,380,500	\$48,600	3	B	5365
W0487	\$844,800	\$894,900	\$50,100	3	H	5457
W1034	\$291,600	\$341,900	\$50,300	4	H	5558
P1223	\$940,400	\$991,600	\$51,200	4	B	5262
W0050	\$0	\$51,700	\$51,700	A	G	4957
W0703	\$641,600	\$693,500	\$51,900	3	I	5457
E5183	\$348,500	\$400,500	\$52,000	5	A	4961
W0191	\$706,000	\$758,100	\$52,100	3	G	4857

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
P1190	\$374,500	\$426,900	\$52,400	4	A	4965
E5074	\$358,400	\$411,300	\$52,900	4	A, B	5160, 5260, 5261
C1210	\$338,100	\$391,100	\$53,000	4	D	5150
W0299	\$303,700	\$358,900	\$55,200	3	A	4958
P1047	\$257,800	\$313,500	\$55,700	4	B	5262
W0151	\$261,200	\$317,600	\$56,400	3	G	4758
P0148	\$669,100	\$725,800	\$56,700	3	B	5365
C1141	\$1,036,100	\$1,092,800	\$56,700	4	E	5452
H1074	\$1,123,900	\$1,181,100	\$57,200	4	I	5659
W0243	\$250,300	\$307,700	\$57,400	3	G	4957
W0369	\$444,900	\$502,400	\$57,500	3	A	5059
E0160	\$212,000	\$270,000	\$58,000	3	H	5259
W0215	\$524,700	\$582,700	\$58,000	3	A	4858
P1017	\$745,300	\$803,300	\$58,000	4	B	5565
H1138	\$761,100	\$819,600	\$58,500	4	B	5657
E5196	\$409,100	\$468,200	\$59,100	5	A	4961
P0165	\$805,000	\$864,200	\$59,200	3	B	5265
H1018	\$348,400	\$408,400	\$60,000	4	B	5460
P0222	\$1,176,400	\$1,237,000	\$60,600	3	A	4965
E5146	\$450,300	\$512,500	\$62,200	4	A	5060
E5121	\$371,500	\$434,300	\$62,800	4	A	5162
C1036	\$297,600	\$361,900	\$64,300	4	E	5654
W0118	\$0	\$64,600	\$64,600	A	G	5057
P0058	\$751,400	\$816,000	\$64,600	3	B	5661
W0364	\$977,700	\$1,043,600	\$65,900	3	A	5059
P0162	\$84,300	\$150,300	\$66,000	3	B	5365
P0136	\$1,898,500	\$1,965,100	\$66,600	3	B	5263
E5180	\$443,000	\$510,700	\$67,700	4	A	4961
E0233	\$0	\$69,100	\$69,100	A	H	5159, 5259
E0029	\$63,700	\$133,200	\$69,500	3	H	5358
P1018	\$528,000	\$598,300	\$70,300	4	B	5565
E5005	\$437,600	\$508,000	\$70,400	4	H	5358
W0429	\$859,000	\$929,500	\$70,500	3	G	5158
E0736	\$83,700	\$154,700	\$71,000	3	A	5061
E5085	\$784,100	\$855,300	\$71,200	4	B	5261
H1054	\$375,100	\$447,000	\$71,900	4	B	5559
E0004	\$72,400	\$144,900	\$72,500	3	H, I	5457, 5458
W0116	\$0	\$72,900	\$72,900	A	G	5057
W0135	\$393,600	\$466,800	\$73,200	3	C	5056
P0091	\$769,600	\$843,200	\$73,600	3	B	5562
P0158	\$186,900	\$262,500	\$75,600	3	B	5365
W0266	\$166,100	\$243,600	\$77,500	3	G	4957

TABLE 10 ALL
5-YEAR COST - GROUP 4

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
H1072	\$982,900	\$1,060,900	\$78,000	4	B	5659
P0070	\$0	\$80,000	\$80,000	4	B	5561
E5166	\$829,500	\$910,000	\$80,500	4	A	4960, 4961
H1069	\$864,600	\$945,200	\$80,600	4	B	5559
C0678	\$0	\$81,000	\$81,000	A	D	5051
P0143	\$41,700	\$123,400	\$81,700	3	B	5264
P1179	\$858,700	\$941,700	\$83,000	3	I	5661
P0031	\$785,300	\$869,000	\$83,700	3	I	5660
P1189	\$526,800	\$610,600	\$83,800	4	A	4965
C1142	\$744,400	\$828,200	\$83,800	4	E	5452
W0660	\$0	\$84,000	\$84,000	A	II	5457
C0217	\$0	\$84,700	\$84,700	A	E	5653
E5082	\$368,300	\$453,200	\$84,900	5	B	5261
C0583	\$850,100	\$937,400	\$87,300	3	D	5150
H1013	\$1,048,000	\$1,136,300	\$88,300	4	B	5460
H1108	\$608,800	\$697,800	\$89,000	4	I	5758
W0478	\$3,046,700	\$3,137,700	\$91,000	3	I	5557
E0928	\$491,700	\$585,300	\$93,600	3	A	5162
C0631	\$1,715,900	\$1,809,600	\$93,700	3	D	5150
W0282	\$659,300	\$754,200	\$94,900	3	G	4957
P1209	\$1,039,100	\$1,136,200	\$97,100	4	B	5565
P0005	\$92,300	\$189,600	\$97,300	3	B	5858
W0385	\$669,100	\$766,400	\$97,300	3	G	4959
P1203	\$817,700	\$917,400	\$99,700	4	B	5465
C0688	\$0	\$100,400	\$100,400	A	D	5050
E5178	\$714,900	\$817,400	\$102,500	4	A	4961
P1140	\$1,002,200	\$1,104,900	\$102,700	3	B	5363
H1009	\$1,543,100	\$1,645,900	\$102,800	4	B	5560
P0142	\$1,687,400	\$1,791,900	\$104,500	3	B	5264
P1156	\$1,307,800	\$1,413,900	\$106,100	4	B	5662
E5086	\$775,500	\$882,700	\$107,200	4	B	5261
C0665	\$531,700	\$640,600	\$108,900	3	C	5152
H0128	\$0	\$111,300	\$111,300	A	B	5459
C0427	\$18,600	\$130,000	\$111,400	3	D	5452
W0172	\$337,700	\$449,700	\$112,000	3	G	4750
P0224	\$142,800	\$256,100	\$113,300	3	A	4965
H1141	\$943,600	\$1,061,000	\$117,400	4	I	5657
W0120	\$0	\$117,500	\$117,500	A	G	5057
P0228	\$54,500	\$172,200	\$117,700	3	A	4965
W0352	\$1,230,300	\$1,349,400	\$119,100	3	A	5058
E5194	\$773,800	\$893,900	\$120,100	4	A, B	5162
W0519	\$0	\$120,200	\$120,200	A	G	4857
C0306	\$0	\$120,600	\$120,600	A	E	5652

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
P1028	\$887,900	\$1,009,200	\$121,300	4	B	5567
P0003	\$0	\$121,500	\$121,500	A	B	5858
H1130	\$626,800	\$750,200	\$123,400	4	B	5658
E5161	\$802,900	\$926,600	\$123,700	4	A	4960
P0089	\$1,069,100	\$1,194,300	\$125,200	3	B	5563
W0365	\$1,572,800	\$1,698,200	\$125,400	3	A	5059
H0129	\$284,400	\$414,000	\$129,600	3	B	5459
E0732	\$0	\$130,300	\$130,300	A	A	5060, 5061
H0115	\$349,600	\$481,000	\$131,400	3	B	5560
E0731	\$1,775,100	\$1,906,500	\$131,400	3	A	5060, 5061
W0127	\$0	\$132,900	\$132,900	A	G	5056
P0231	\$38,400	\$171,700	\$133,300	3	B	5365
H1067	\$2,497,500	\$2,632,400	\$134,900	4	B	5458
W0441	\$167,300	\$302,700	\$135,400	3	G	5257
W0490	\$164,600	\$302,400	\$137,800	3	H	5458
C1006	\$613,600	\$752,200	\$138,600	4	I	5655
P1235	\$836,400	\$979,000	\$142,600	4	B	5567
P0007	\$1,503,000	\$1,649,200	\$146,200	3	B	5859
D0003	\$0	\$146,800	\$146,800	A	I	5656
H1003	\$1,838,000	\$1,985,300	\$147,300	4	II	5460
C0480	\$611,000	\$759,500	\$148,500	3	E	5553
D0487	\$208,000	\$356,900	\$148,900	3	C	5053
H1077	\$1,507,400	\$1,656,600	\$149,200	4	I	5659
P0131	\$482,100	\$633,300	\$151,200	3	B	5262
D7036	\$0	\$153,900	\$153,900	A	C	5153
W0451	\$1,040,100	\$1,197,000	\$156,900	3	H	5357
P0206	\$1,813,000	\$1,970,100	\$157,100	3	B	5266
H1053	\$1,119,400	\$1,278,500	\$159,100	4	B	5559
P0215	\$40,800	\$200,000	\$159,200	3	A	4965
P0173	\$0	\$159,800	\$159,800	A	B	5365
E5168	\$1,076,200	\$1,236,300	\$160,100	4	A	4961, 5061
W0641	\$0	\$161,900	\$161,900	A	D	5357
P1045	\$1,355,300	\$1,517,400	\$162,100	4	B	5262
H1055	\$1,076,700	\$1,239,100	\$162,400	4	B	5559
W0661	\$0	\$162,800	\$162,800	A	II	5457
W0664	\$0	\$163,100	\$163,100	A	H	5457
P1027	\$1,425,500	\$1,588,900	\$163,400	4	B	5567
W0489	\$5,464,500	\$5,628,800	\$164,300	3	A	5158
C0621	\$843,900	\$1,011,000	\$167,100	3	D	5150
H1016	\$1,264,600	\$1,431,700	\$167,100	4	B	5460
P0004	\$0	\$168,300	\$168,300	4	B	5858
W0259	\$743,800	\$912,700	\$168,900	3	G	4958
W0217	\$969,400	\$1,139,400	\$170,000	3	A	4858

TABLE 10 ALL
5-YEAR COST - GROUP 4

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
P0225	\$134,300	\$305,200	\$170,900	3	A	4965
W0465	\$428,400	\$600,800	\$172,400	3	I	5357
E5116	\$1,115,500	\$1,288,500	\$173,000	5	A, B	5162
P1006	\$1,910,100	\$2,084,000	\$173,900	4	B	5565
W0329	\$485,000	\$660,100	\$175,100	3	A	4958
C0593	\$1,906,100	\$2,081,600	\$175,500	3	D	5150
E5187	\$1,658,300	\$1,834,300	\$176,000	4	A	4961, 5061
H1065	\$1,274,400	\$1,451,500	\$177,100	4	H	5559
W0219	\$893,500	\$1,070,800	\$177,300	3	A	4858
W0143	\$0	\$178,000	\$178,000	A	G	5056
P1171	\$975,400	\$1,155,200	\$179,800	4	B	5661
W0223	\$874,700	\$1,055,400	\$180,700	3	G	4857
W0073	\$0	\$182,000	\$182,000	A	C	5056
E0130	\$229,800	\$412,600	\$182,800	3	A	5061, 5062, 5161, 5162
P1008	\$1,448,600	\$1,632,100	\$183,500	4	B	5465
W0038	\$0	\$183,700	\$183,700	A	G	4956
E0333	\$22,600	\$208,600	\$186,000	3	H	5359
W0177	\$0	\$187,500	\$187,500	A	G	4858
P0152	\$1,595,800	\$1,784,700	\$188,900	3	B	5365
H1004	\$1,592,900	\$1,783,600	\$190,700	4	H	5460
W0507	\$1,396,100	\$1,587,700	\$191,600	3	G	5158
W0331	\$159,500	\$351,300	\$191,800	3	A	4958
E0560	\$794,400	\$986,200	\$191,800	3	A	5061, 5062
W0121	\$0	\$192,500	\$192,500	A	G	5057
E0746	\$833,400	\$1,026,900	\$193,500	3	A	5059
C0023	\$1,522,800	\$1,717,200	\$194,400	3	I	5654
P0062	\$0	\$197,000	\$197,000	4	B	5662
H1100	\$1,983,600	\$2,181,500	\$197,900	4	I	5659
P1186	\$1,490,800	\$1,689,900	\$199,100	4	A	4965
C0019	\$3,942,000	\$4,143,000	\$201,000	3	I	5653
W0658	\$0	\$202,300	\$202,300	A	I	5457
W0022	\$0	\$203,400	\$203,400	A	G	4957
E5188	\$1,517,700	\$1,721,300	\$203,600	4	A	5061
C1109	\$1,702,600	\$1,909,200	\$206,600	4	E	5553
E0705	\$0	\$209,700	\$209,700	A	A	5160
P0146	\$249,200	\$461,500	\$212,300	3	B	5264
C1206	\$1,211,700	\$1,425,200	\$213,500	4	D	5150
W0128	\$0	\$213,700	\$213,700	A	G	5056
W0363	\$145,700	\$366,500	\$220,800	3	A	5059
C0549	\$56,700	\$278,100	\$221,400	3	D	5251
P0119	\$528,700	\$750,500	\$221,800	3	B	5565
	\$1,795,000	\$2,017,500	\$222,500	5	A	4961

Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
W0211	\$144,800	\$367,900	\$223,100	3	G	4857
H1064	\$1,667,700	\$1,890,900	\$223,200	4	B	5559
W0066	\$0	\$224,000	\$224,000	A	G	4956
W0302	\$2,332,200	\$2,557,500	\$225,300	3	A	4959
W0088	\$0	\$226,500	\$226,500	A	C	5056
P1234	\$1,901,400	\$2,129,400	\$228,000	4	B	5567
E0700	\$0	\$229,900	\$229,900	A	A	5160
D0039	\$481,000	\$712,200	\$231,200	3	I	5555
W0654	\$0	\$232,400	\$232,400	A	I	5457
W0435	\$1,931,300	\$2,164,000	\$232,700	3	G	5258
H1066	\$1,606,400	\$1,841,400	\$235,000	4	H	5458
W0353	\$1,981,200	\$2,217,100	\$235,900	3	A	5058
C0587	\$945,000	\$1,182,300	\$237,300	3	D	5250
C1277	\$2,182,800	\$2,423,000	\$240,200	4	D	5150
E0796	\$0	\$248,700	\$248,700	A	A	4959, 4960
D0091	\$474,800	\$726,400	\$251,600	3	D	5355
P1072	\$2,311,800	\$2,567,000	\$255,200	4	I	5761
H1076	\$1,648,100	\$1,904,400	\$256,300	4	I	5659
D7045	\$910,400	\$1,166,800	\$256,400	3	F	4955
P0006	\$894,200	\$1,150,800	\$256,600	3	B	5858
P0032	\$824,100	\$1,083,200	\$259,100	3	I	5660
E0726	\$88,800	\$351,700	\$262,900	3	A	5060, 5160
P0151	\$595,100	\$862,300	\$267,200	3	B	5365
W0182	\$0	\$268,000	\$268,000	A	G	4858
W0218	\$901,900	\$1,170,100	\$268,200	3	A	4858
W0178	\$0	\$271,200	\$271,200	A	G	4858
W0379	\$522,800	\$794,500	\$271,700	3	A	5058
W0477	\$511,900	\$785,800	\$273,900	3	I	5557
C0109	\$100,500	\$375,400	\$274,900	3	C	5051
C1287	\$1,962,400	\$2,244,500	\$282,100	4	E	5852
P0104	\$725,400	\$1,015,800	\$290,400	3	B	5465
C0122	\$0	\$290,700	\$290,700	A	I	5655
E5177	\$1,699,600	\$1,993,600	\$294,000	5	A	4961
E0236	\$2,016,000	\$2,314,800	\$298,800	3	H	5159, 5160
W0137	\$0	\$302,500	\$302,500	A	C	5056
W0216	\$145,300	\$450,100	\$304,800	3	A	4858
H1091	\$1,791,100	\$2,098,200	\$307,100	4	B	5659
H1014	\$2,983,600	\$3,299,000	\$315,400	4	H	5460
P1196	\$3,712,500	\$4,028,000	\$315,500	4	B	5263
H0097	\$111,300	\$427,800	\$316,500	3	B	5559
W0671	\$0	\$323,200	\$323,200	A	I	5557
W0007	\$0	\$331,000	\$331,000	A	G	4857
C1179	\$2,113,100	\$2,446,300	\$333,200	4	D	5252

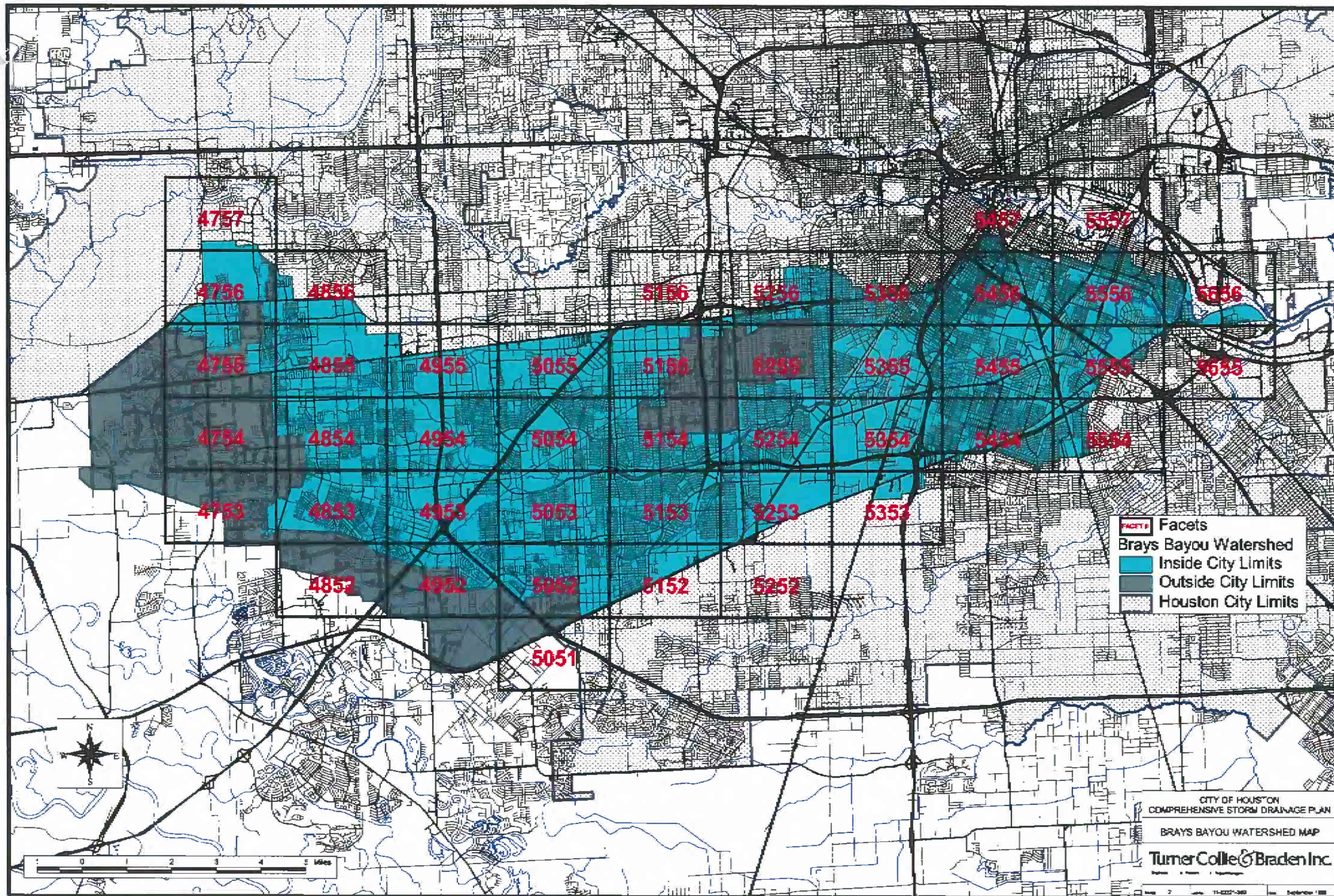
TABLE 10 ALL
5-YEAR COST - GROUP 4

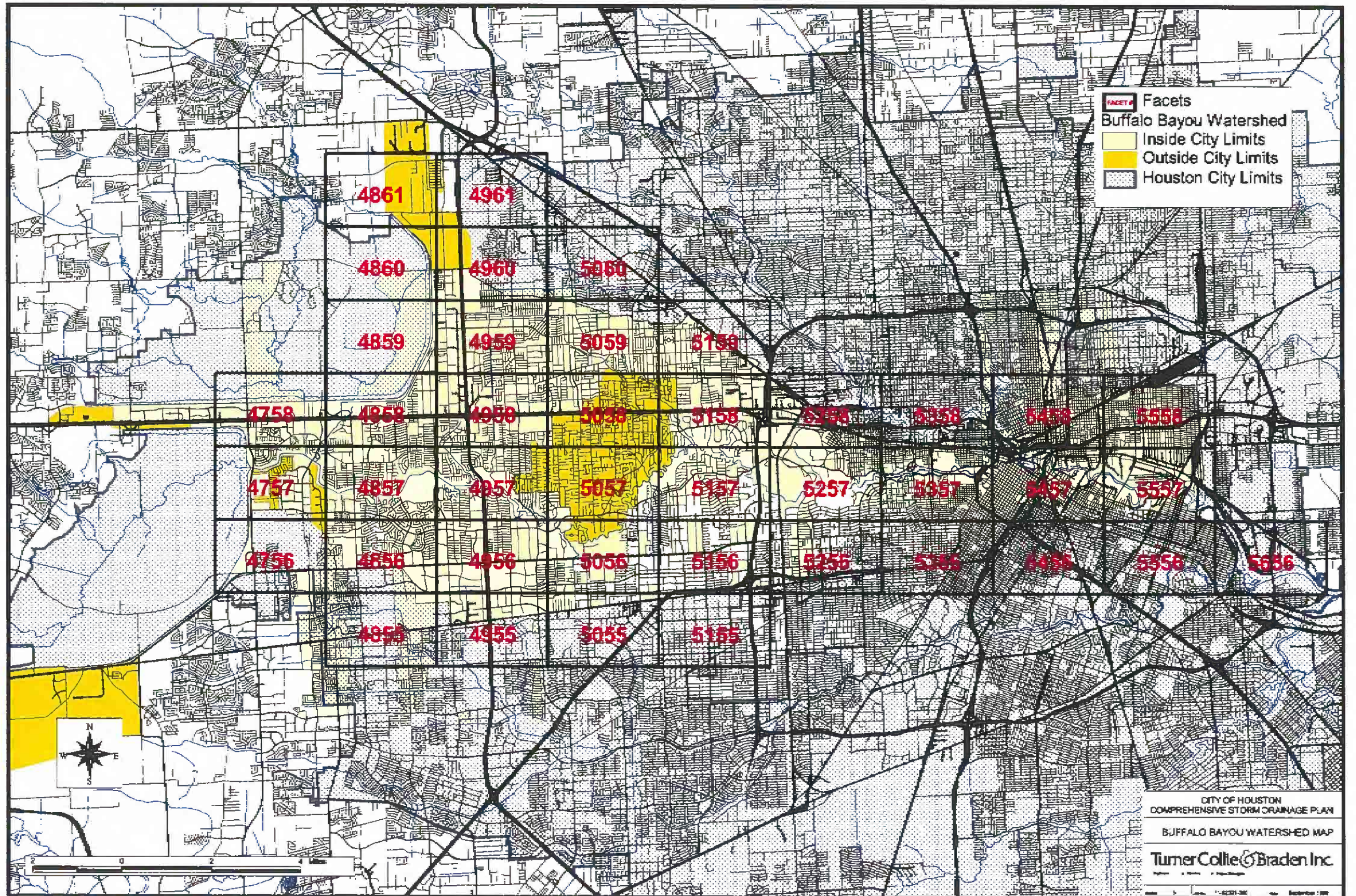
Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
W0212	\$253,800	\$587,800	\$334,000	3	G	4857
E0063	\$192,100	\$536,100	\$344,000	3	A	5259
C0625	\$1,083,400	\$1,428,400	\$345,000	3	D	5150
C0603	\$815,700	\$1,162,200	\$346,500	3	D	5150
W0225	\$1,058,800	\$1,407,000	\$348,200	3	G	4857
H1030	\$3,536,800	\$3,892,000	\$355,200	4	B	5560
W0114	\$0	\$357,000	\$357,000	A	G	5057
C0489	\$0	\$359,300	\$359,300	A	D	5351
W0414	\$0	\$359,700	\$359,700	A	G	5158
H0054	\$366,200	\$727,800	\$361,600	3	I	5659
W0476	\$468,000	\$829,900	\$361,900	3	B	5457
D0622	\$0	\$367,300	\$367,300	A	C	5053
E0762	\$1,401,100	\$1,770,400	\$369,300	3	A	4960, 5060
W0031	\$0	\$369,800	\$369,800	A	G	4957
W0427	\$1,543,700	\$1,917,900	\$374,200	3	G	5158
W0029	\$0	\$378,500	\$378,500	A	G	4957
C0321	\$0	\$382,800	\$382,800	A	E	5752
W0171	\$0	\$384,000	\$384,000	A	G	4758
W0462	\$0	\$385,500	\$385,500	A	I	5357
W0423	\$2,092,900	\$2,485,500	\$392,600	3	G	5157
W0450	\$1,836,400	\$2,233,100	\$396,700	3	H	5357
W0391	\$5,651,100	\$6,055,800	\$404,700	3	A	4959
H1137	\$3,197,400	\$3,604,500	\$407,100	4	B	5657
W0057	\$0	\$408,100	\$408,100	A	C	5055
E0073	\$1,574,700	\$1,983,500	\$408,800	3	A, H	5159, 5259
W0634	\$0	\$426,500	\$426,500	A	G	5257
H1005	\$3,207,000	\$3,634,800	\$427,800	4	H	5460
W0139	\$0	\$431,000	\$431,000	A	C	5056
H1140	\$2,864,200	\$3,303,900	\$439,700	4	I	5657
P1031	\$2,391,600	\$2,836,800	\$445,200	4	B	5567
W0175	\$0	\$453,800	\$453,800	A	G	4758
E0764	\$3,645,500	\$4,103,600	\$458,100	3	A	4961, 5060, 5061
P1098	\$3,853,700	\$4,315,200	\$461,500	4	B	5662
W1035	\$3,836,200	\$4,303,100	\$466,900	4	G	4757
C0531	\$1,231,000	\$1,702,800	\$471,800	3	D	5252
W0659	\$0	\$480,000	\$480,000	A	H	5457
P0201	\$1,121,300	\$1,610,600	\$489,300	3	B	5265
P1004	\$1,878,500	\$2,371,900	\$493,400	4	B	5565
E0240	\$2,896,100	\$3,399,300	\$503,200	3	H	5159
D0100	\$0	\$503,600	\$503,600	A	D	5354
W0210	\$3,134,200	\$3,642,900	\$508,700	3	G	4857
W0443	\$1,557,200	\$2,080,700	\$523,500	3	G	5257

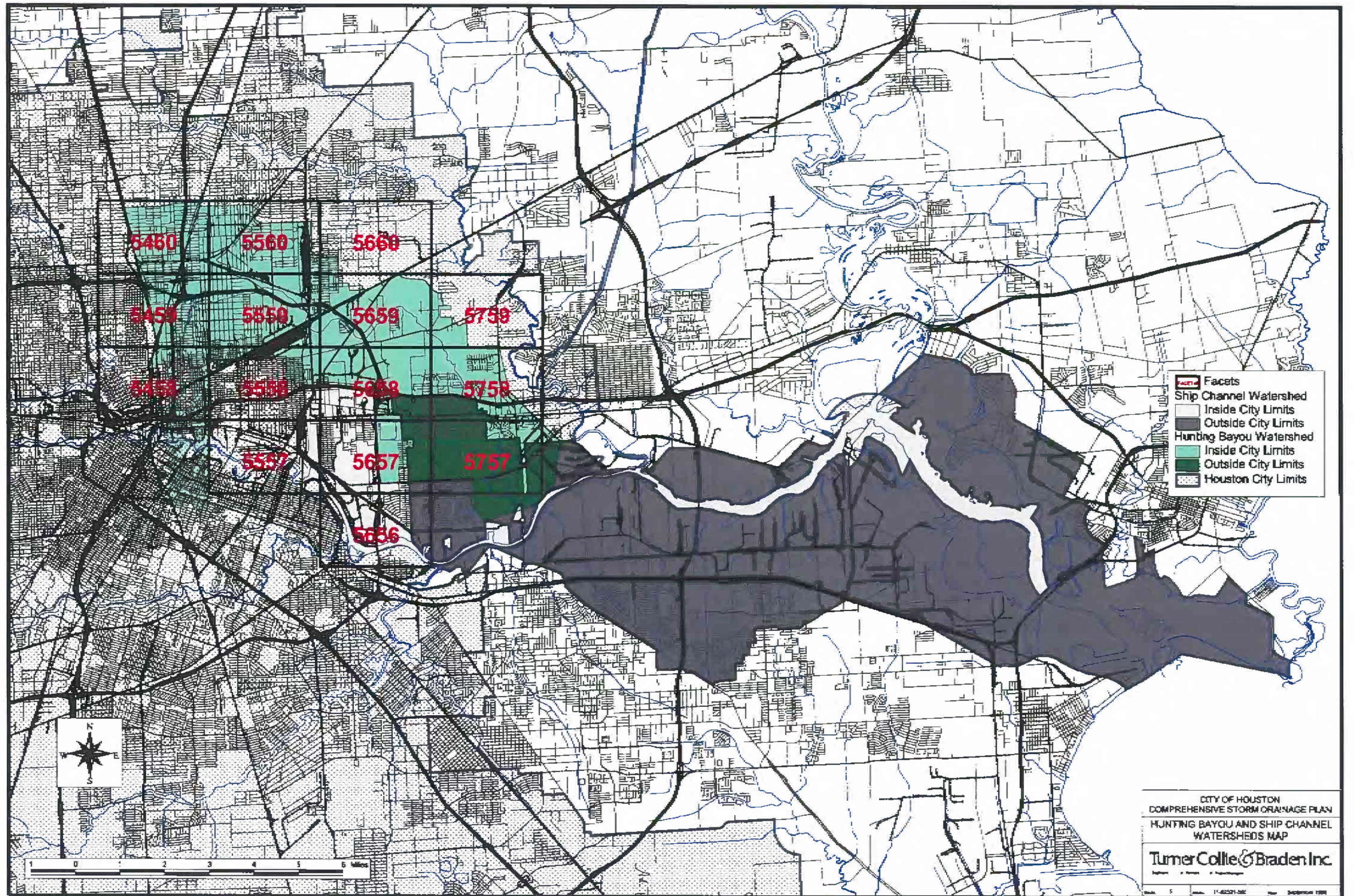
Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
D0633	\$0	\$539,300	\$539,300	A	C	4953
P0134	\$1,057,900	\$1,602,300	\$544,400	3	B	5262
W0647	\$0	\$557,400	\$557,400	A	I	5357
P0149	\$632,200	\$1,210,500	\$578,300	3	B	5365
E0345	\$0	\$585,300	\$585,300	A	H	5360
W0138	\$606,100	\$1,192,400	\$586,300	3	C	5056
D0677	\$0	\$600,800	\$600,800	A	F	4954
W0436	\$2,660,600	\$3,263,000	\$602,400	3	G	5257
W0349	\$334,000	\$945,300	\$611,300	3	A	5058
H1008	\$4,969,600	\$5,593,800	\$624,200	4	B	5560
D0052	\$0	\$630,200	\$630,200	A	D	5455
P0227	\$324,200	\$955,500	\$631,300	3	A	4965
W0434	\$355,400	\$996,400	\$641,000	3	G	5158
P1013	\$3,685,200	\$4,329,500	\$644,300	4	B	5465
P1124	\$5,295,200	\$5,956,700	\$661,500	4	H	5461
C1223	\$7,491,000	\$8,169,900	\$678,900	4	D	5252
W0457	\$1,042,400	\$1,722,000	\$679,600	3	H	5357
W0180	\$383,500	\$1,079,600	\$696,100	3	G	4858
W0614	\$2,842,600	\$3,540,600	\$698,000	3	G	5157
W0322	\$6,323,600	\$7,040,200	\$716,600	3	A	4959
H10103	\$1,631,500	\$2,385,800	\$754,300	3	H	5558
C0623	\$1,000,100	\$1,774,600	\$774,500	3	D	5150
P0001	\$741,800	\$1,555,400	\$813,600	3	I	5858
C1207	\$6,814,400	\$7,701,200	\$886,800	4	D	5251
E5105	\$8,244,100	\$9,202,400	\$958,300	5	A	5161
W0133	\$346,500	\$1,327,500	\$981,000	3	C	5056
W0491	\$1,495,800	\$2,519,900	\$1,024,100	3	H	5459
D7044	\$300,600	\$1,370,800	\$1,070,200	3	F	4955
W0312	\$2,633,000	\$3,803,600	\$1,170,600	3	A	4959
P1215	\$4,284,800	\$5,485,800	\$1,201,000	4	B	5566
W0449	\$1,405,000	\$2,628,200	\$1,223,200	3	G	5257
W0480	\$1,587,700	\$2,823,400	\$1,235,700	3	I	5558
C0529	\$0	\$1,263,700	\$1,263,700	A	D	5252
W0194	\$0	\$1,267,800	\$1,267,800	A	G	4857
H10086	\$3,949,000	\$5,244,600	\$1,295,600	3	B	5558
W0113	\$0	\$1,343,400	\$1,343,400	A	G	5057
P0167	\$422,500	\$1,938,900	\$1,516,400	3	B	5265
W0257	\$1,716,200	\$3,287,200	\$1,571,000	3	G	4958
E0526	\$2,743,800	\$4,381,700	\$1,637,900	C.N.A.	A	5061, 5161
W0469	\$2,545,500	\$4,295,600	\$1,750,100	3	H	5458
W0155	\$2,431,900	\$4,304,000	\$1,872,100	3	G	4758
W0438	\$822,700	\$2,716,700	\$1,894,000	3	G	5257
W0656	\$577,900	\$2,616,300	\$2,038,400	3	I	5557

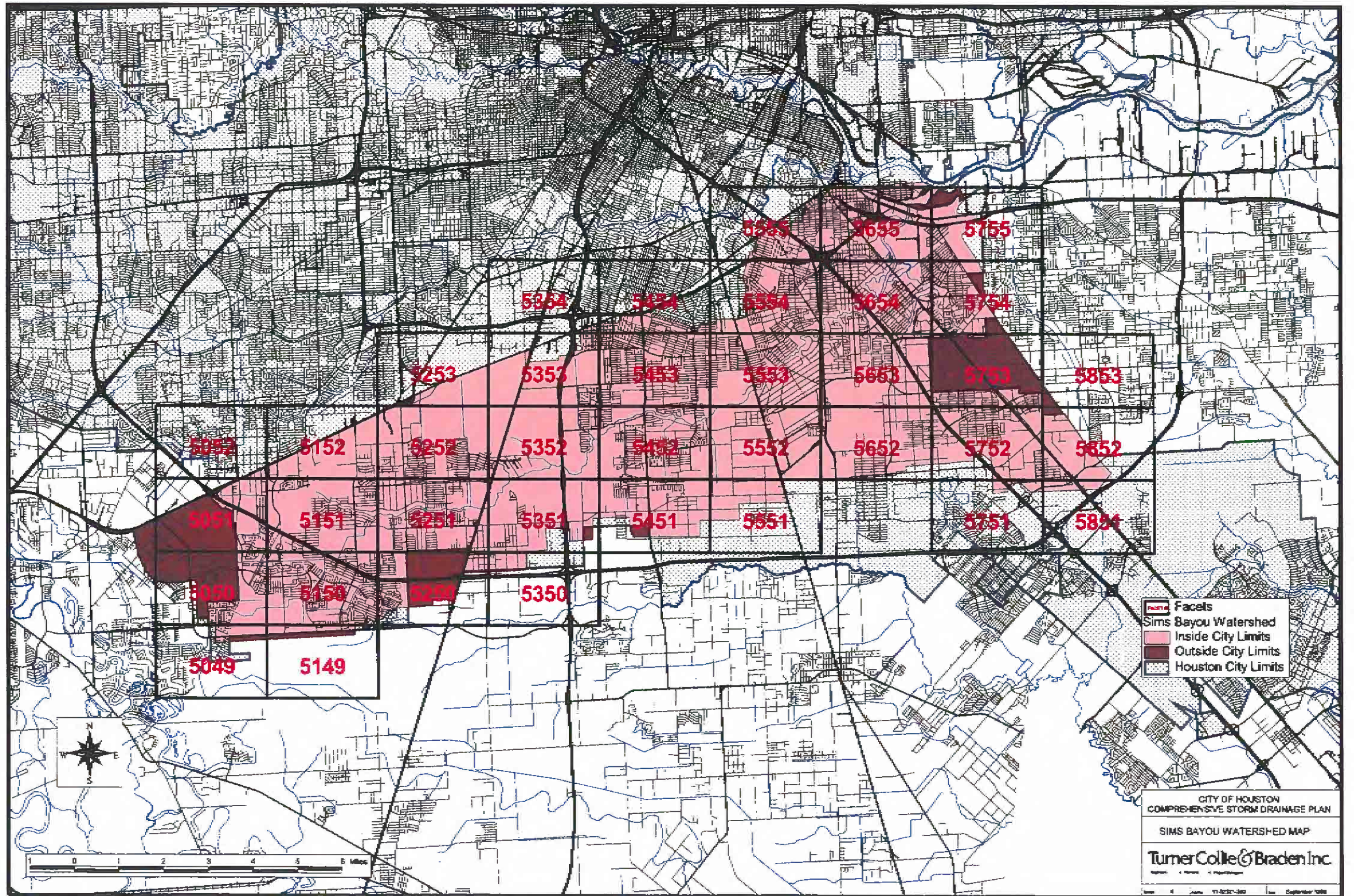
**TABLE 10 ALL
5-YEAR COST - GROUP 4**

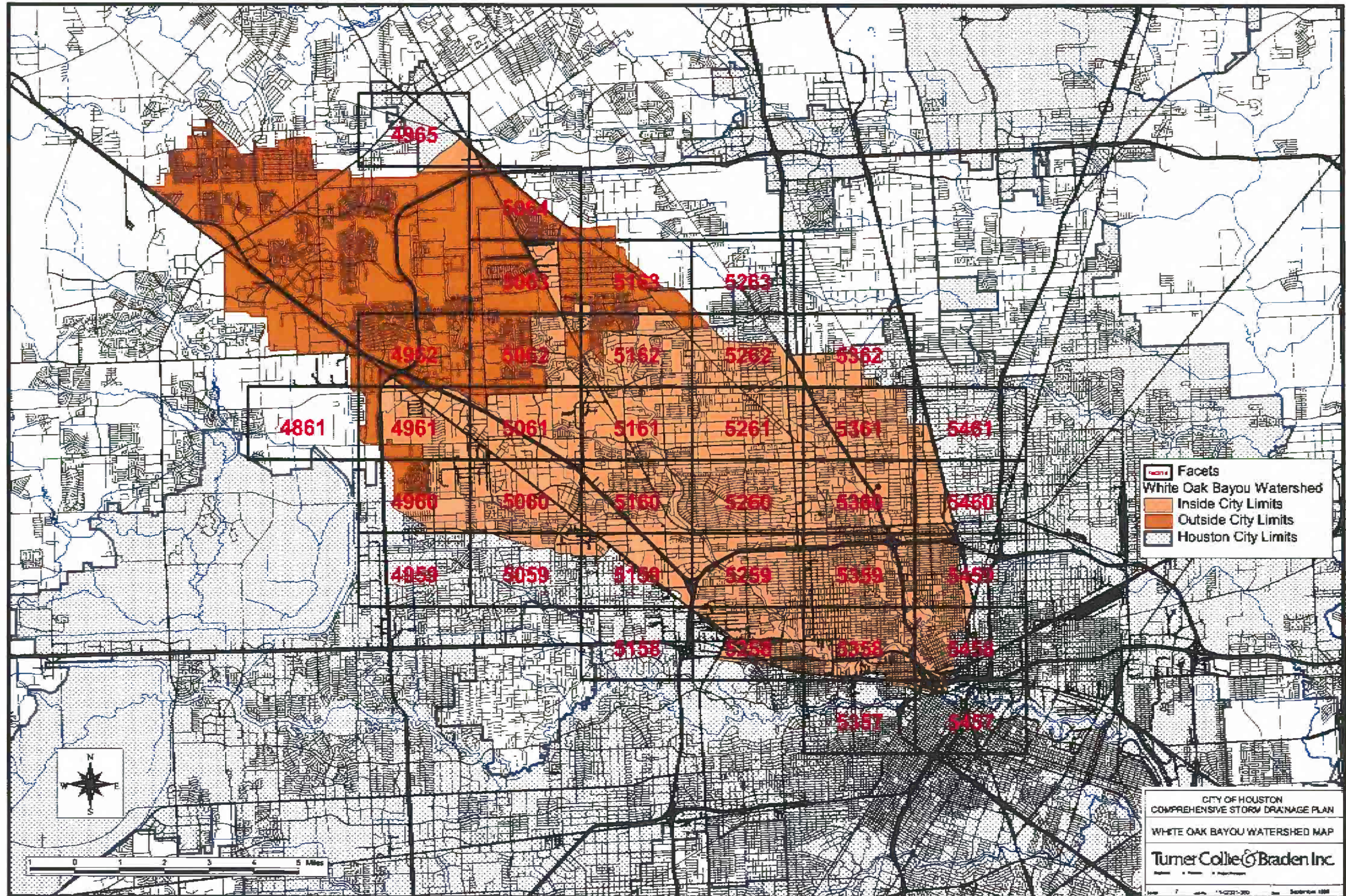
Outfall System ID	2-Year CIP Cost	5-Year Storm Cost	Additional for 5-Year Storm	2-Year Category	City Council District	Facet Number
W0381	\$7,090,300	\$9,567,900	\$2,477,600	3	A	4959
W0293	\$206,000	\$2,971,900	\$2,765,900	3	G	4958
E0763	\$1,034,200	\$4,177,400	\$3,143,200	3	A	4960, 4961, 5060, 5061
W0484	\$8,450,400	\$11,892,400	\$3,442,000	3	I	5558
W0485	\$9,958,800	\$14,512,600	\$4,553,800	3	I	5458
TOTAL	\$364,463,400	\$475,866,300	\$111,402,900			










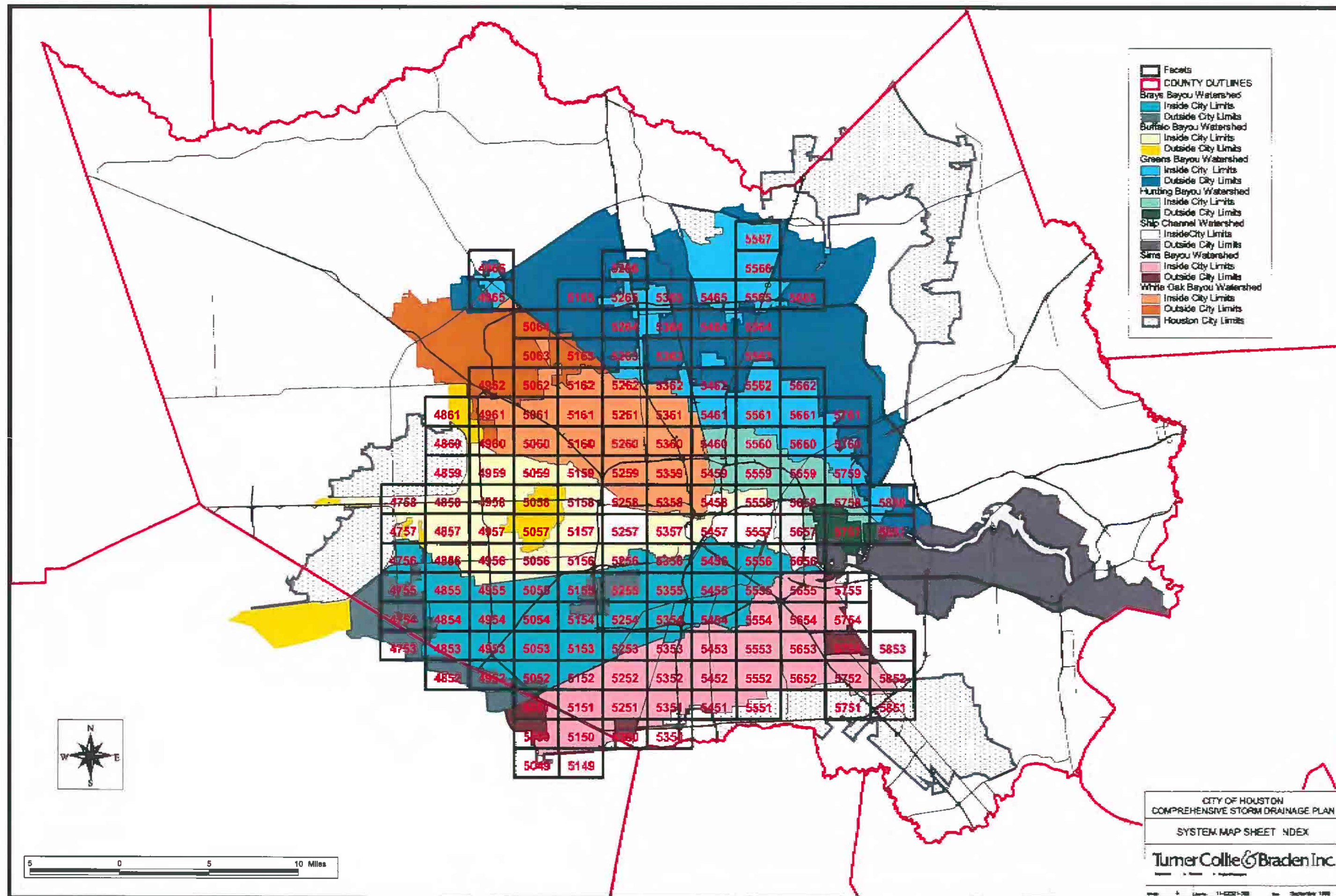






 Facets
 White Oak Bayou Watershed
 Inside City Limits
 Outside City Limits
 Houston City Limits

CITY OF HOUSTON
COMPREHENSIVE STORM DRAINAGE PLAN
WHITE OAK BAYOU WATERSHED MAP
Turner Collie & Braden Inc.
September 1998



	Existing Storm Sewer Pipe Alignment and Diameter (inches)
	Proposed Pipe Diameter Upgrade for Existing Systems (inches)
	Proposed Storm Sewer Pipe Alignment and Diameter (inches)
	Proposed Box (Width, ft x Height, ft)
	Manhole
	Existing Outfall
	System Outfall Identification
	Storm Sewer System Drainage Area
	Flooding Complaint (Approximate Location)
	FEMA Repetitive Claim (Approximate Location)
	Drainage Survey (Approximate Location)
	Watershed Boundary and Name
	City of Houston Corporate Limit (City Limit)
	Major Channel and Name
	Drainage Ditch
	Adjacent System (Facet) Map Number
	CIP Not Determined for This Area Improvements Determined in Other Study
	Detention Basin

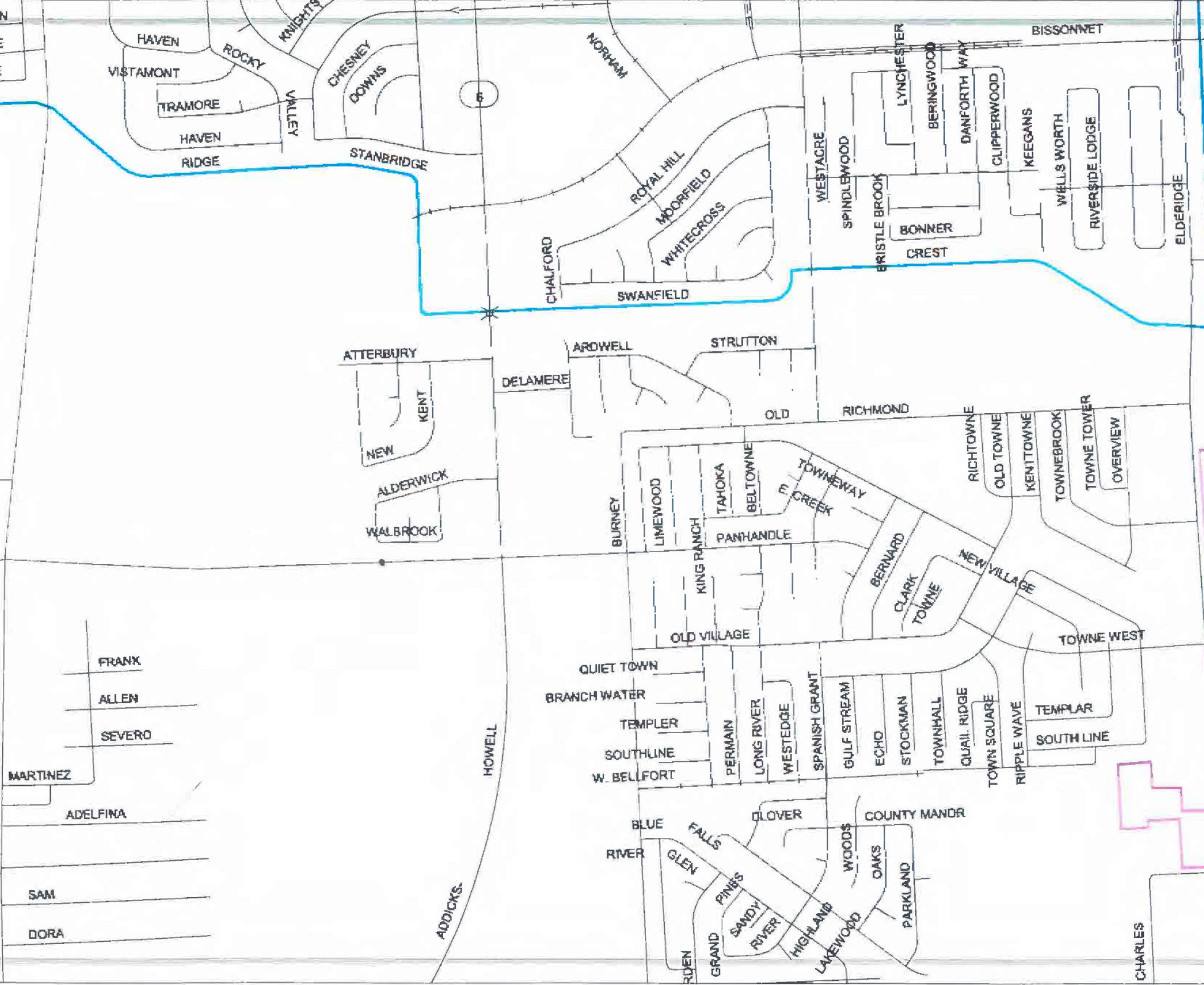
SYSTEM MAP LEGEND



DISCLAIMER

The data used to prepare maps, exhibits, tables, and the analyses for this project was derived from various sources. TC&B provides no warranty nor accepts any responsibility for the data used for purposes other than intended use in this project. Any liability or risk associated with such use shall be the responsibility of said user.

SEE FACET 4754



SEE FACET 4752

SEE FACET 4754

SEE FACET 4653

SEE FACET 4853



Brays Bayou Watershed



SEE FACET 4752

SEE FACET 4755



SEE FACET 0

SEE FACET 4854

SEE FACET 4753

SEE FACET 4755

SEE FACET 4654

SEE FACET 4854

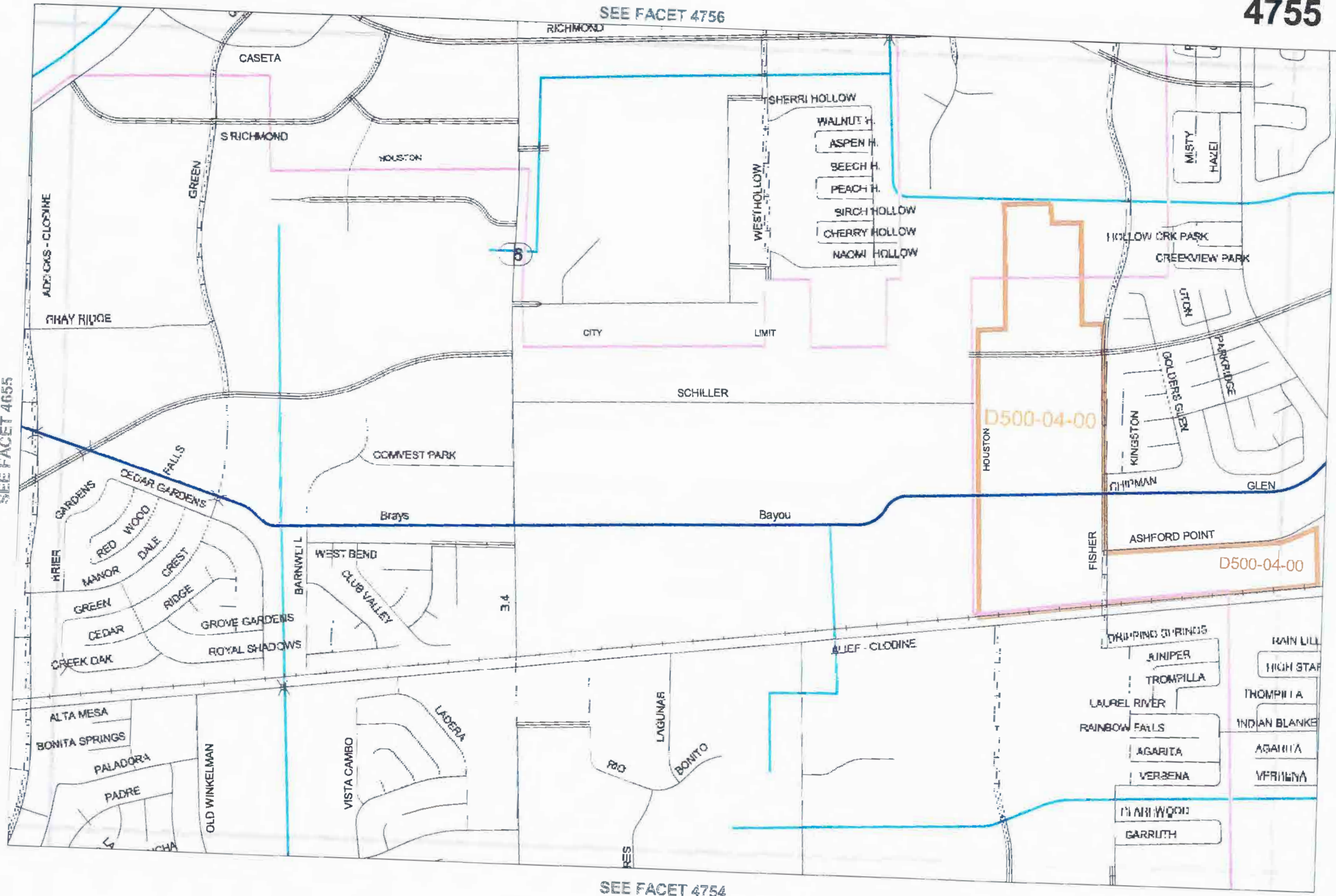


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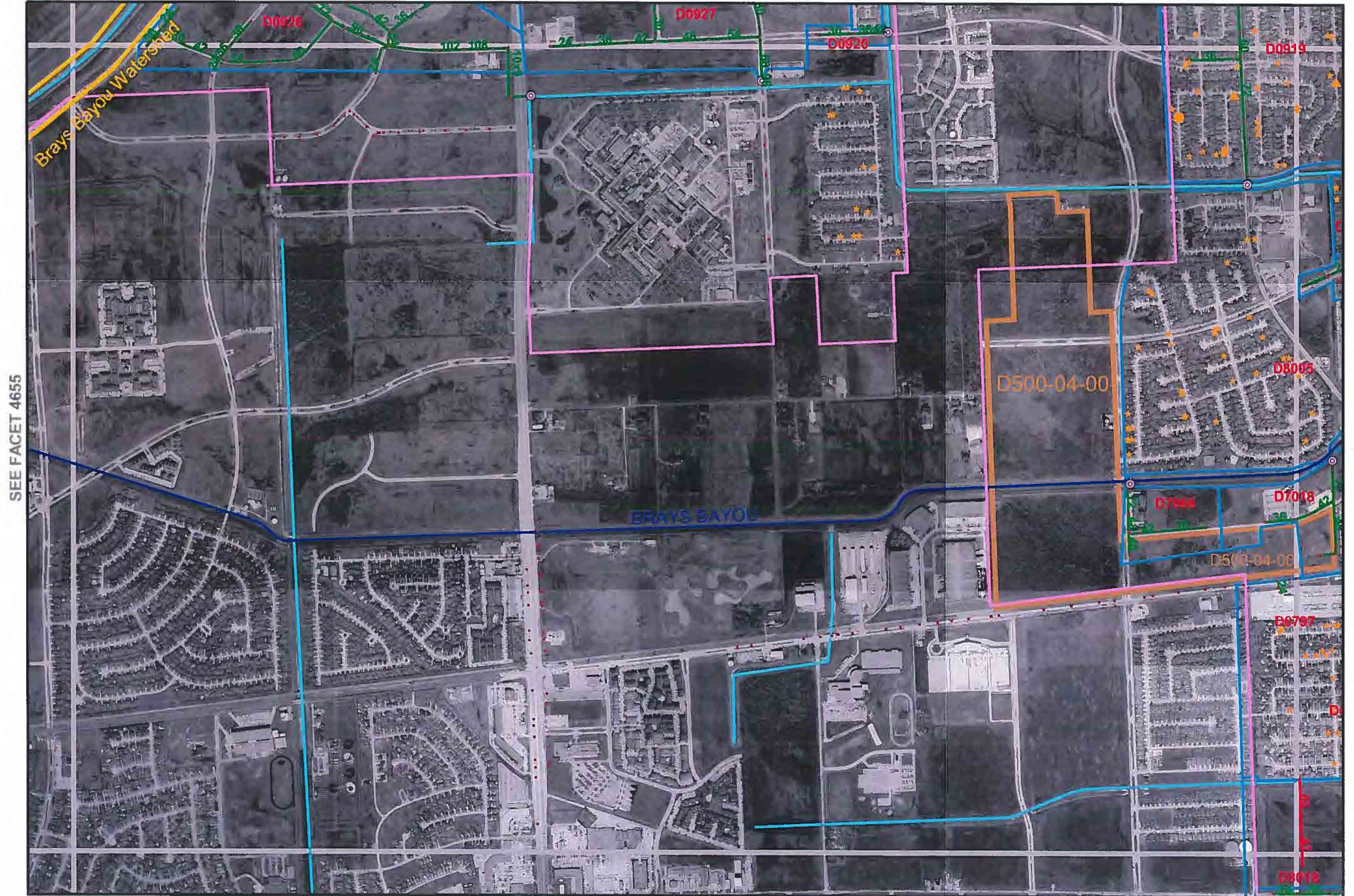
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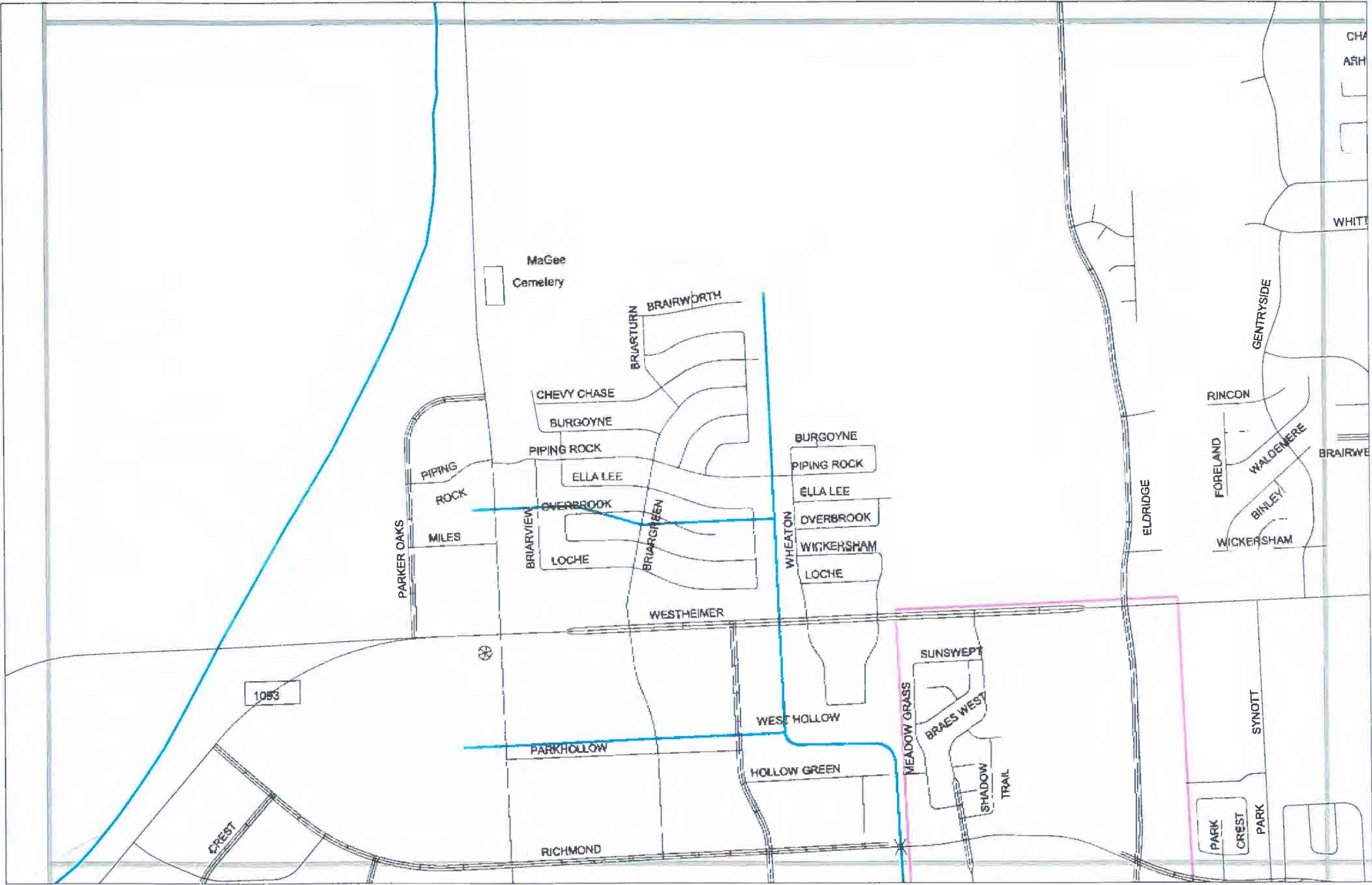
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Date: September 1999

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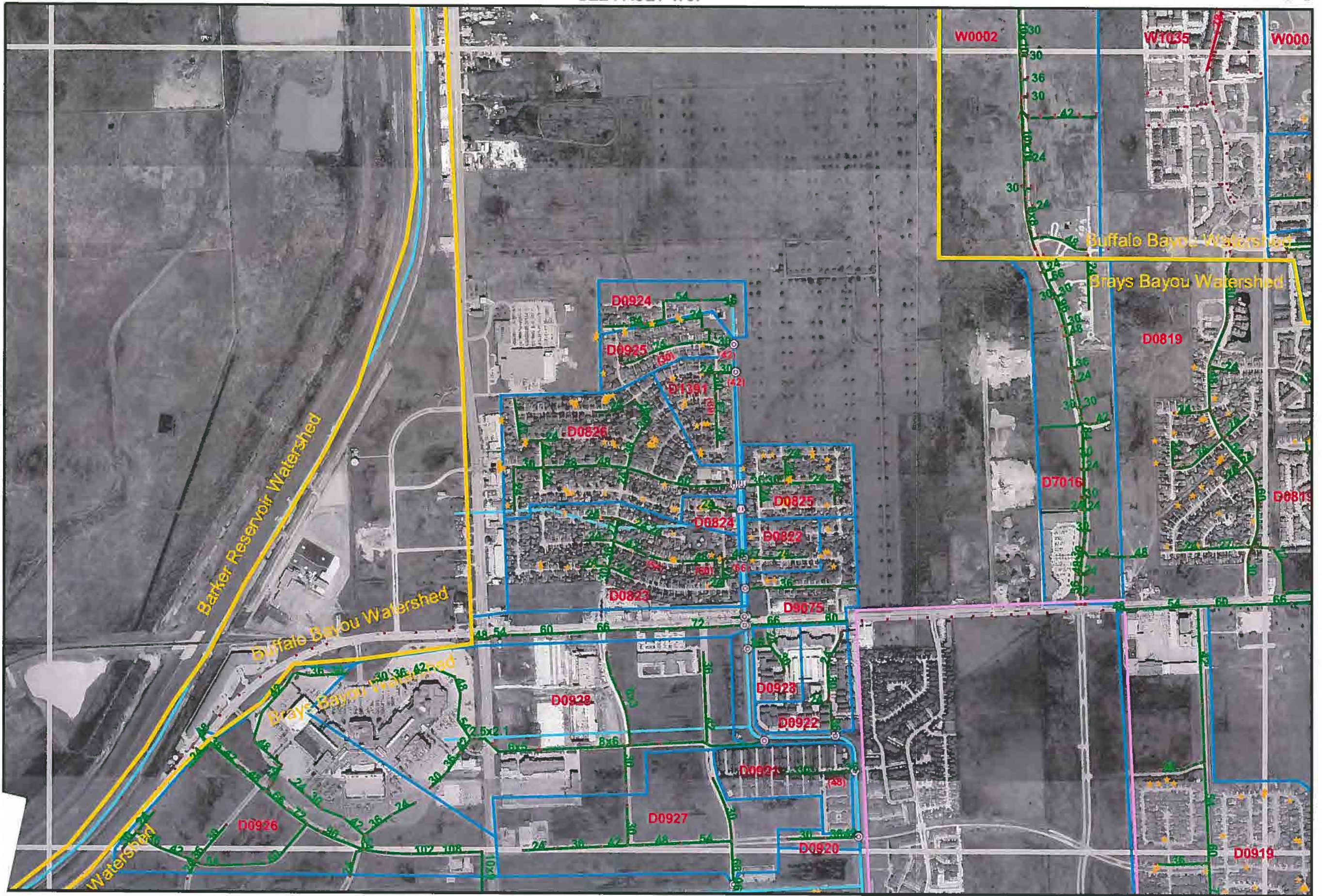


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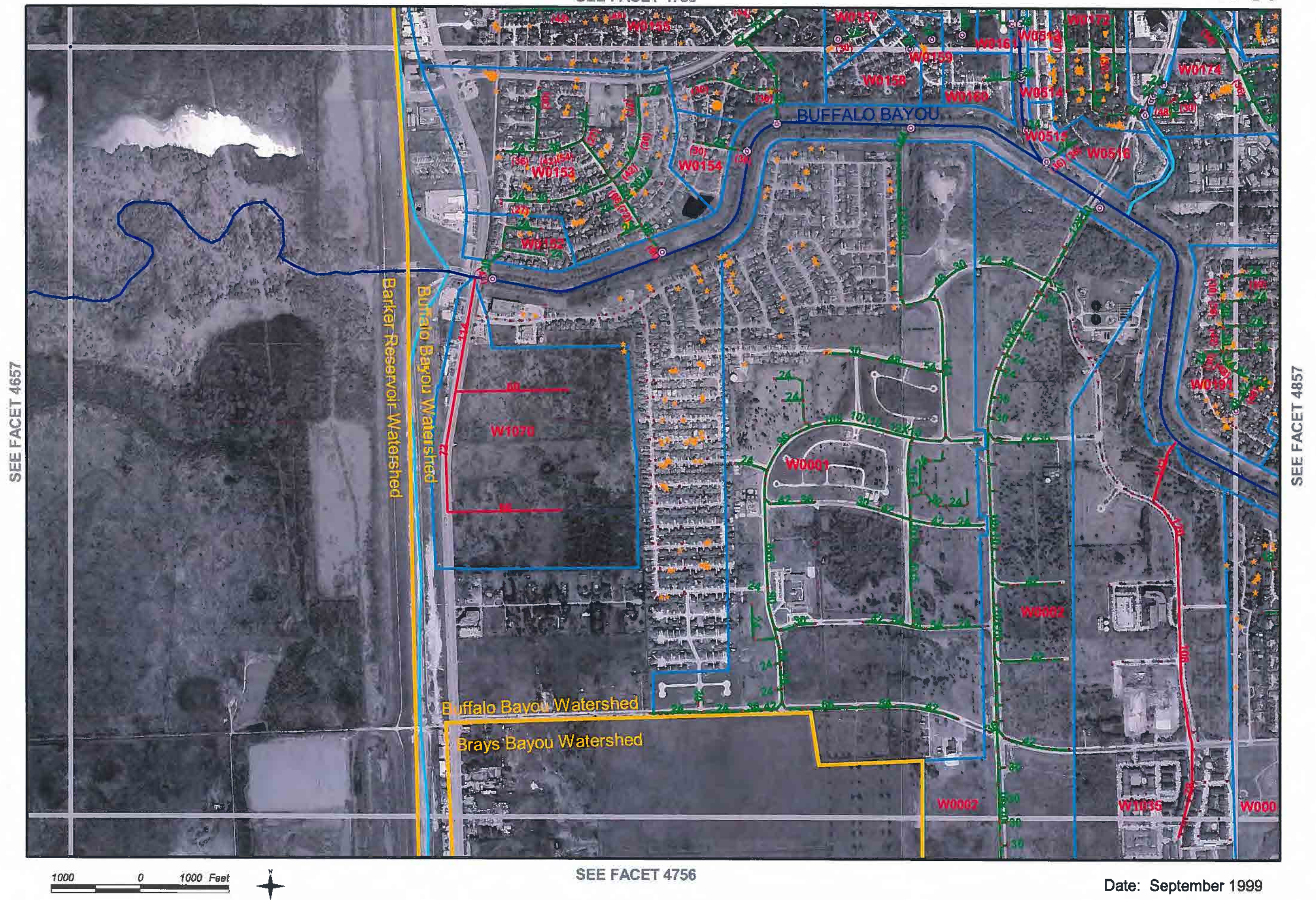
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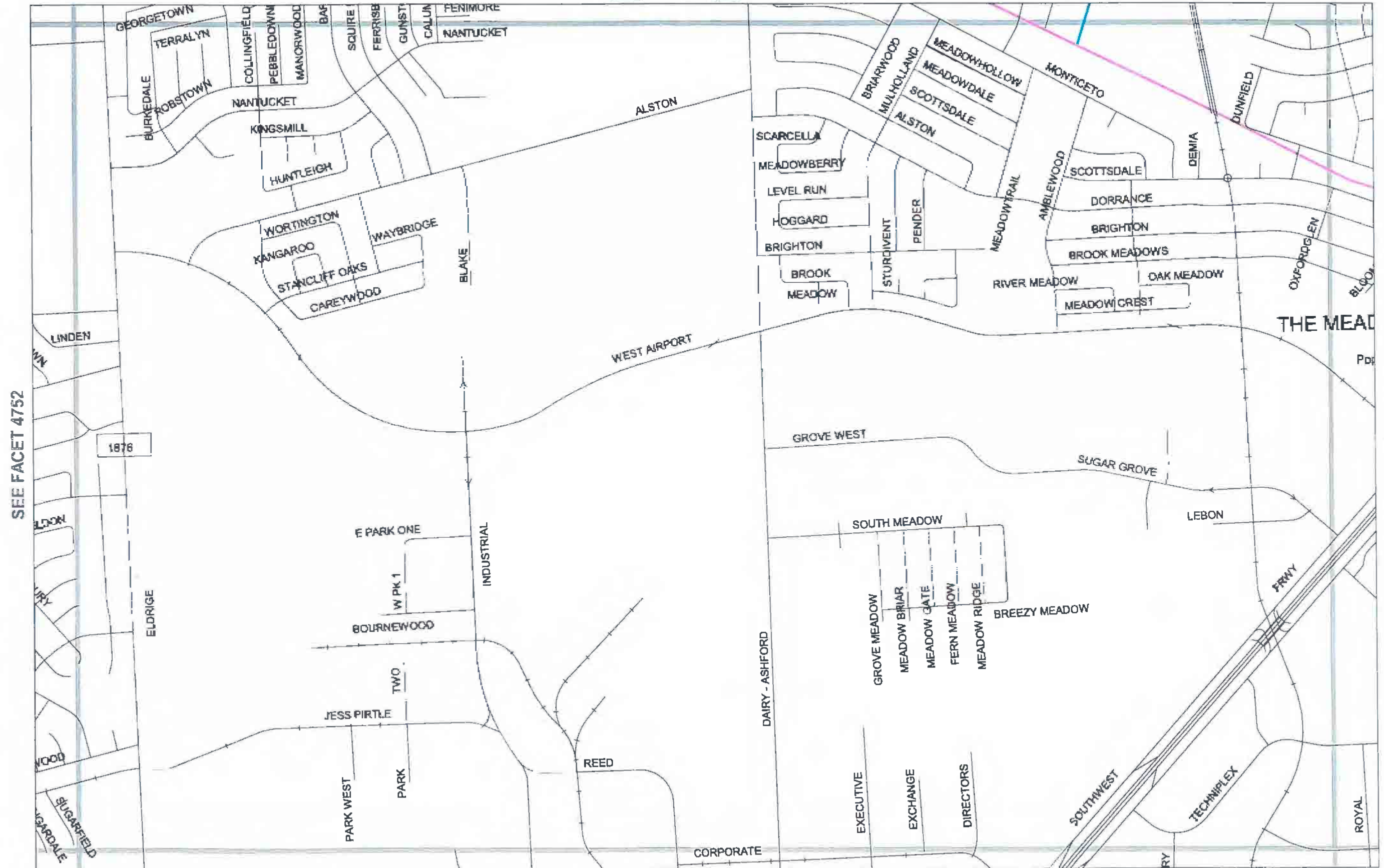
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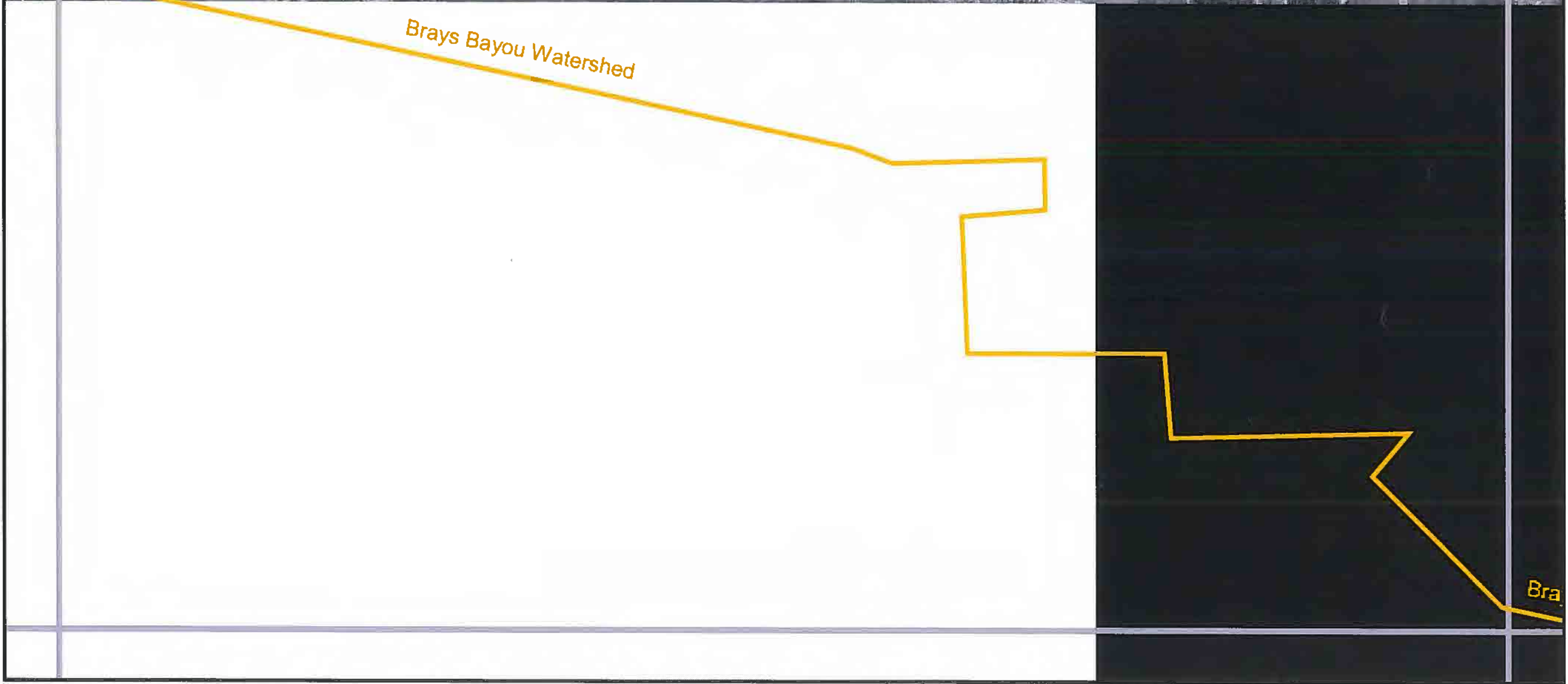
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SEE FACET 4752

Brays Bayou Watershed

SEE FACET 4952



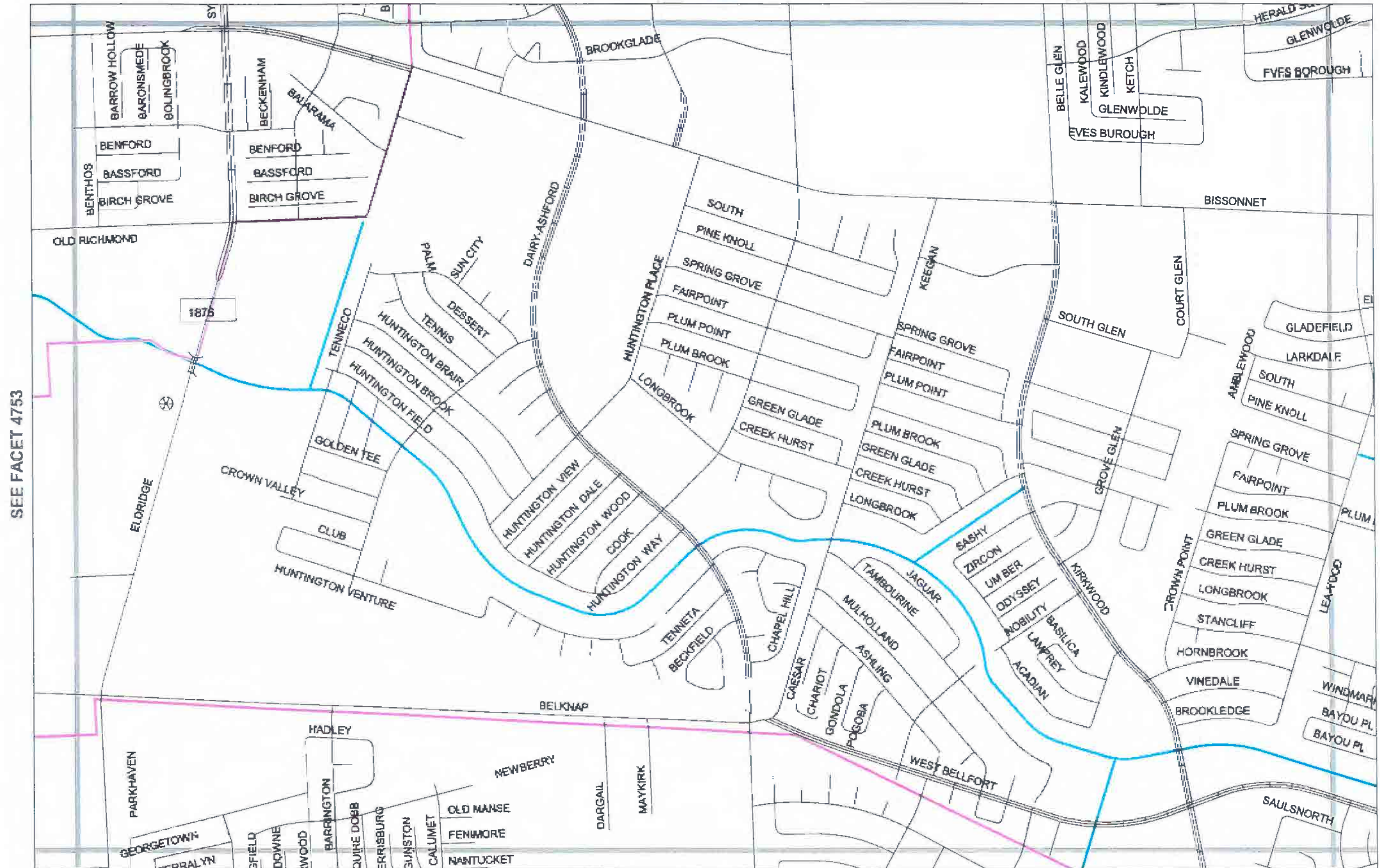
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Date: September 1999

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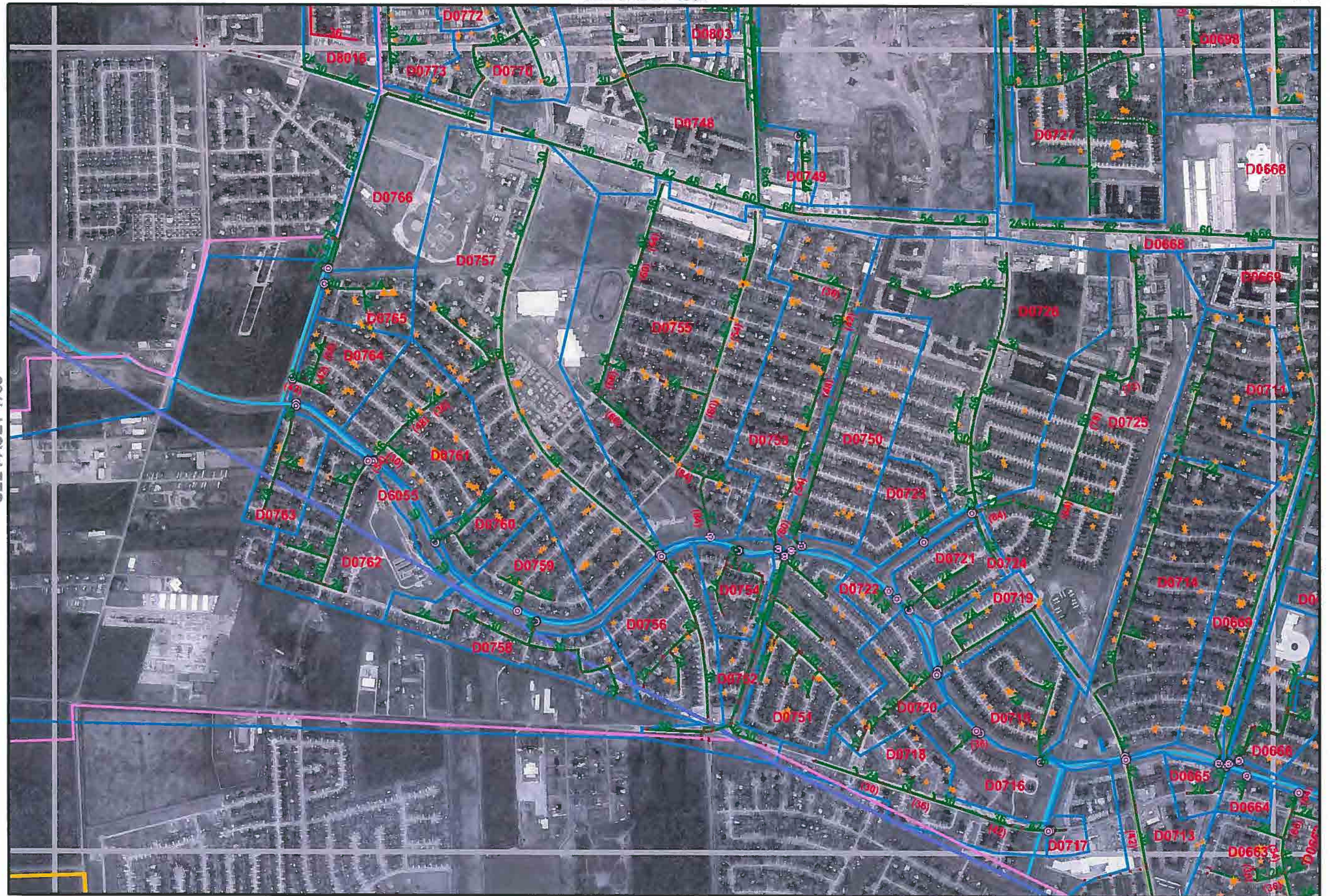


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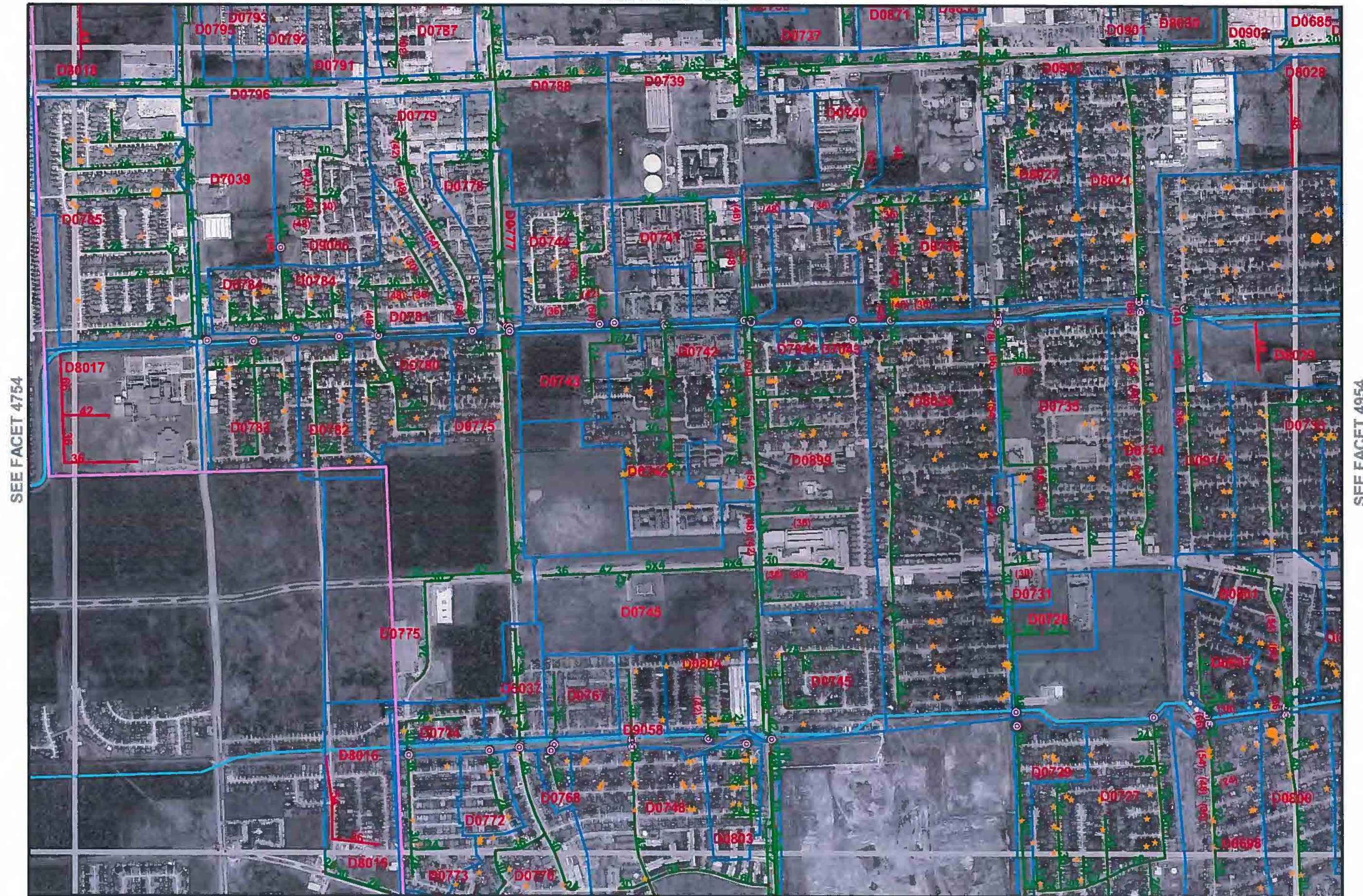
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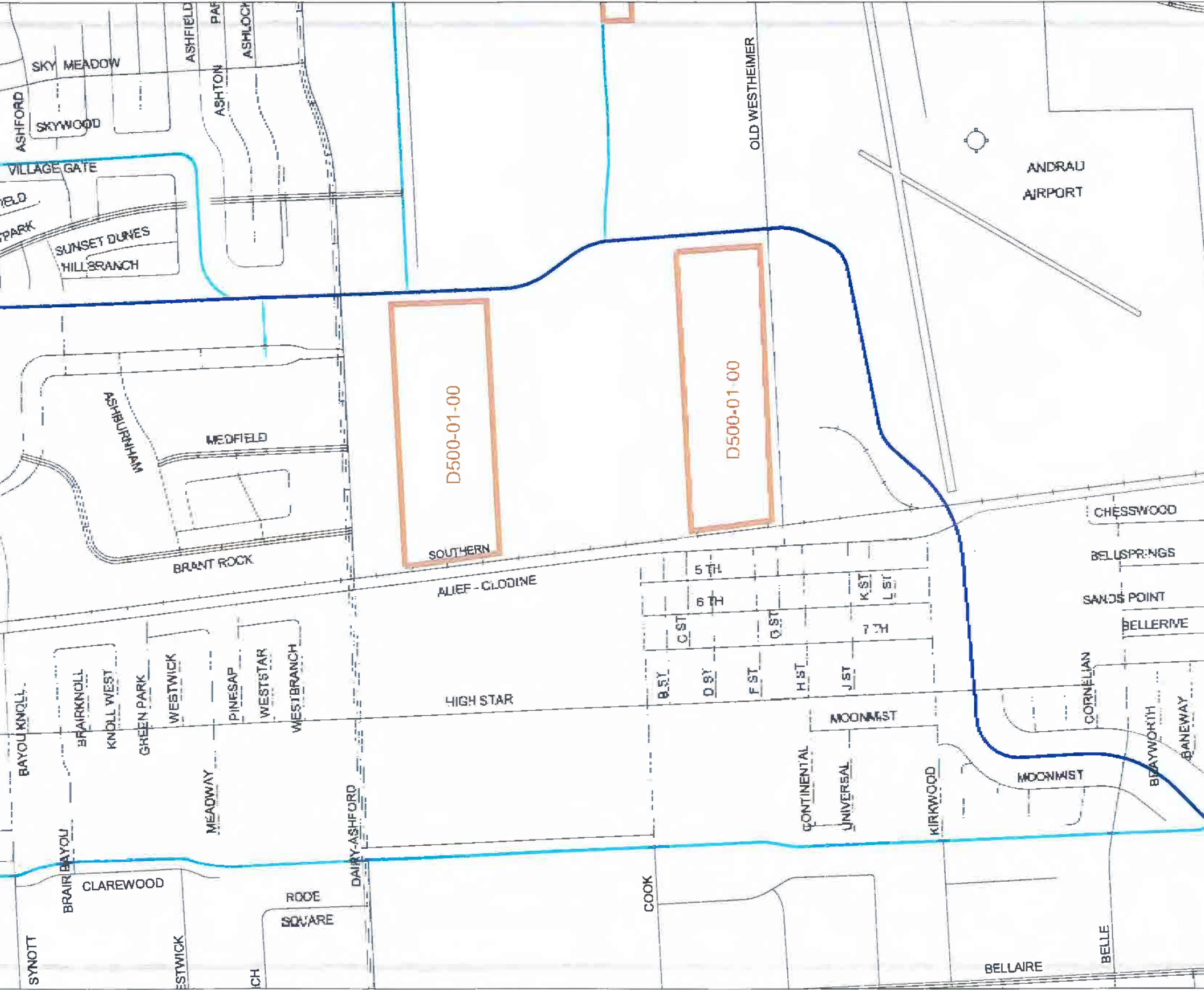
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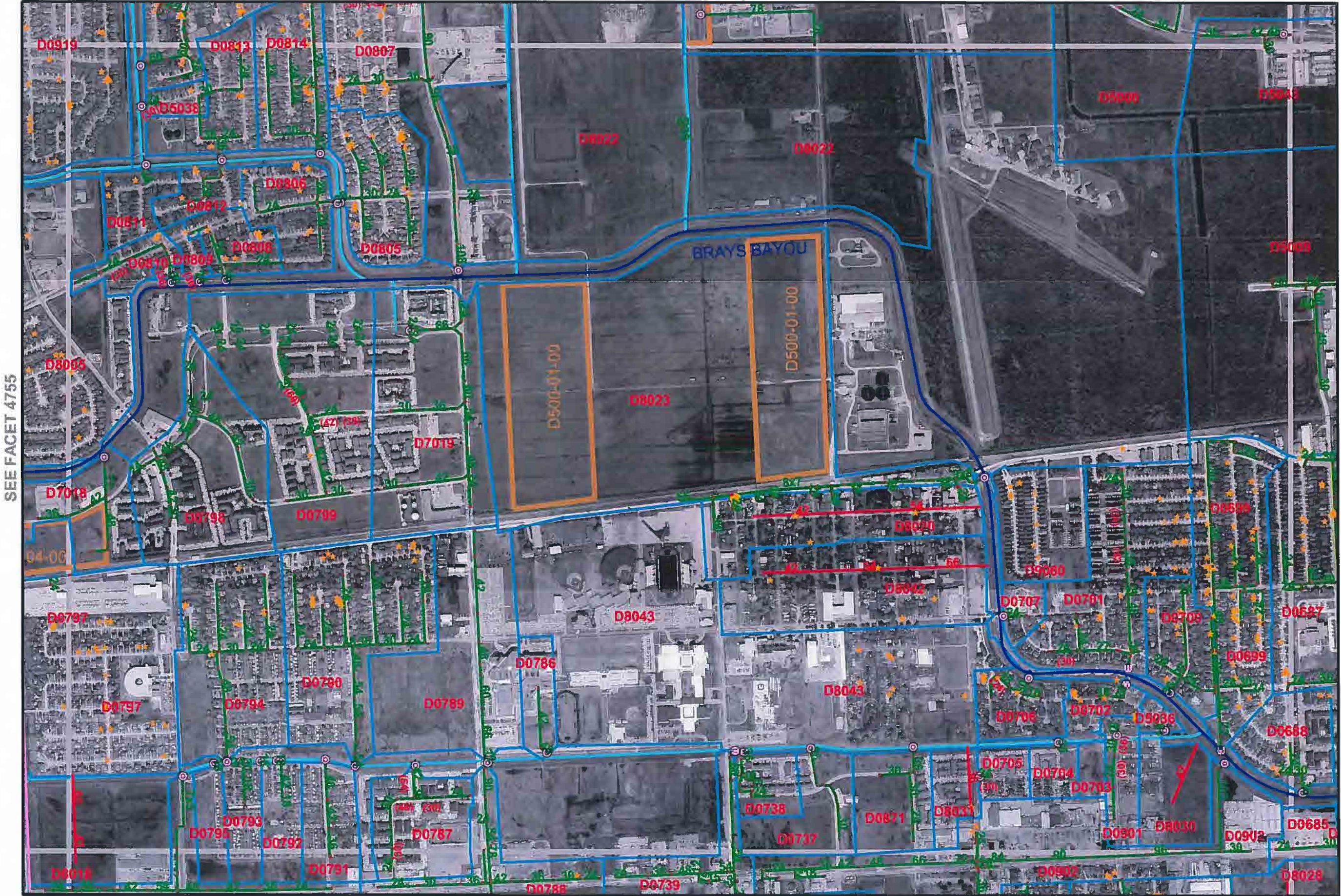
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SEE FACET 4854

Date: September 1999

SEE FACET 4857



SEE FACET 4956

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SEE FACET 4857



SEE FACET 4756

SEE FACET 4956

Buffalo Bayou Watershed
Brays Bayou Watershed

1000 0 1000 Feet



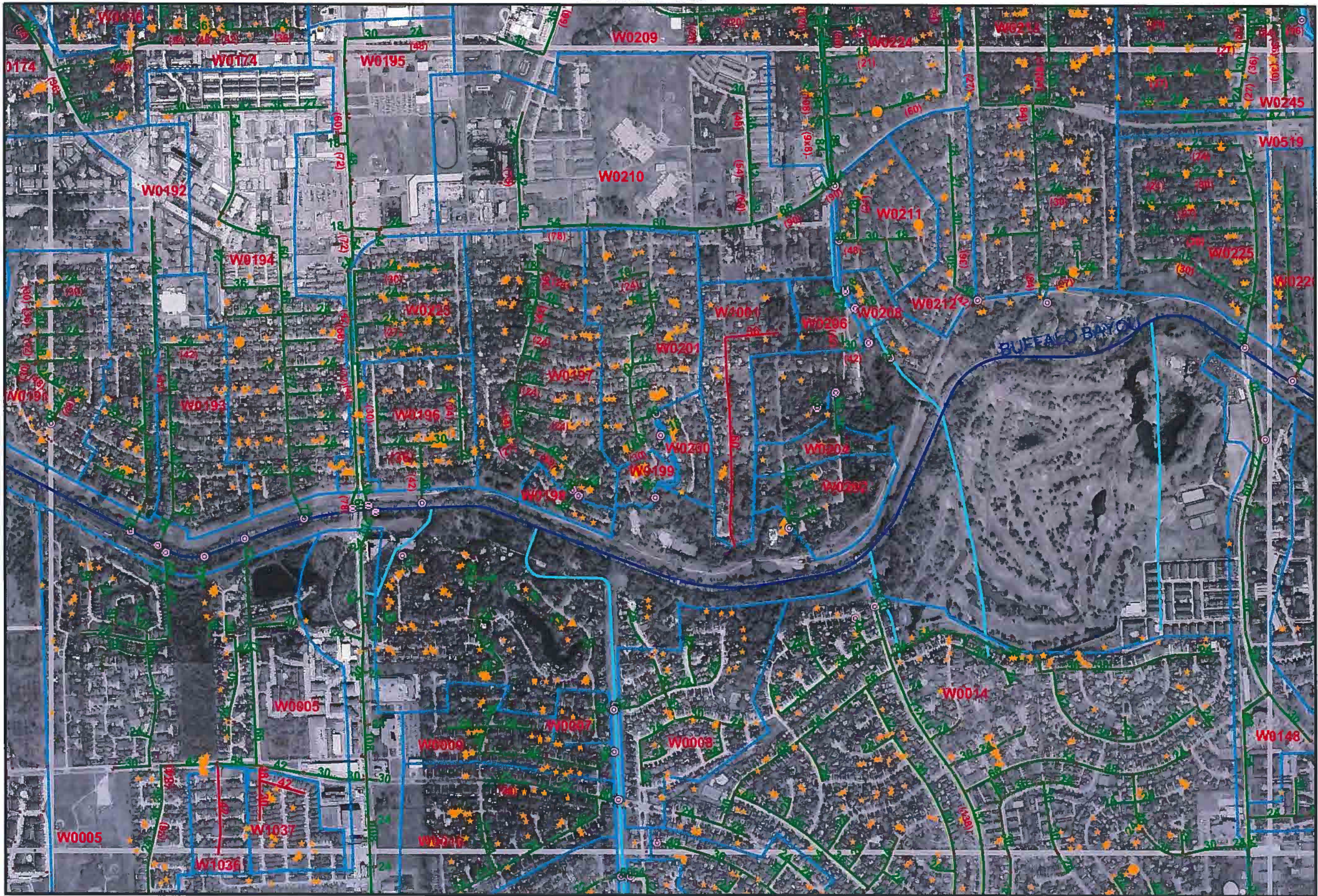
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Date: September 1999



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SEE FACET 4957

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Date: September 1999

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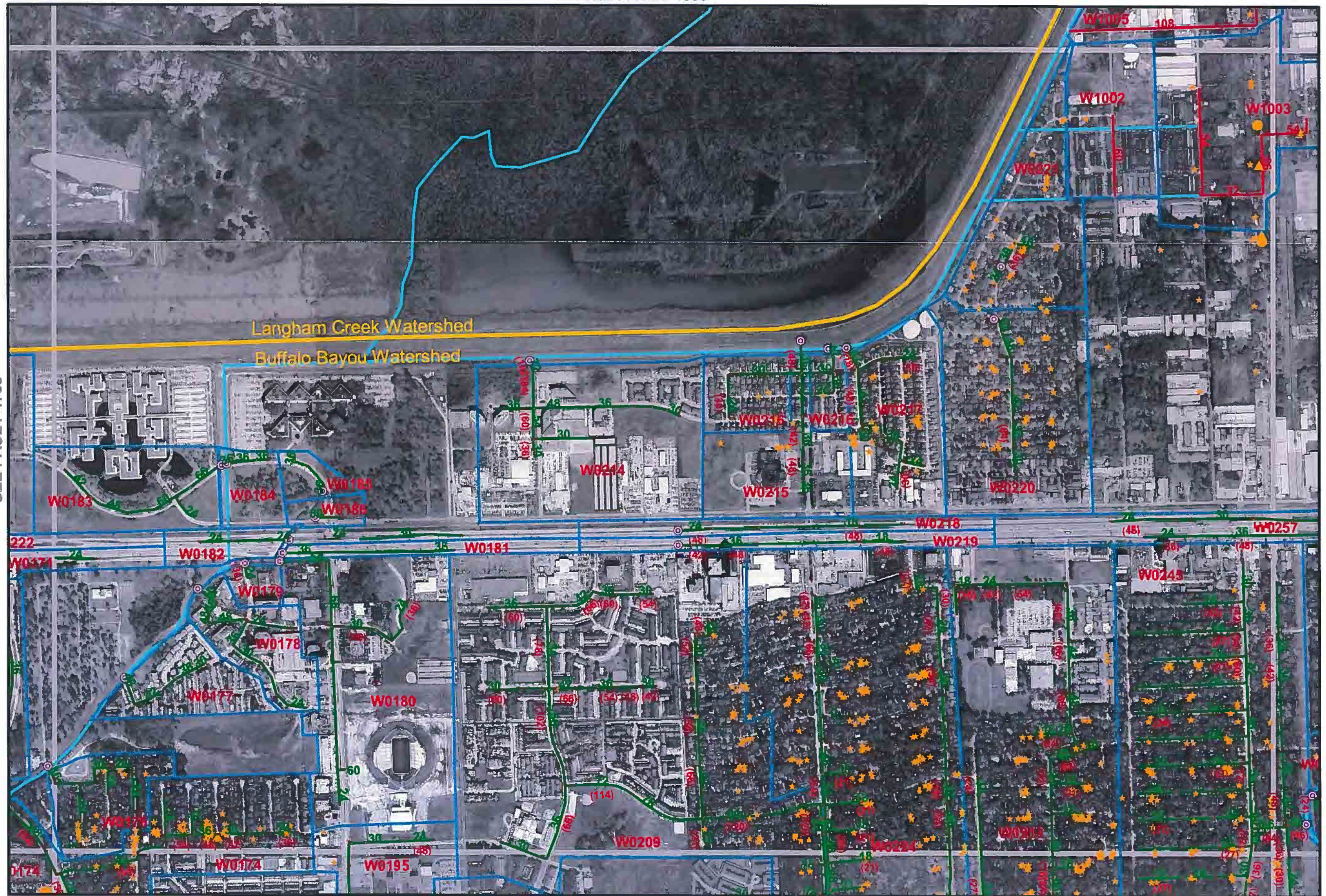
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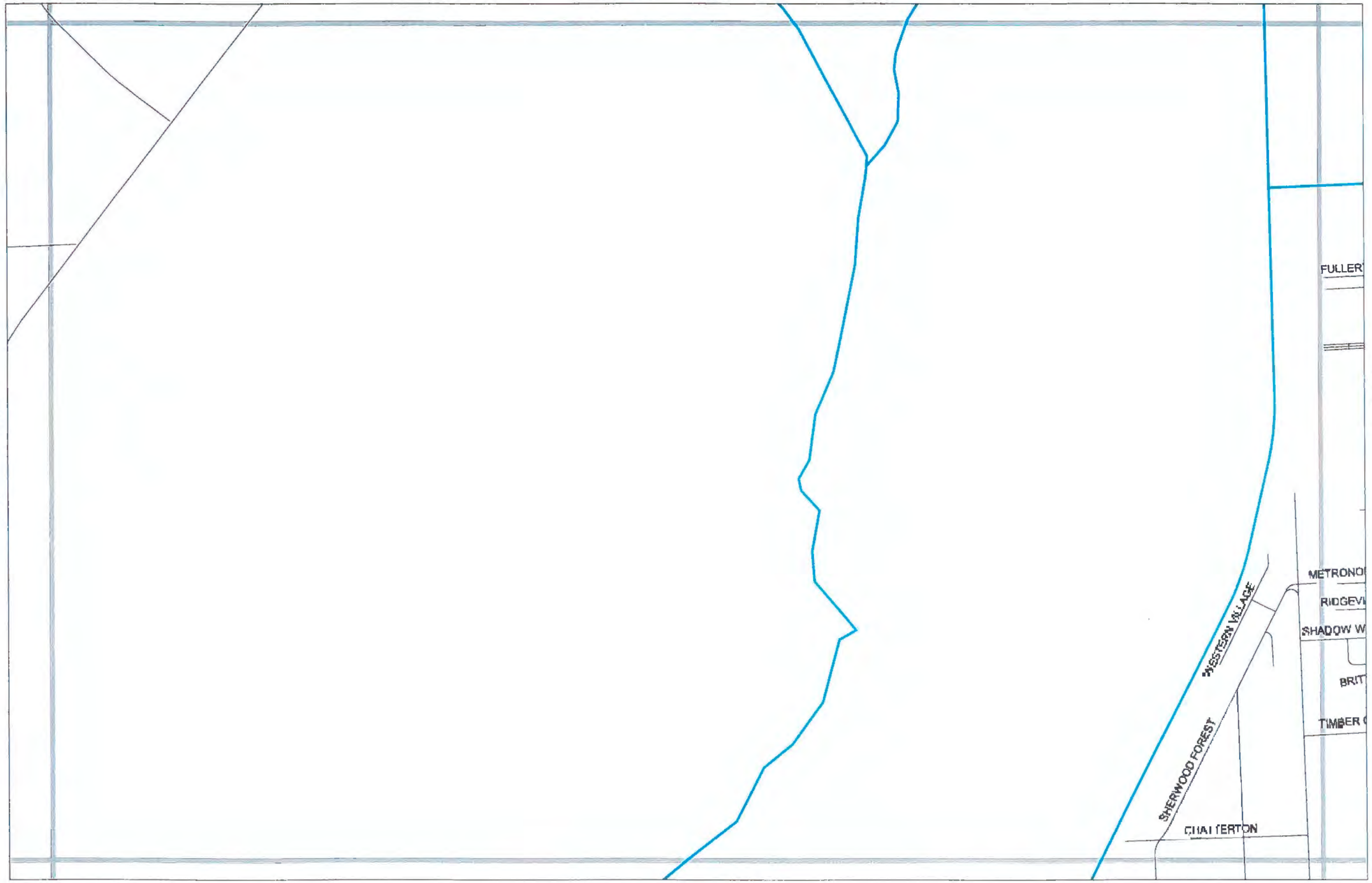
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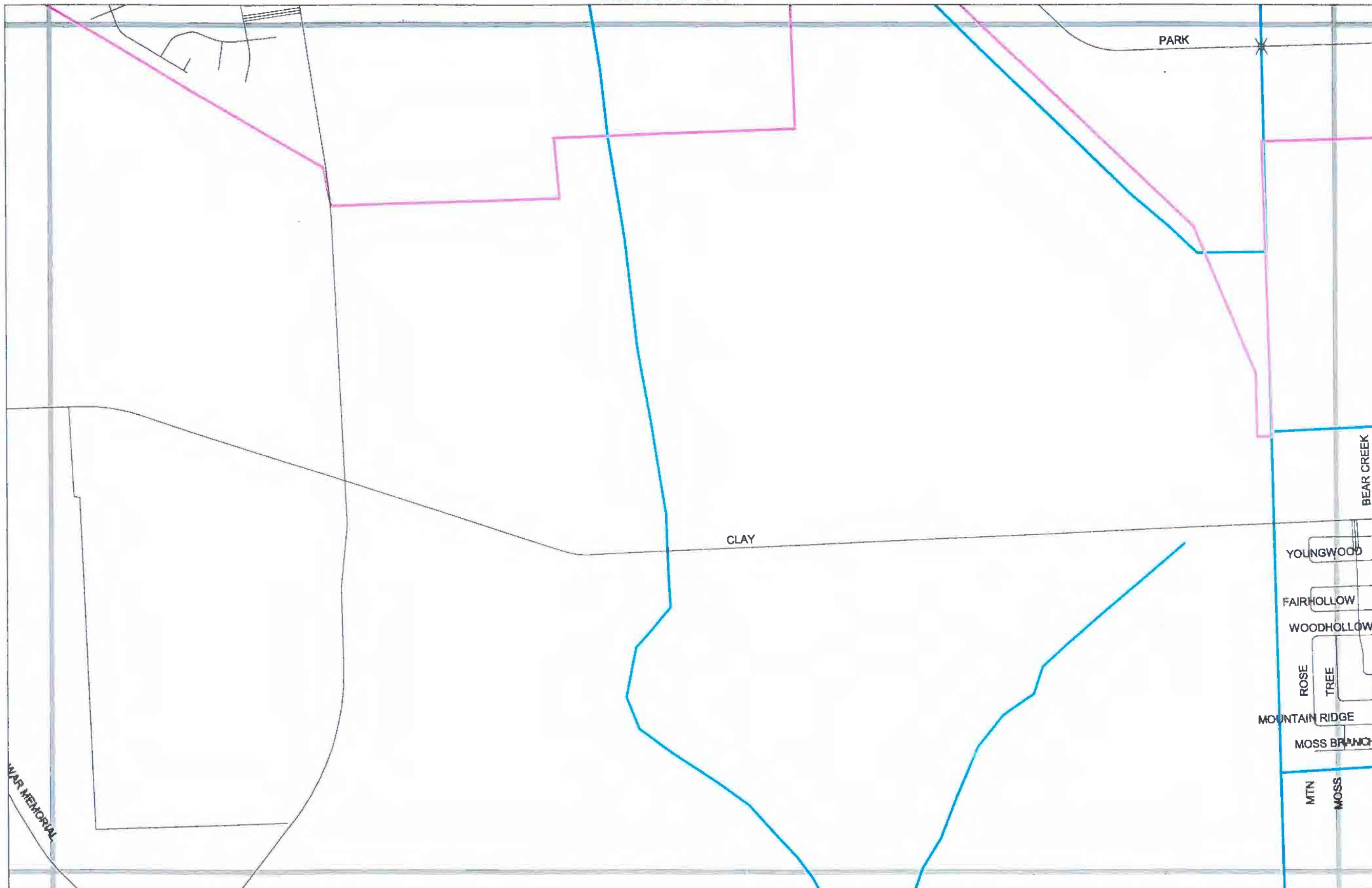


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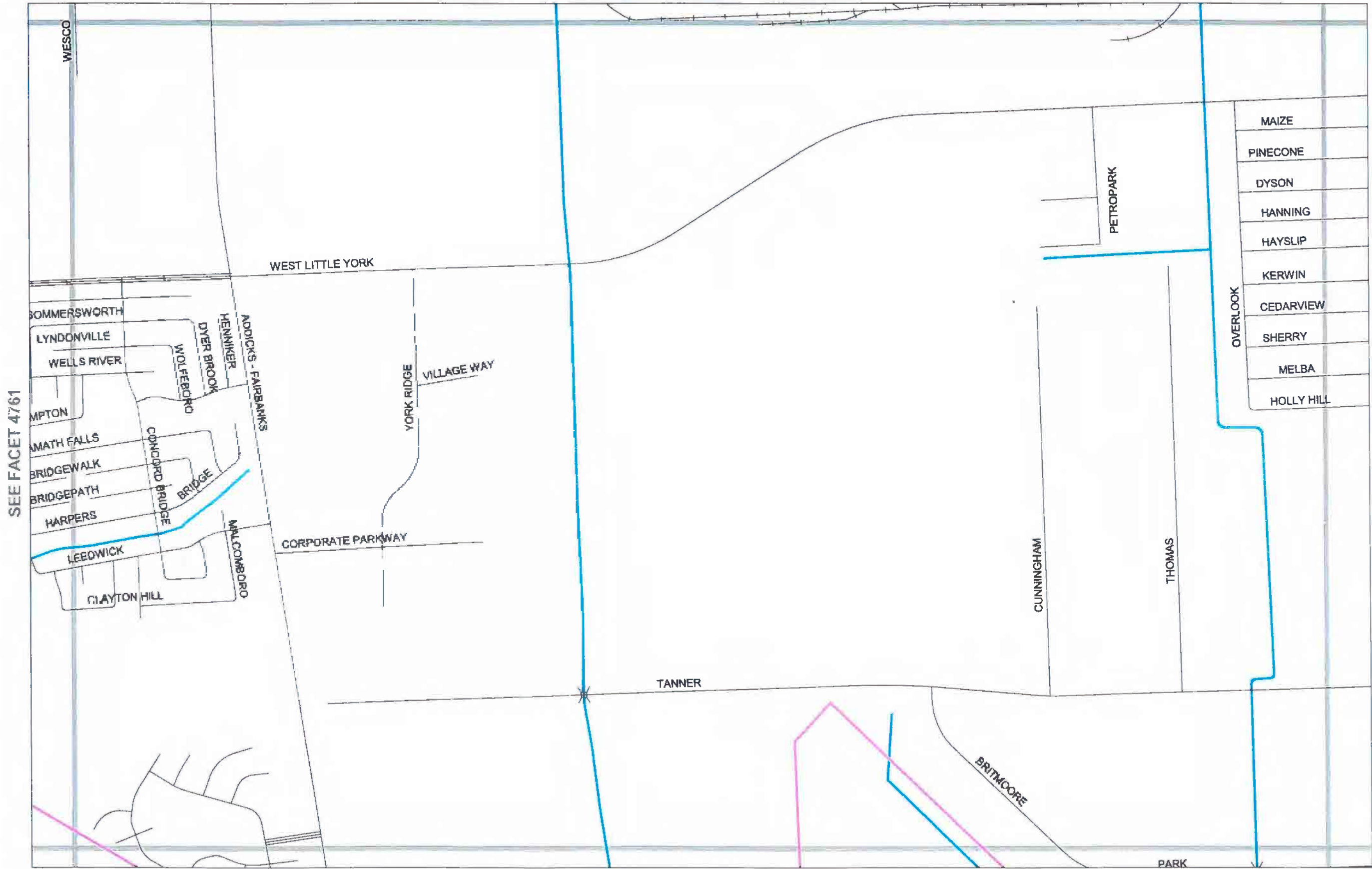
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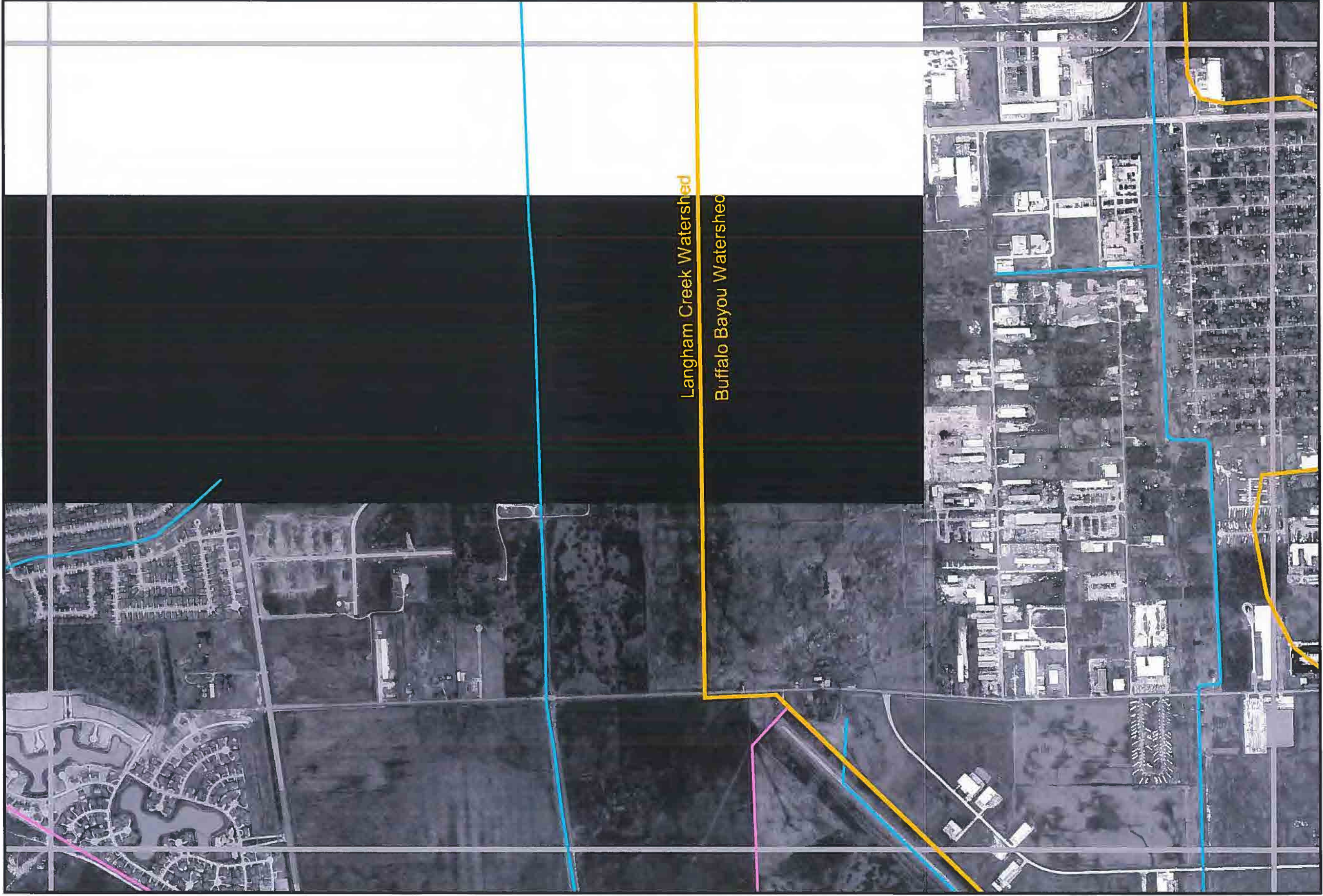
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Langham Creek Watershed
Buffalo Bayou Watershed

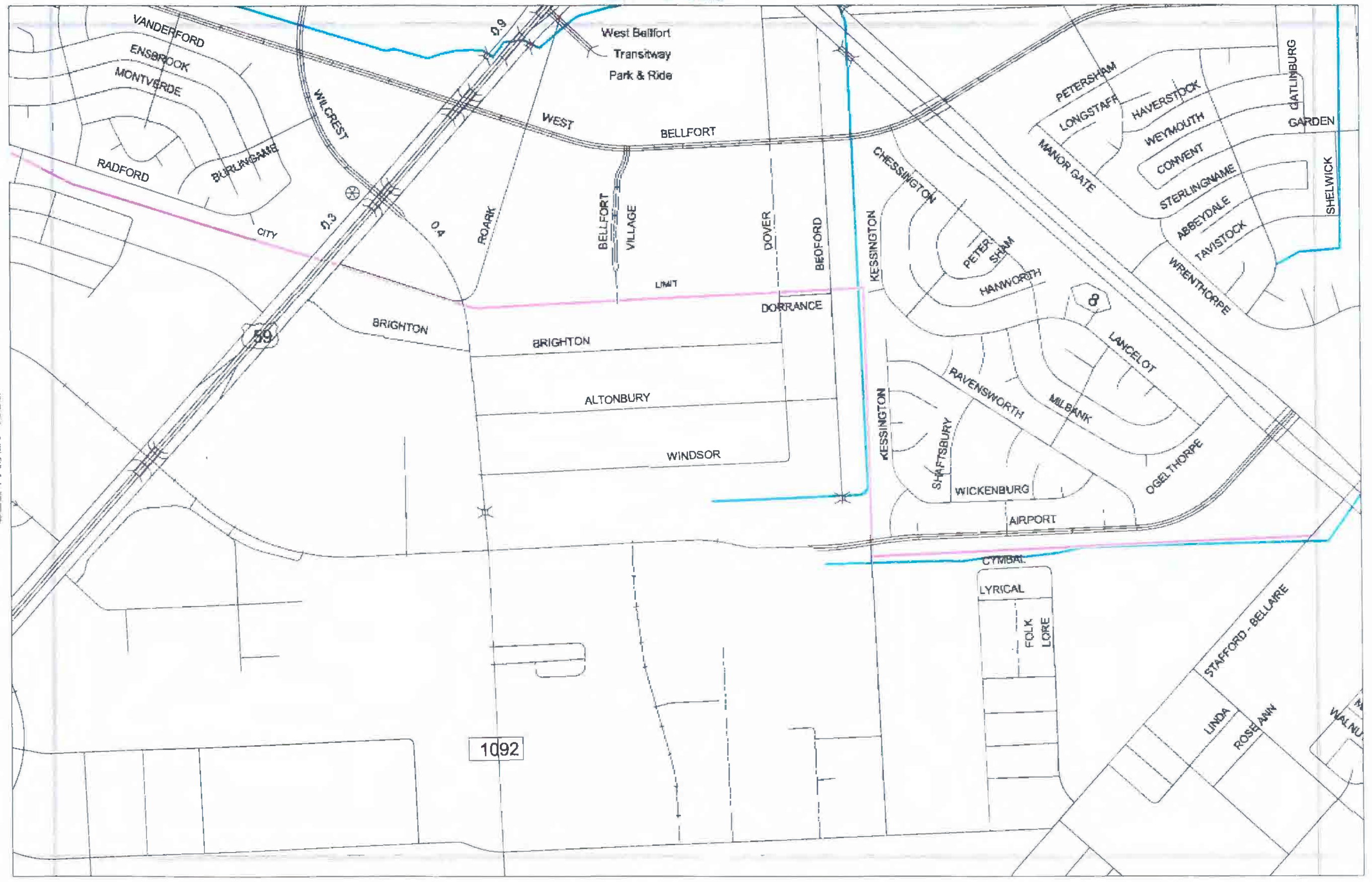


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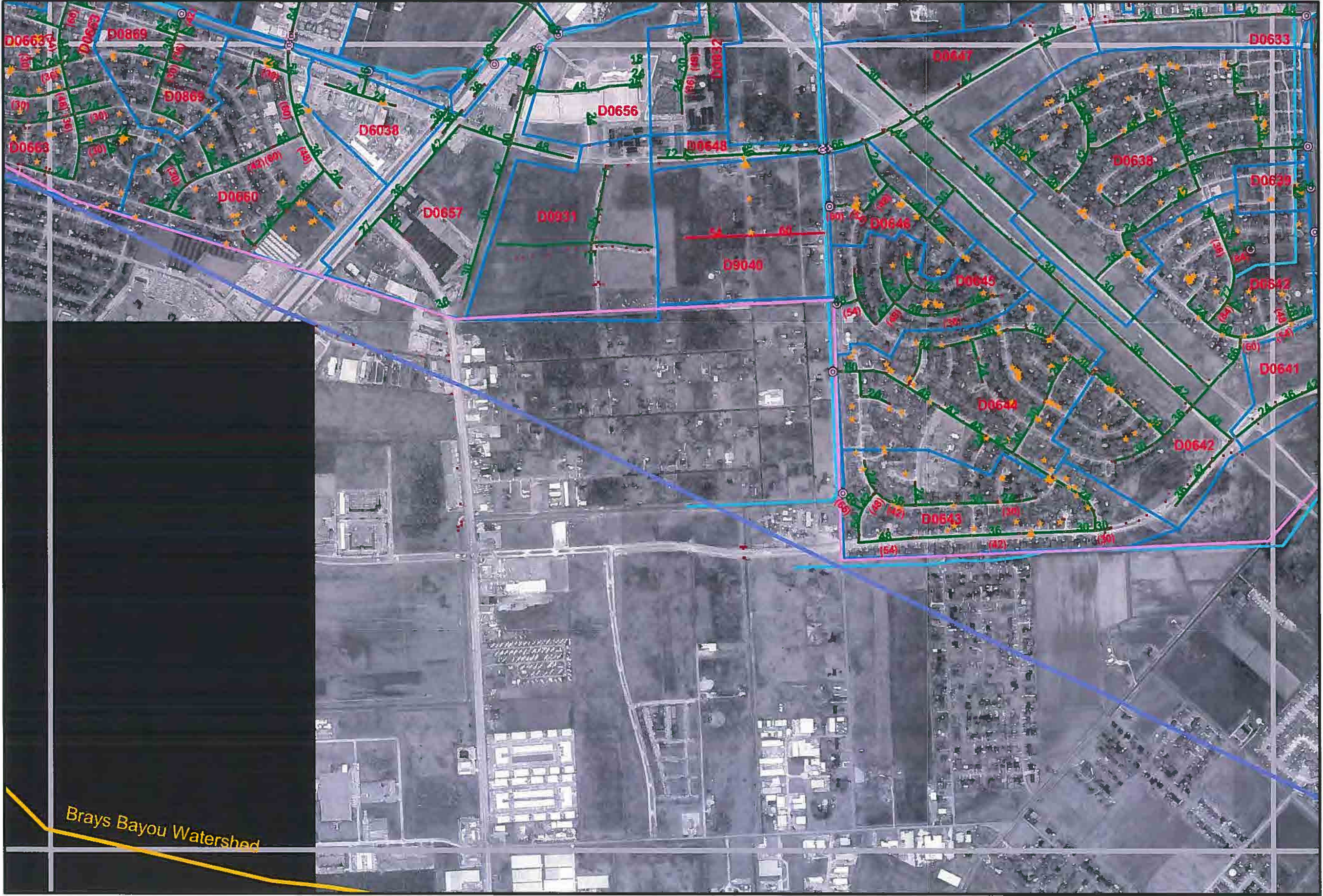


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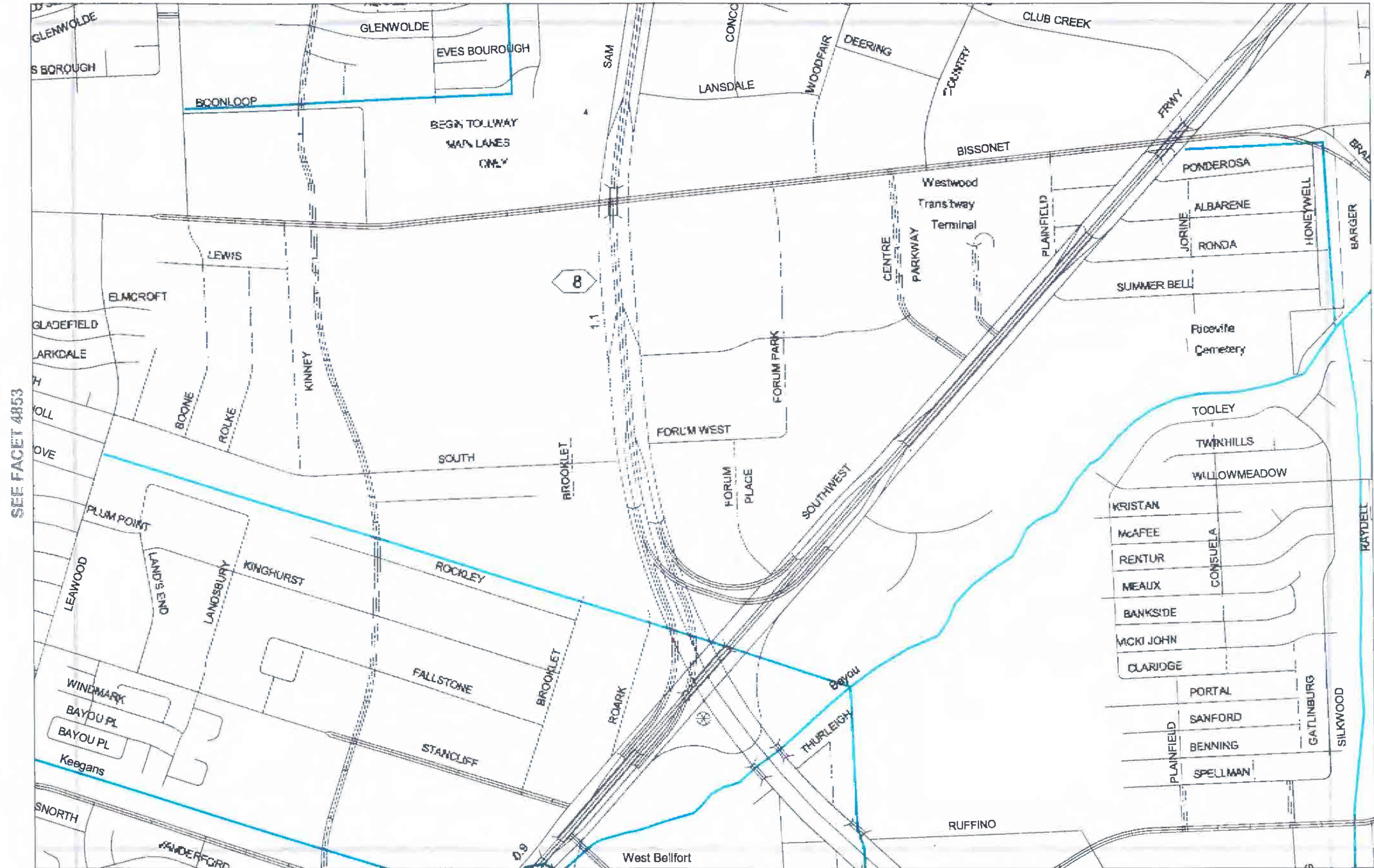
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Date: September 1999

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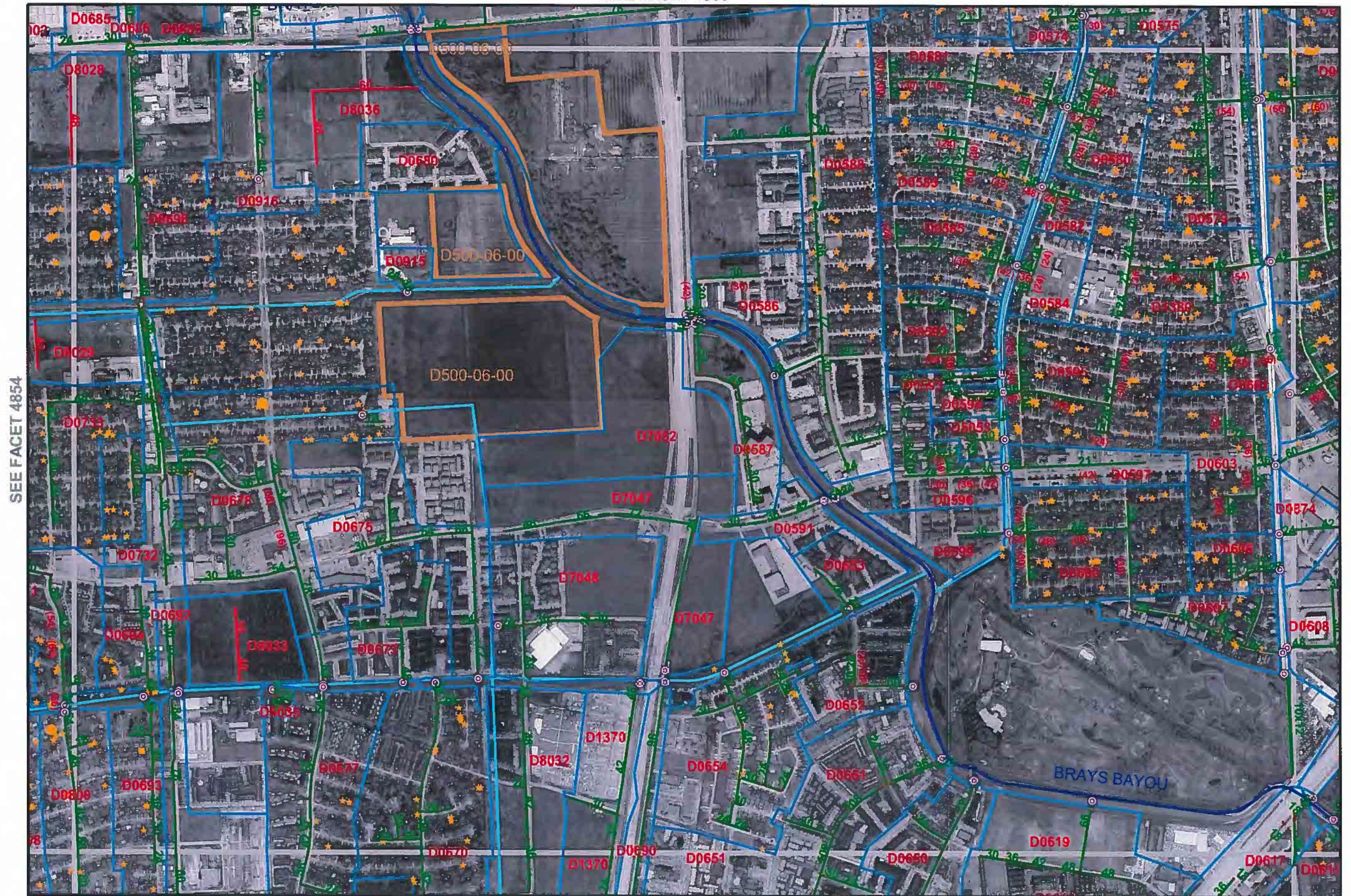
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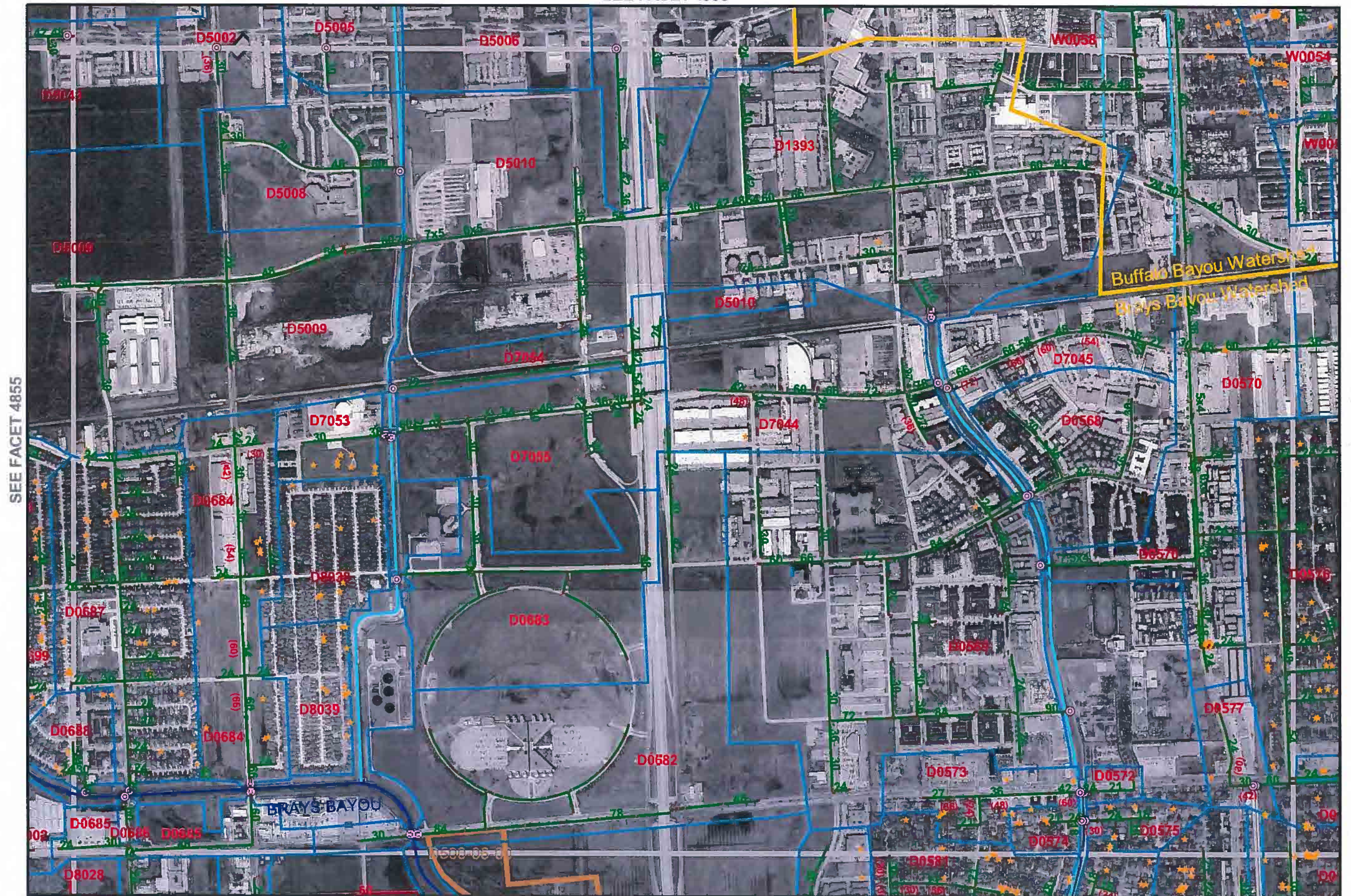
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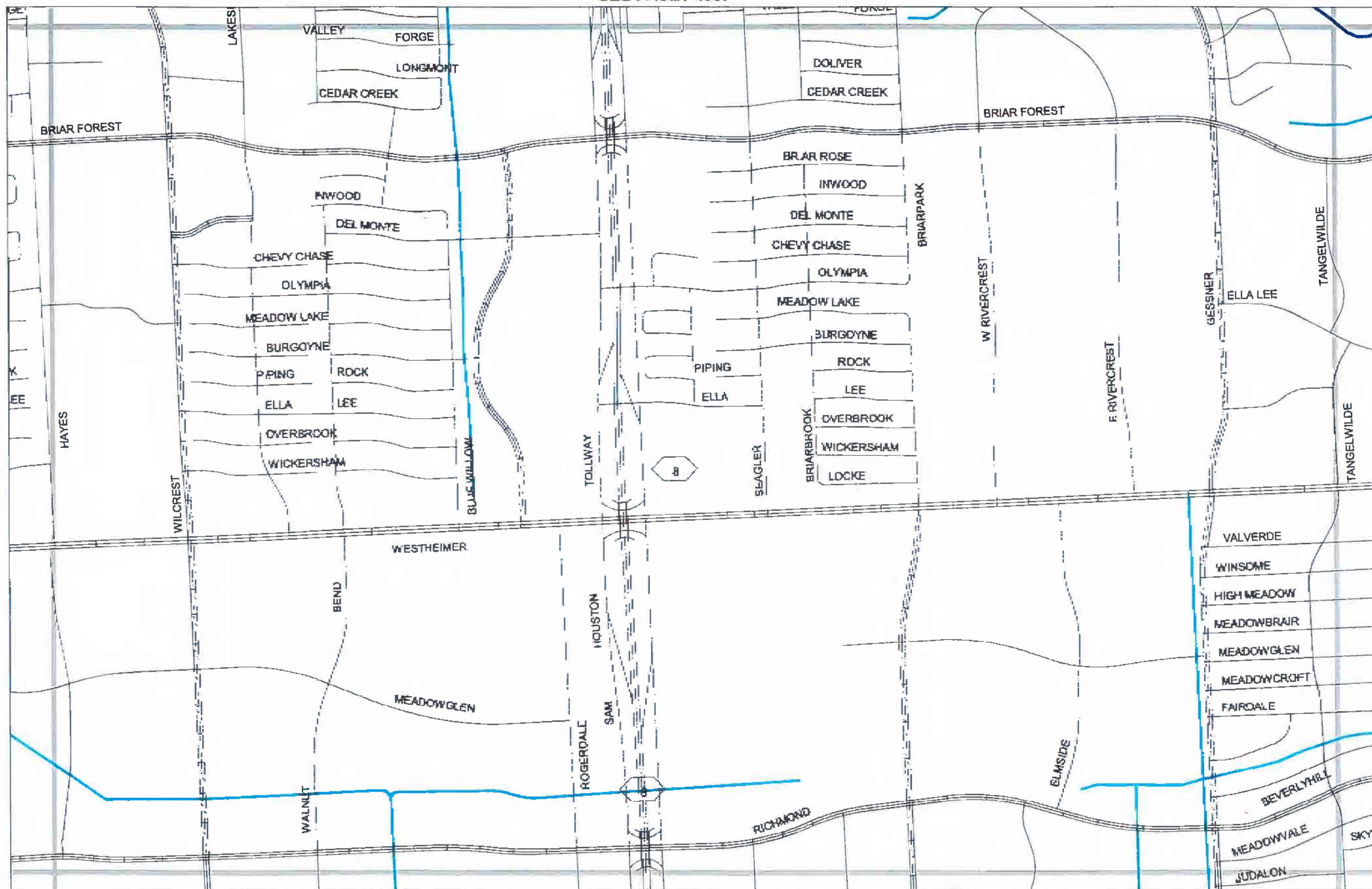
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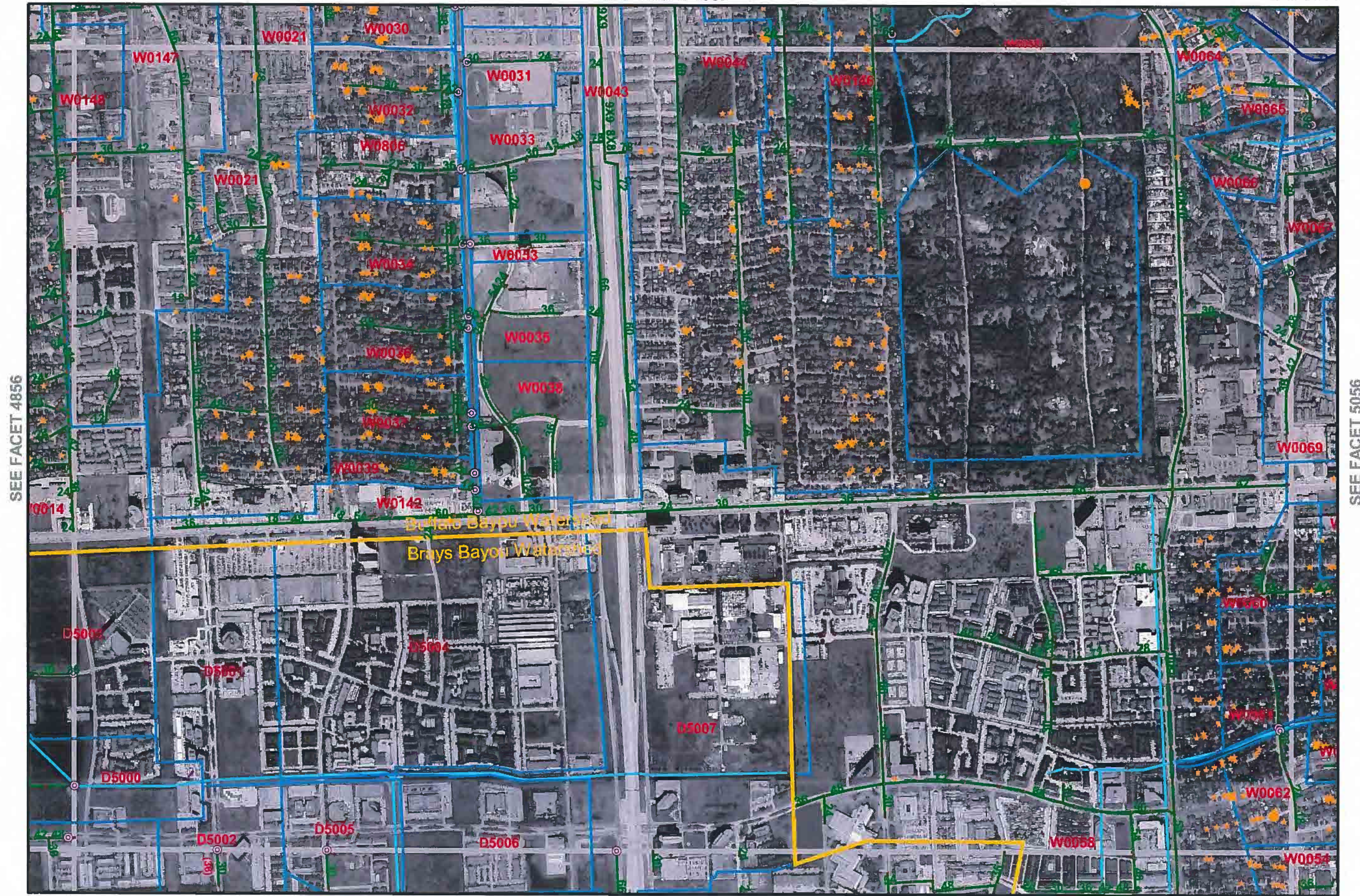
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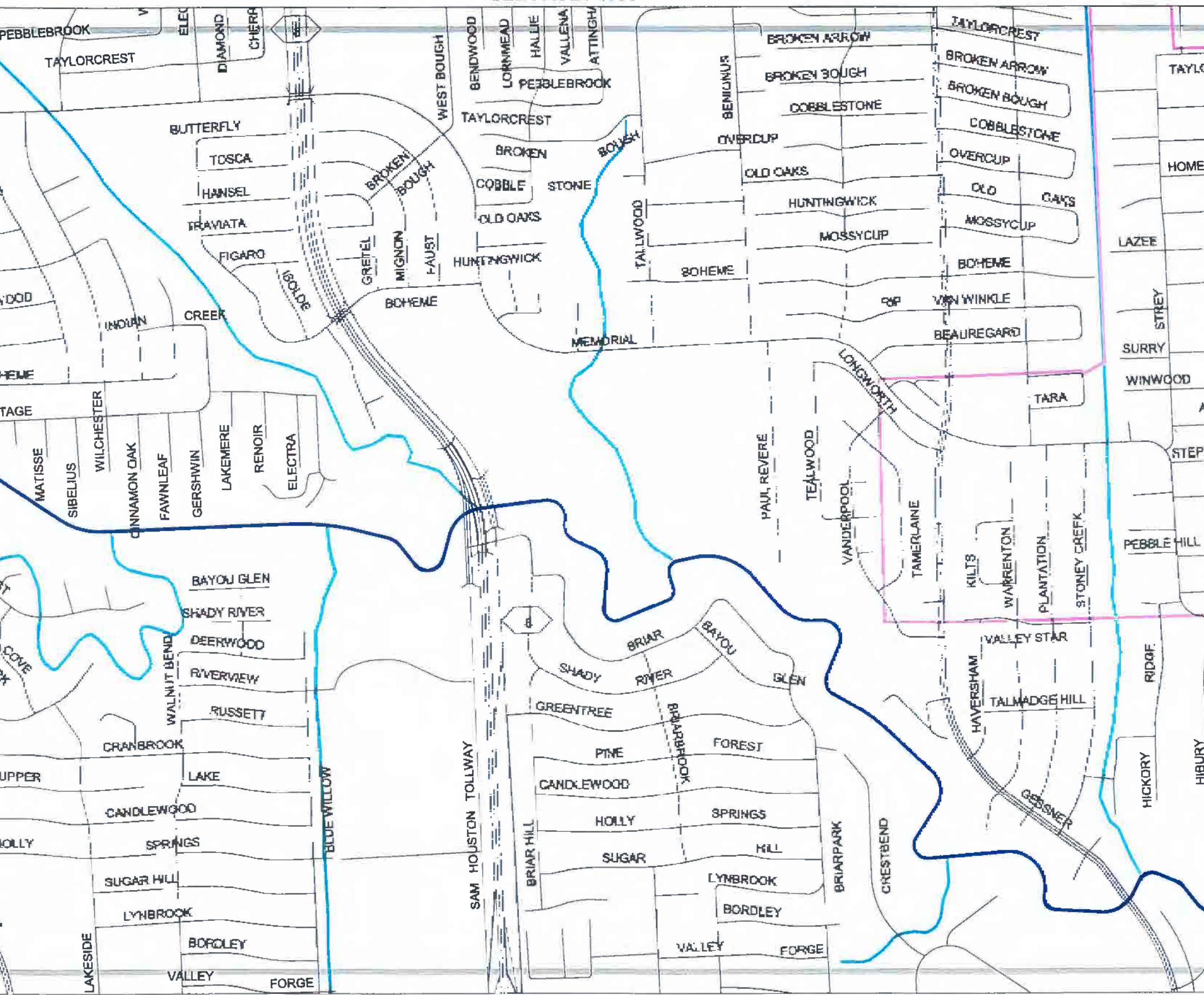
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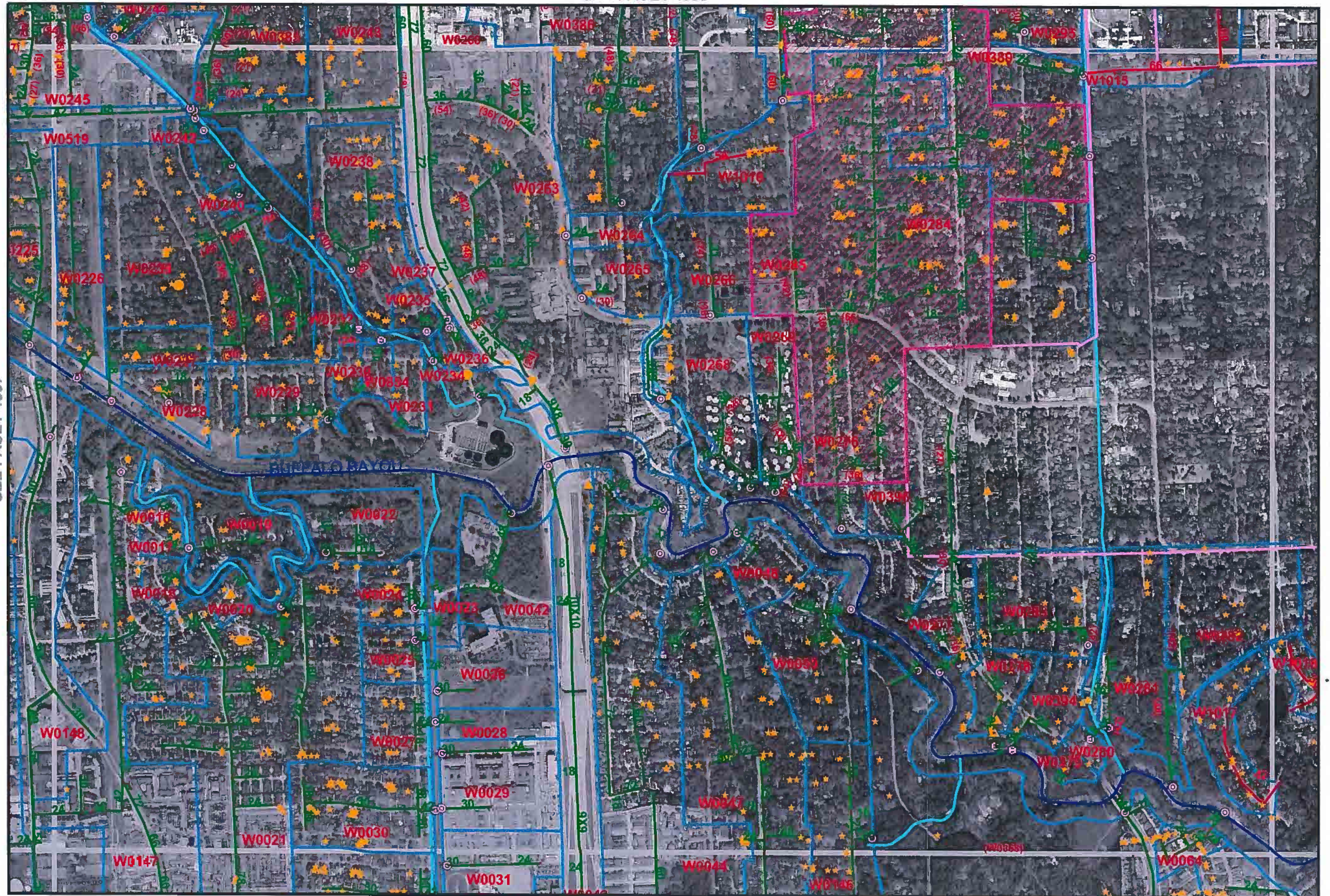


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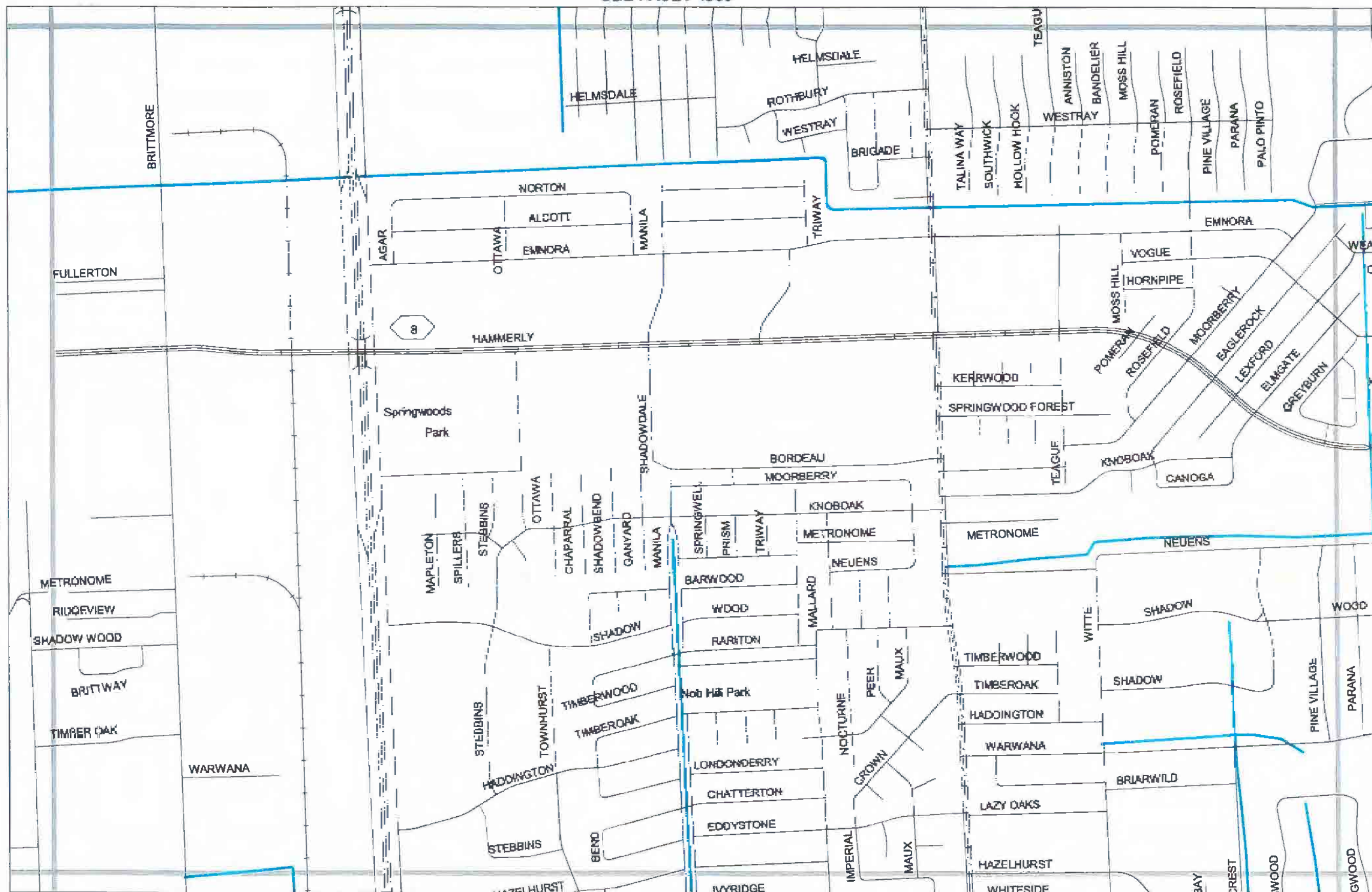


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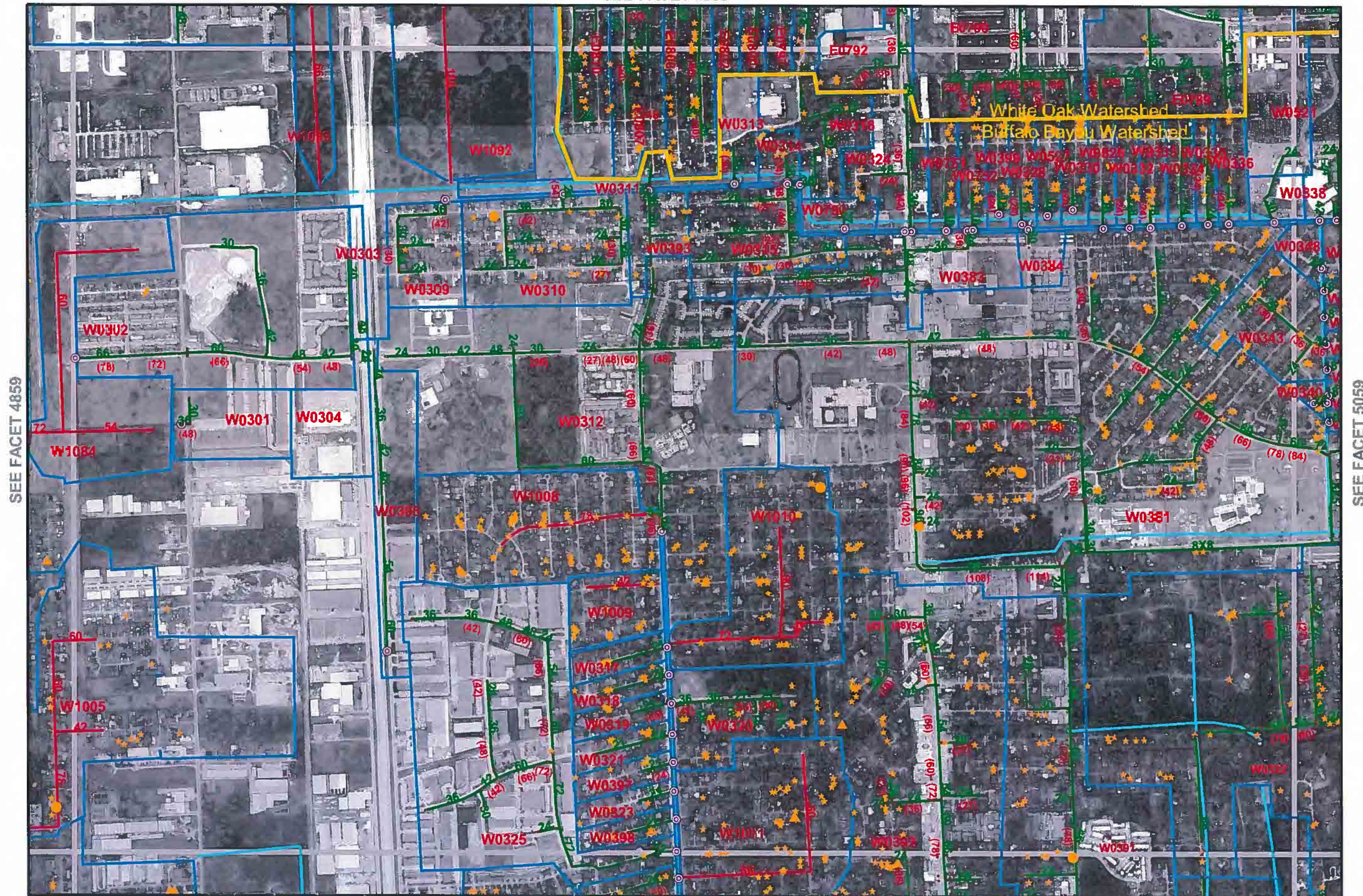
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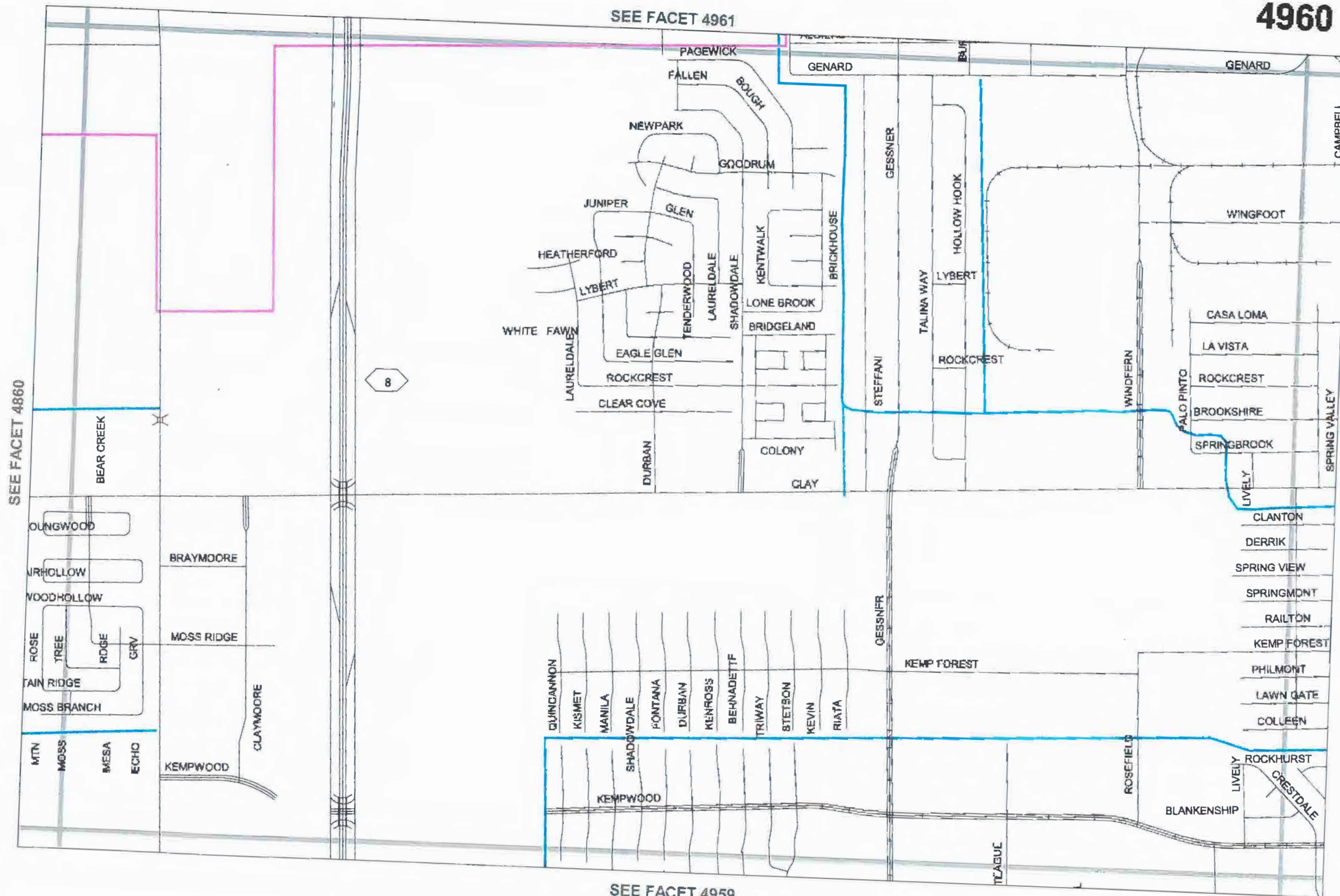


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Date: September 1999

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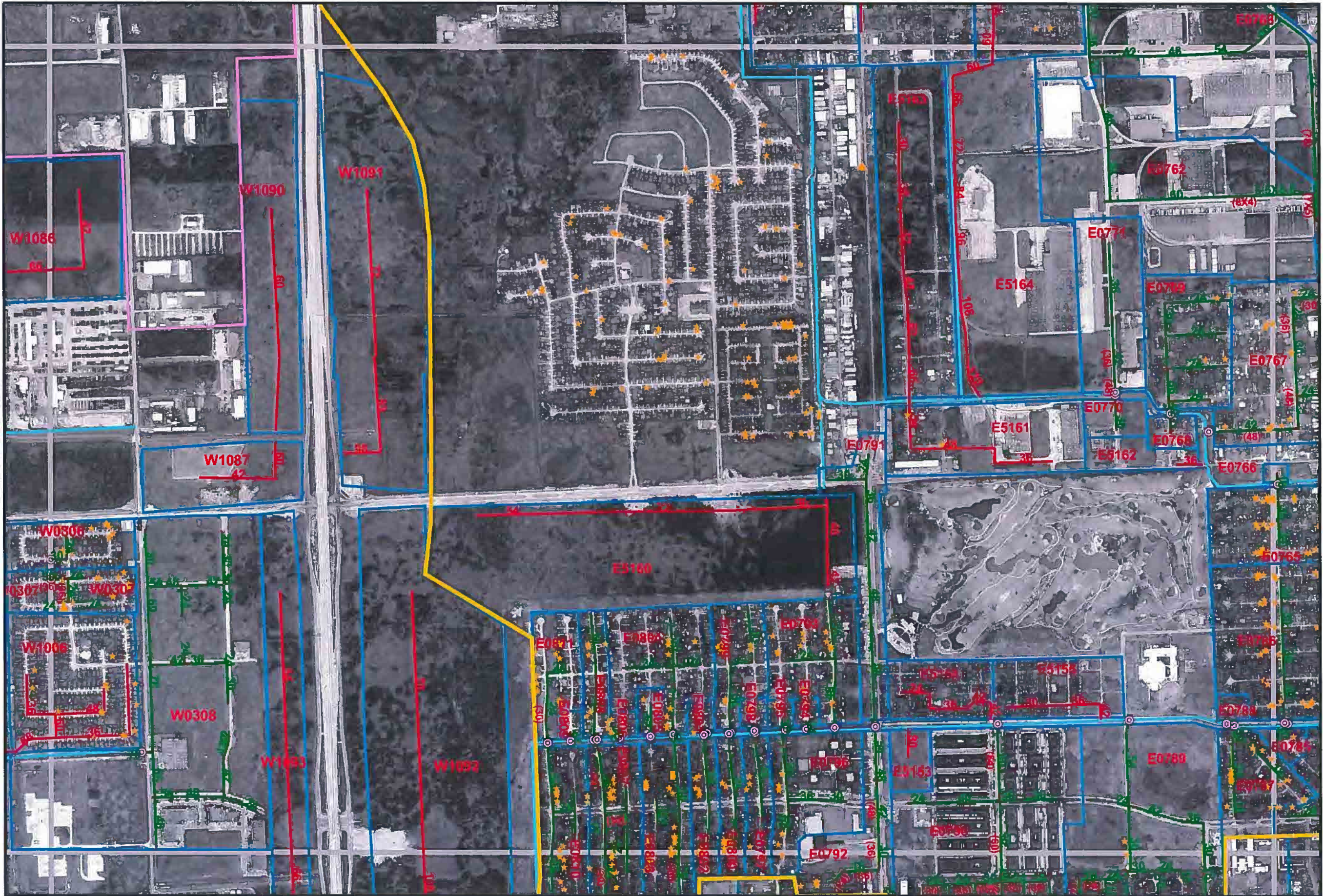
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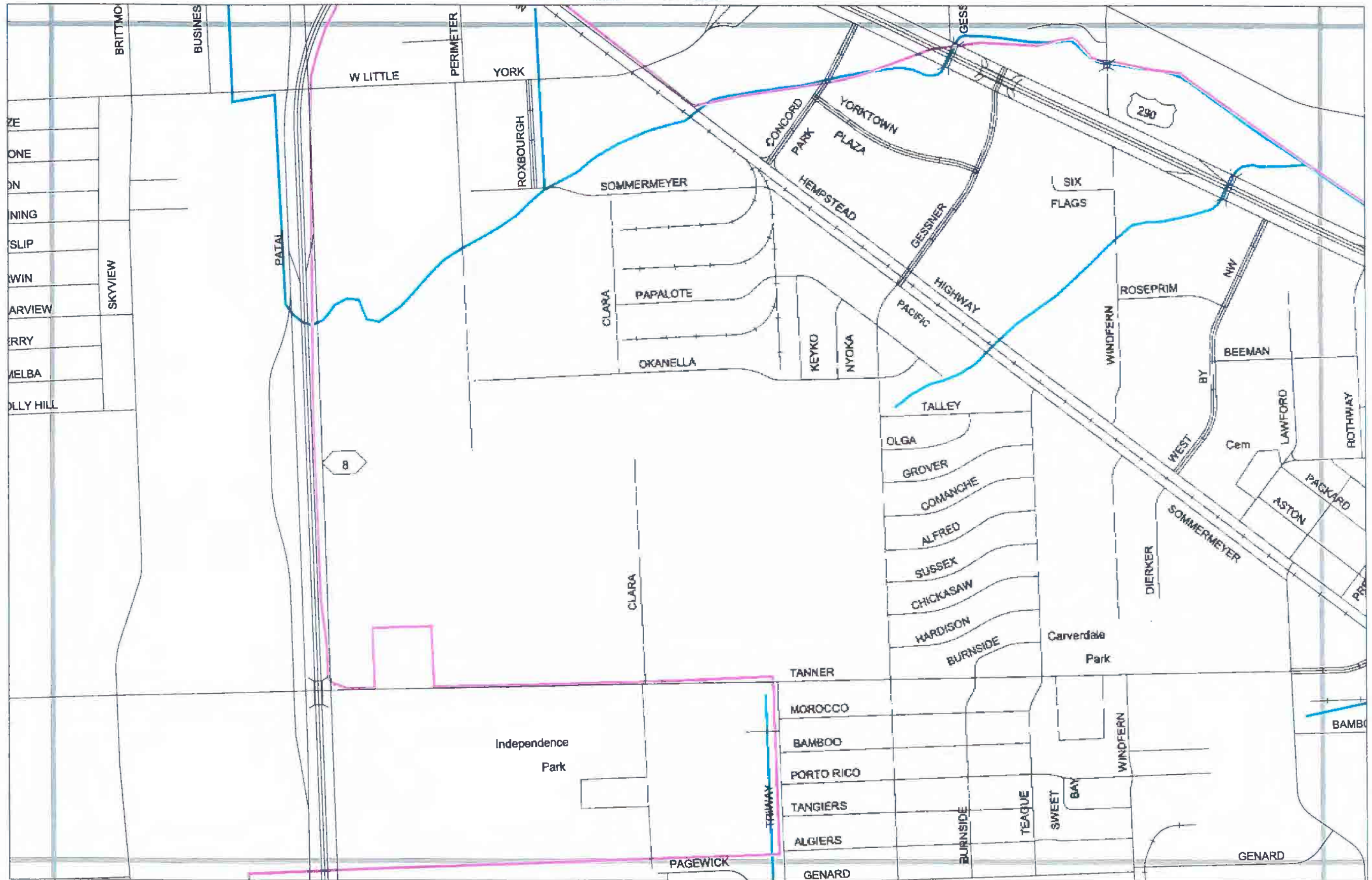
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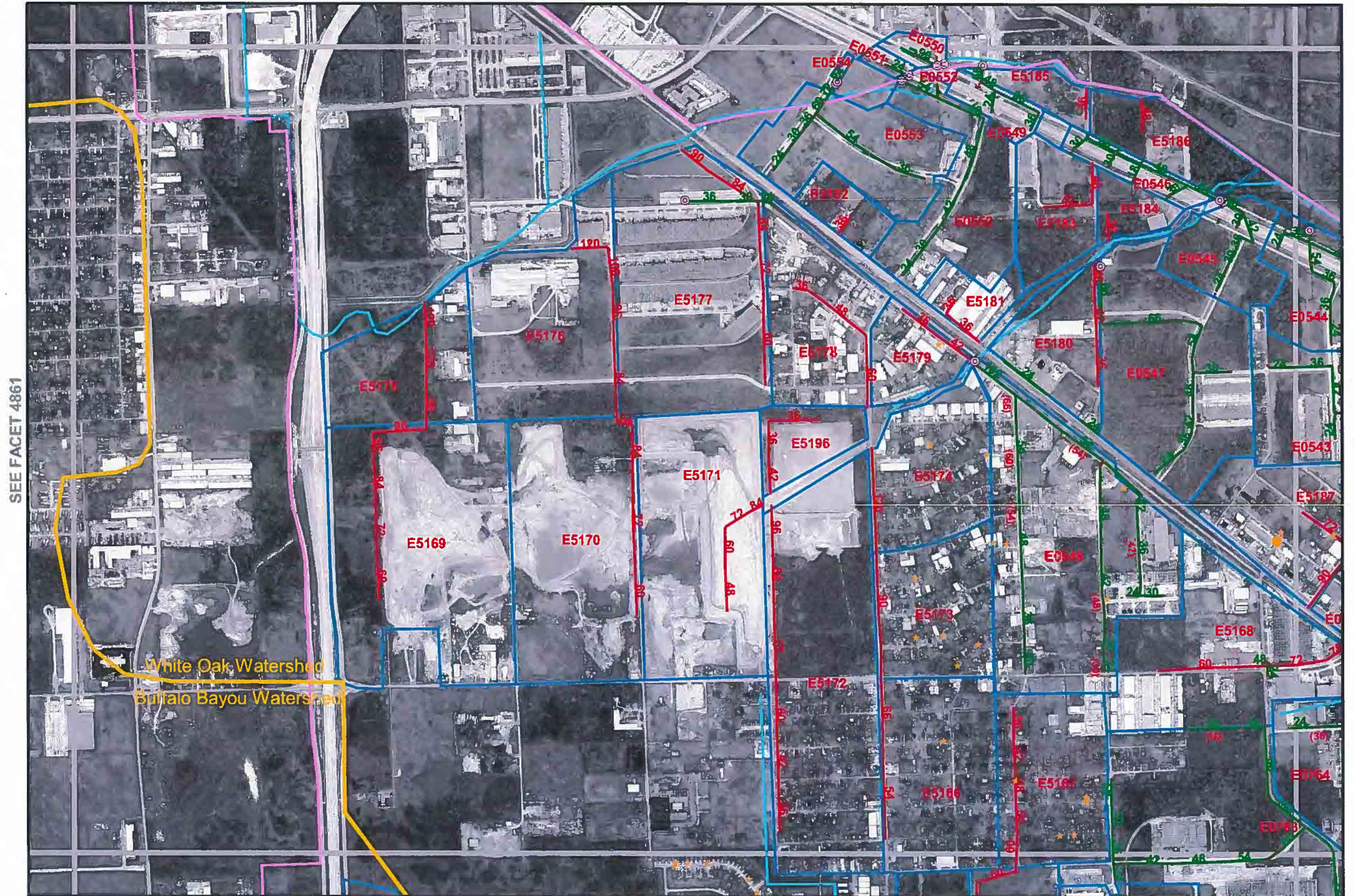
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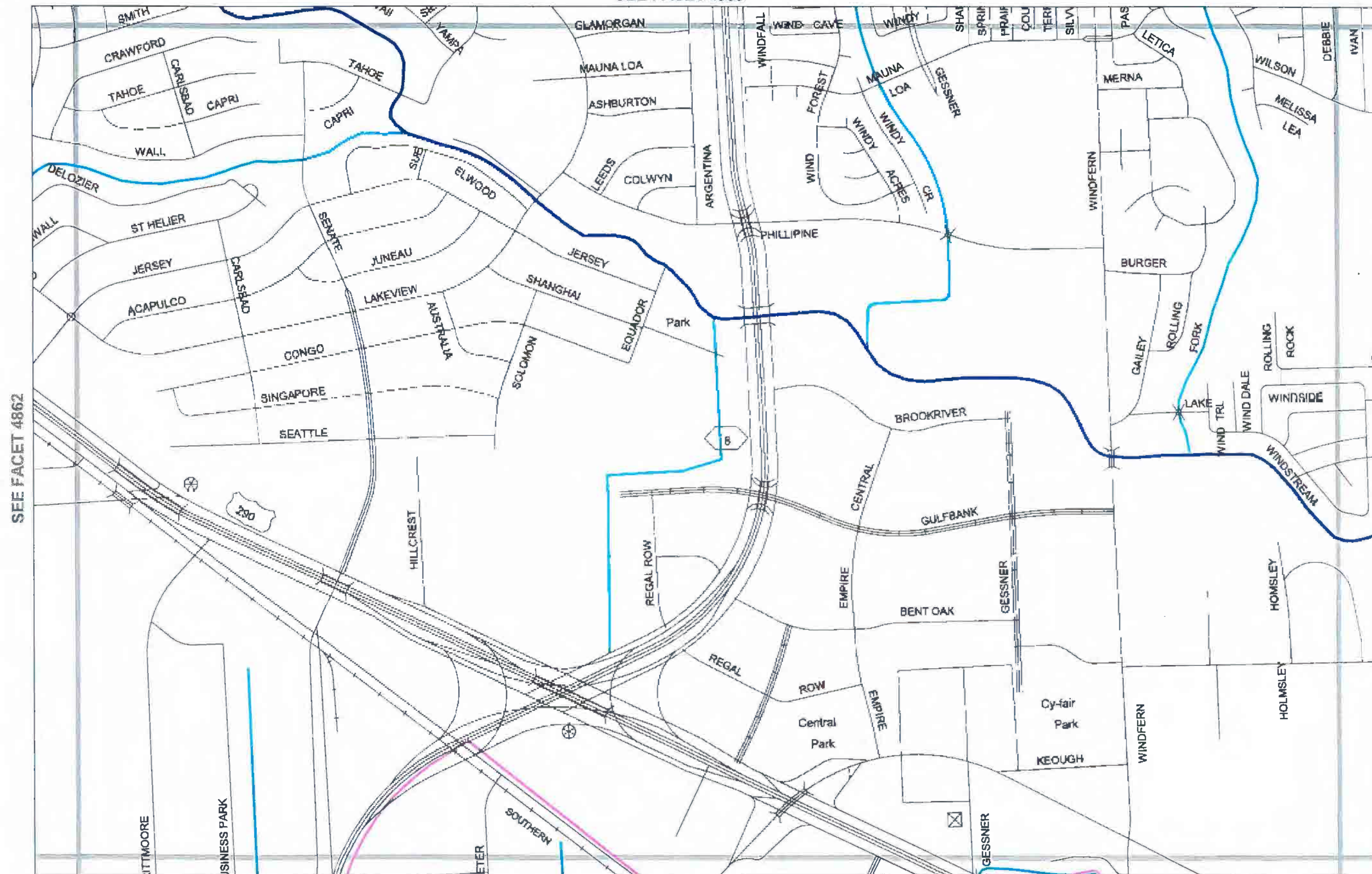
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Date: September 1999

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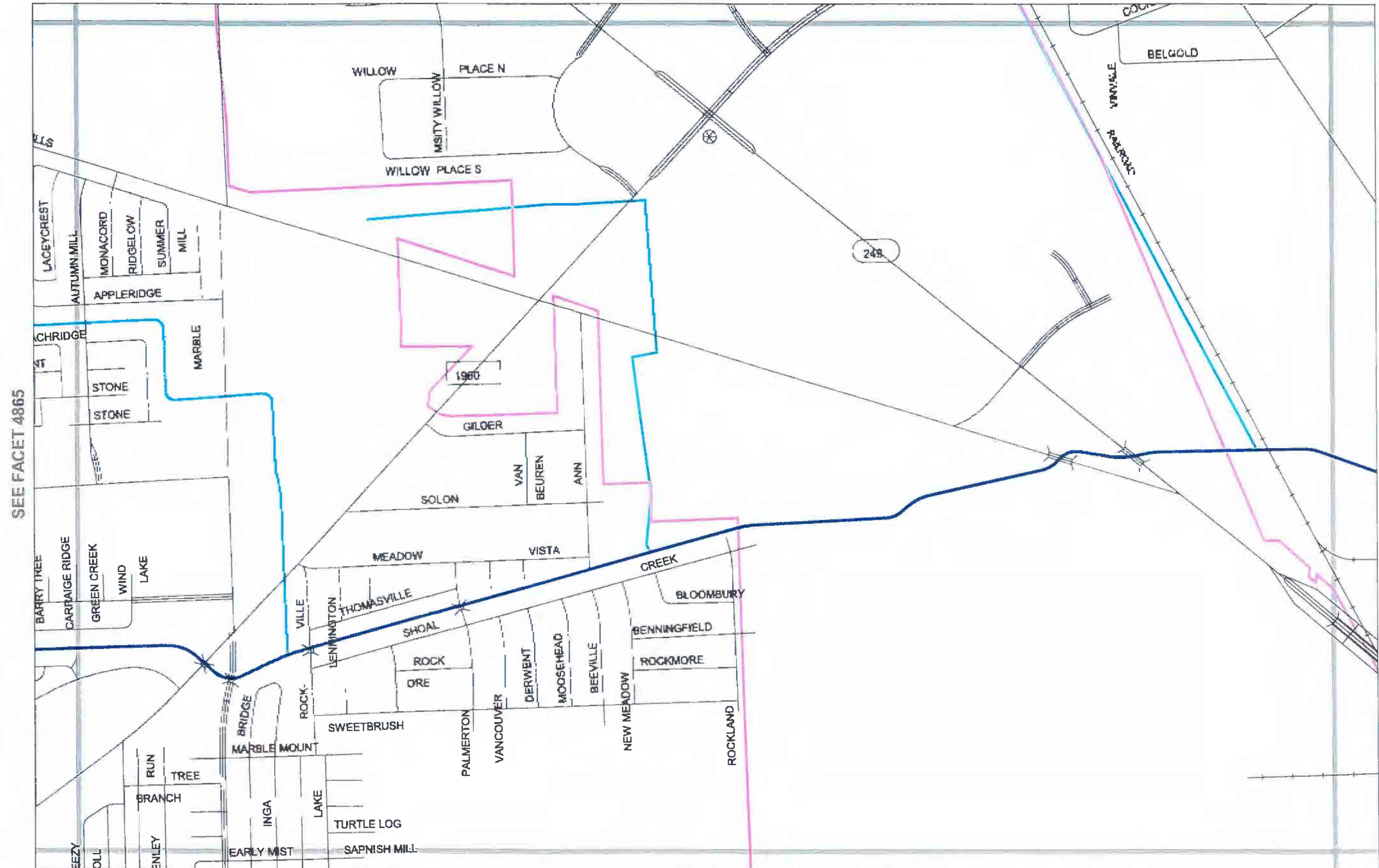
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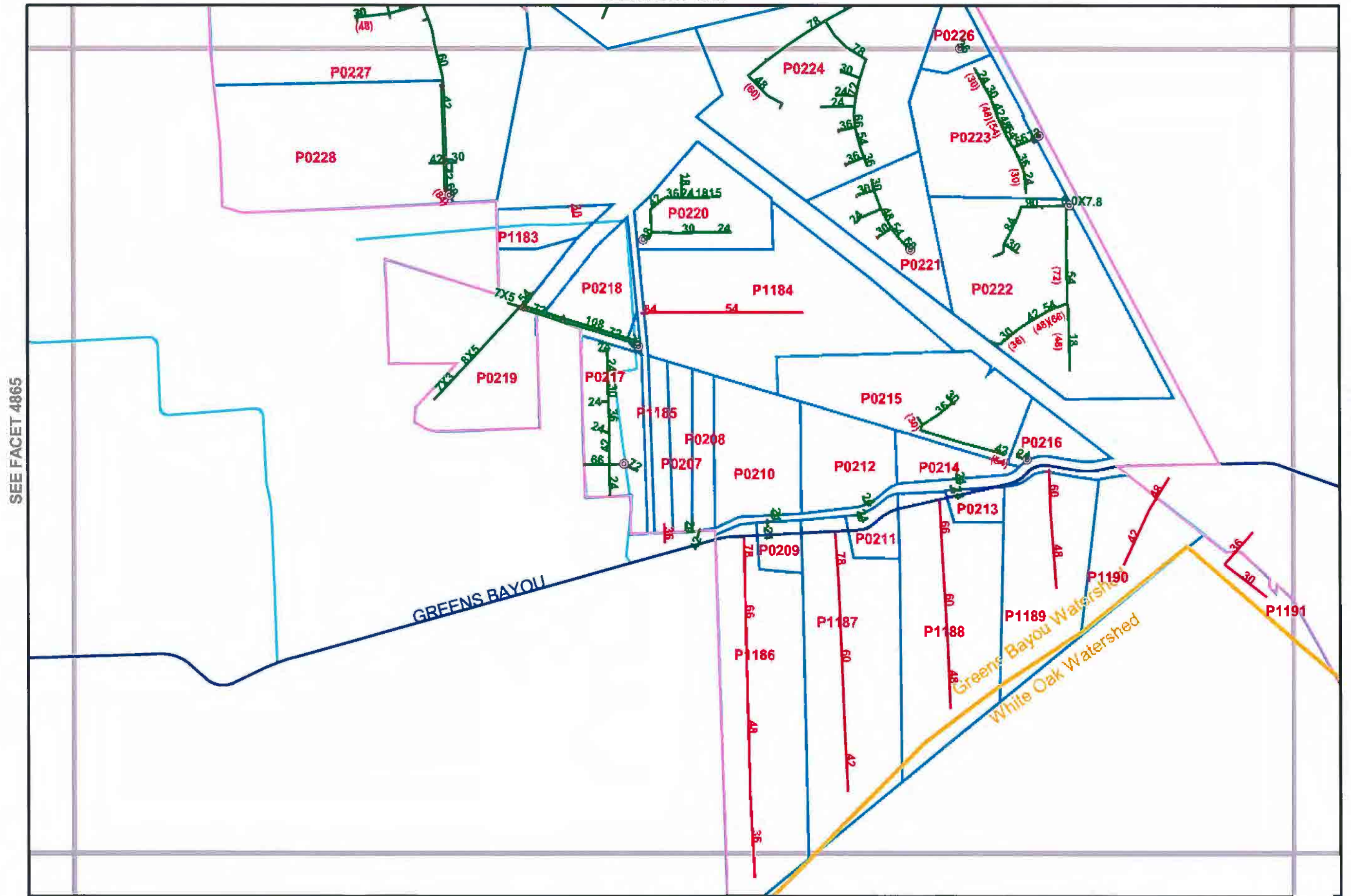
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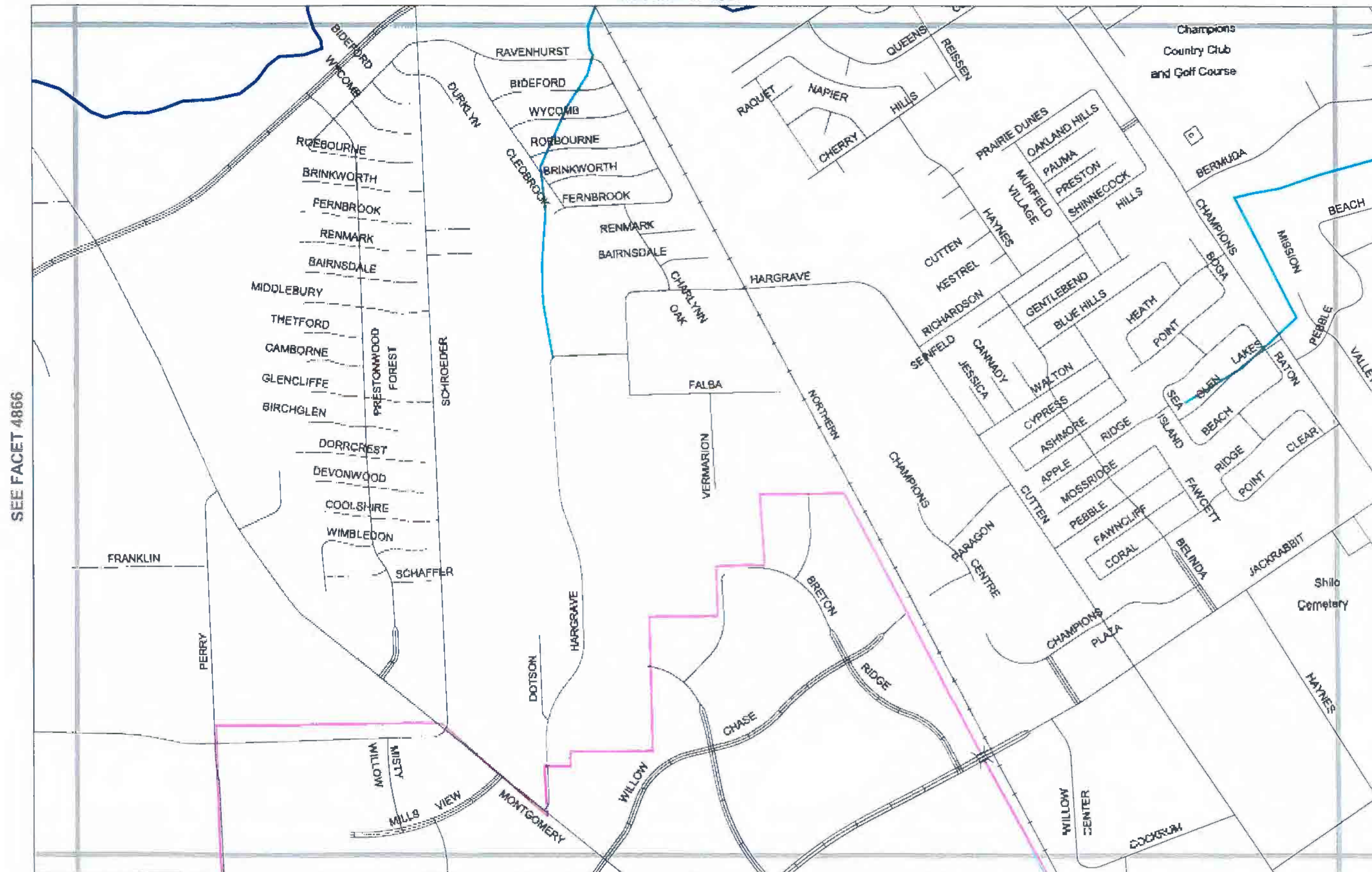
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Date: September 1999

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HOUSTON

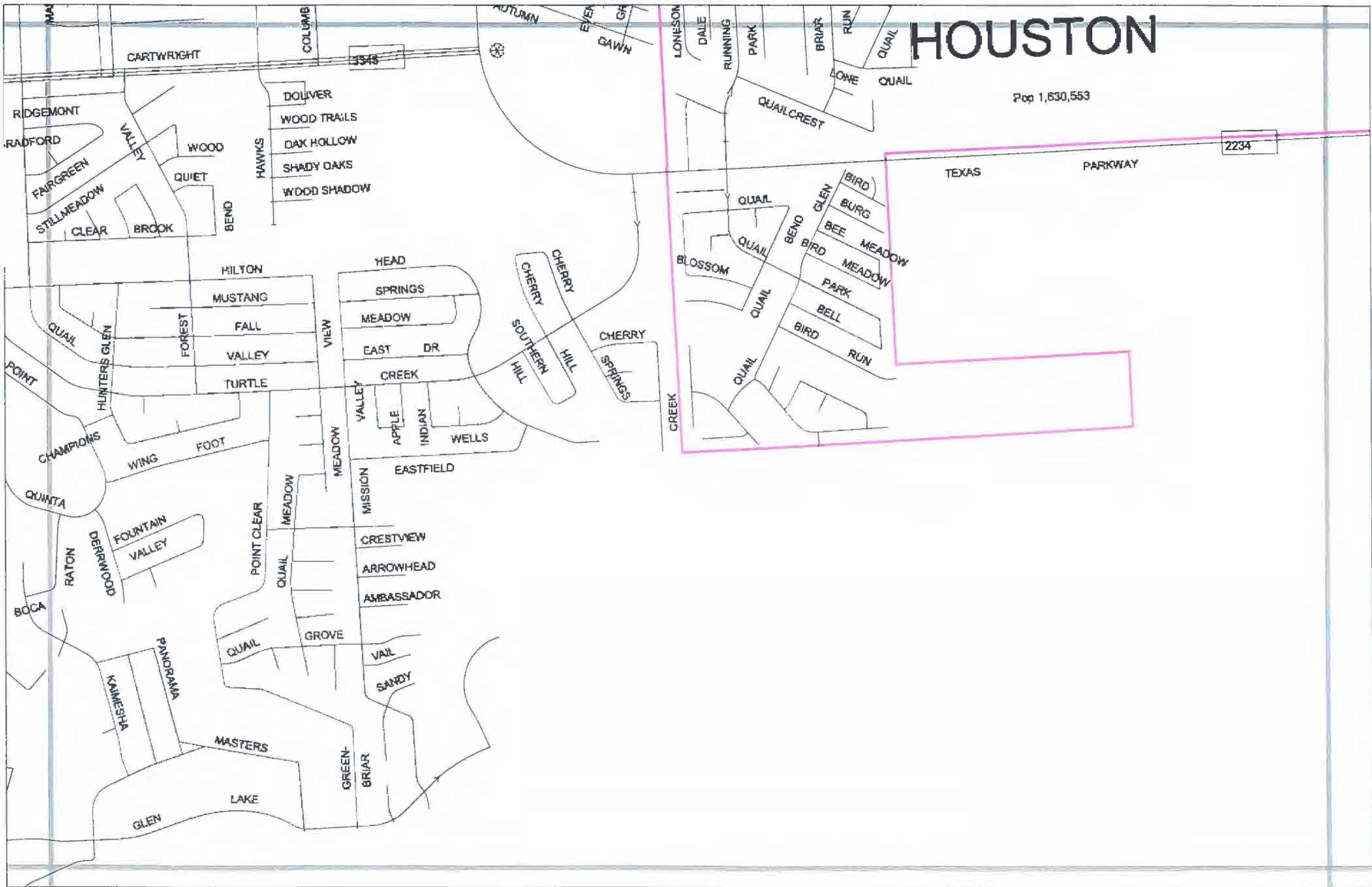
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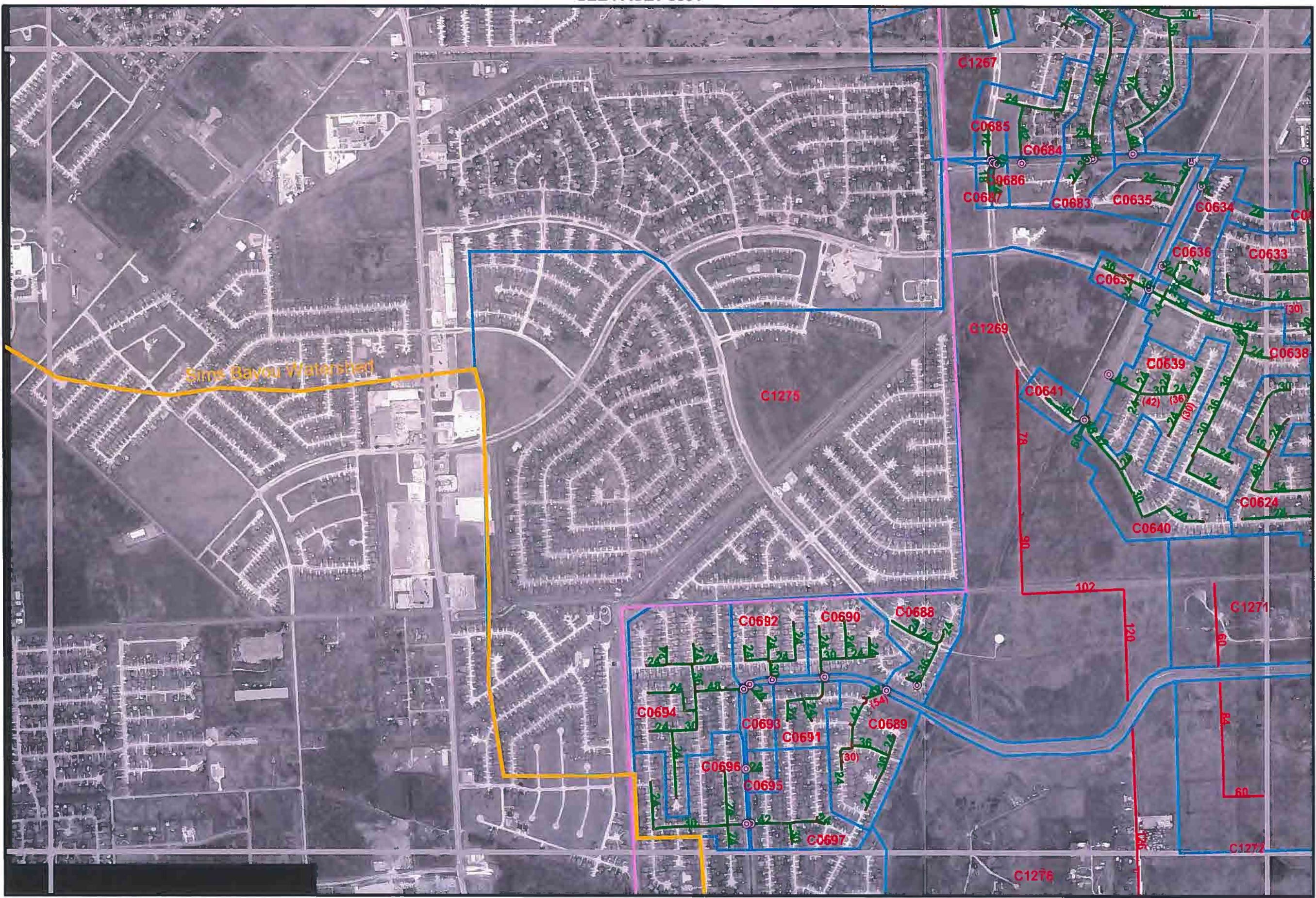
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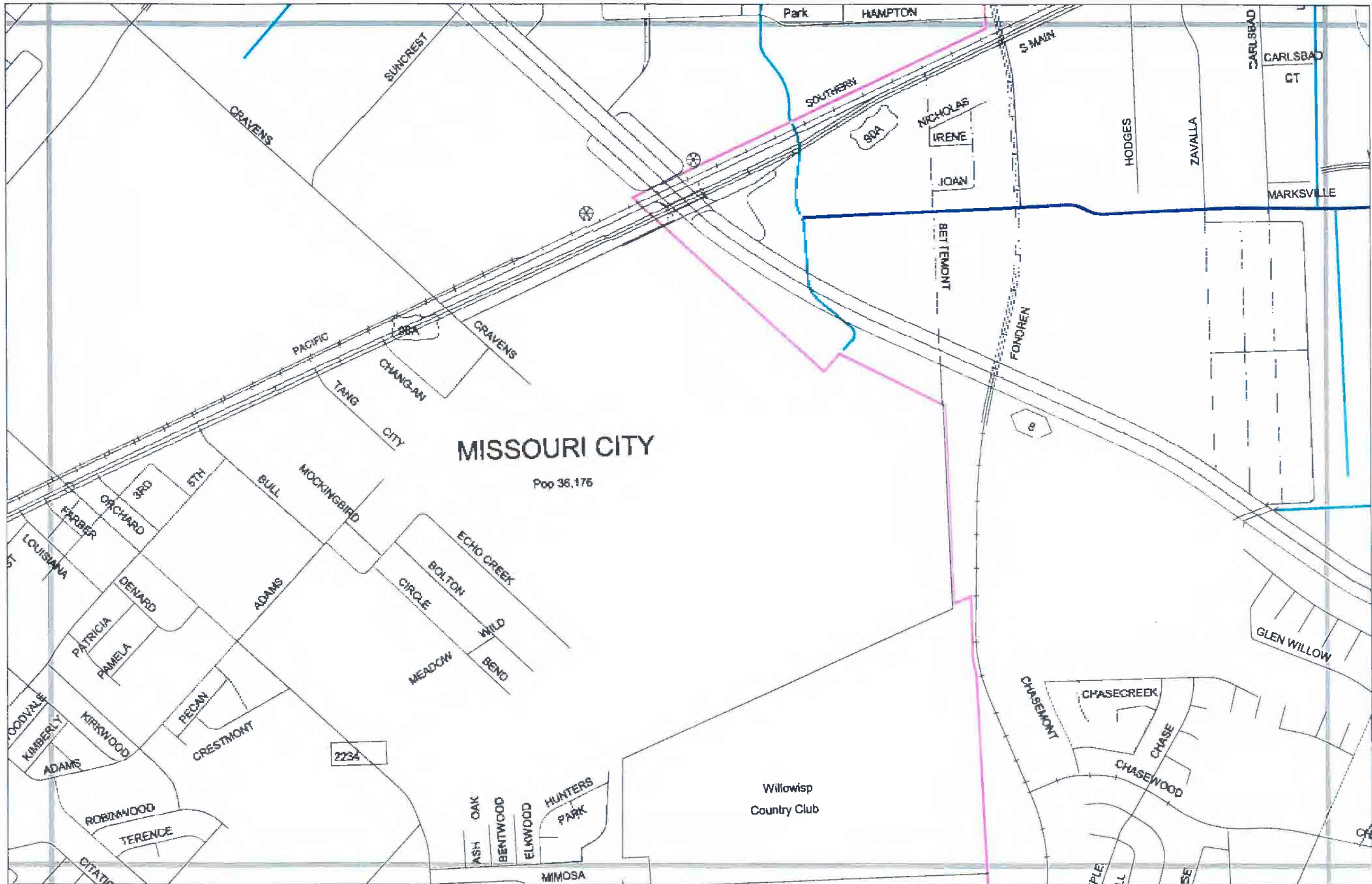
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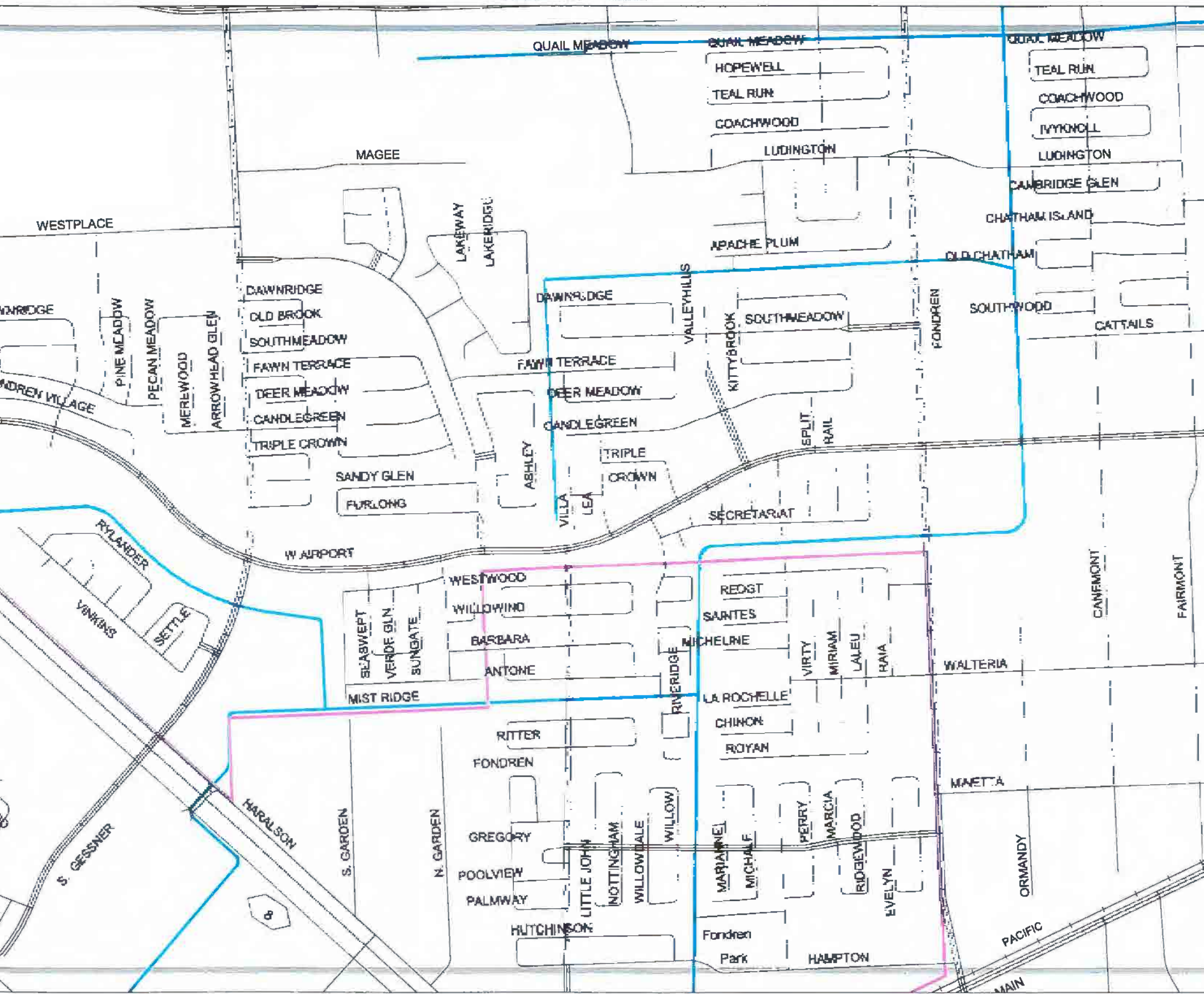
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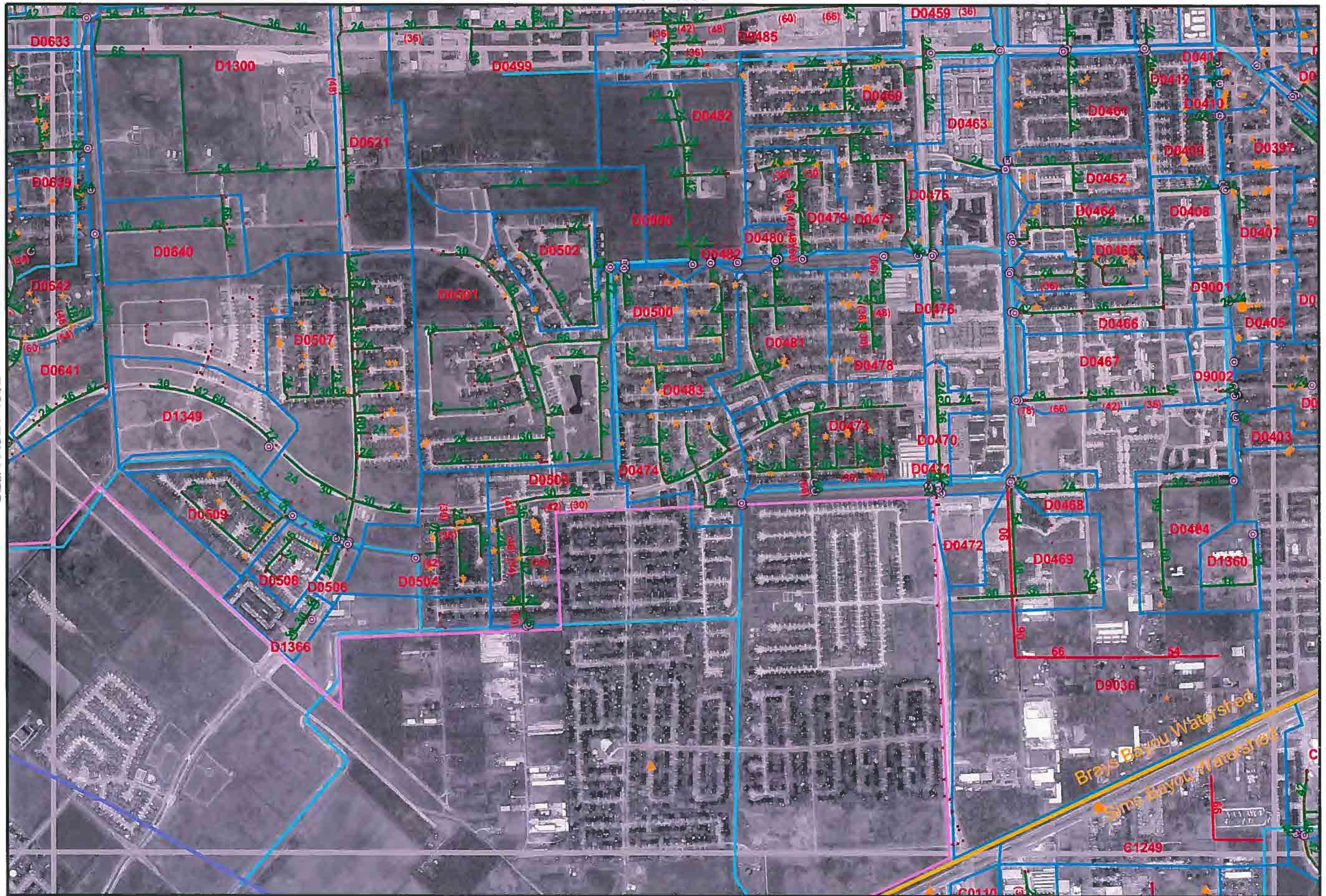


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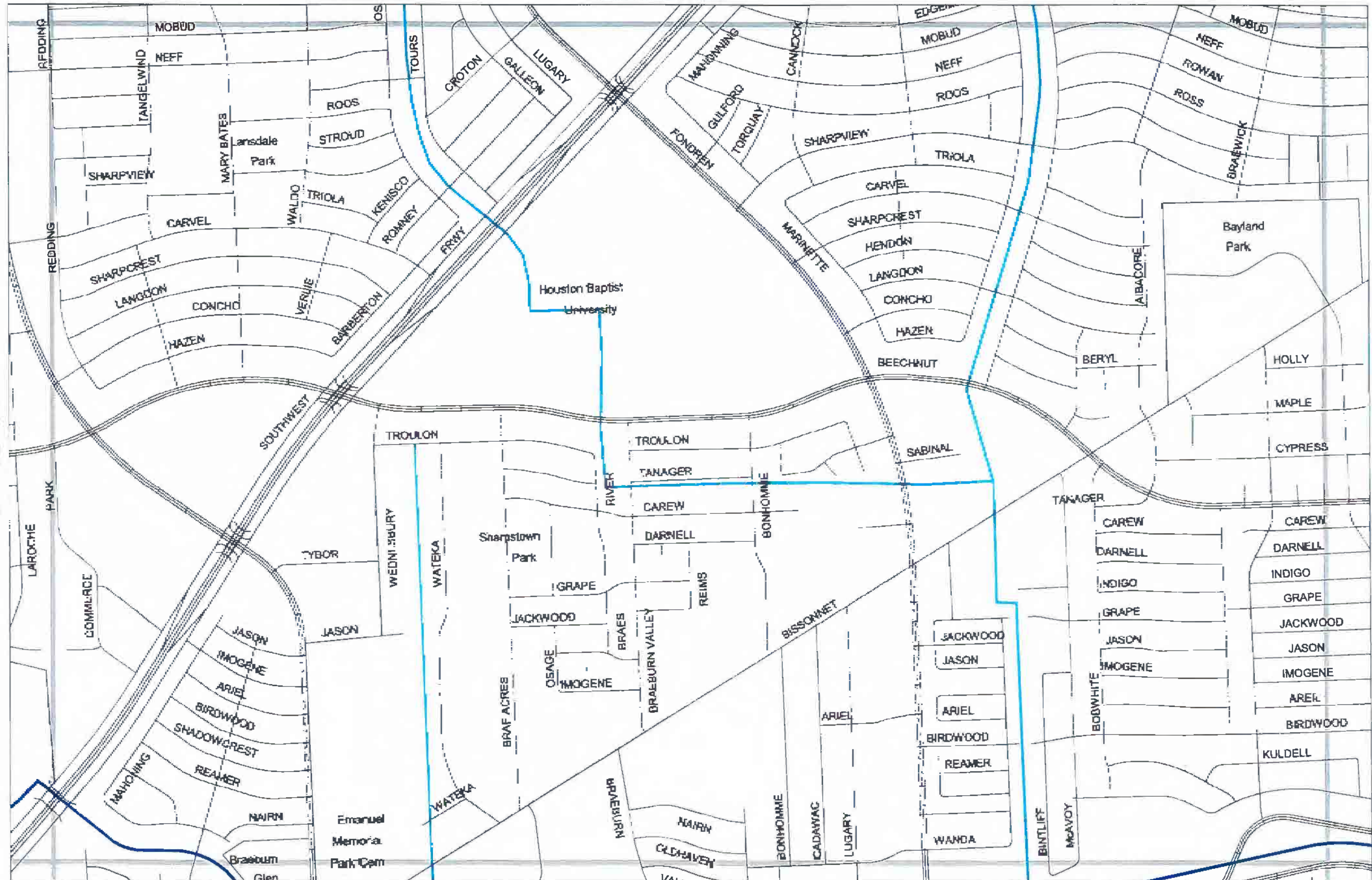
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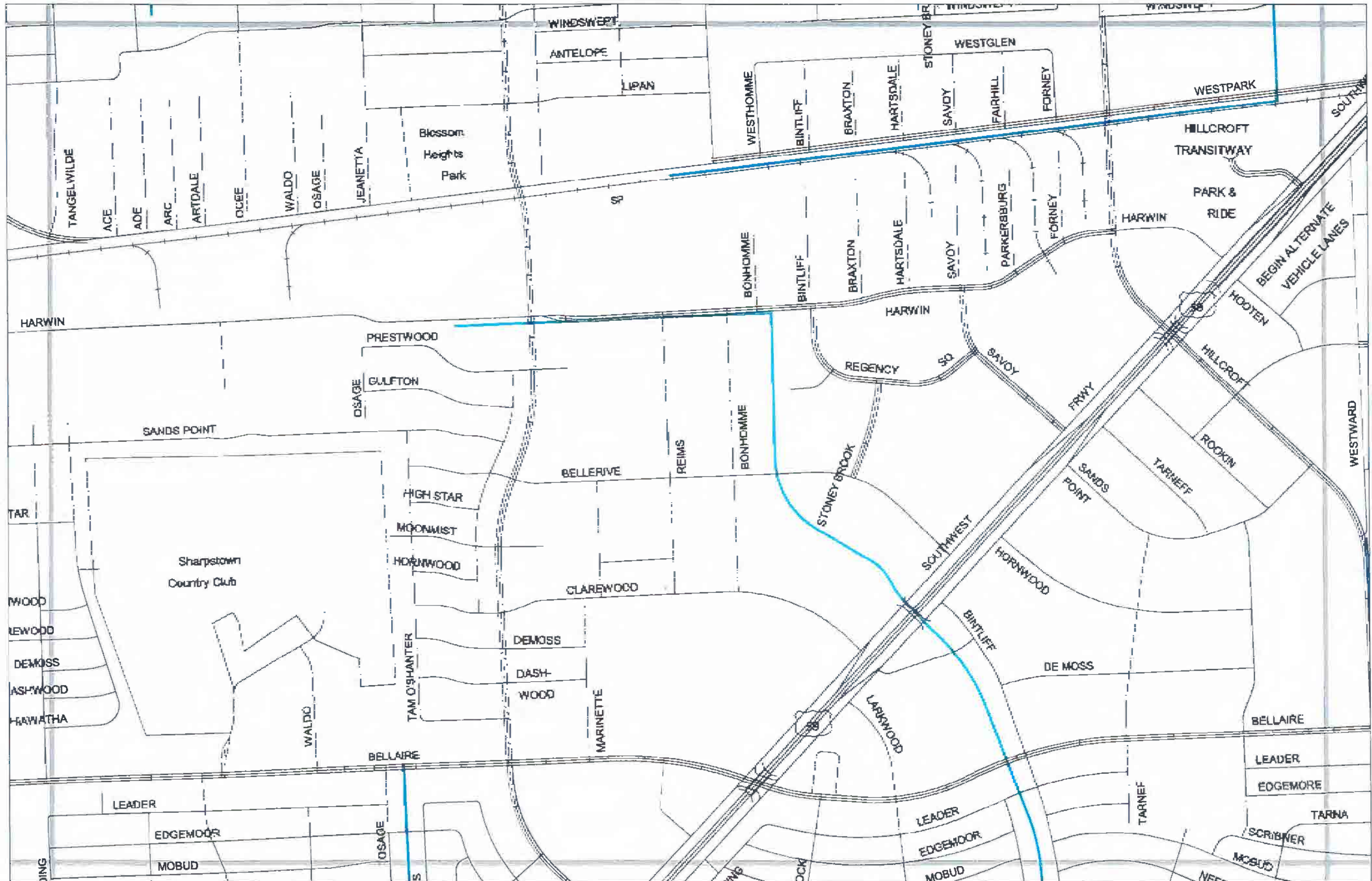
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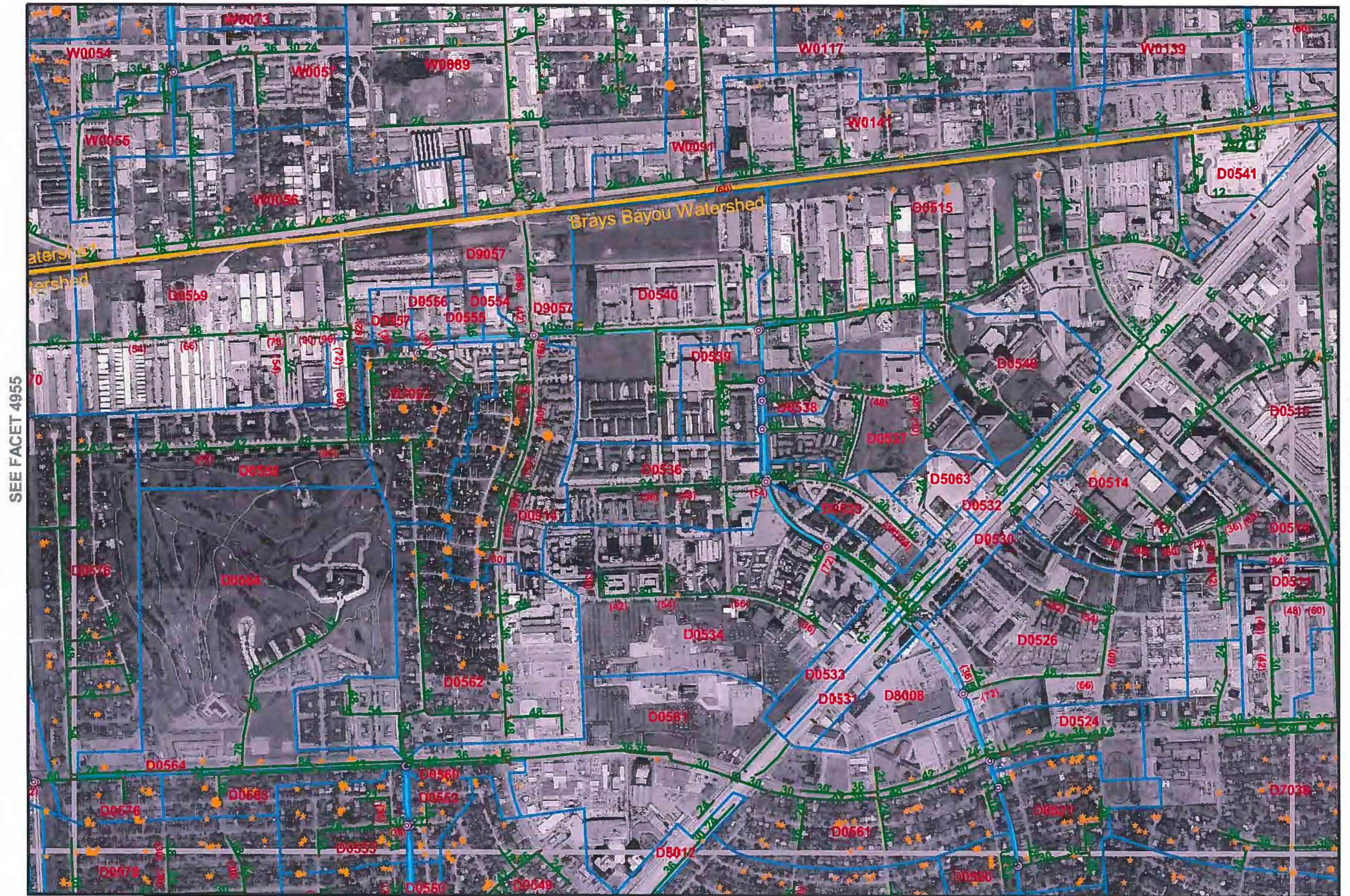
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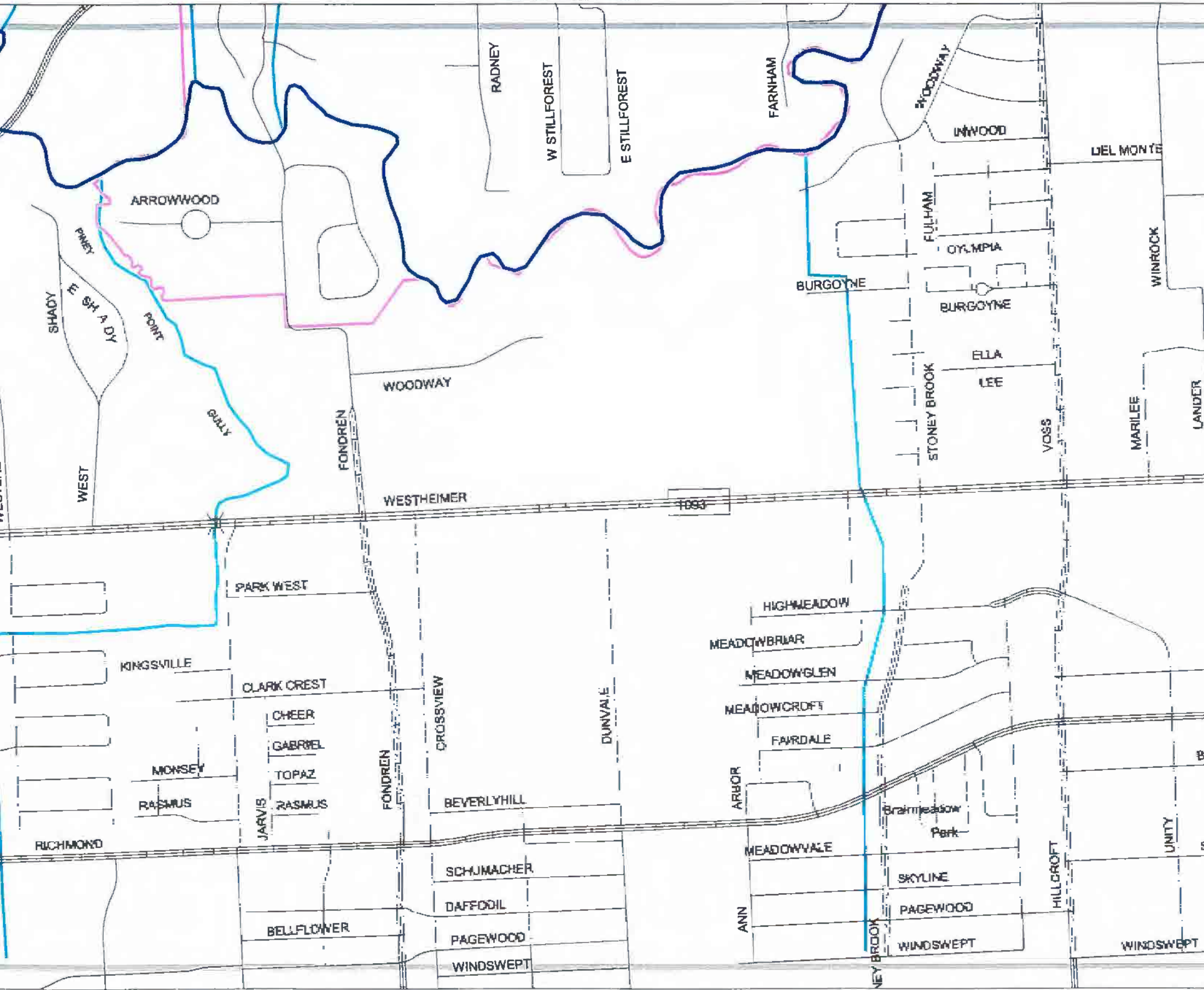
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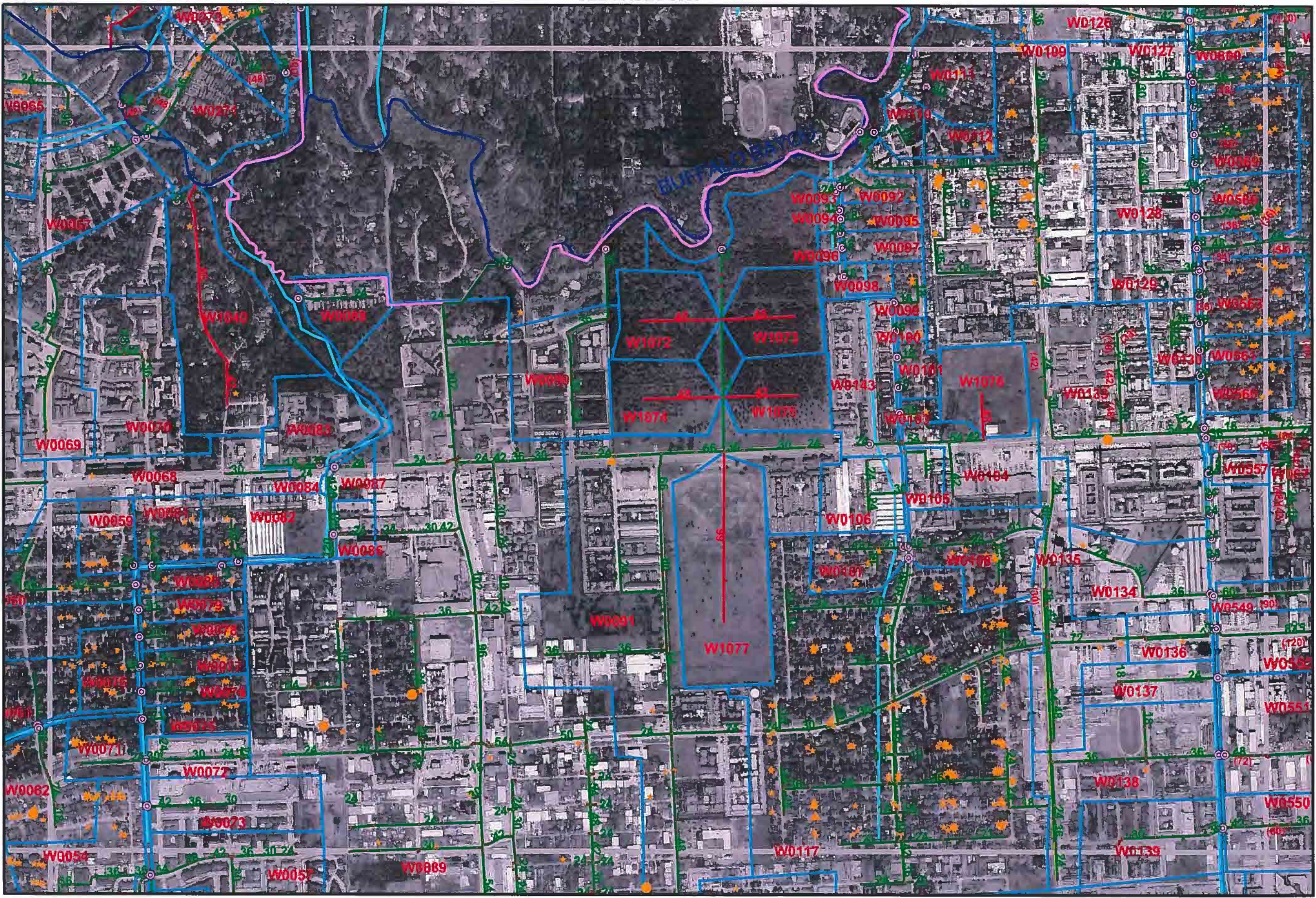


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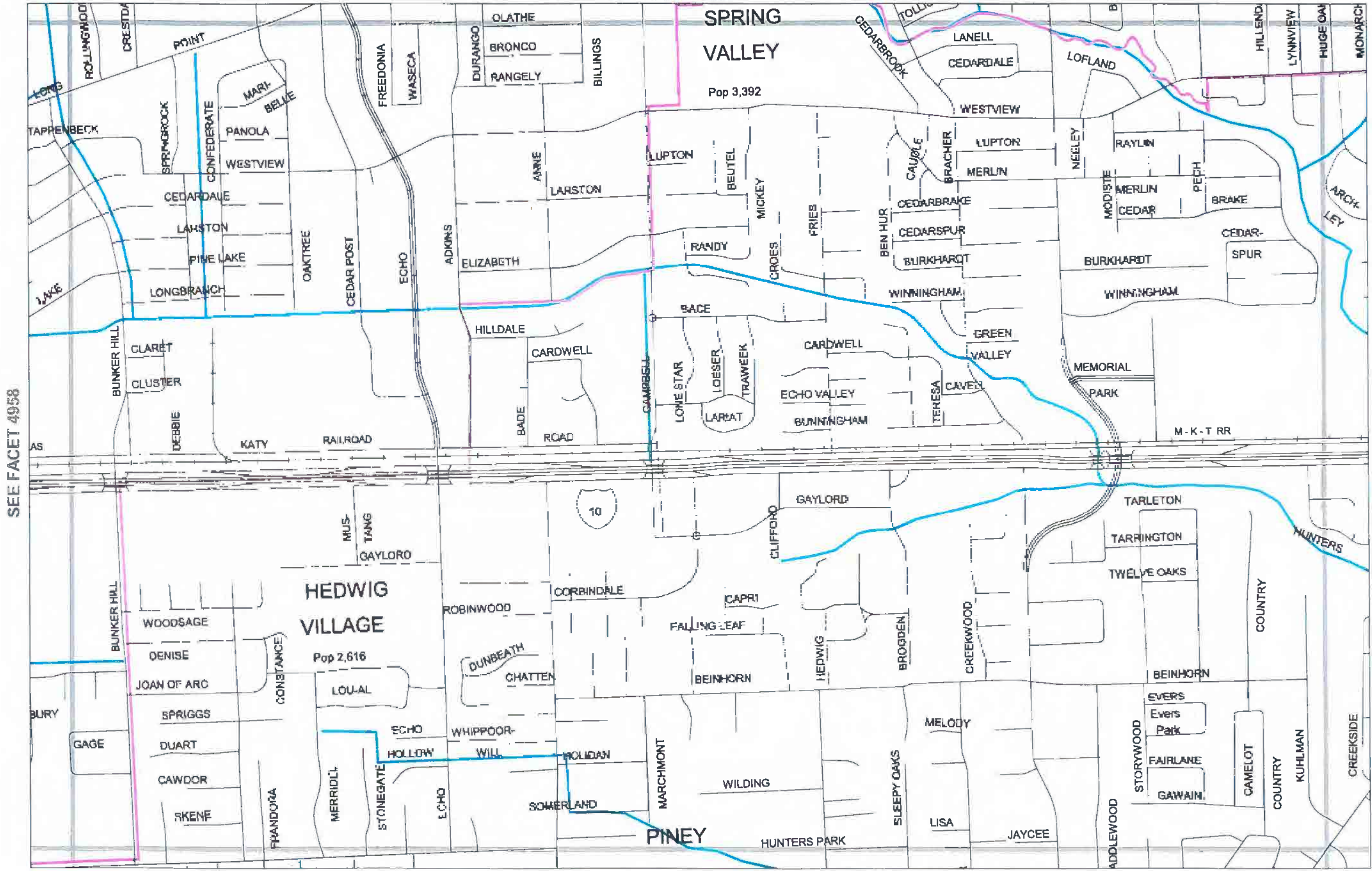


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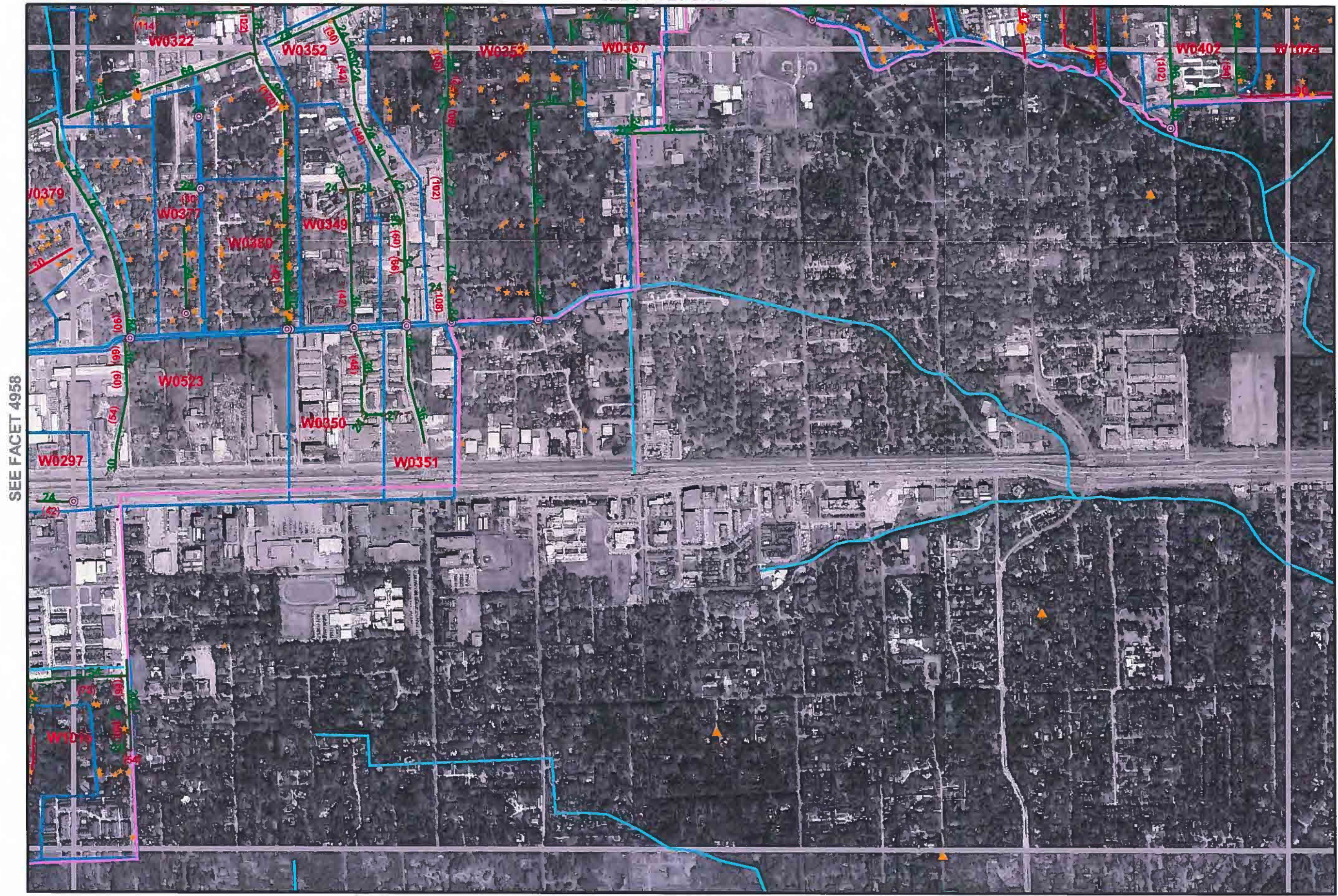


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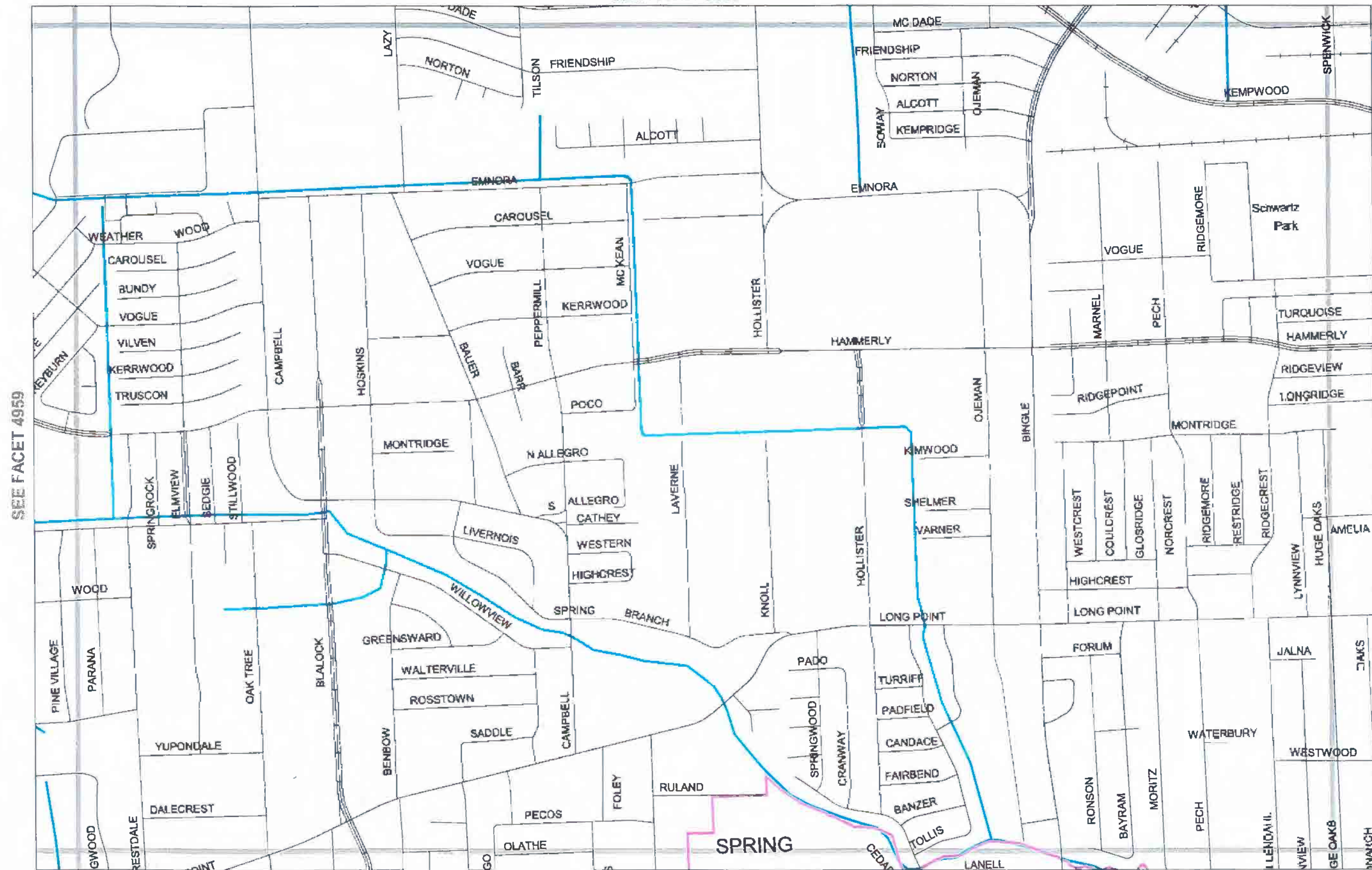
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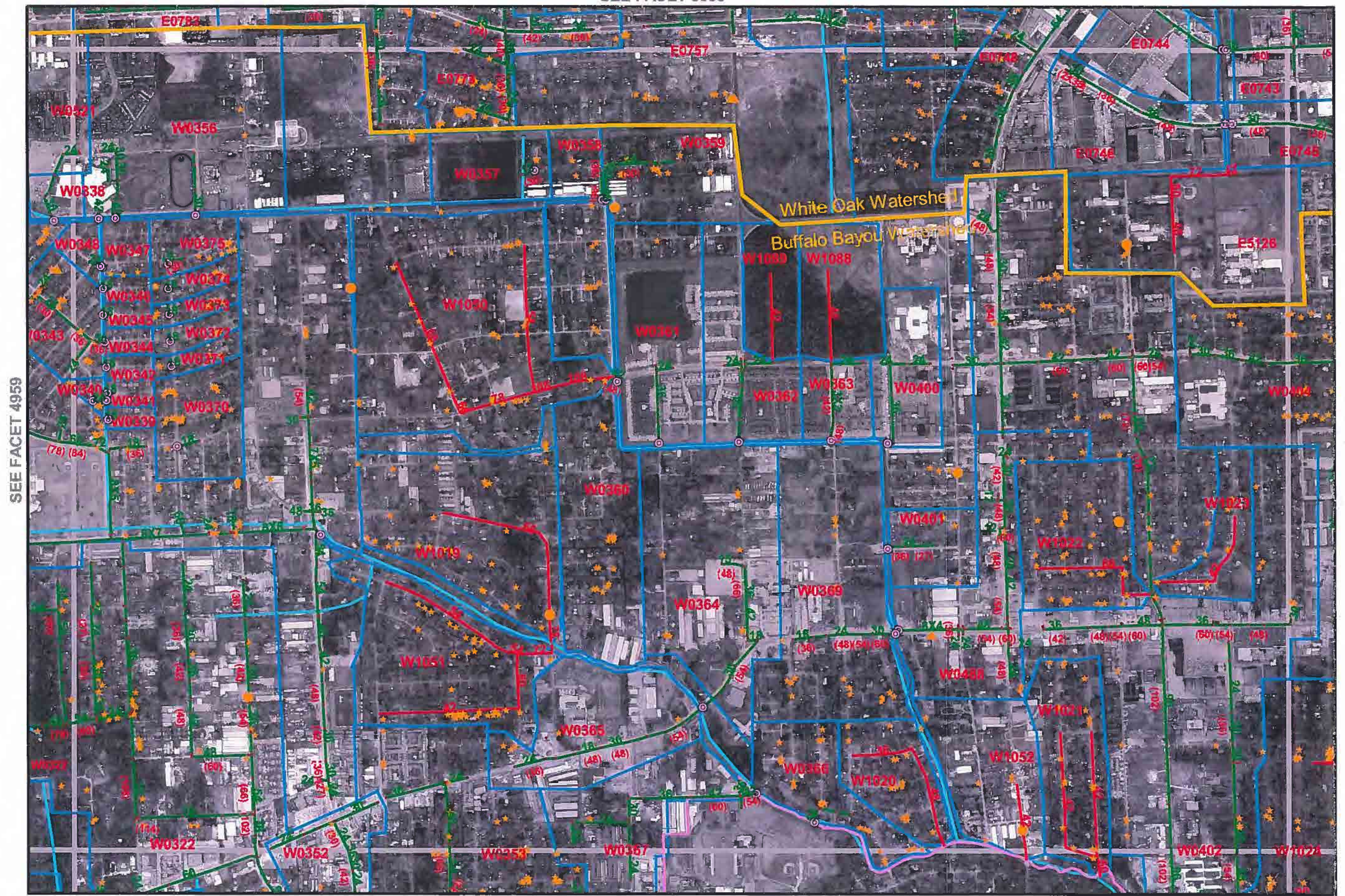
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SEE FACET 5058

Date: September 1999

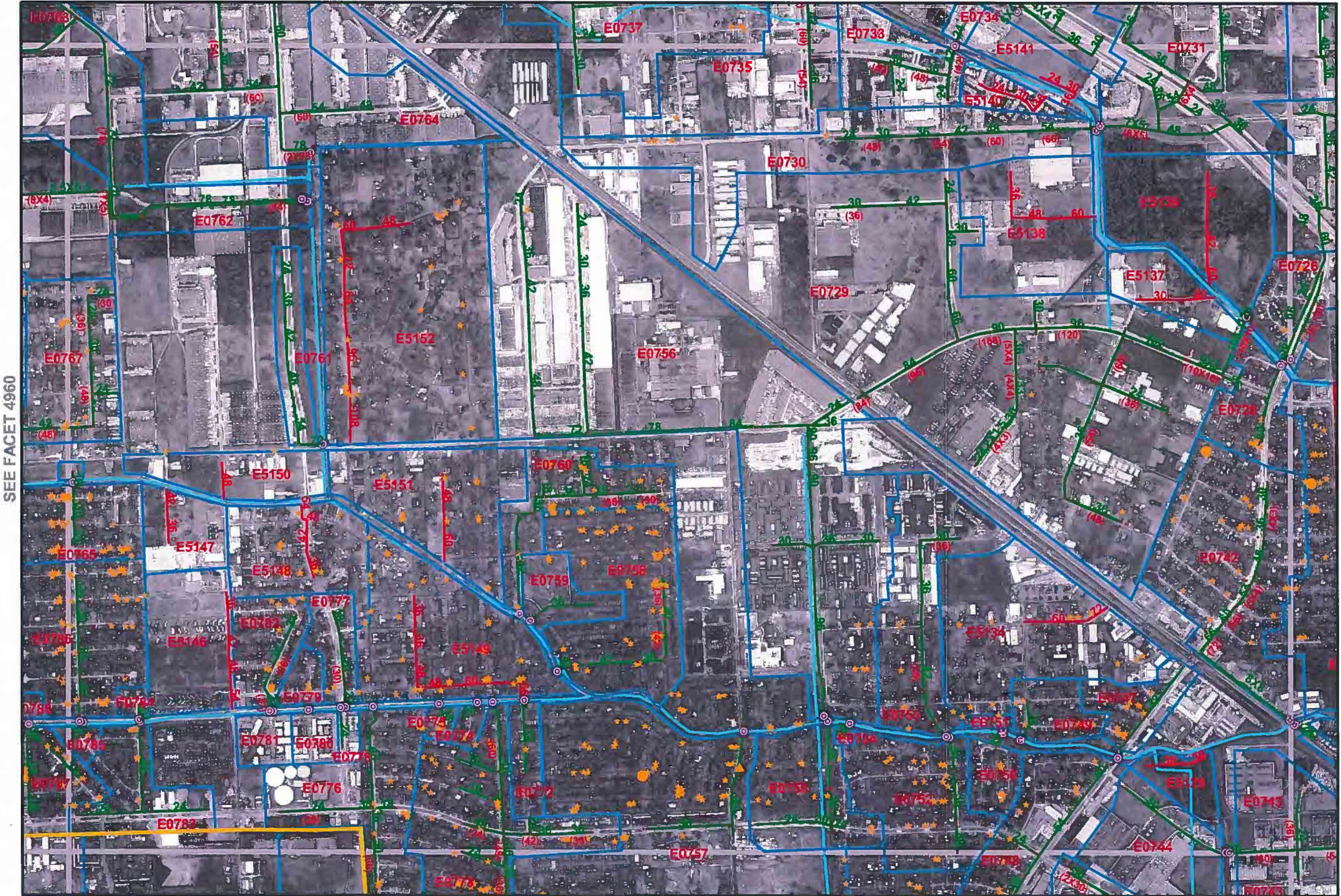
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SEE FACET 5160

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SEE FACET 5161

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SEE FACET 5059

Date: September 1999

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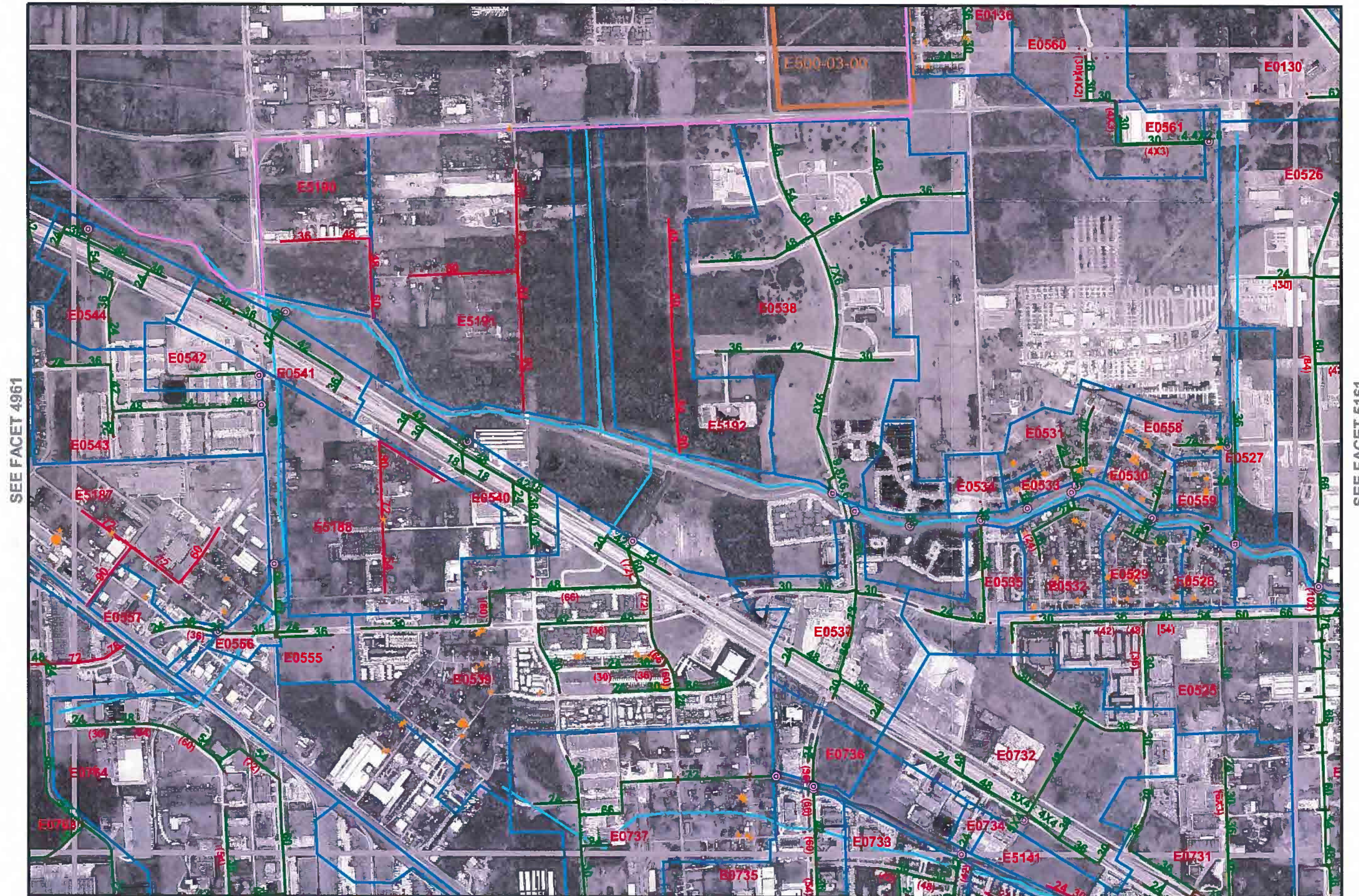


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SEE FACET 4961

SEE FACET 5161

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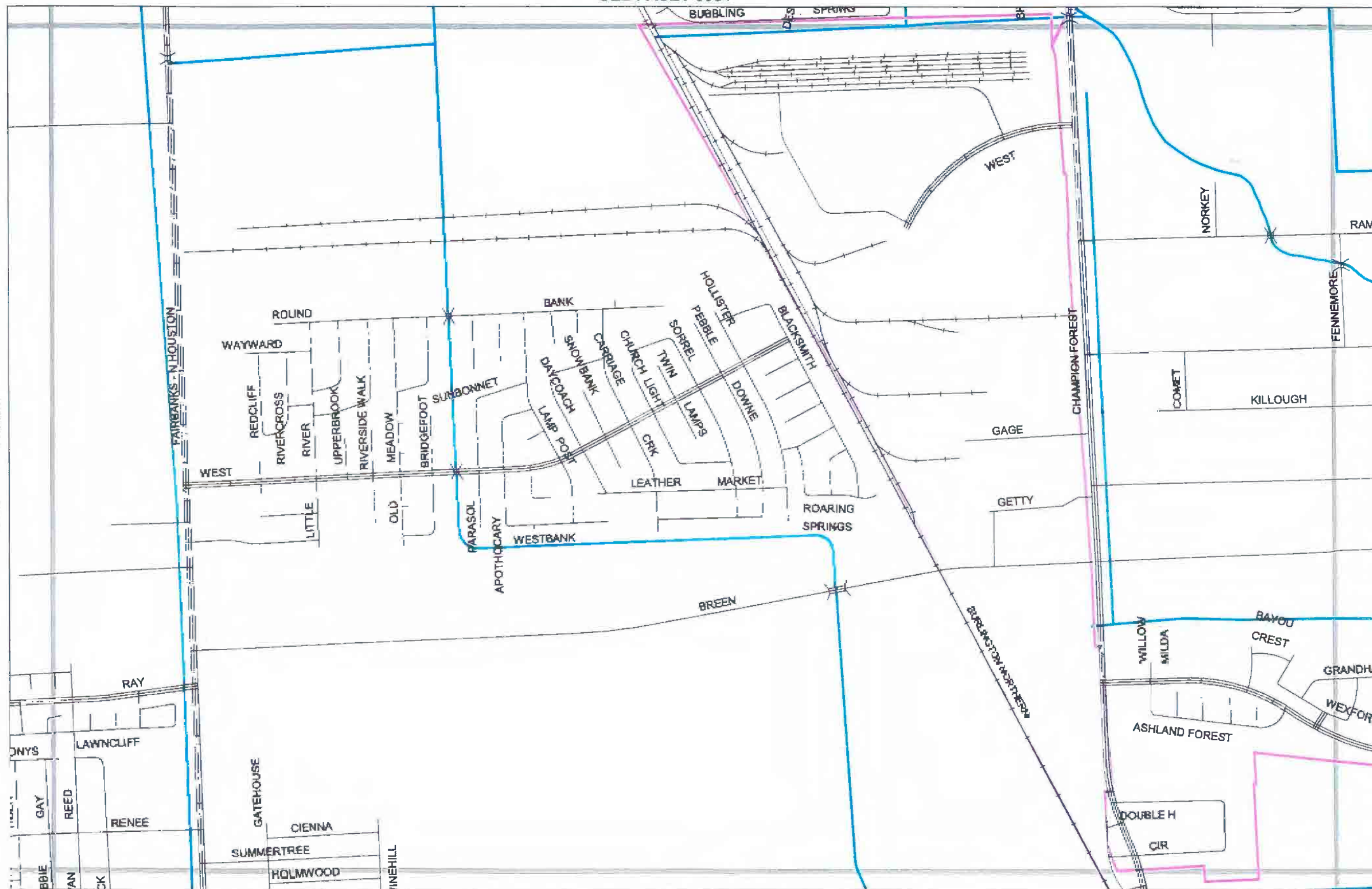
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Date: September 1999



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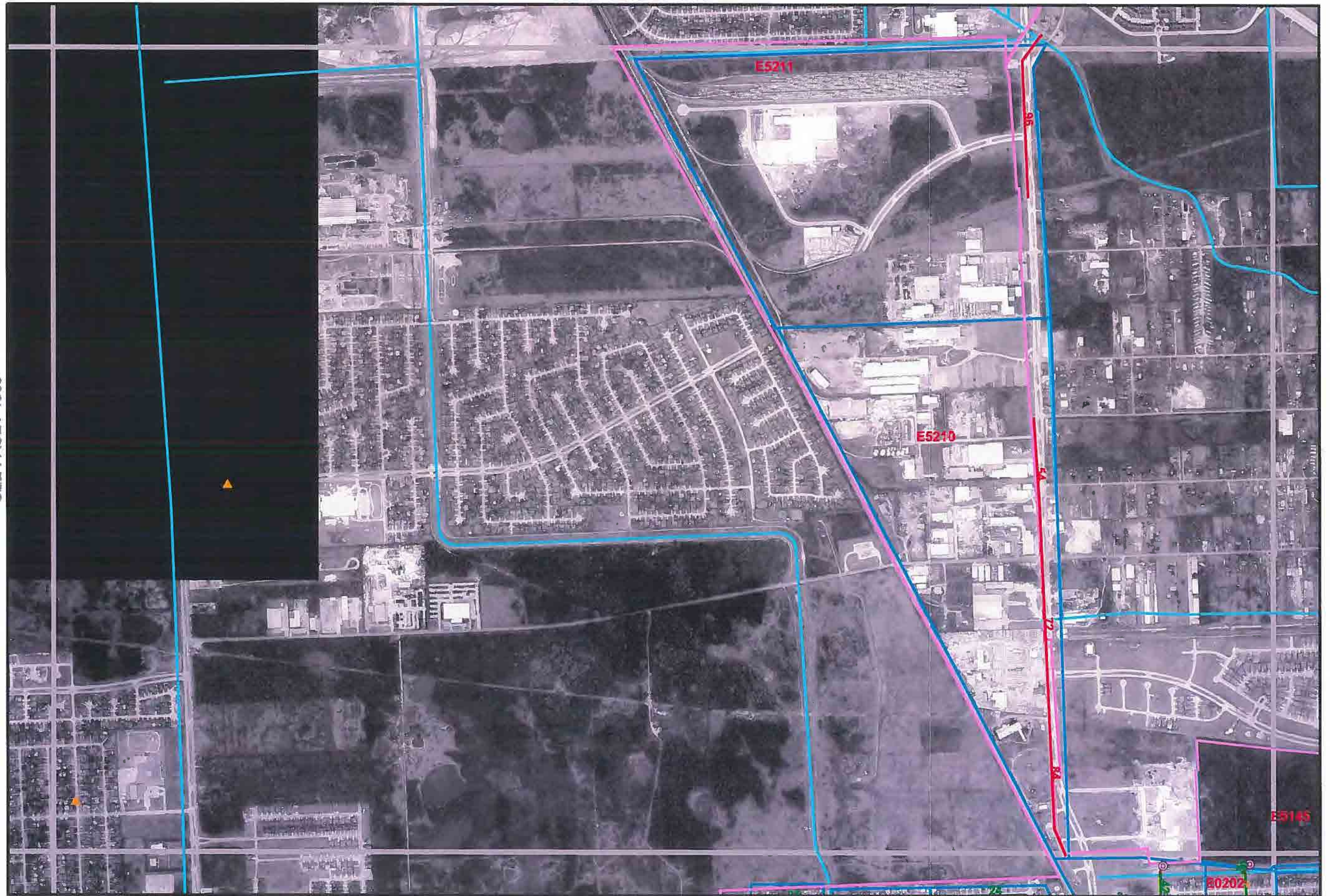
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SEE FACET 4963

SEE FACET 5163



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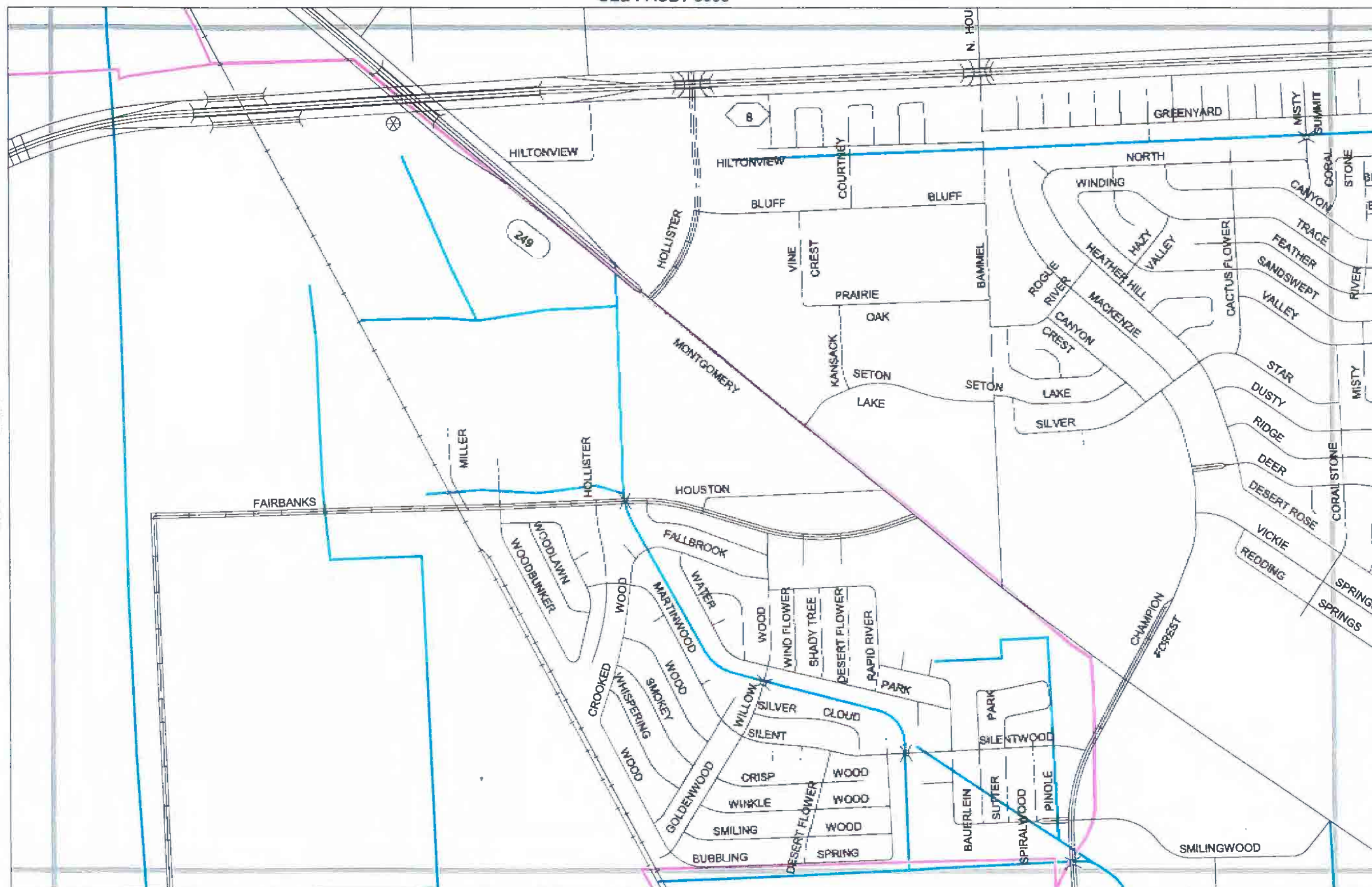


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Date: September 1999

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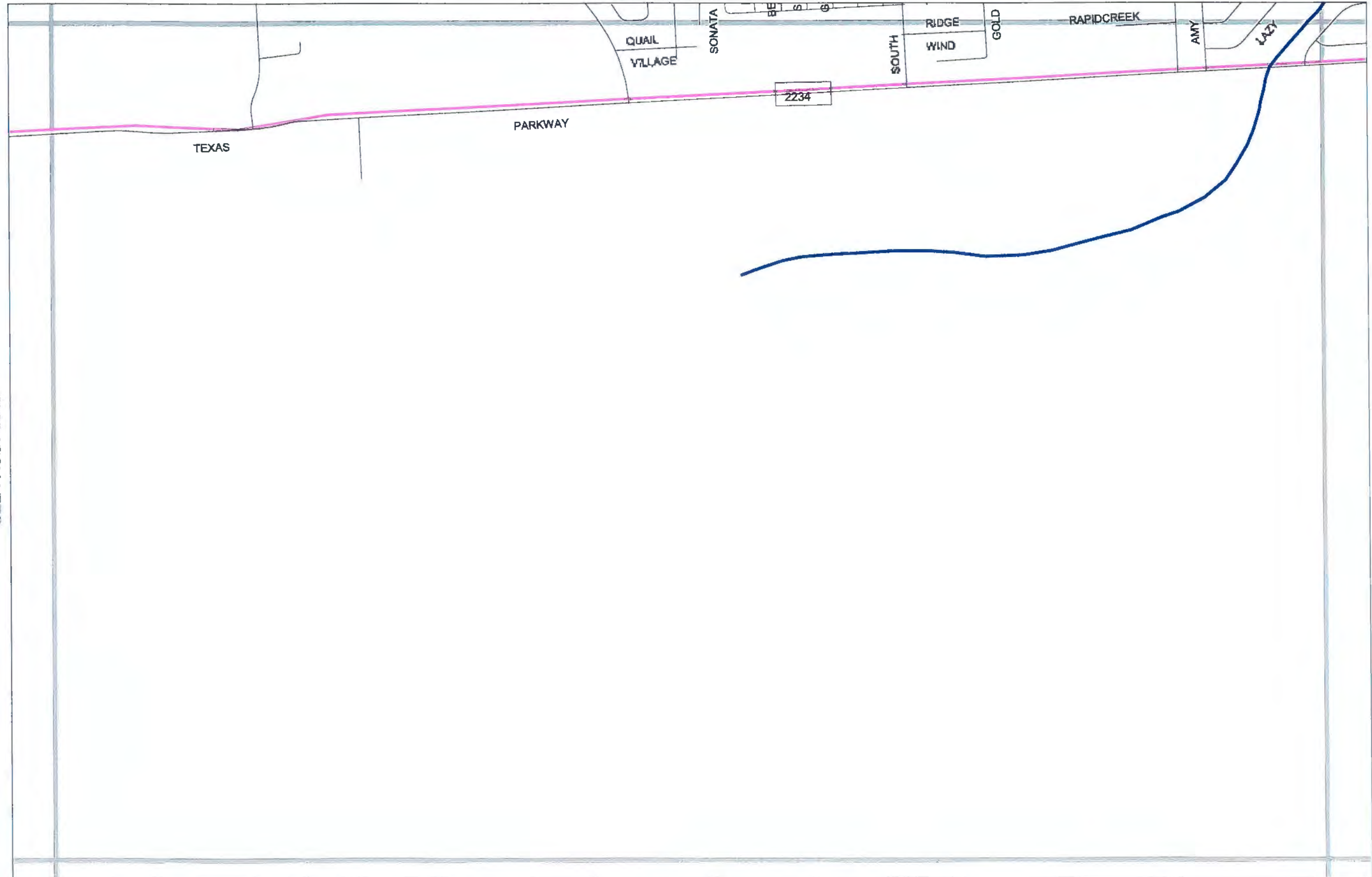
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Date: September 1999

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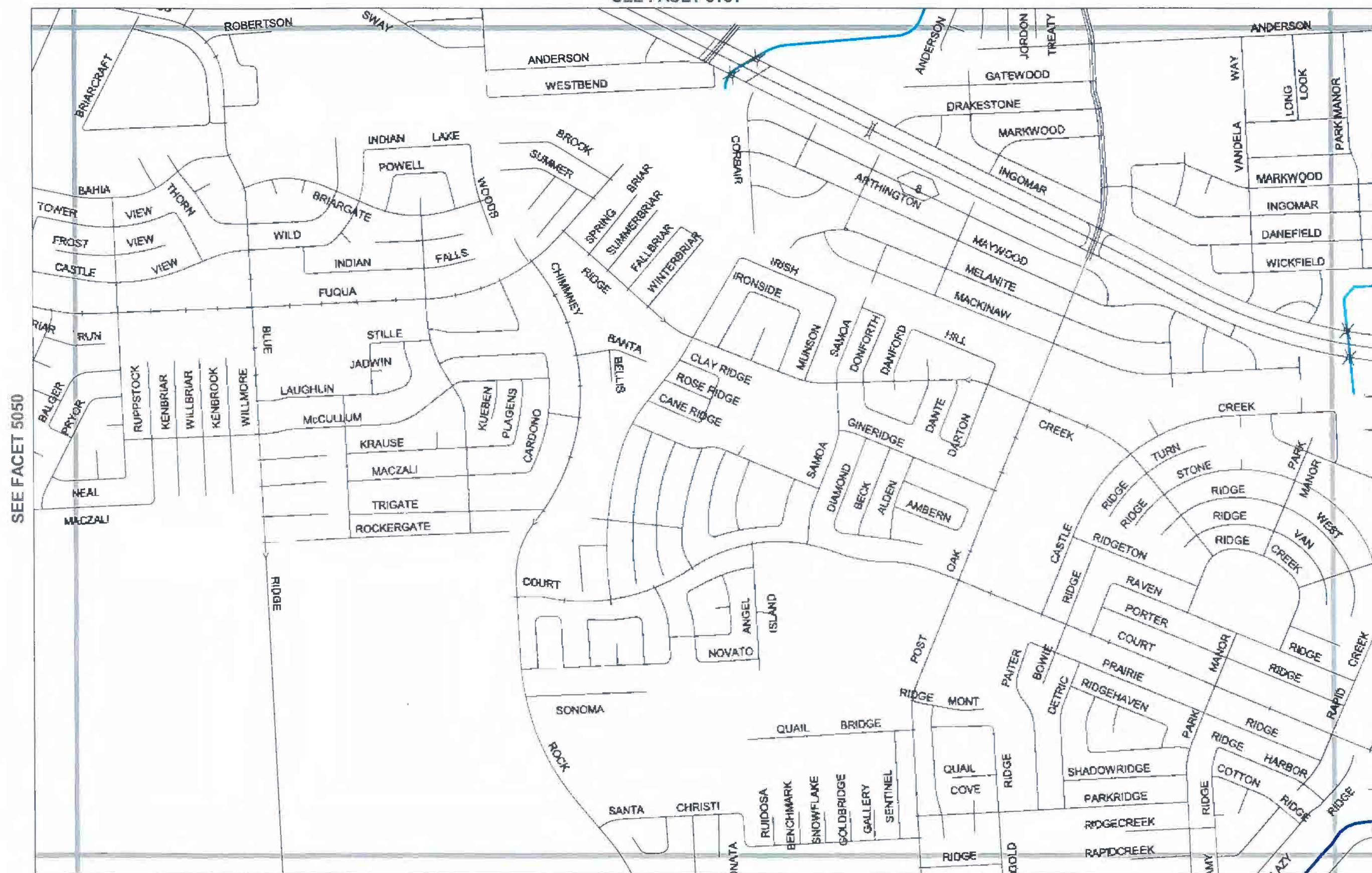
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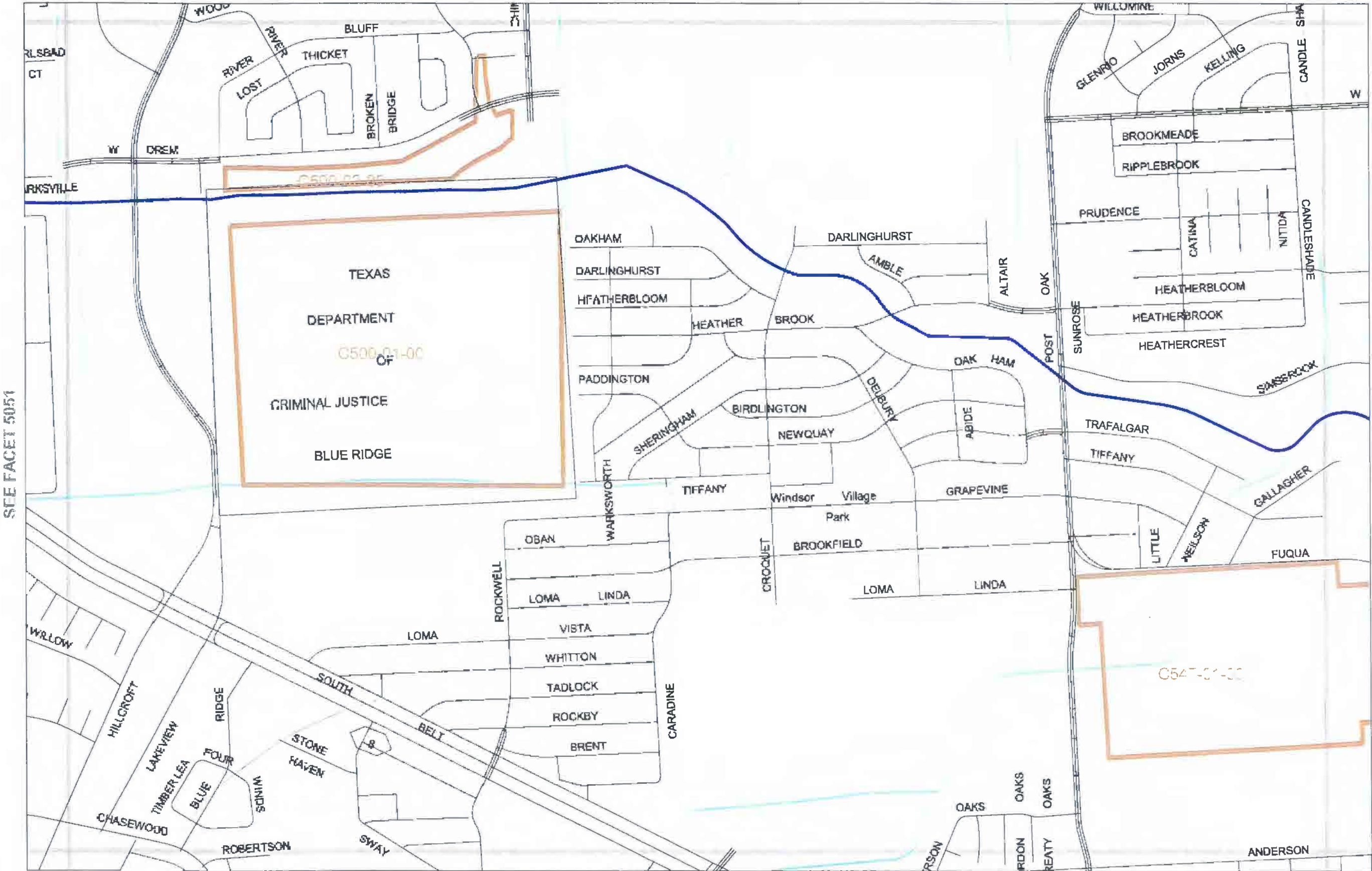
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Date: September 1999

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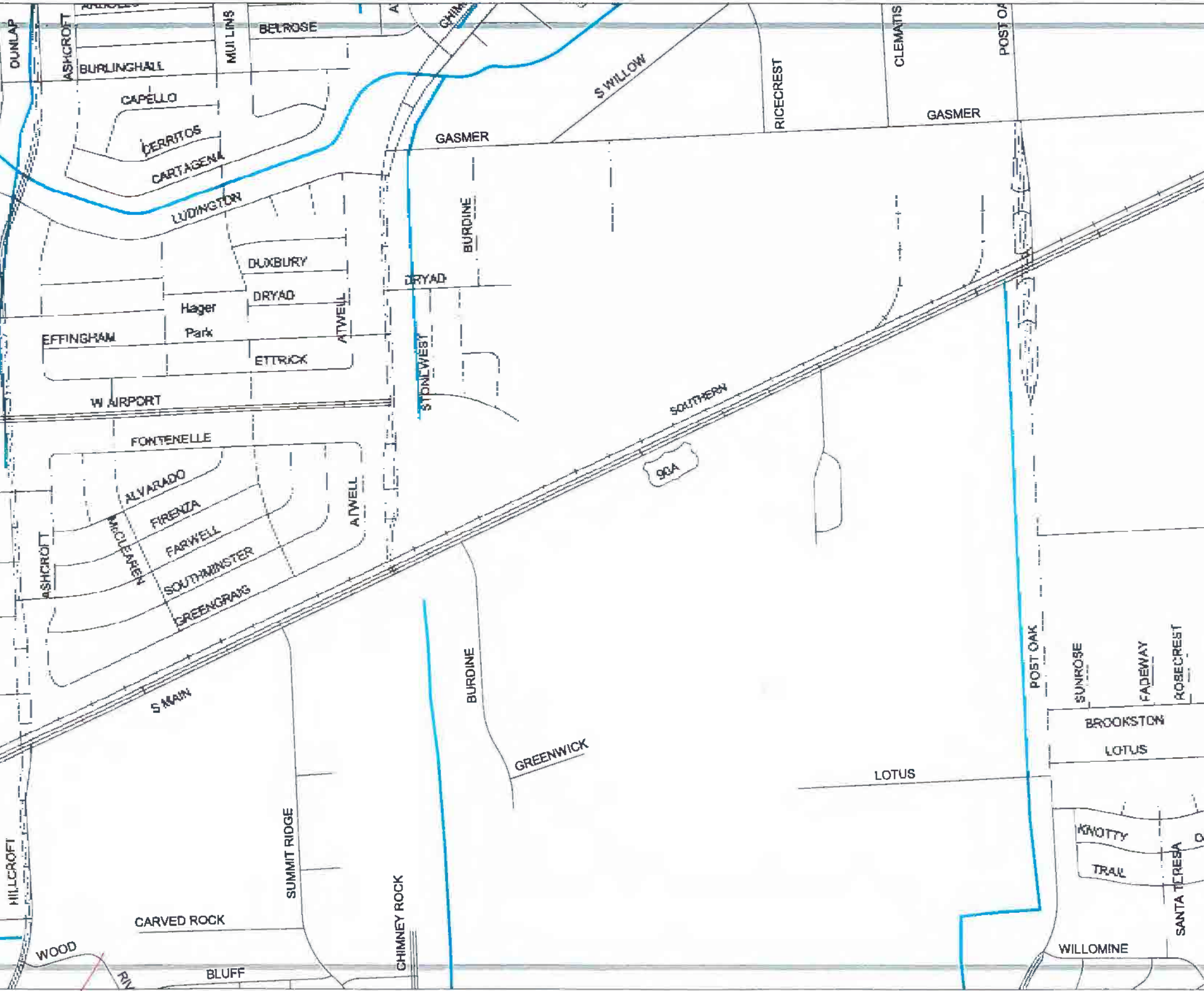
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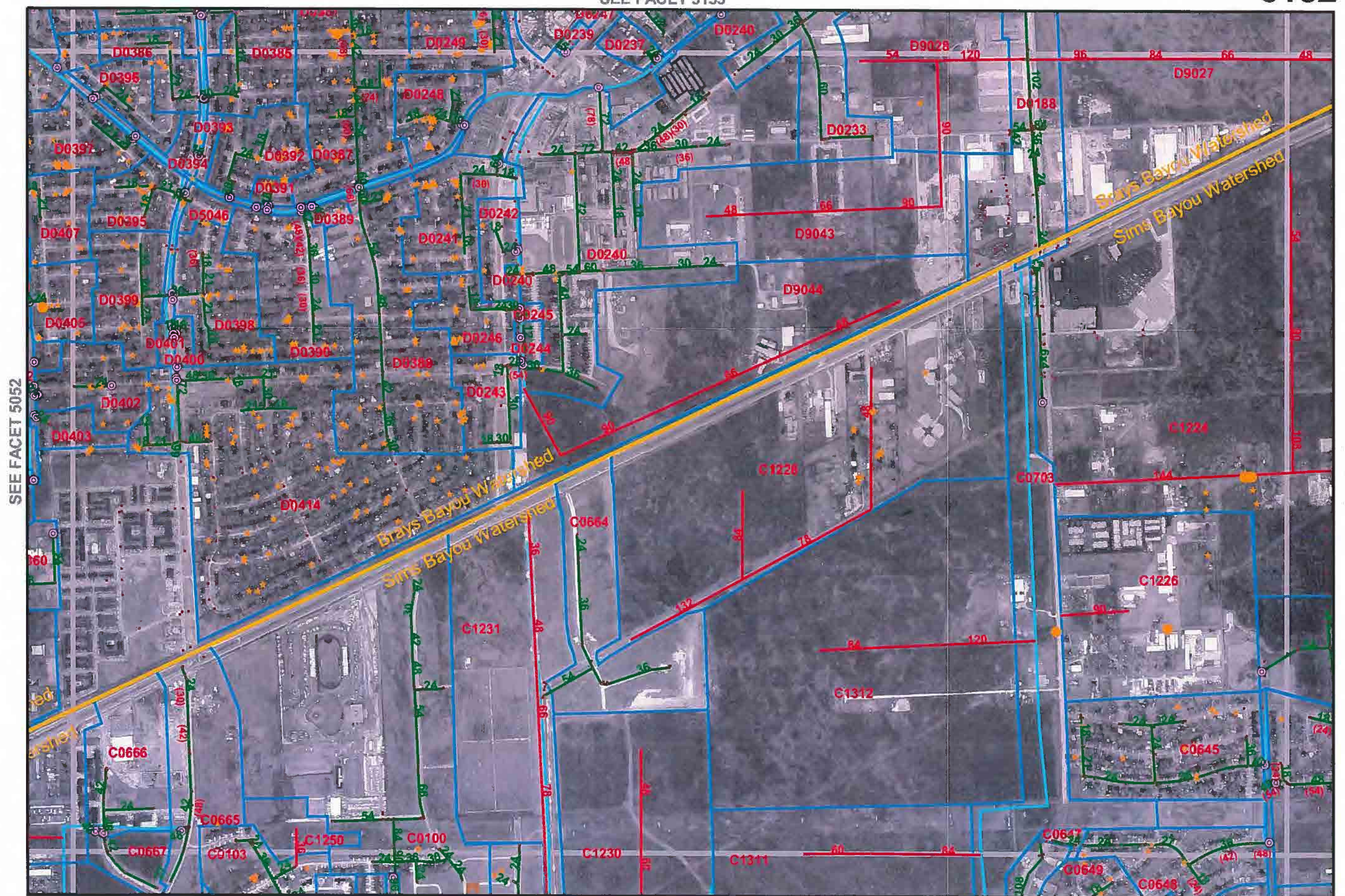


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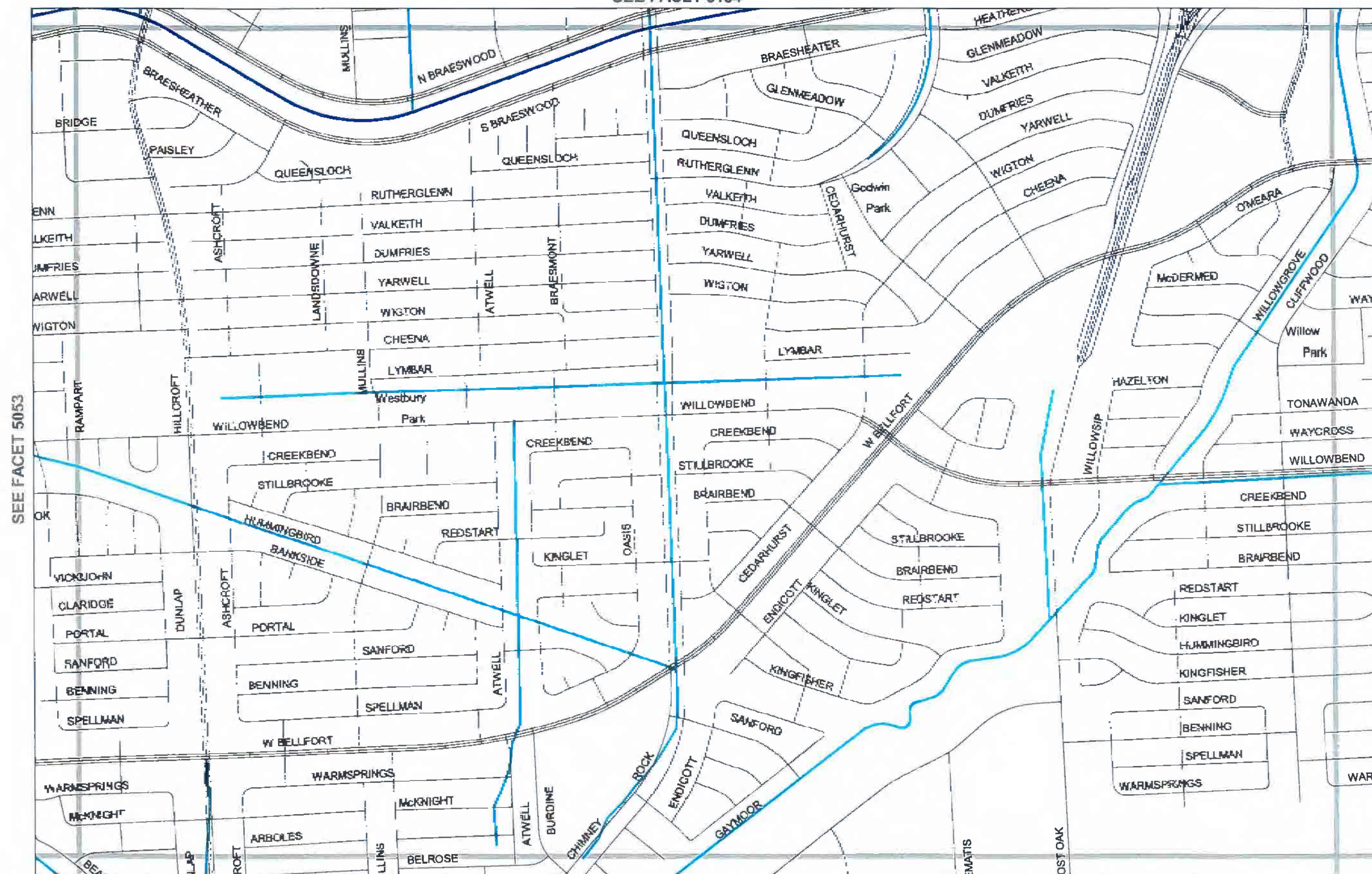
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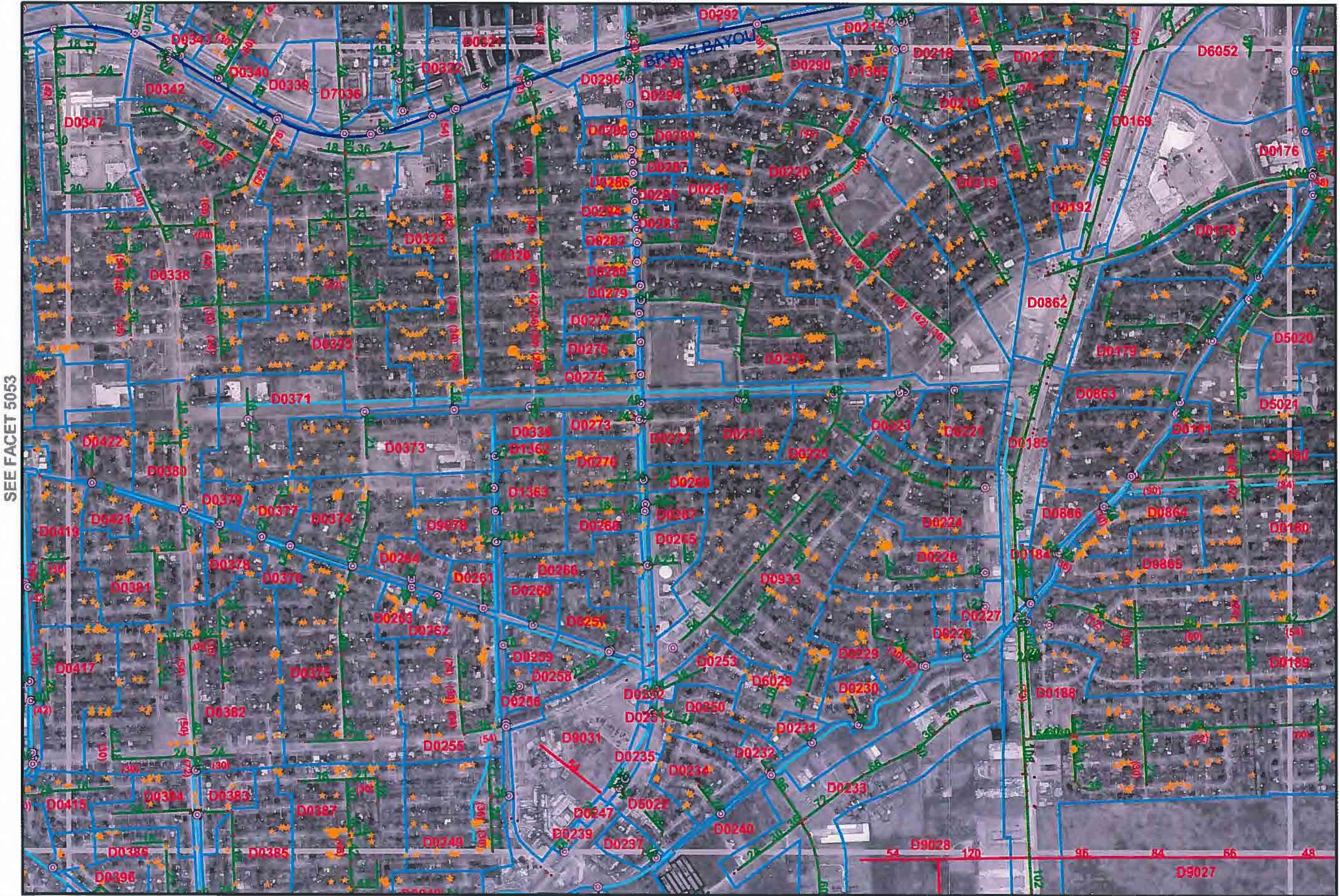


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Date: September 1999



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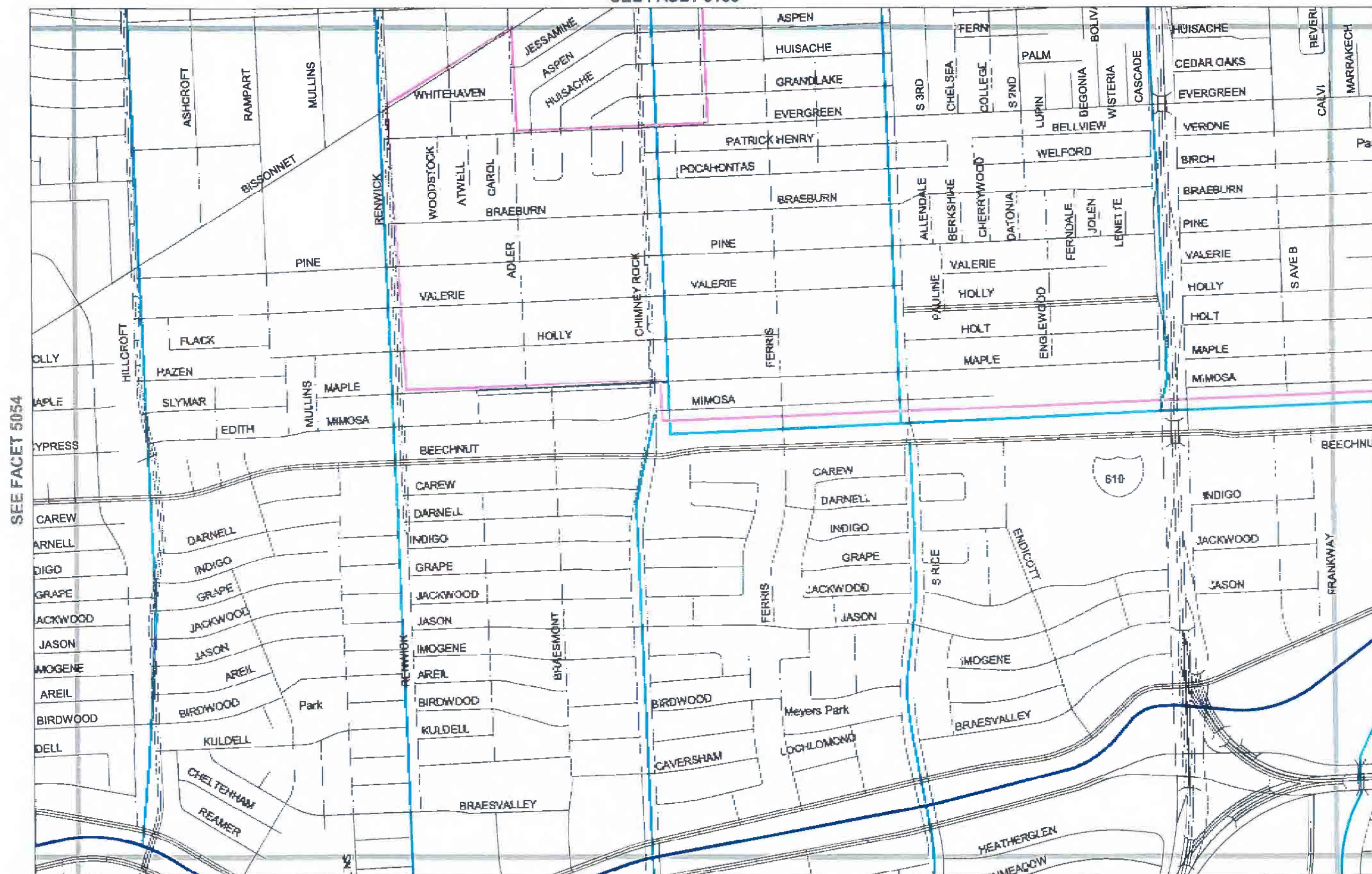
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Date: September 1999

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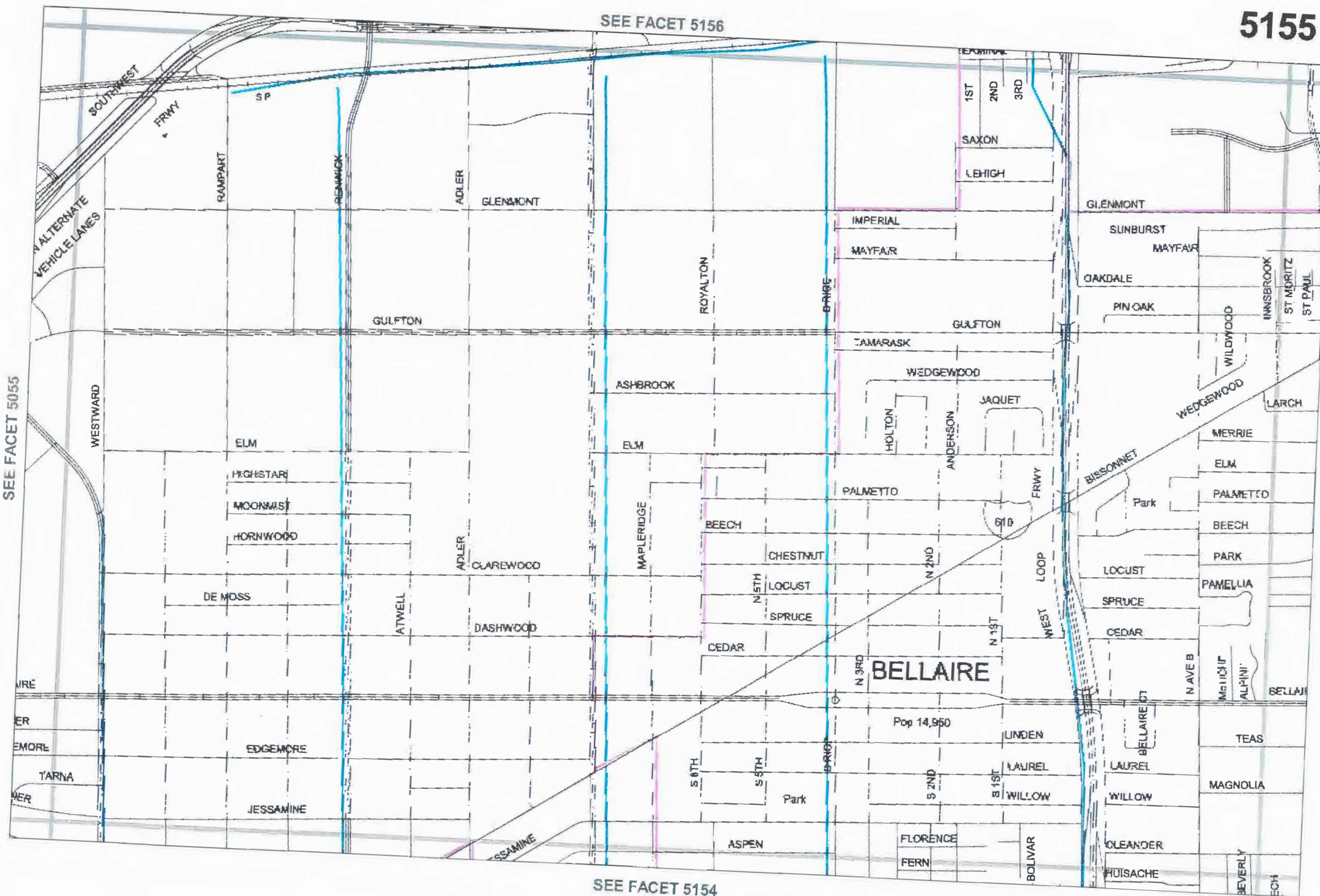
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Date: September 1999

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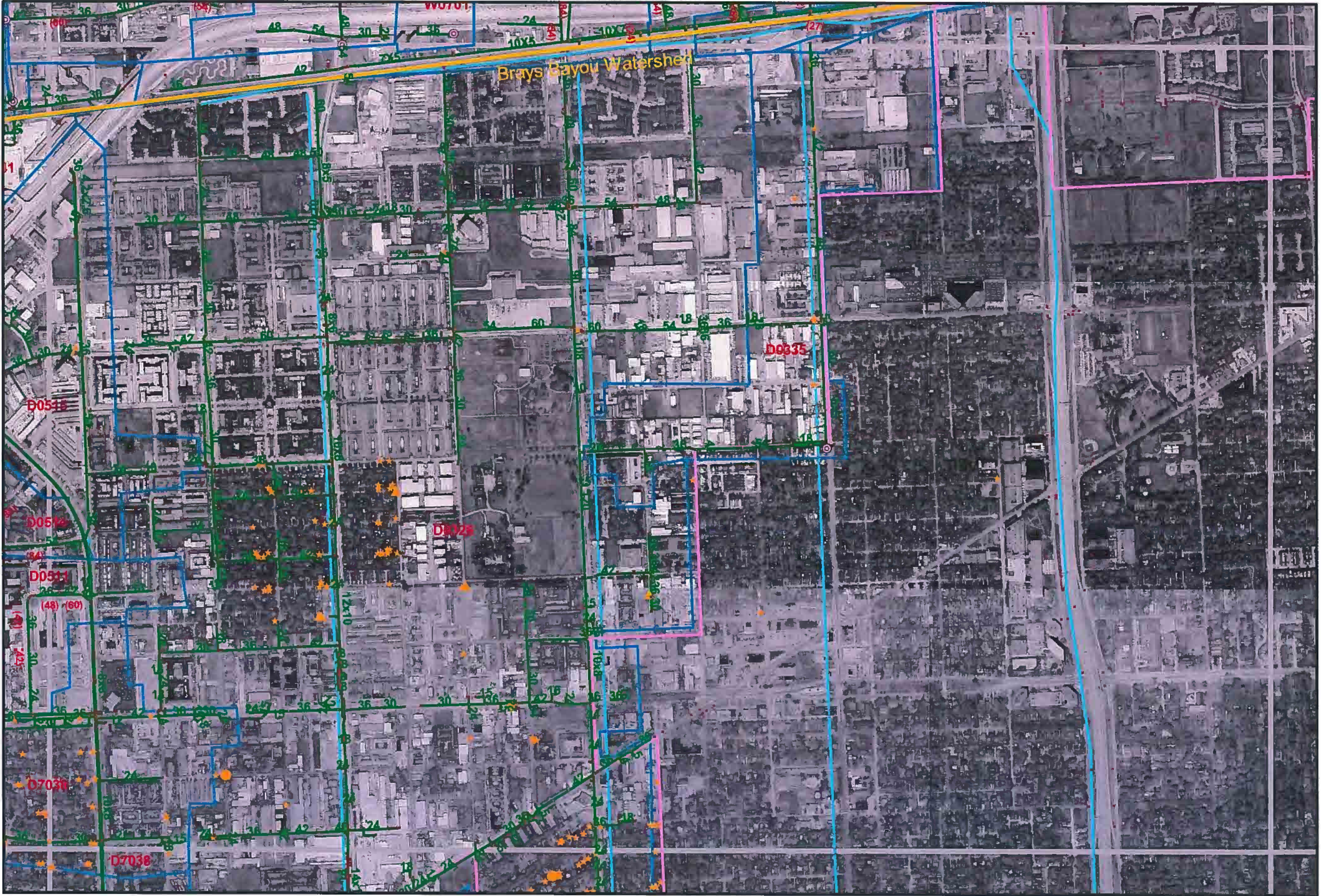
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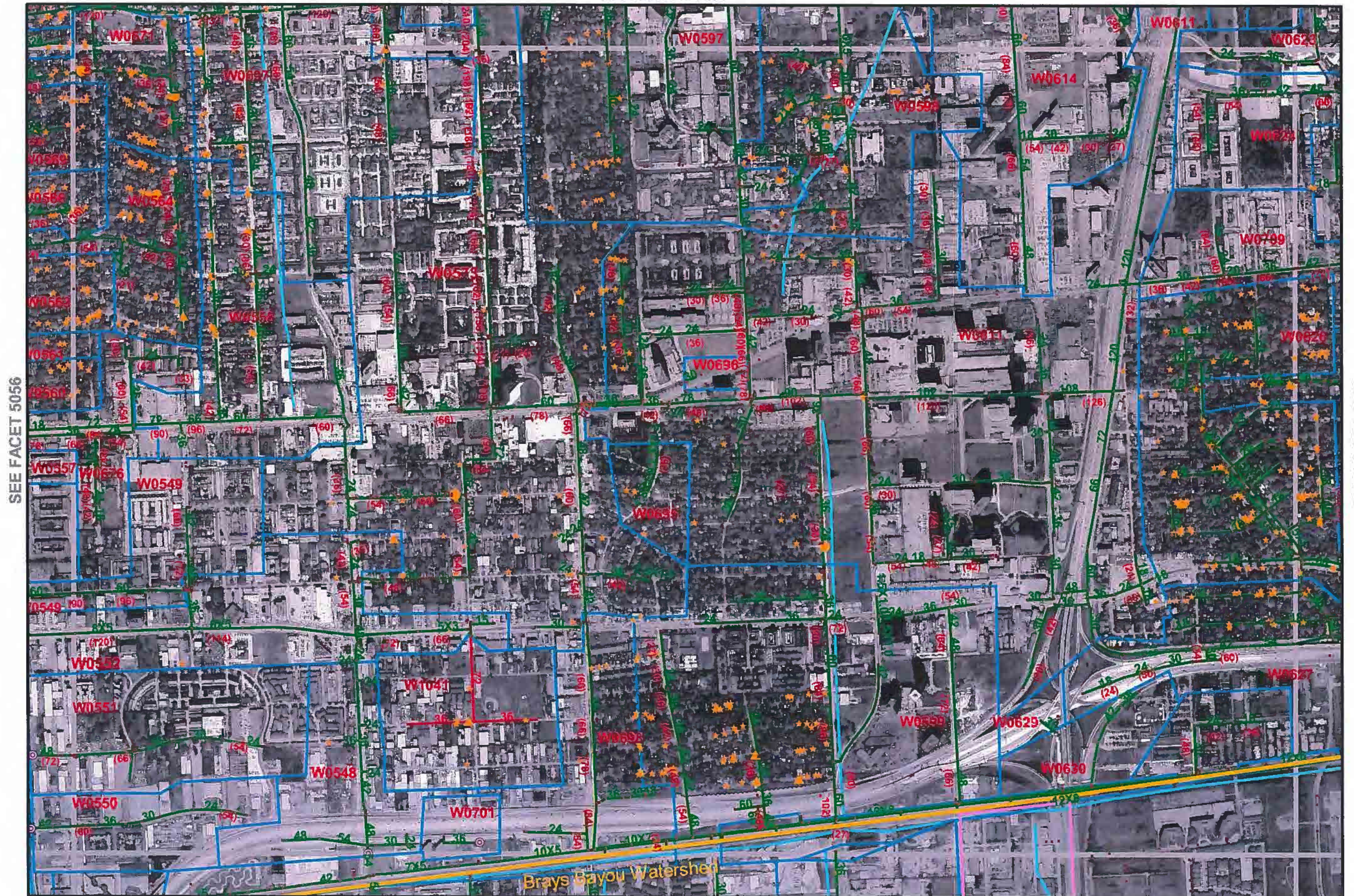


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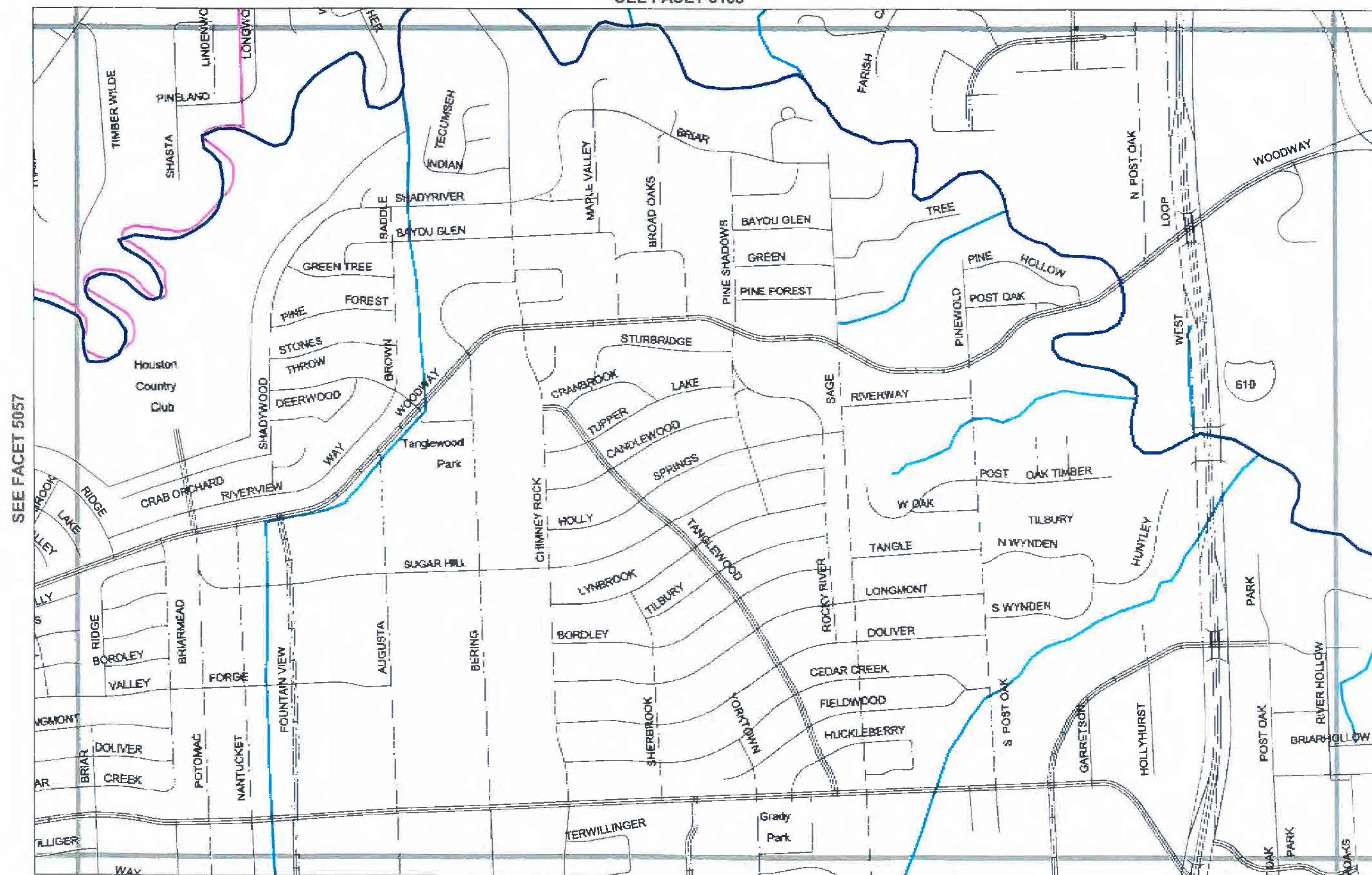
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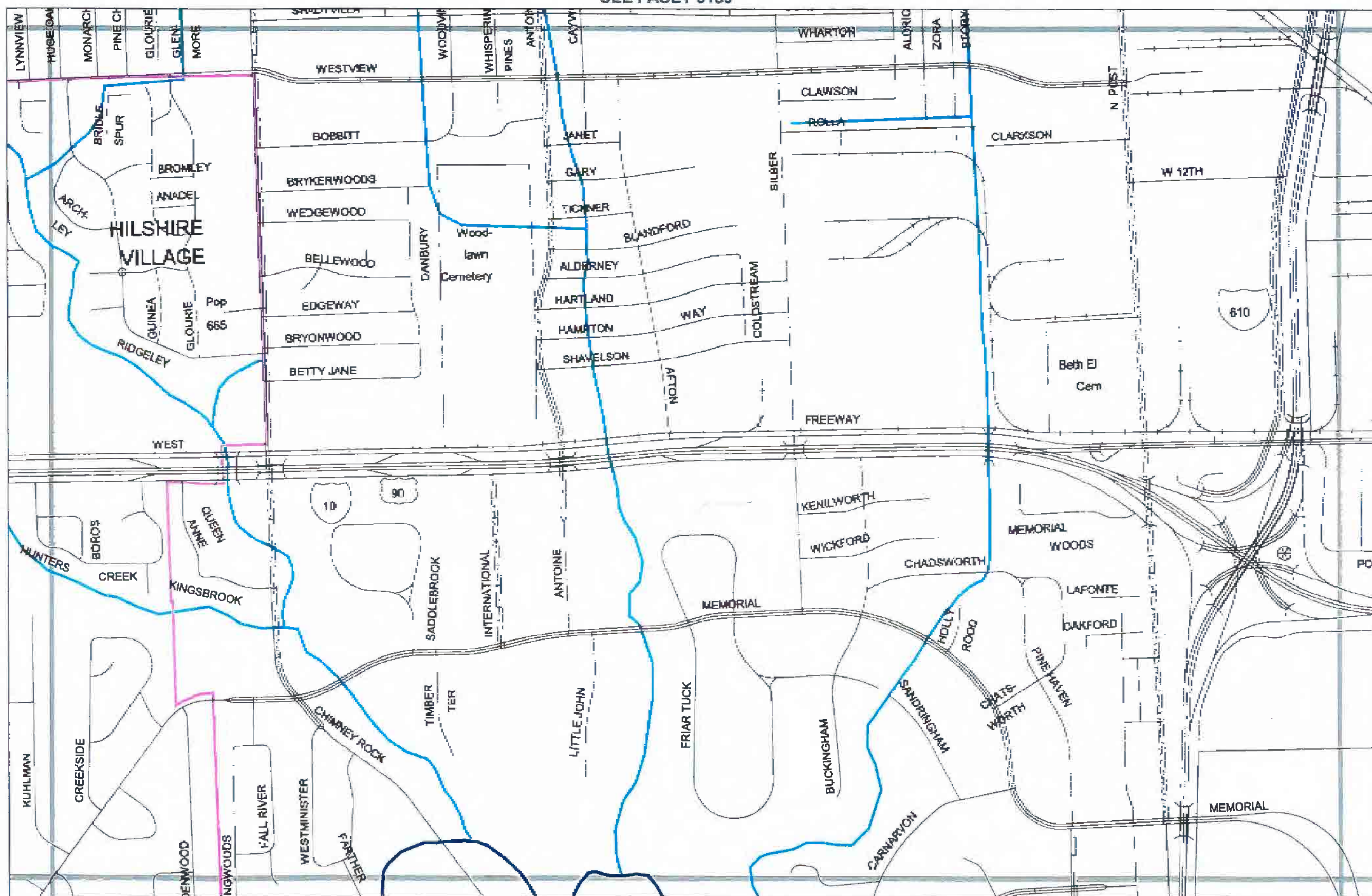
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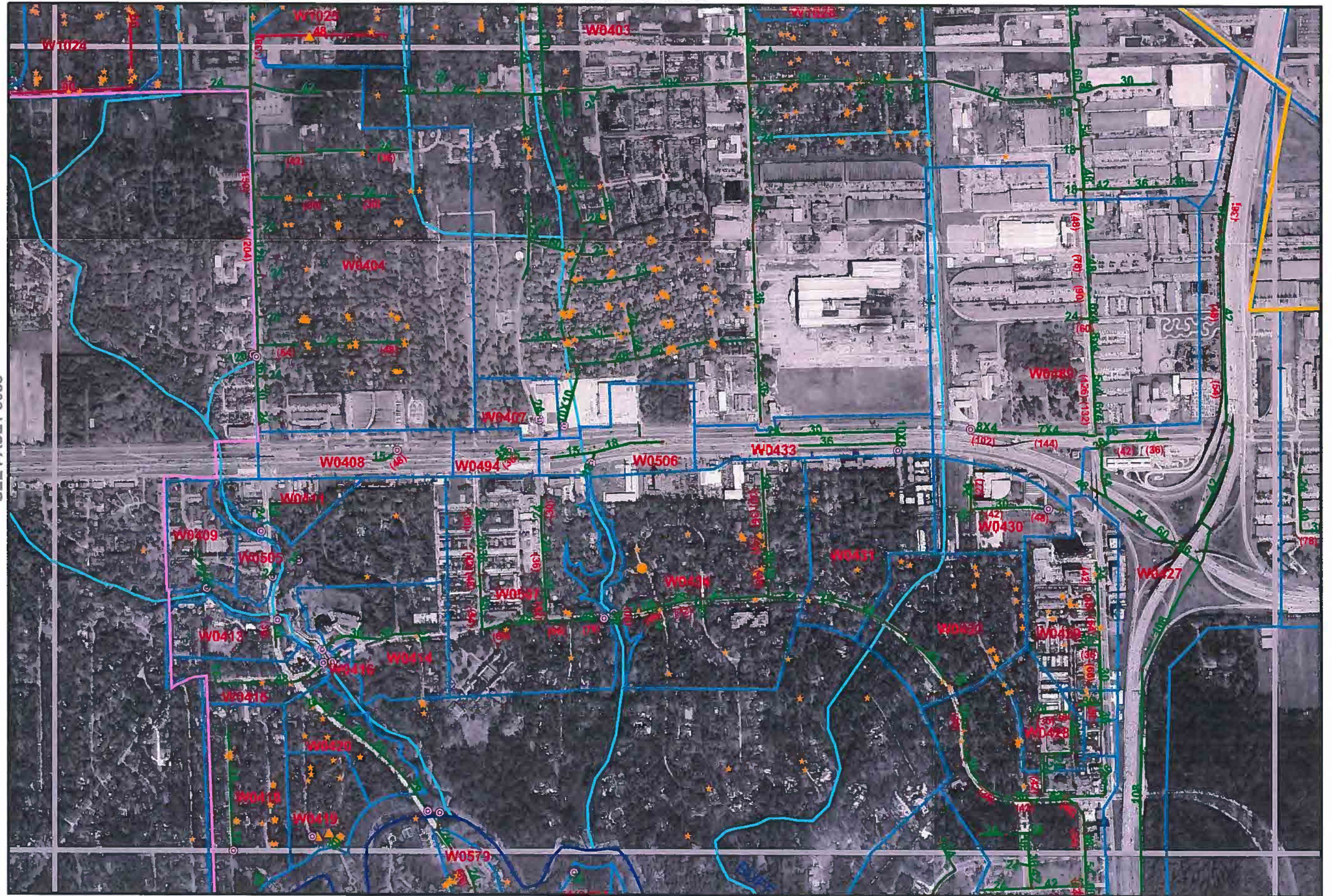
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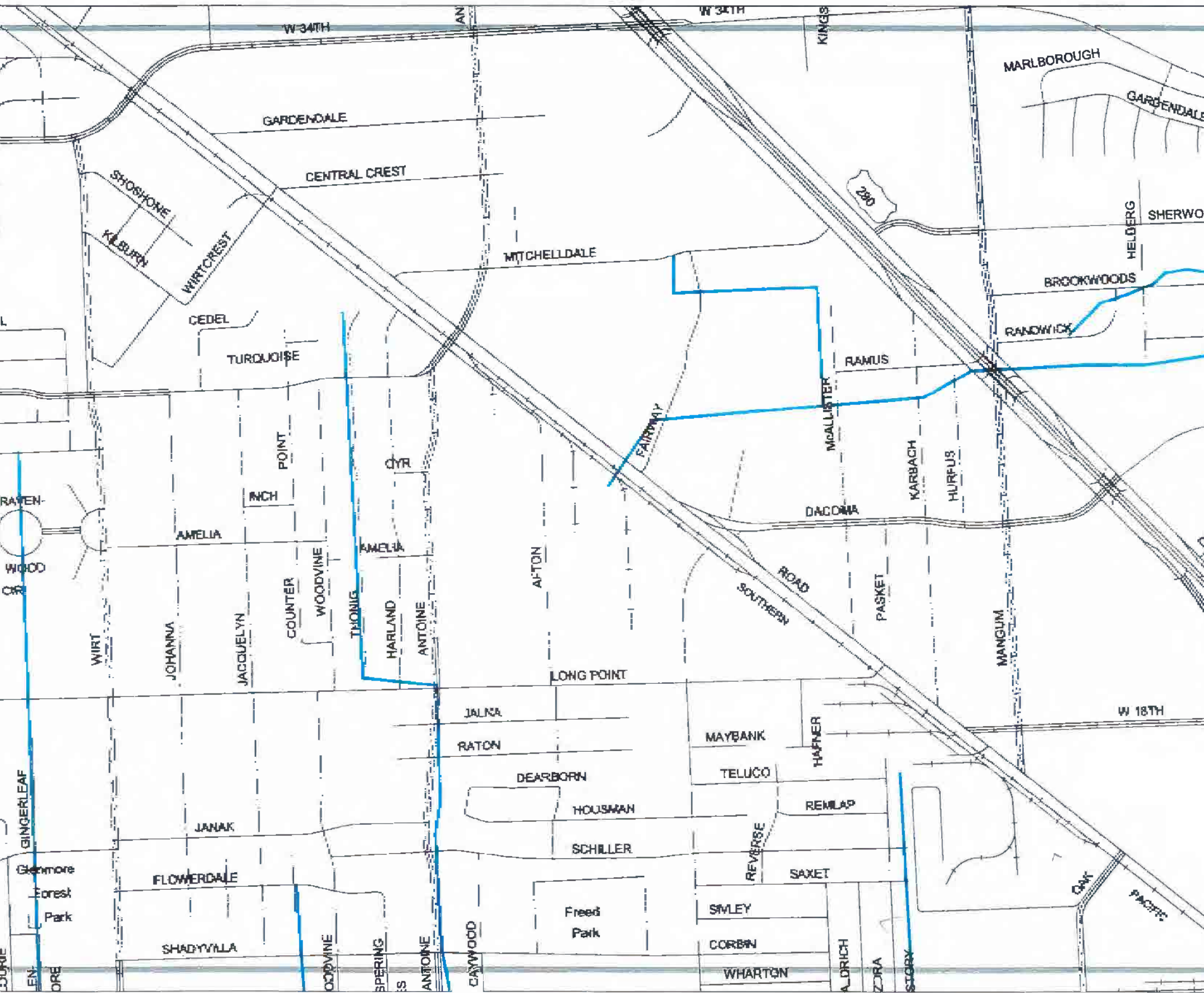
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Date: September 1999

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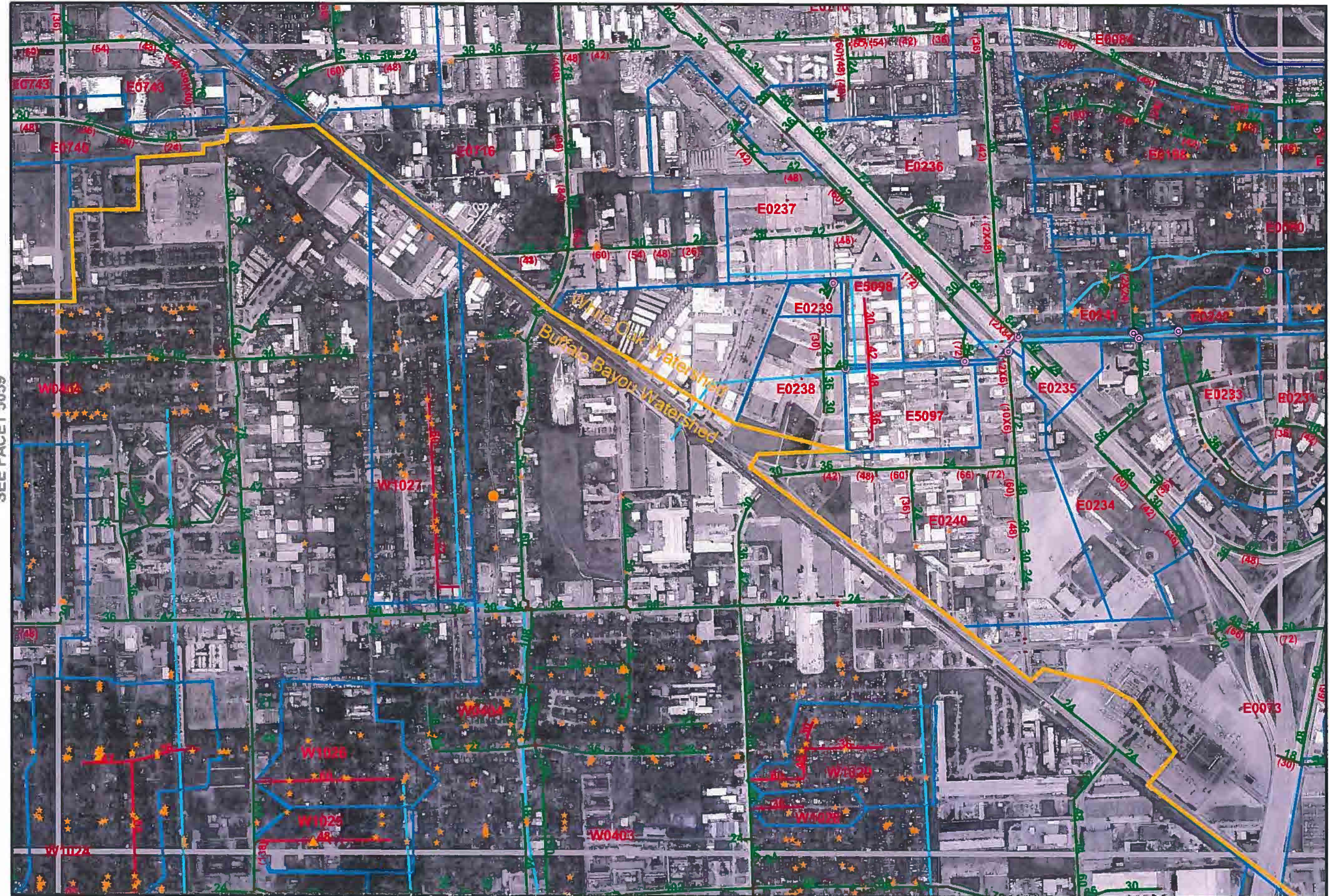


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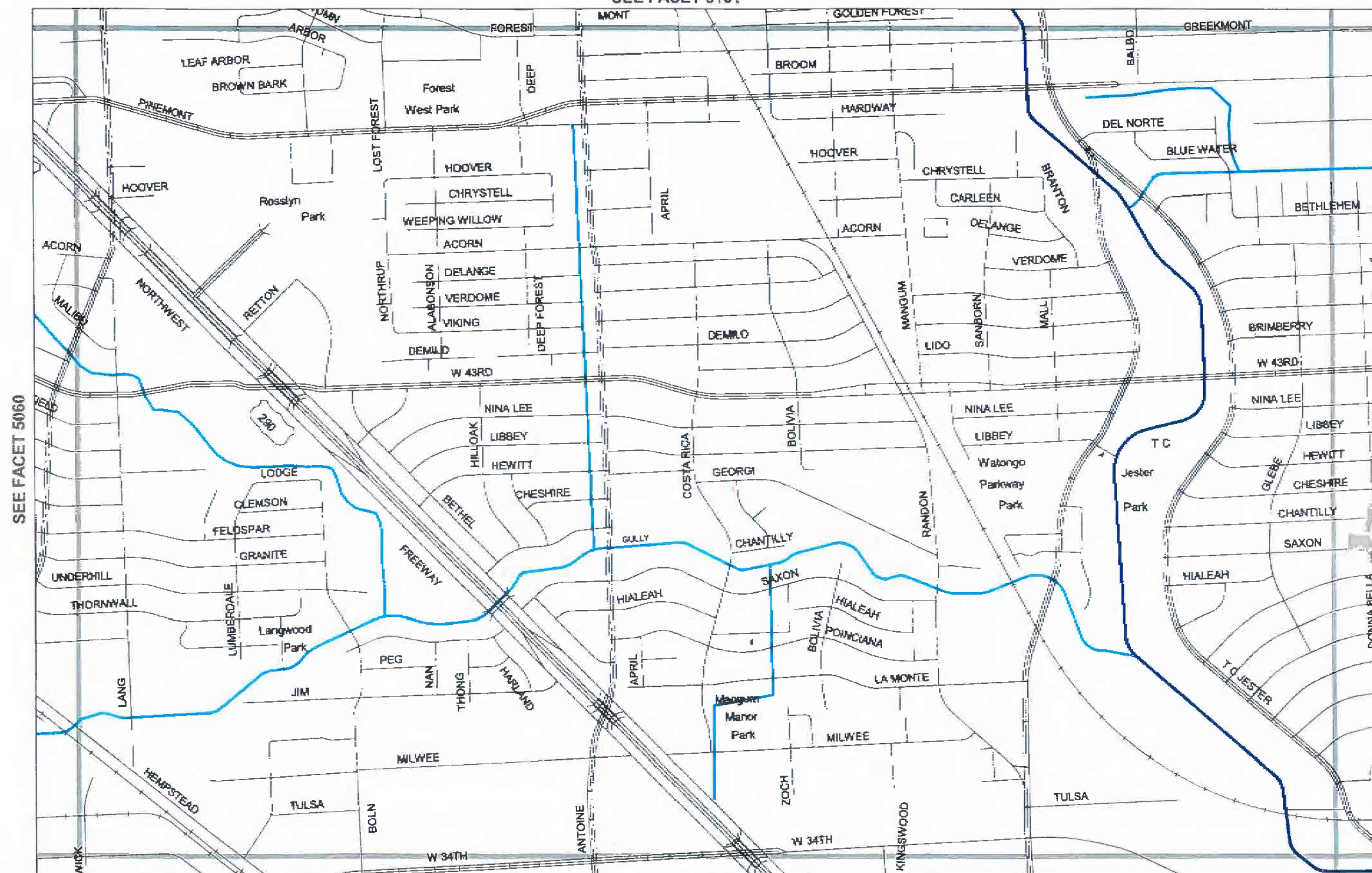
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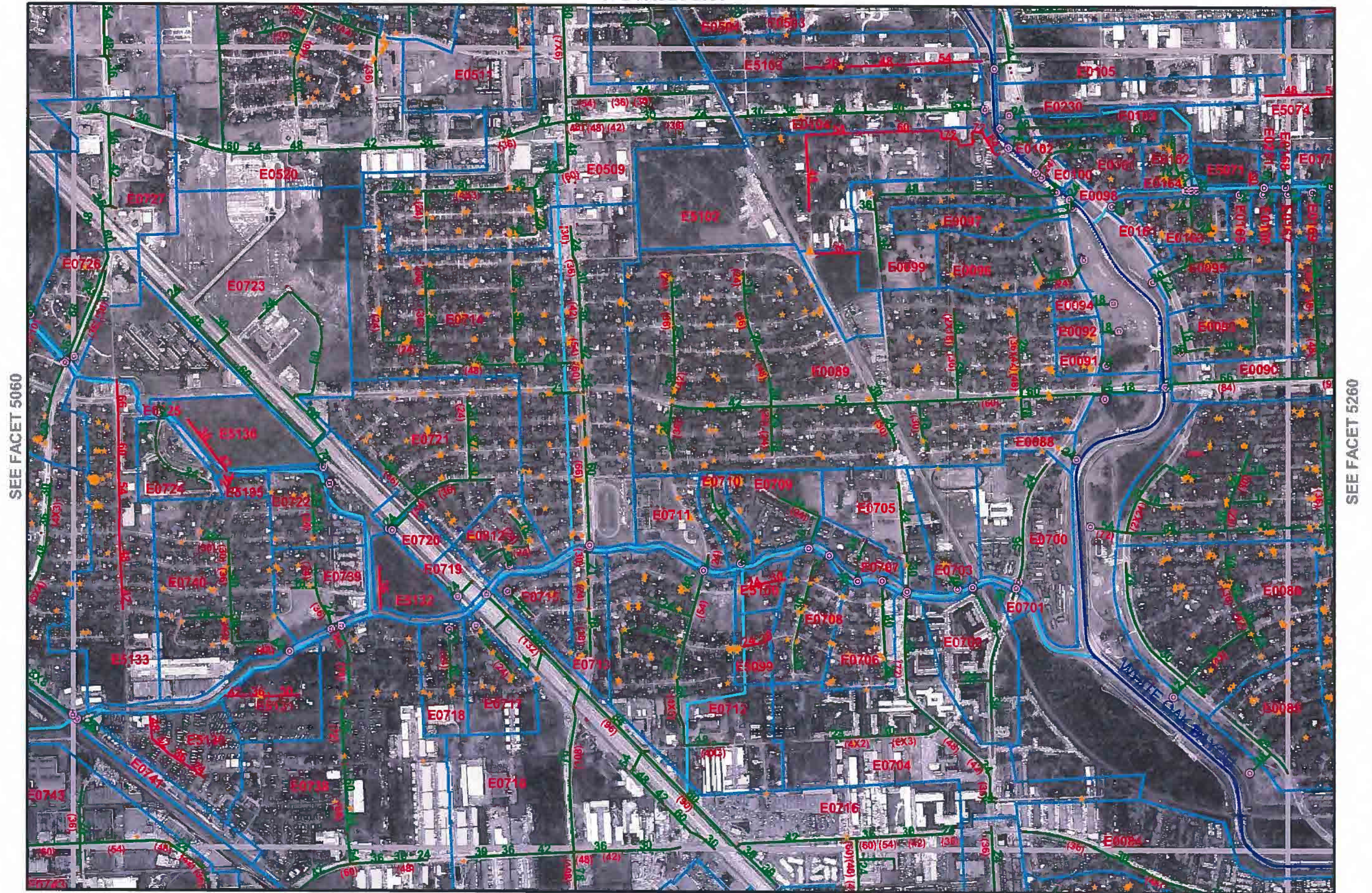
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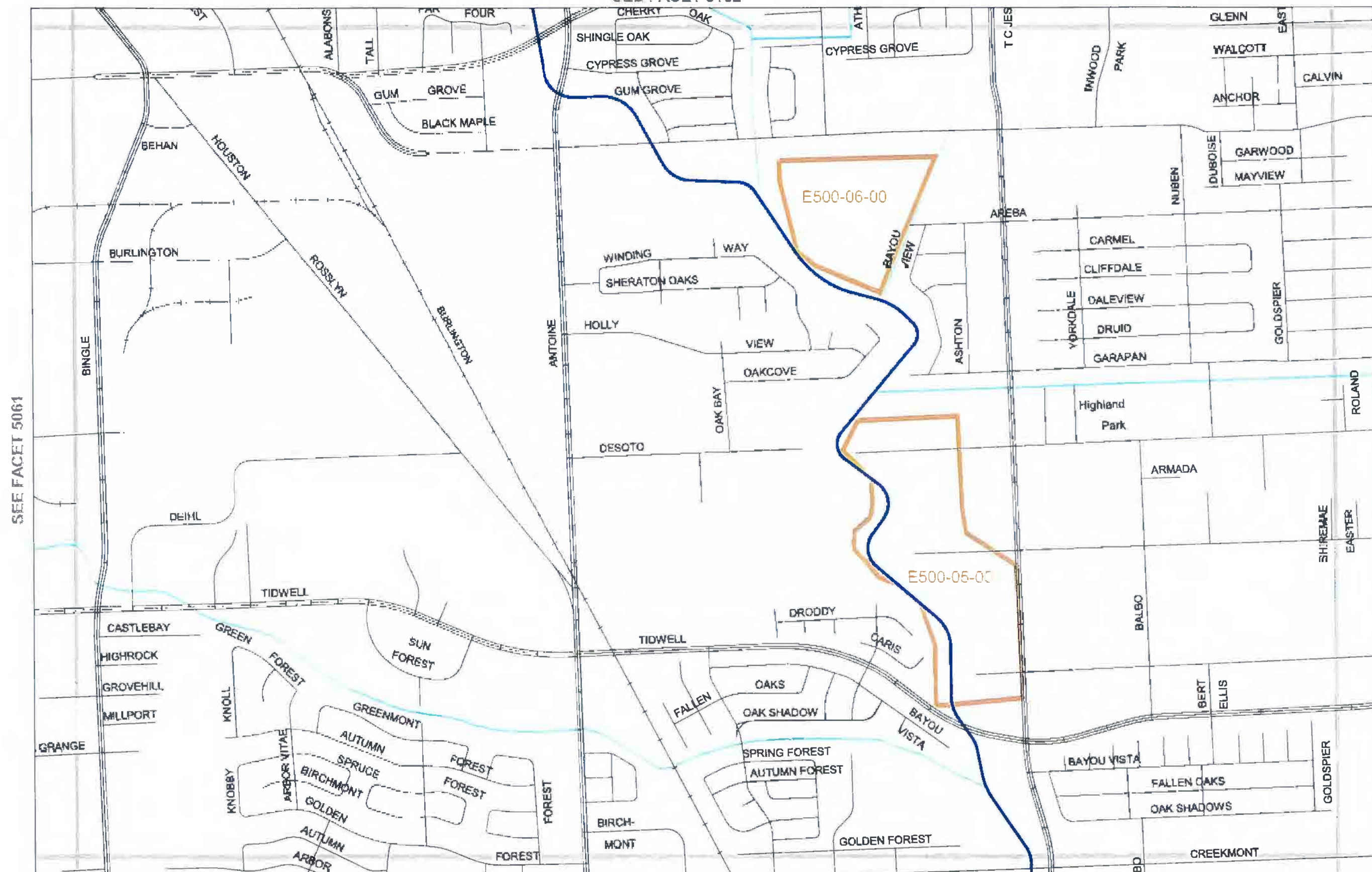
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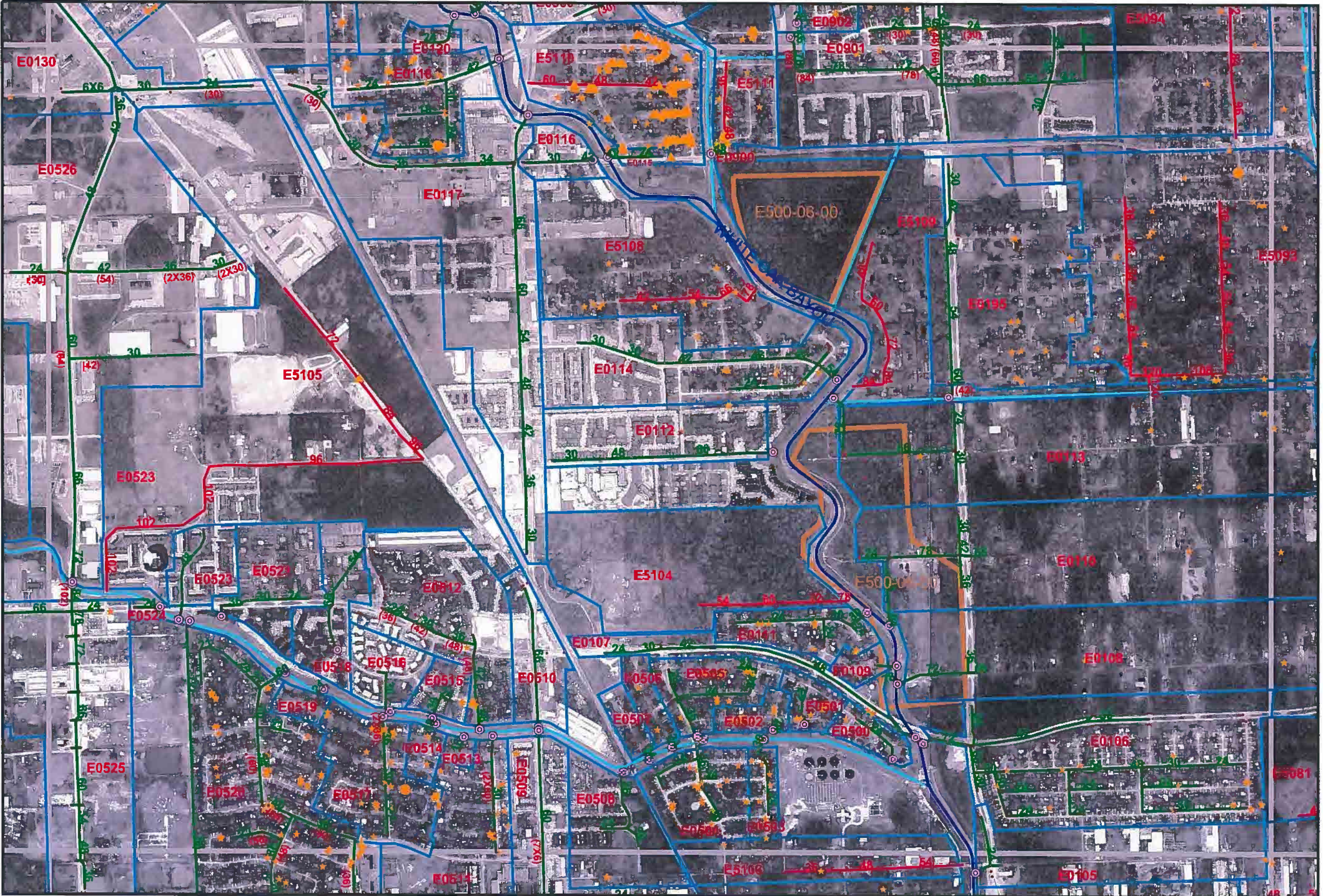
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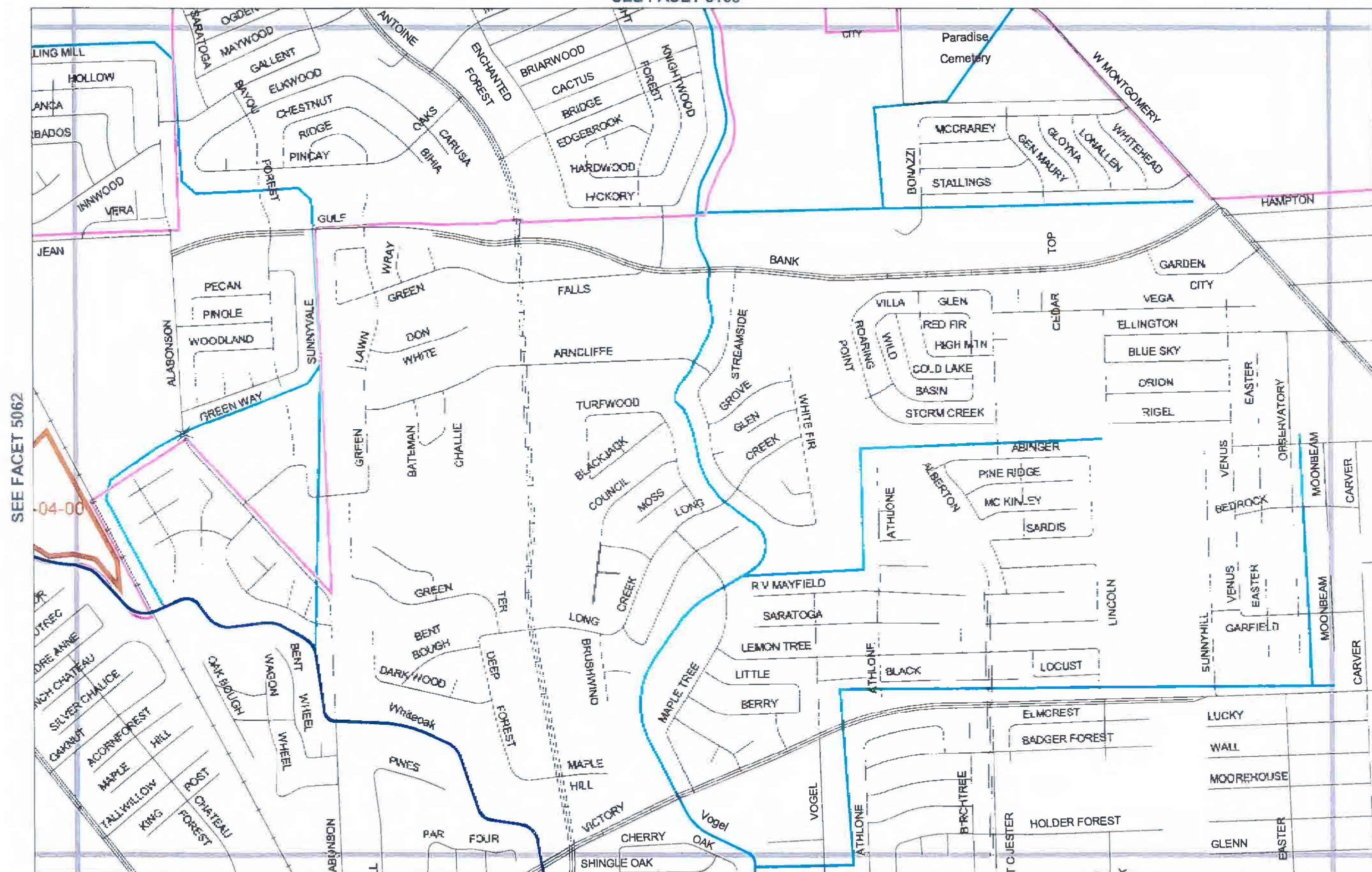
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Date: September 1999

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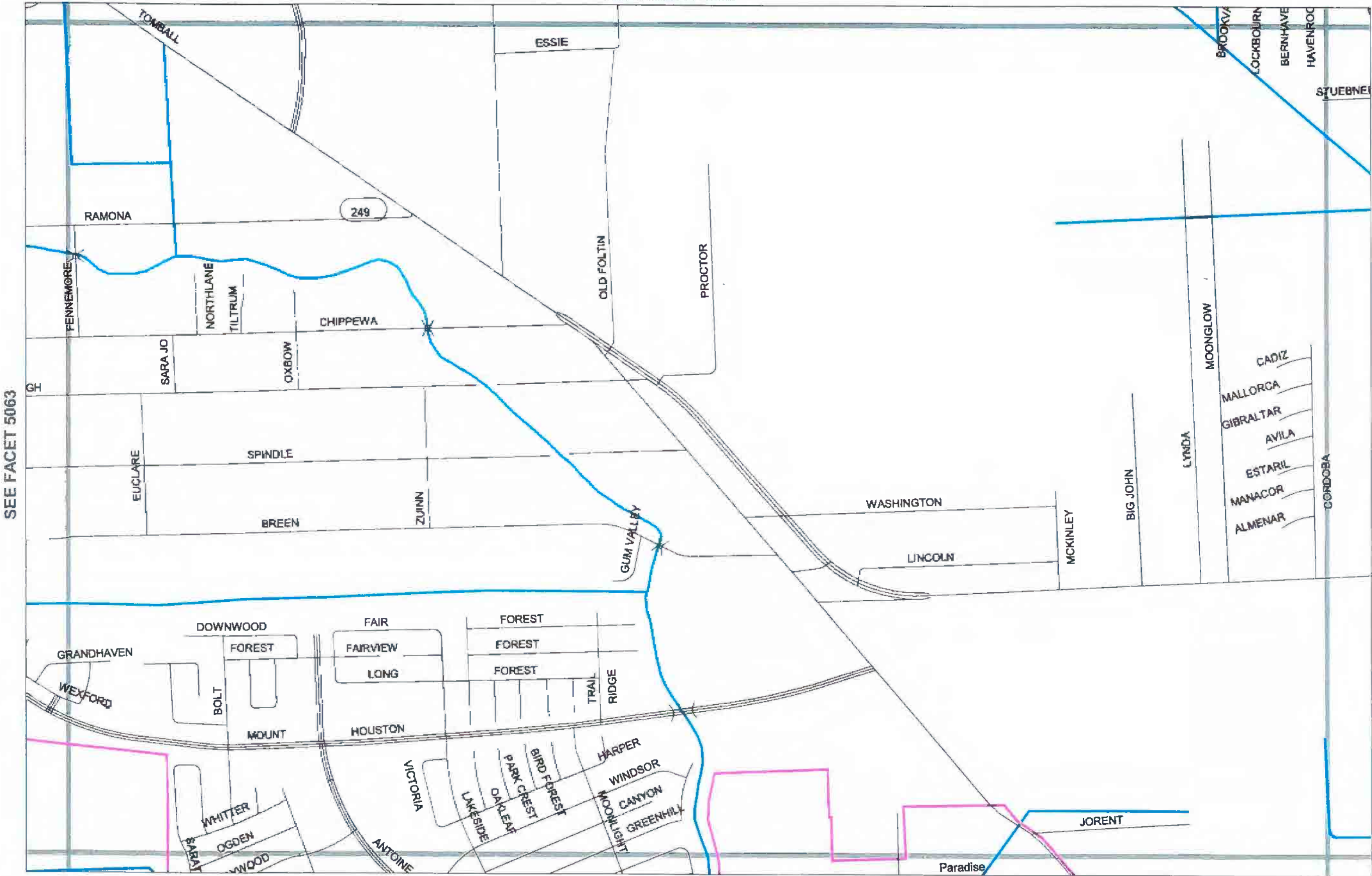
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Date: September 1999

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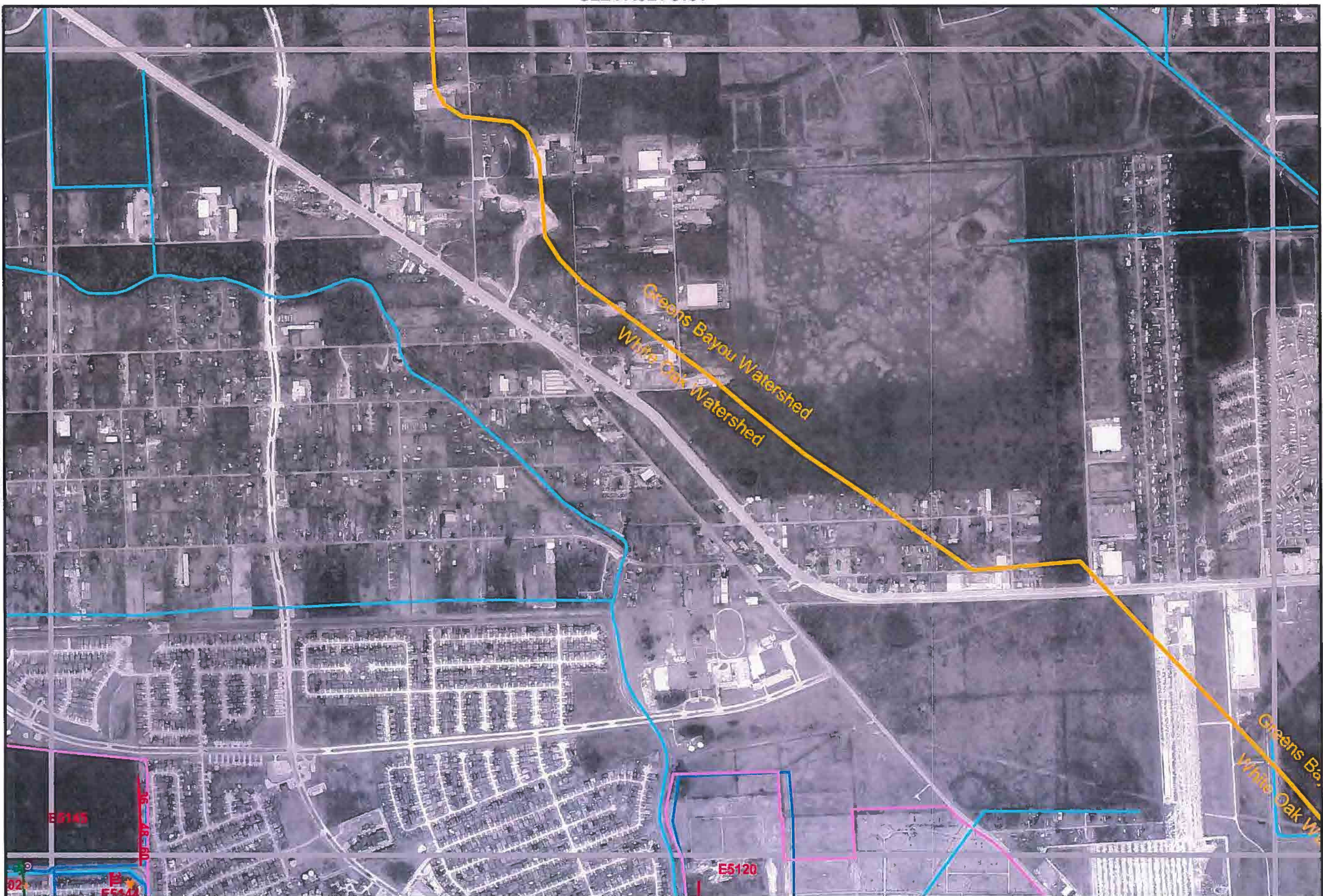
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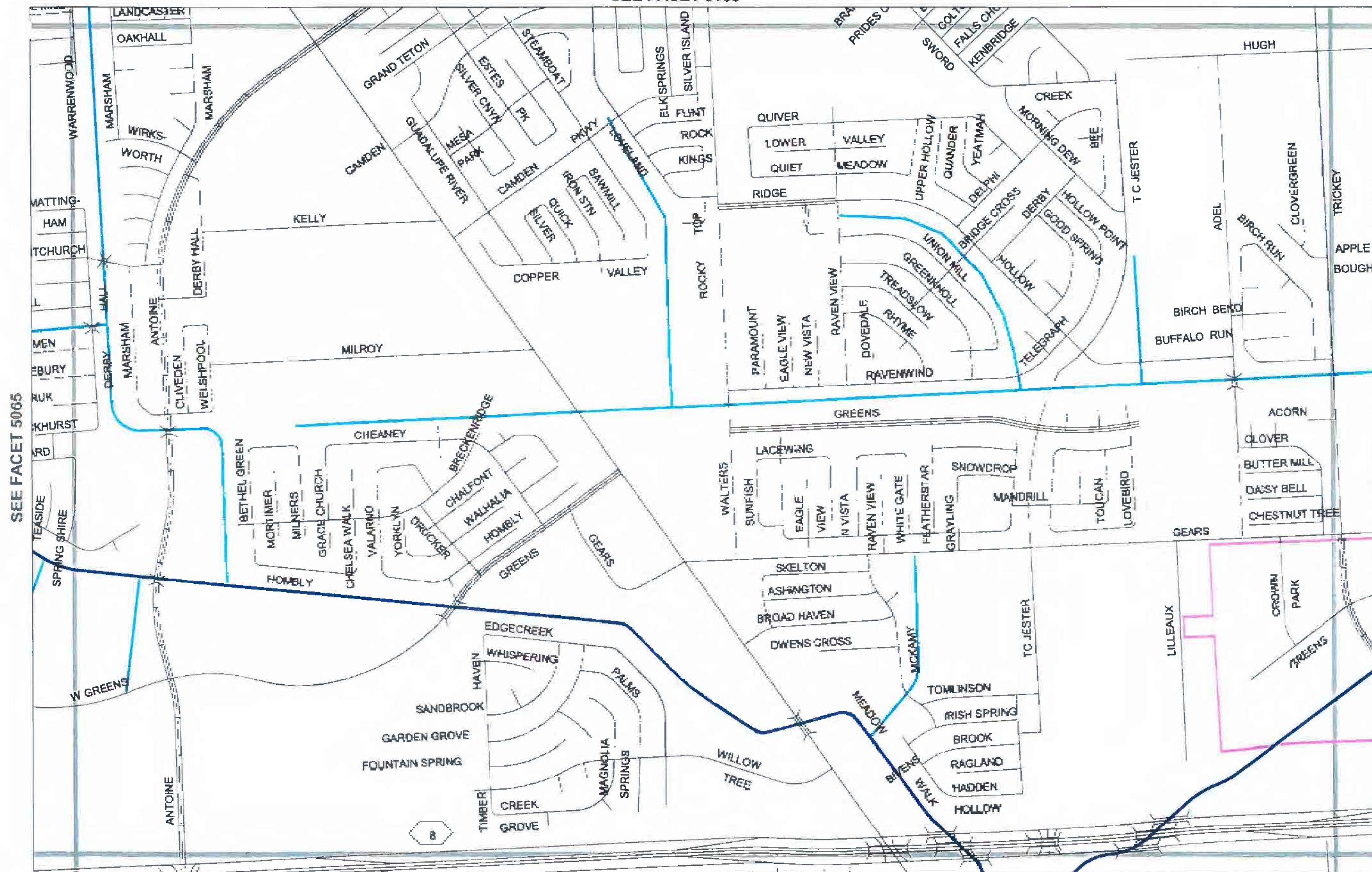
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Date: September 1999

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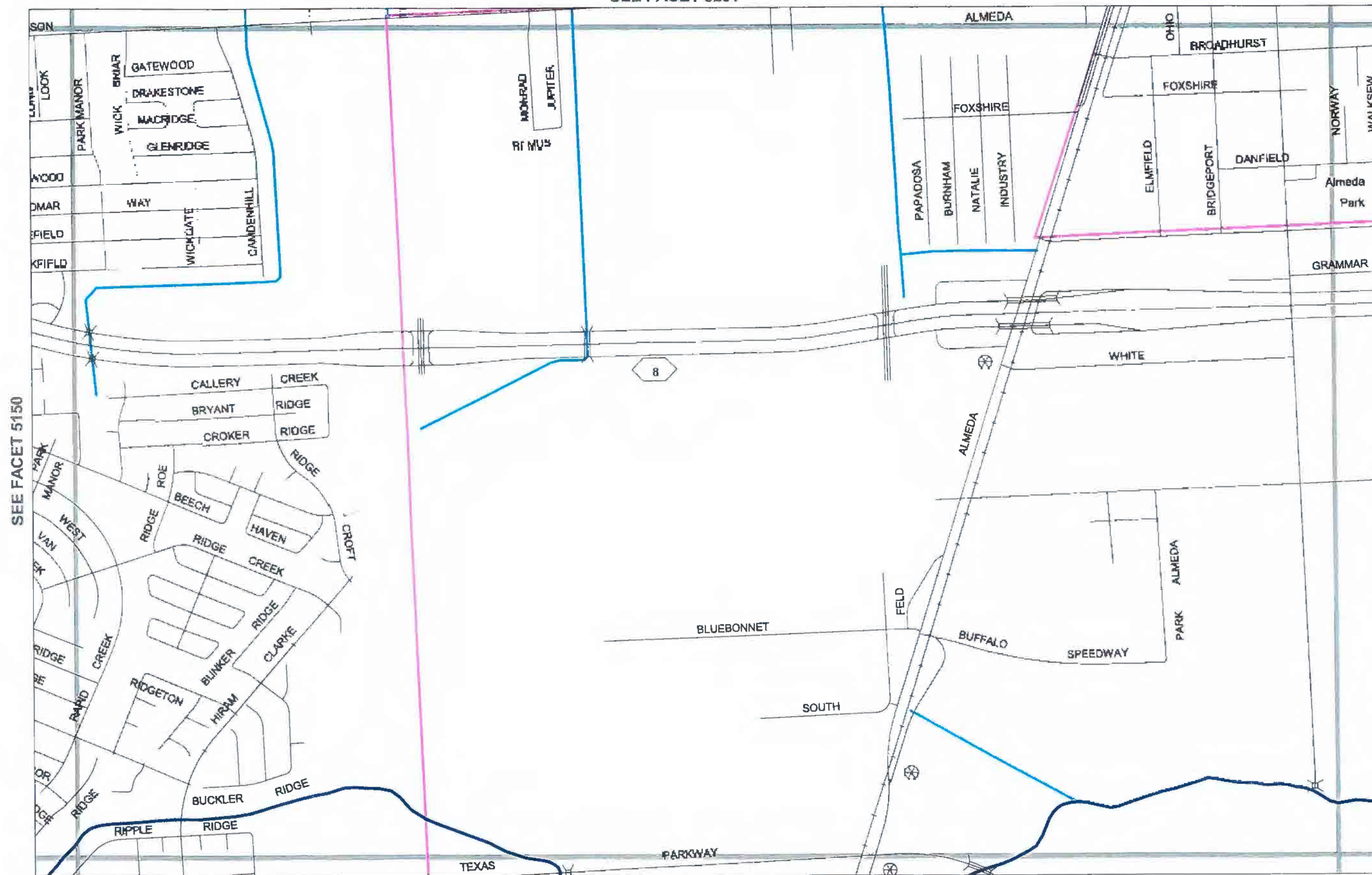
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Date: September 1999

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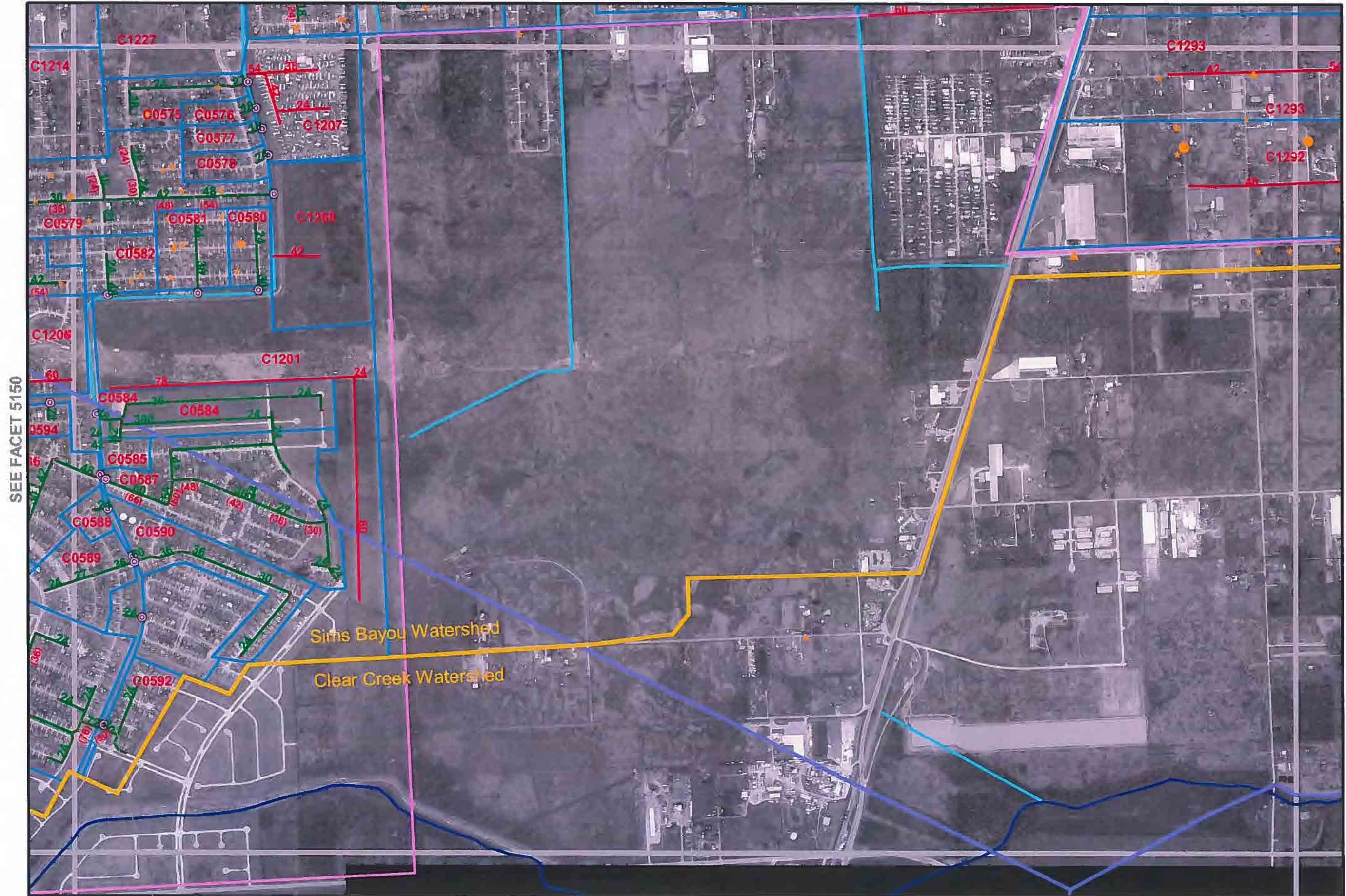


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SEE FACET 5249

Date: September 1999

SEE FACET 5253

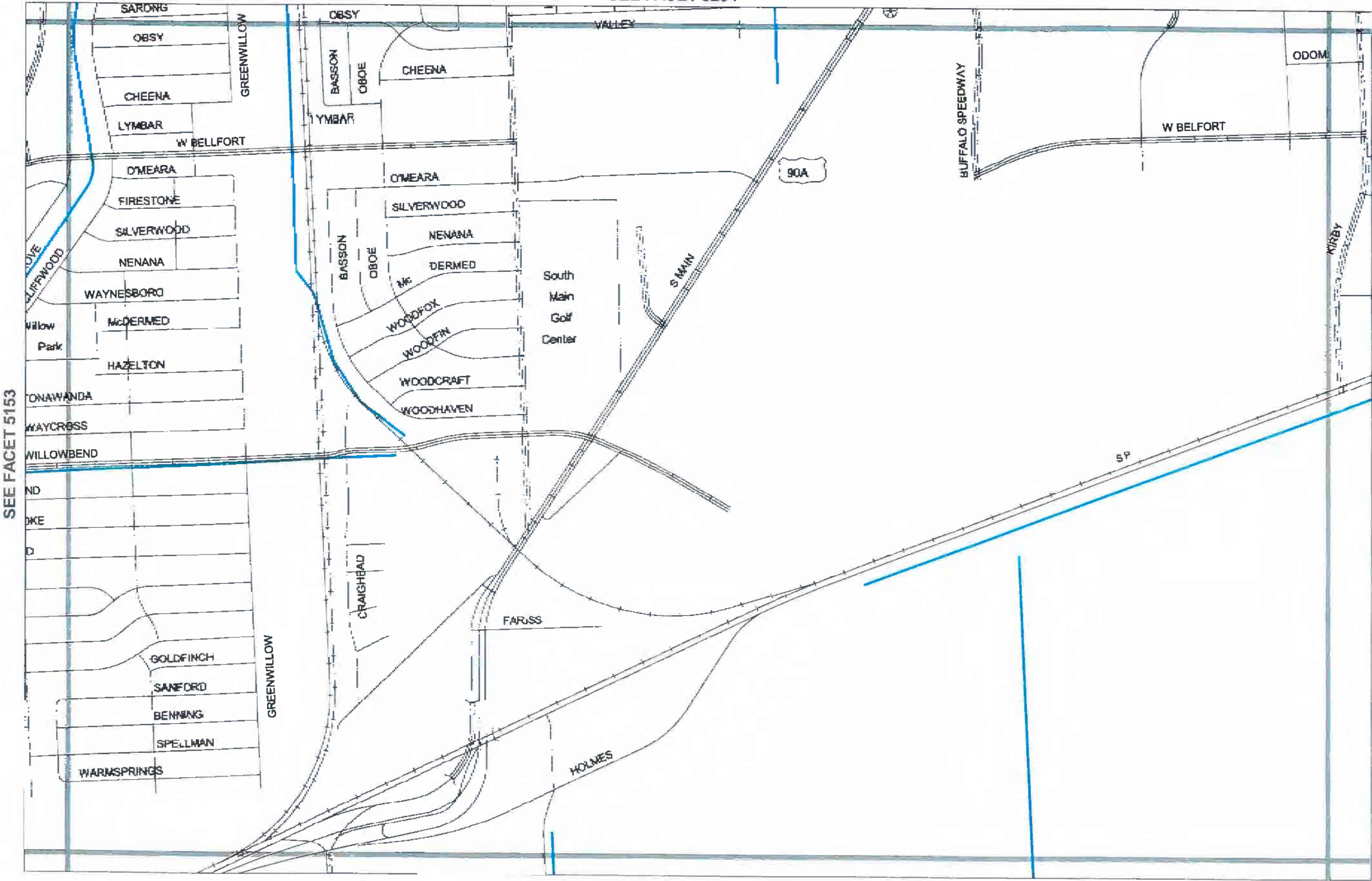
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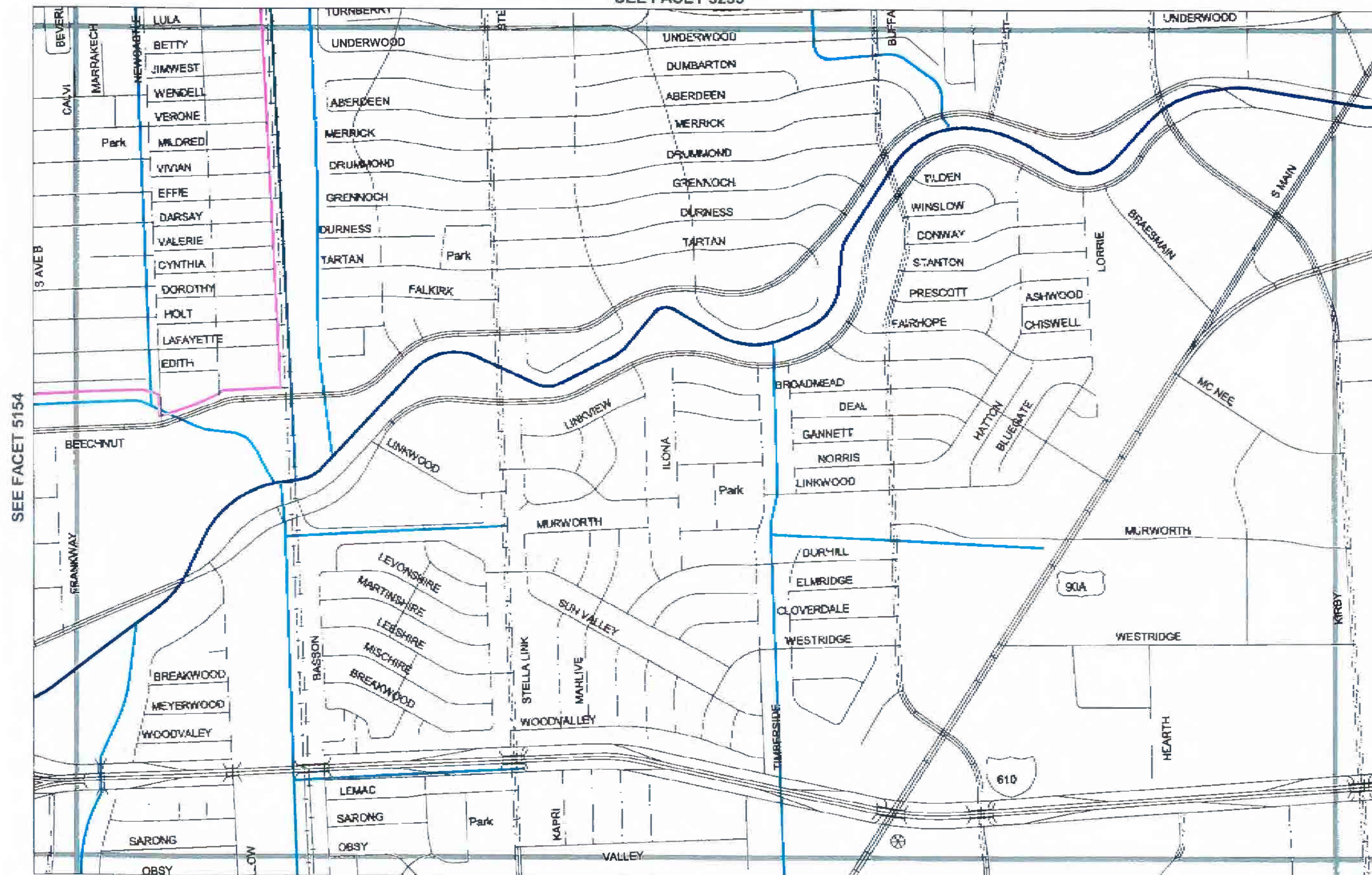
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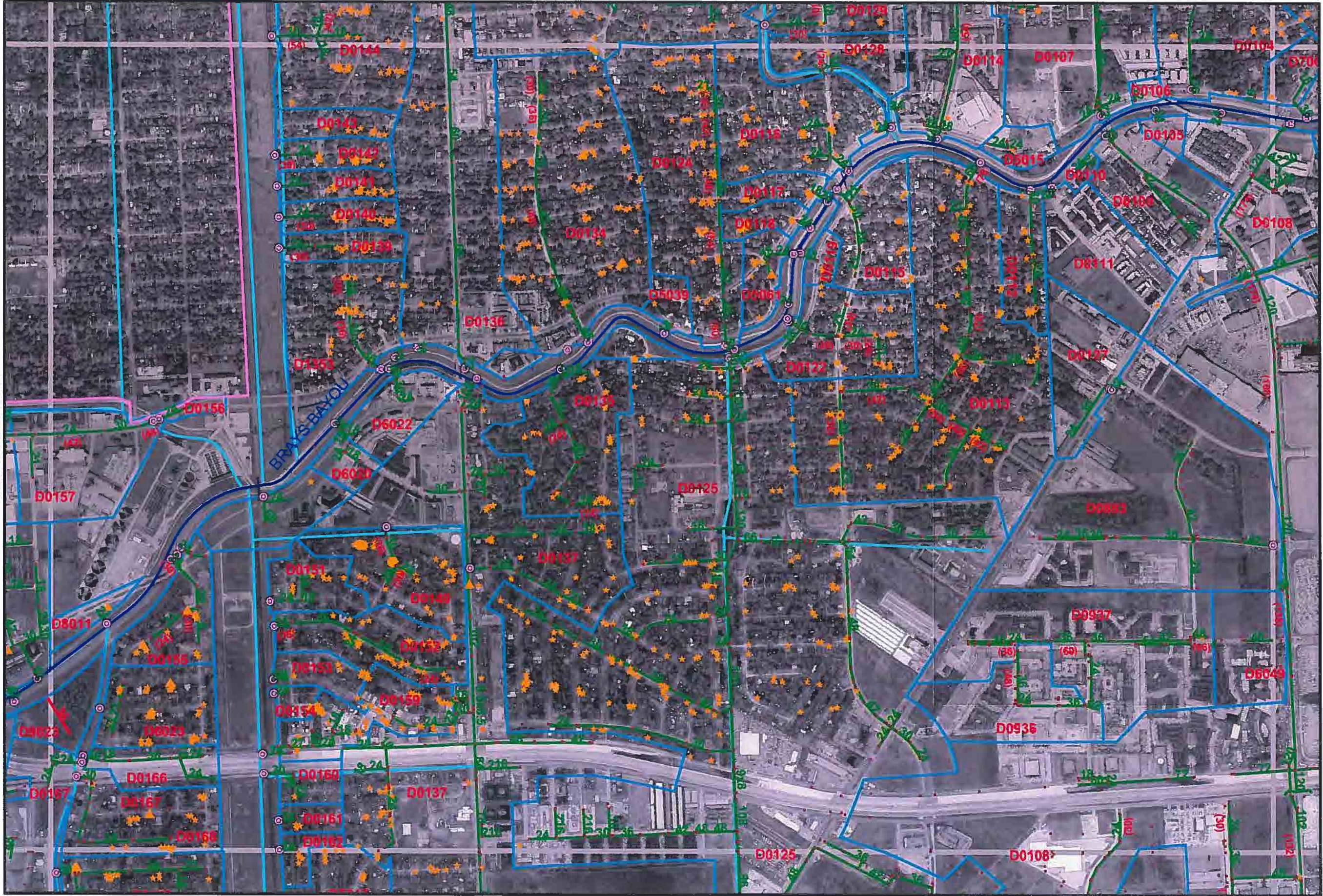
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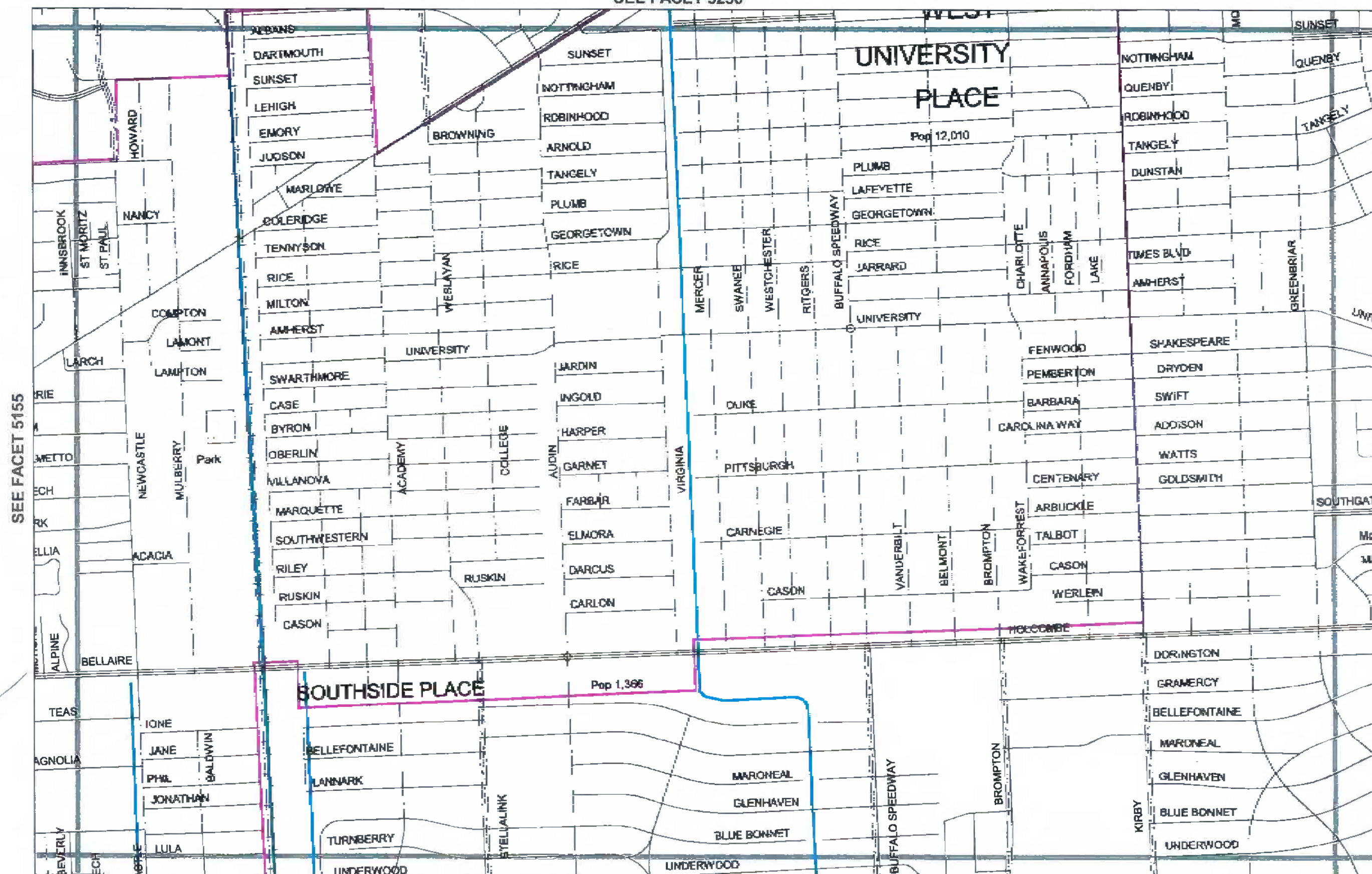


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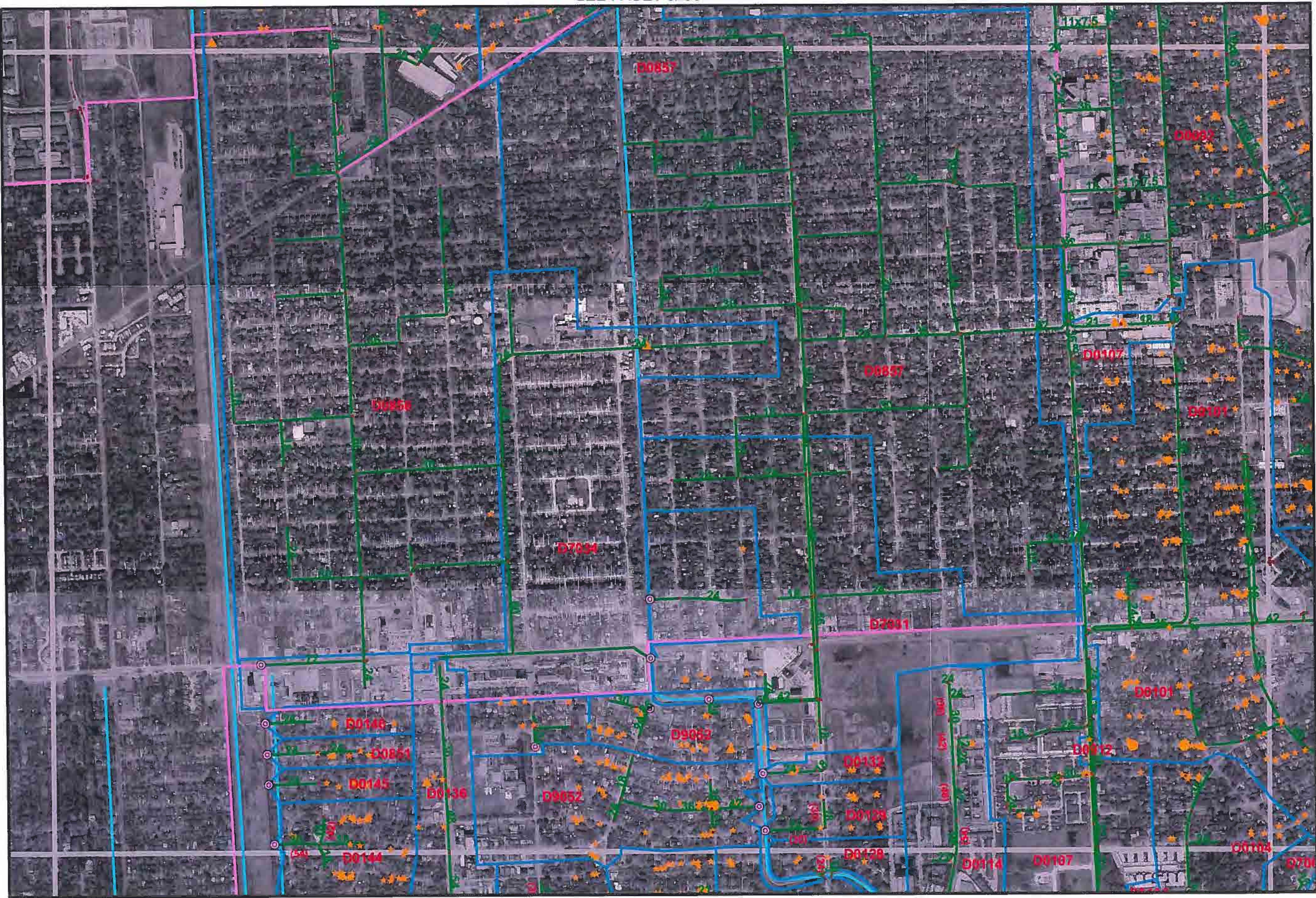
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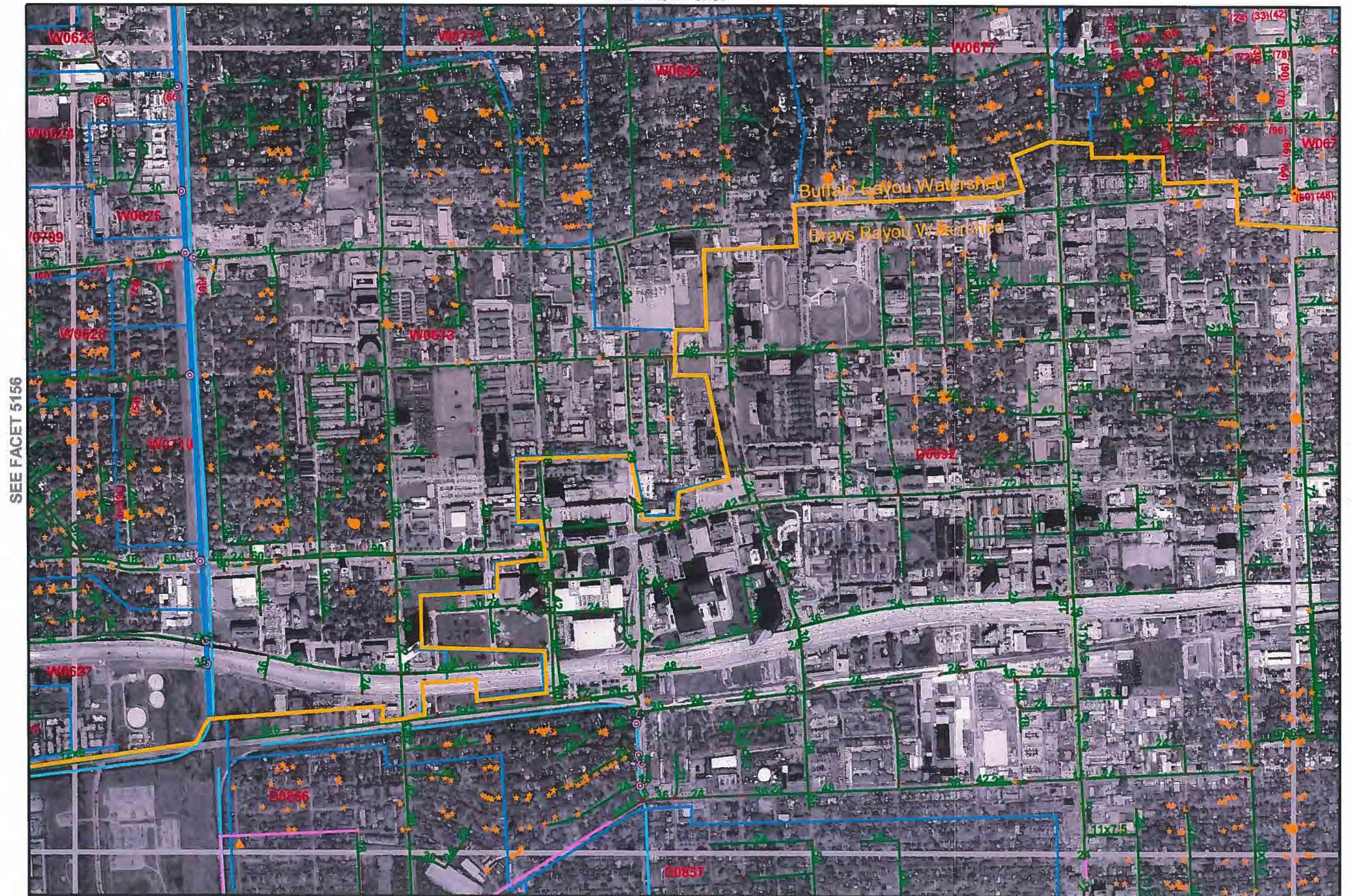
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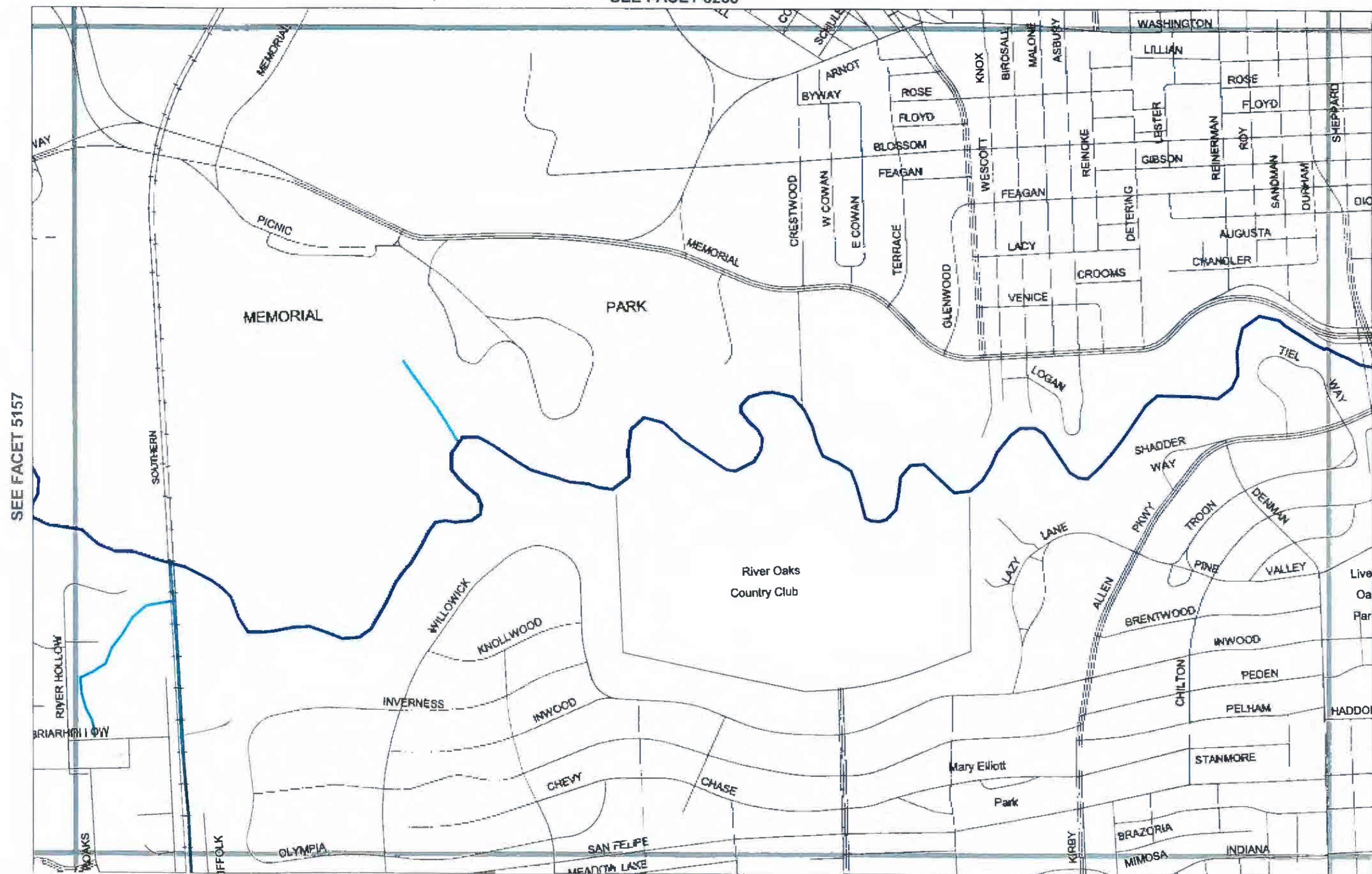
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Date: September 1999

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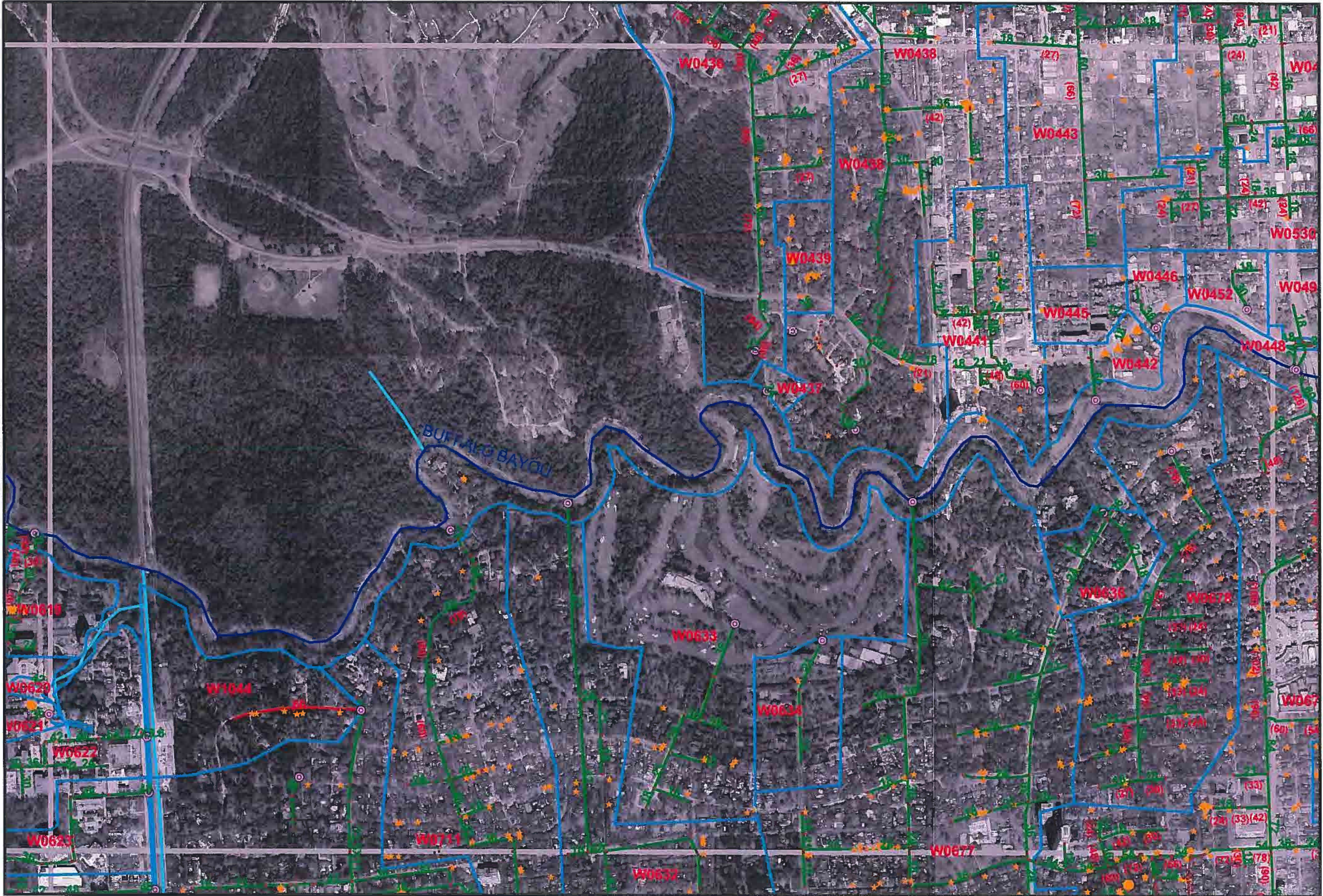
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SEE FACET 5357



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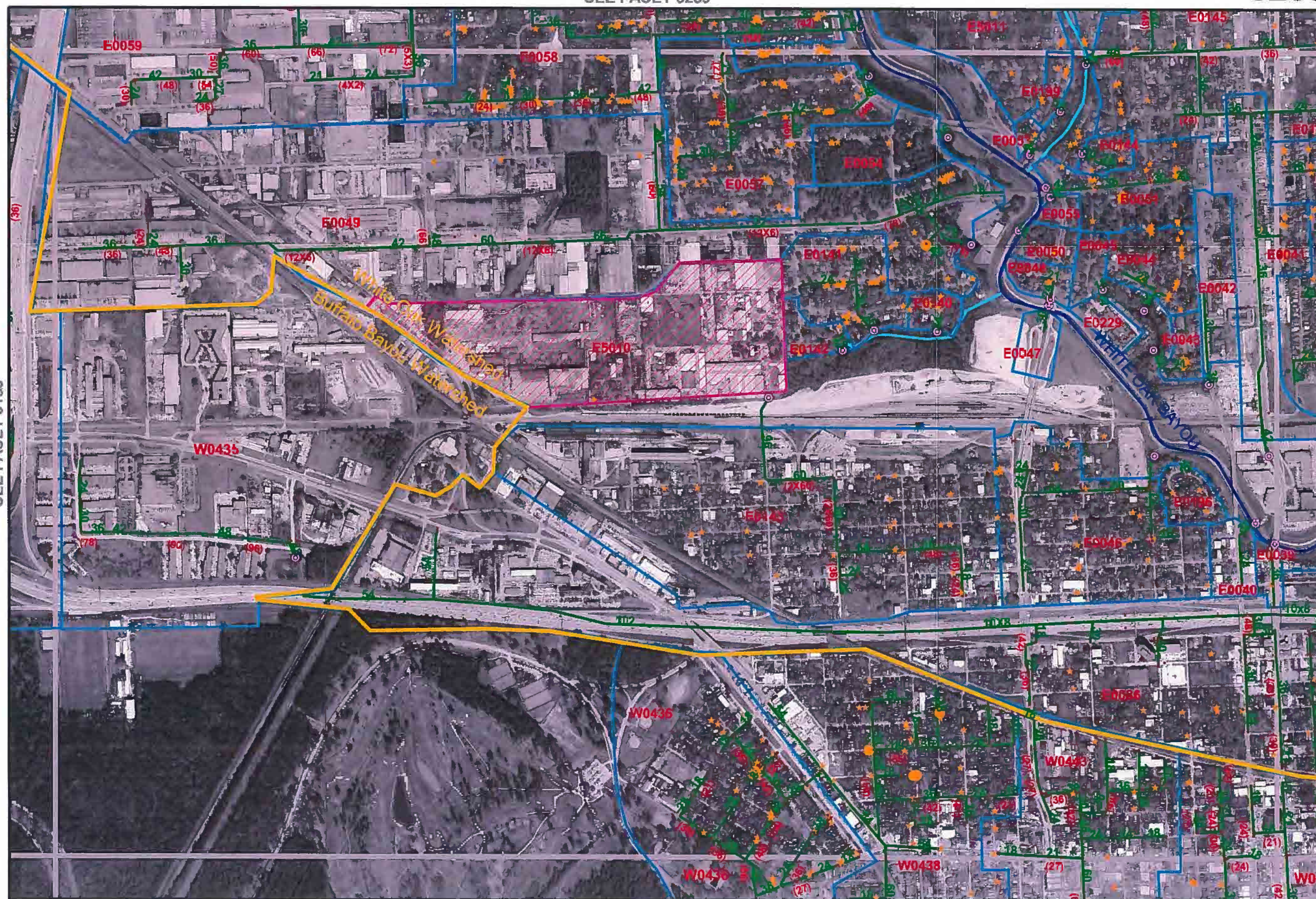
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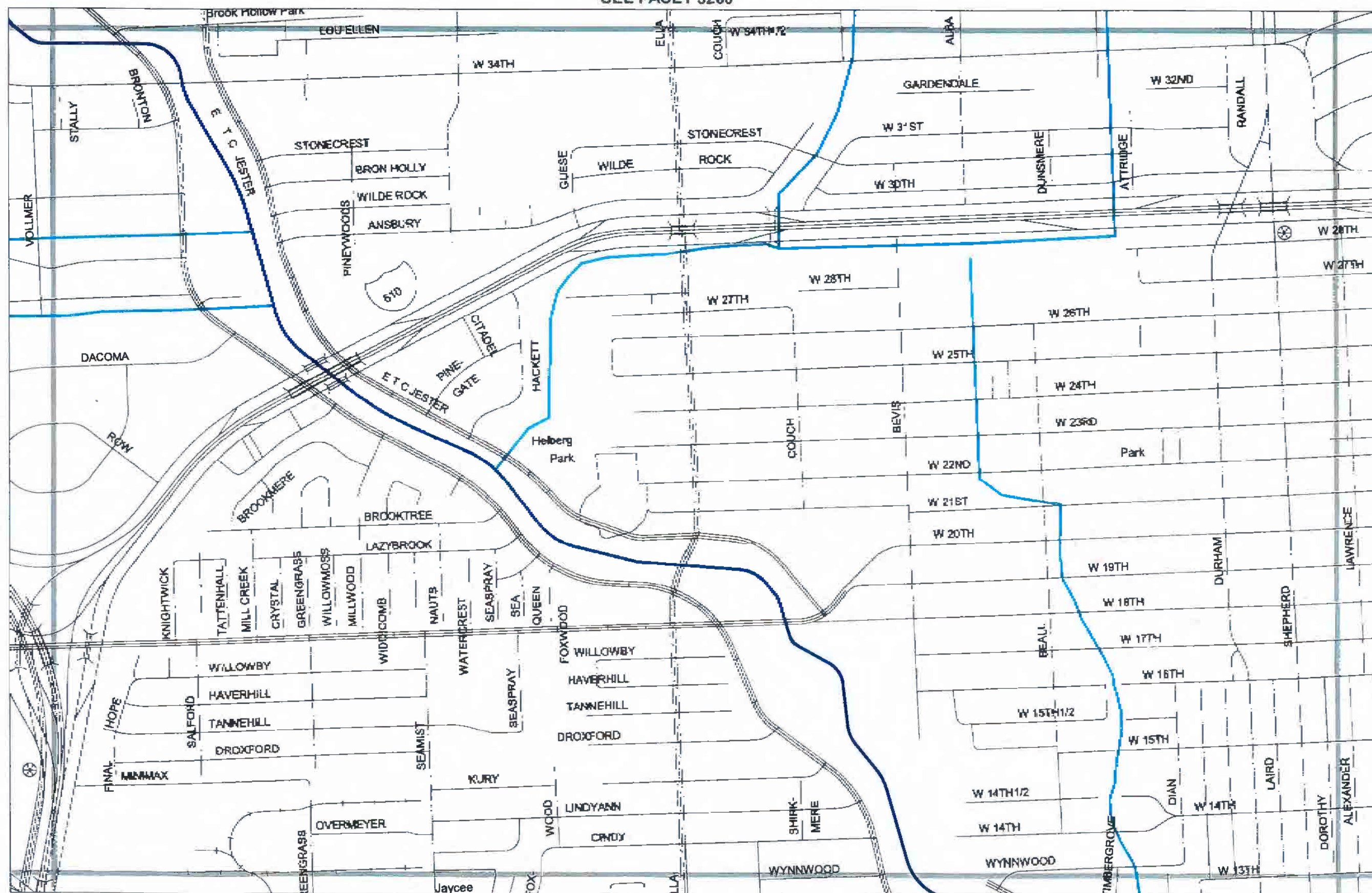


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Date: September 1999

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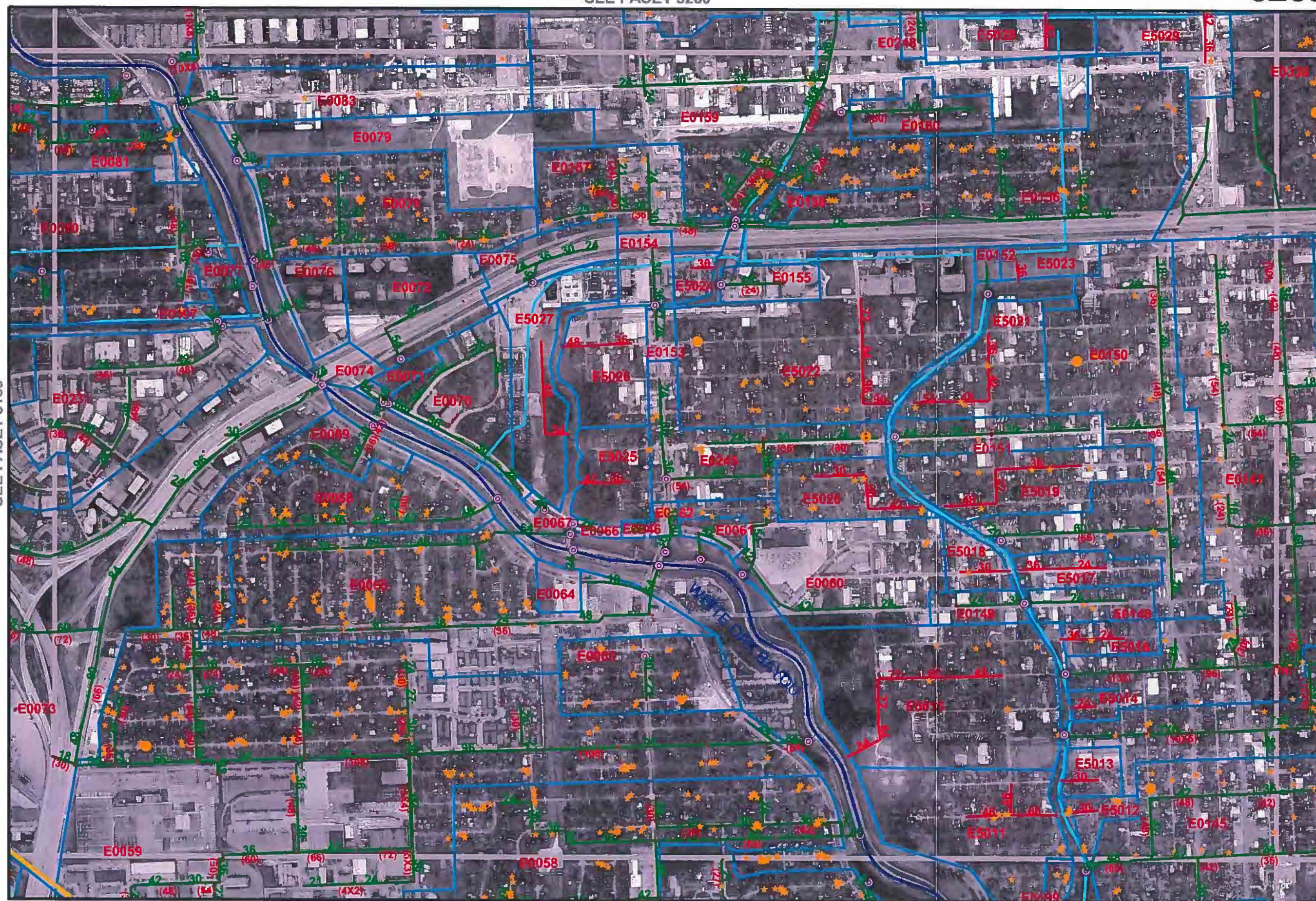


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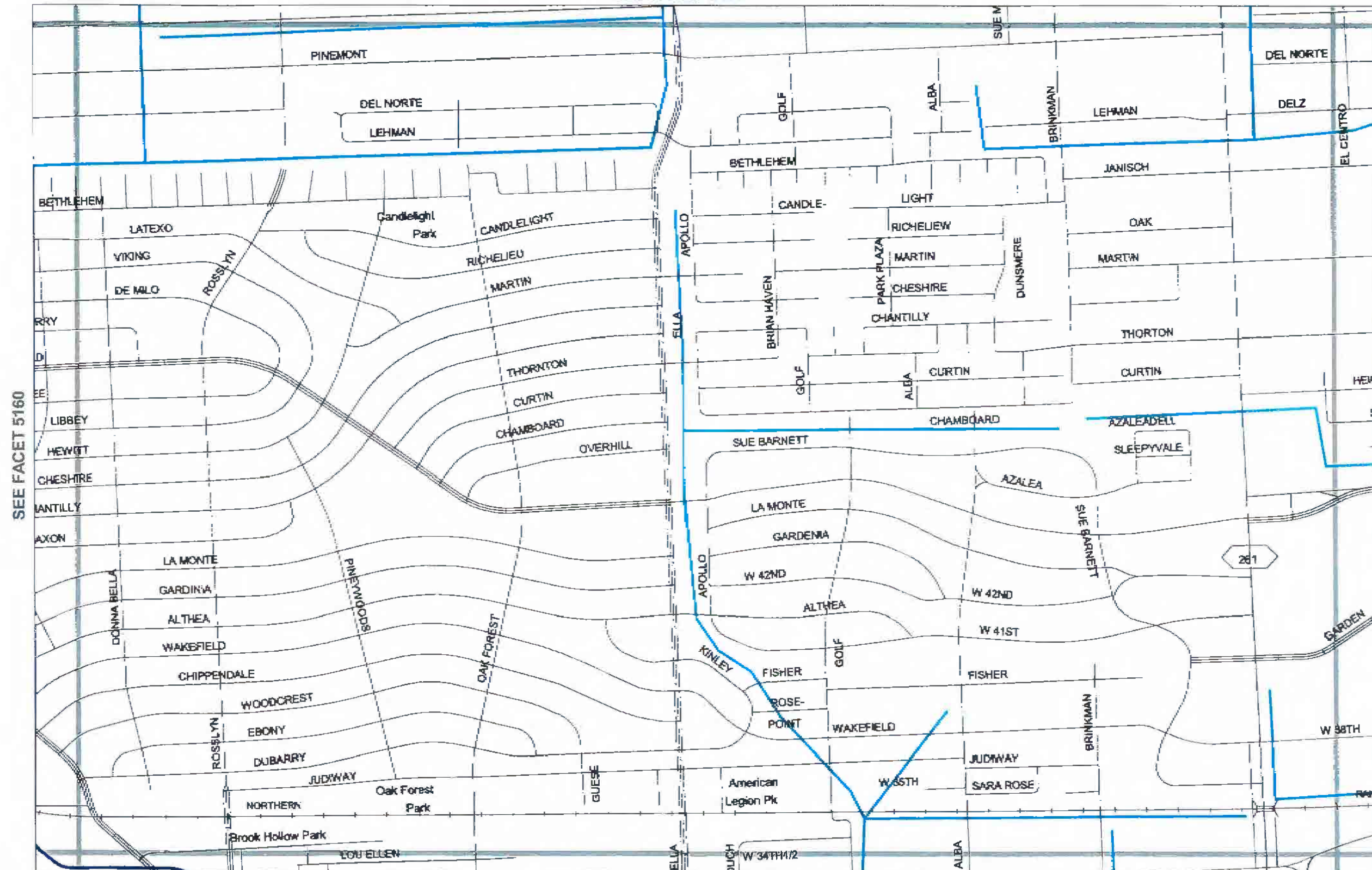
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Date: September 1999

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SEE FACET 5360



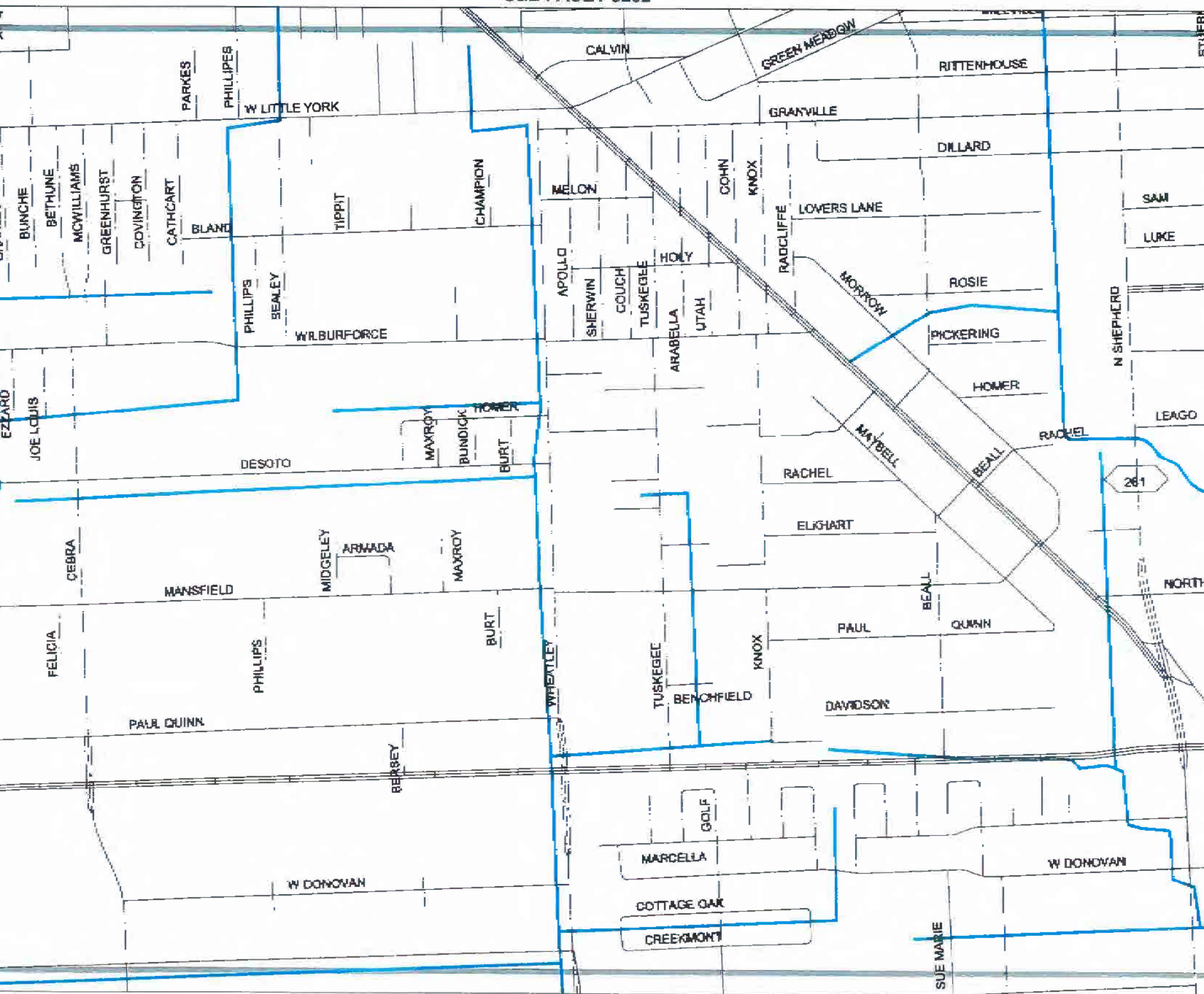
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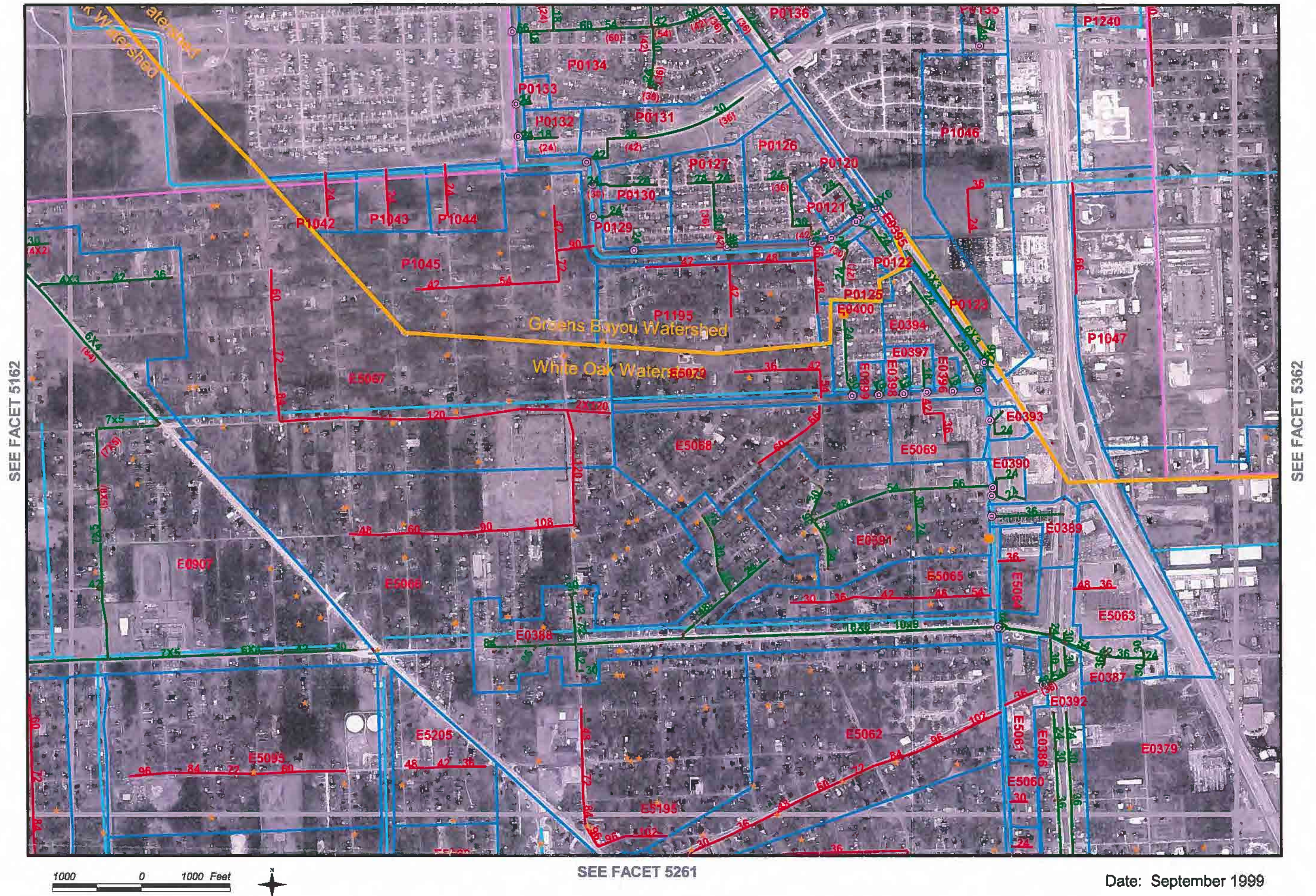


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SEE FACET 5264



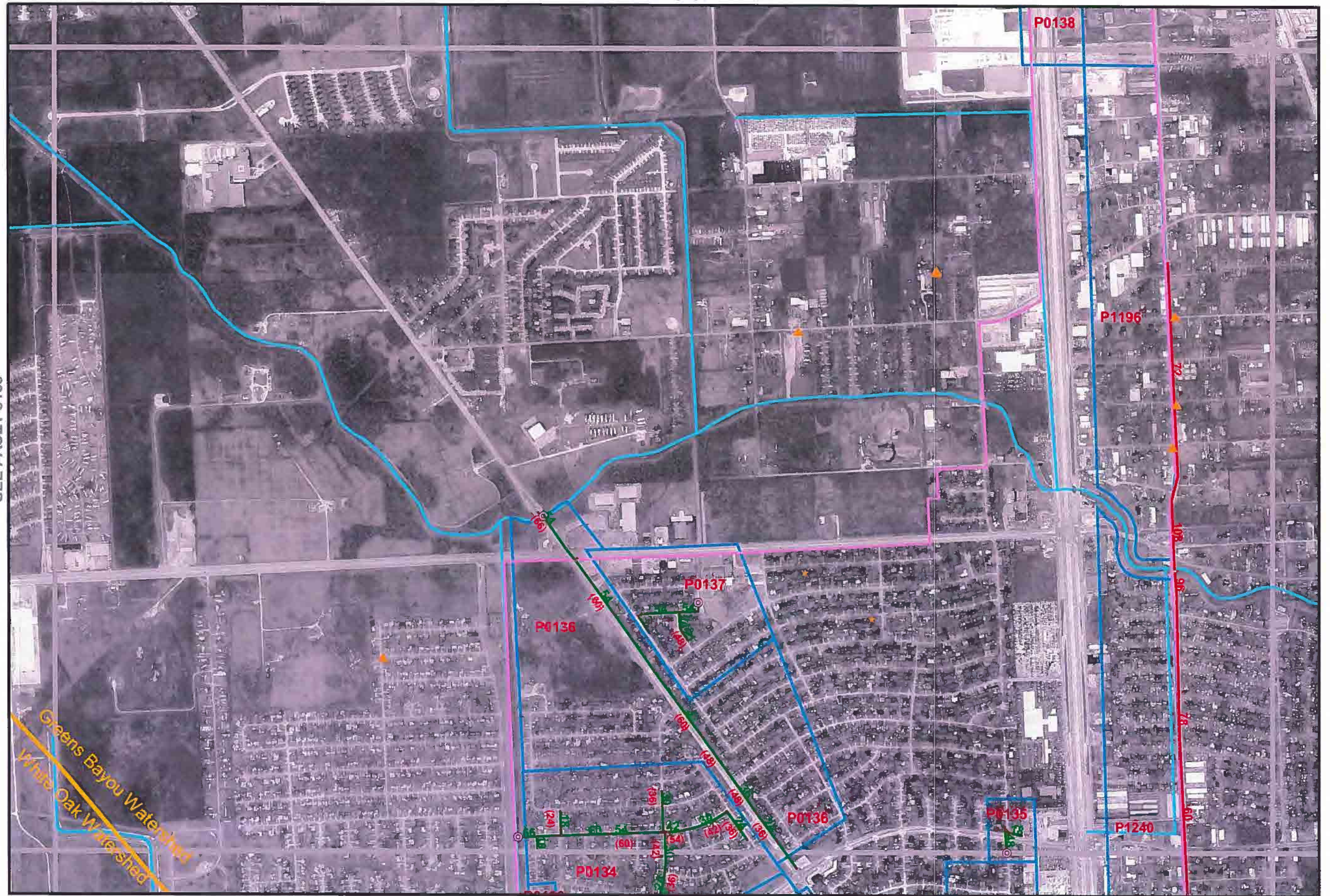
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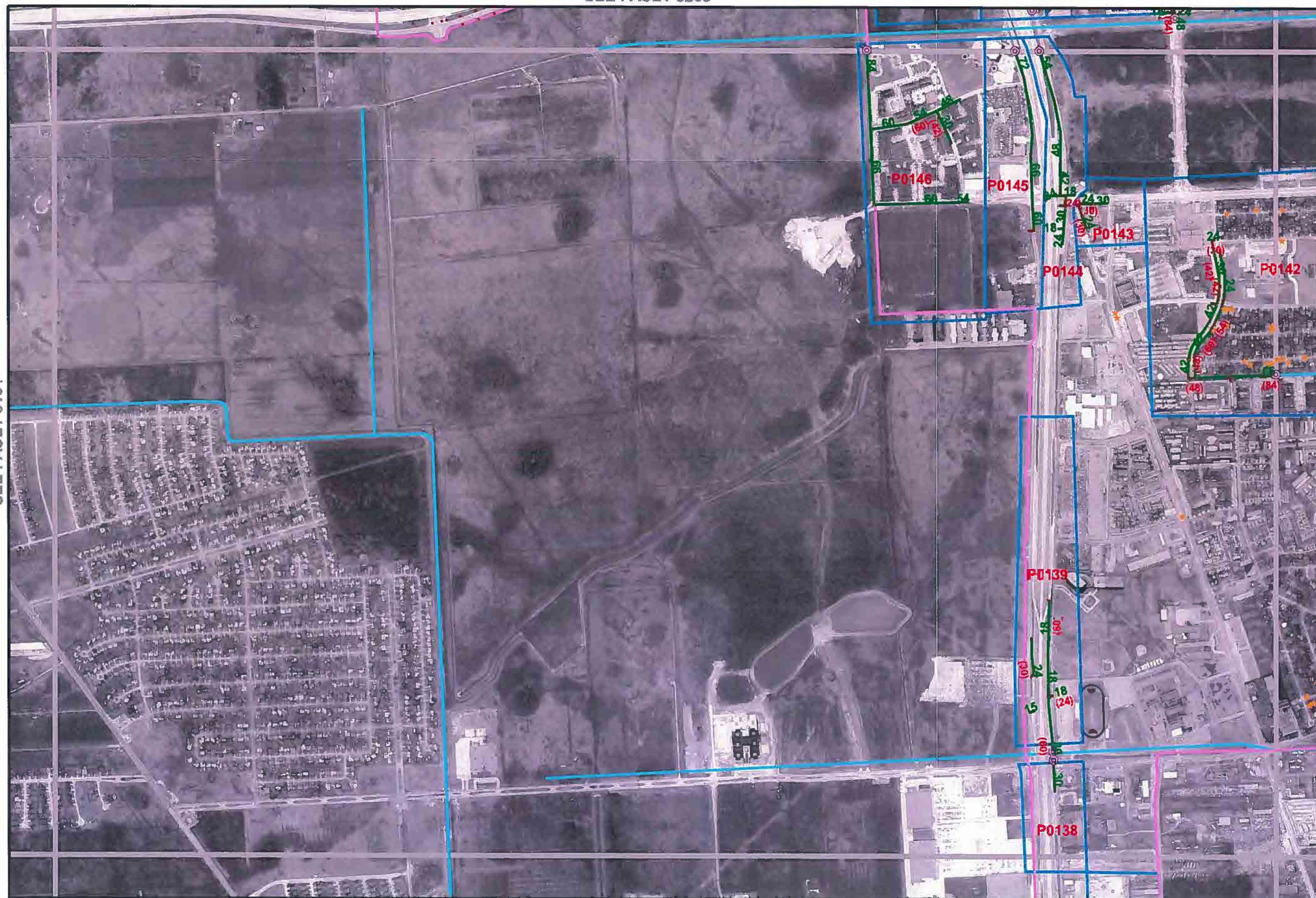


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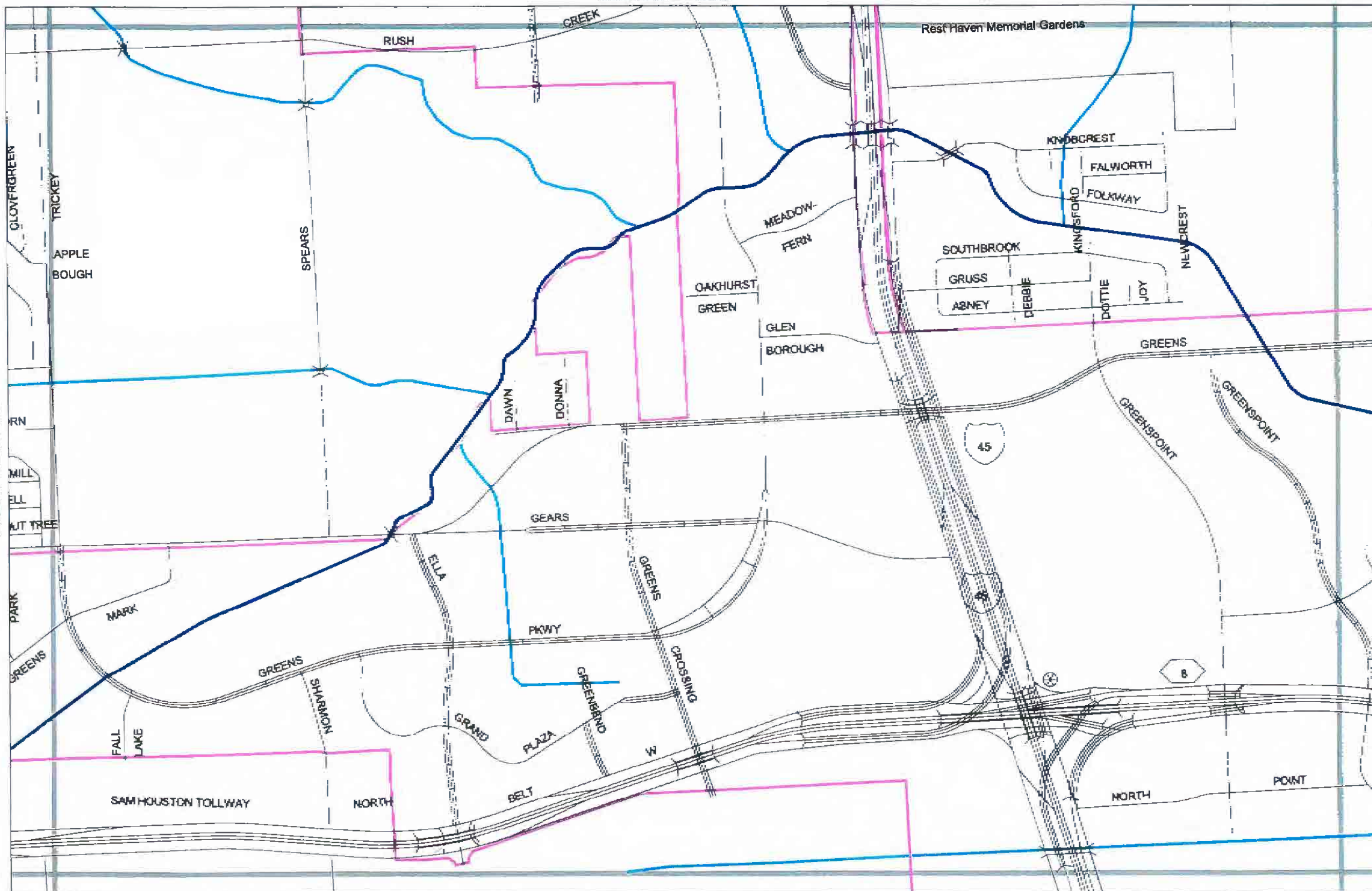
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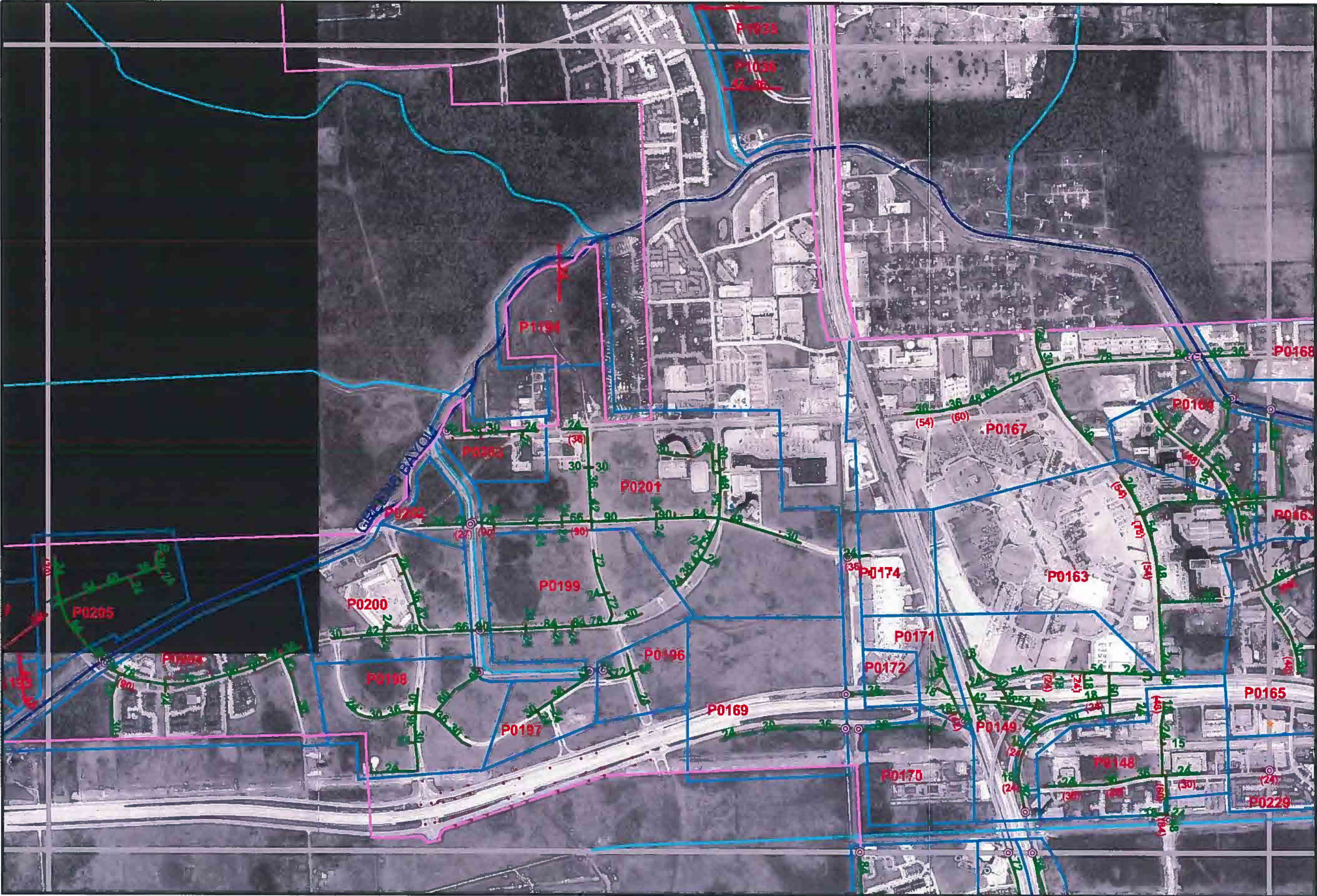
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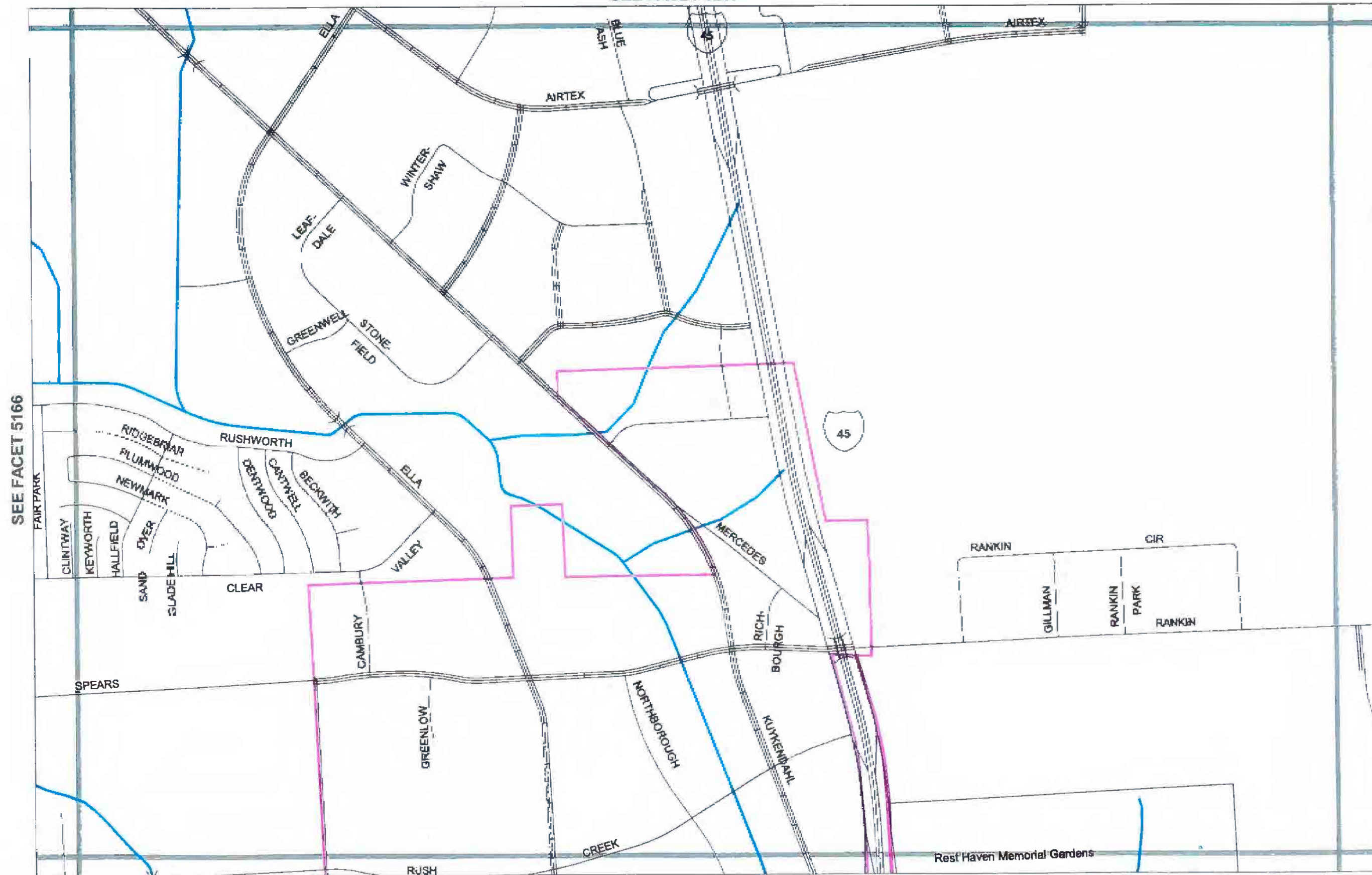


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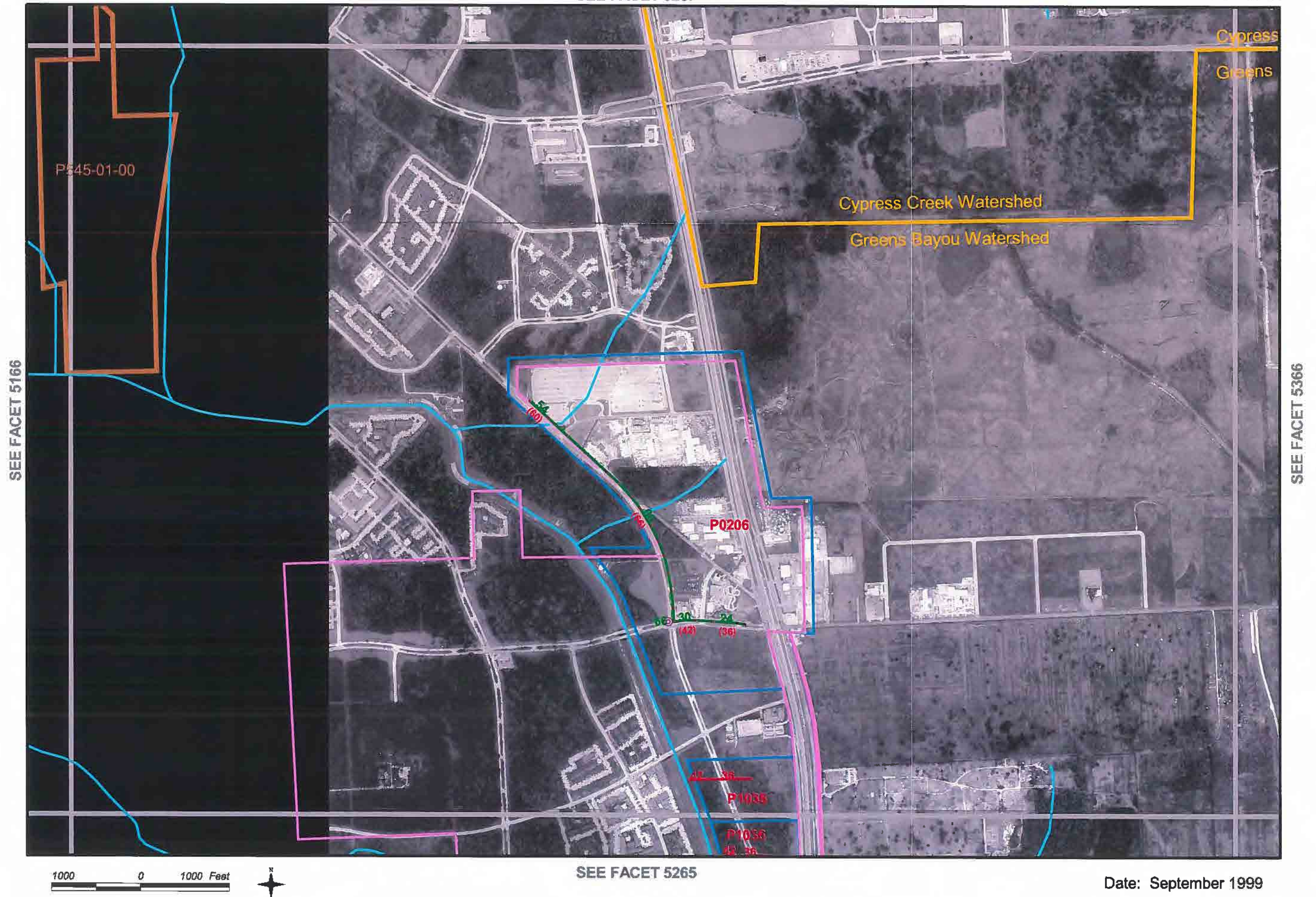
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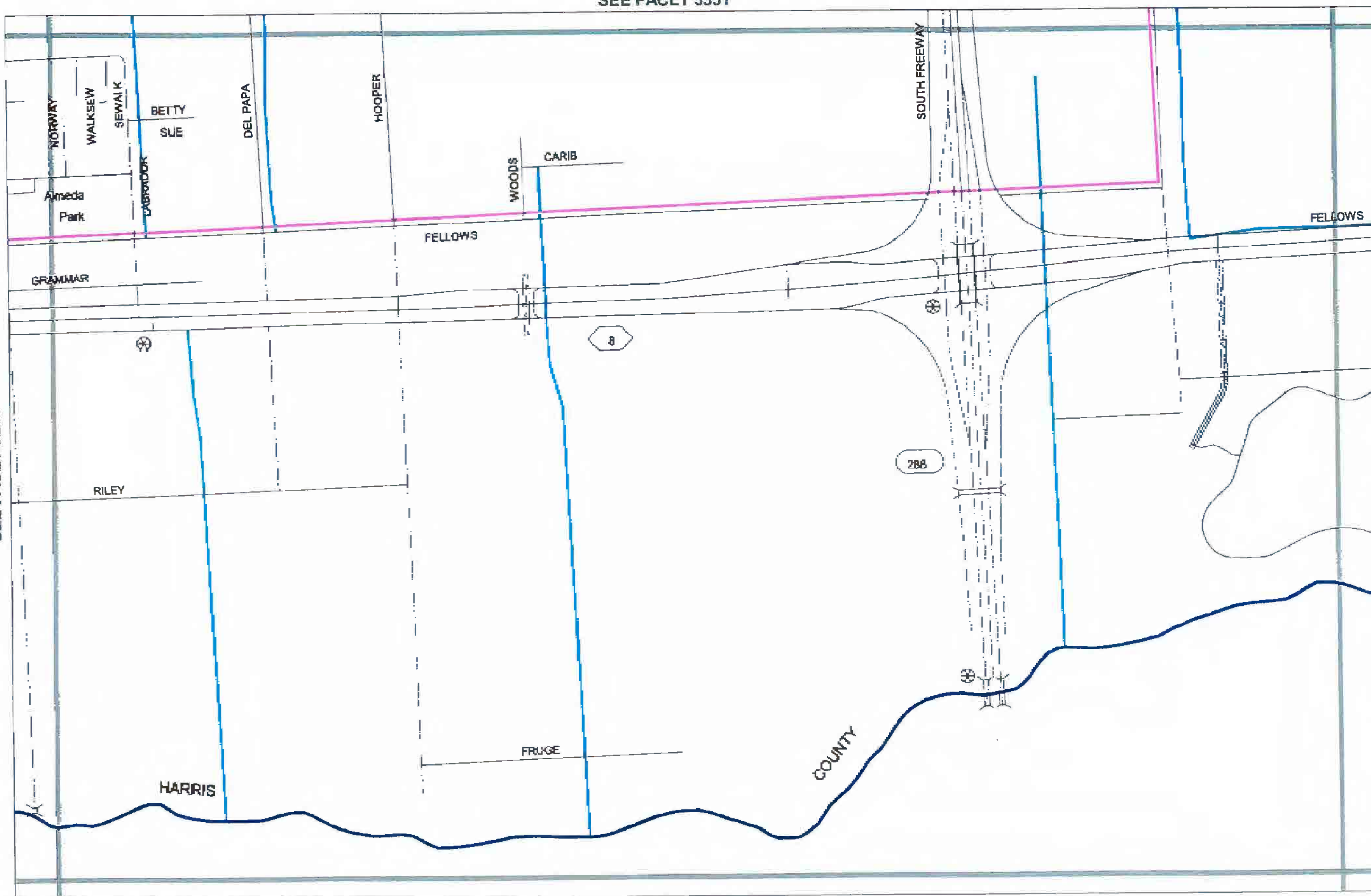


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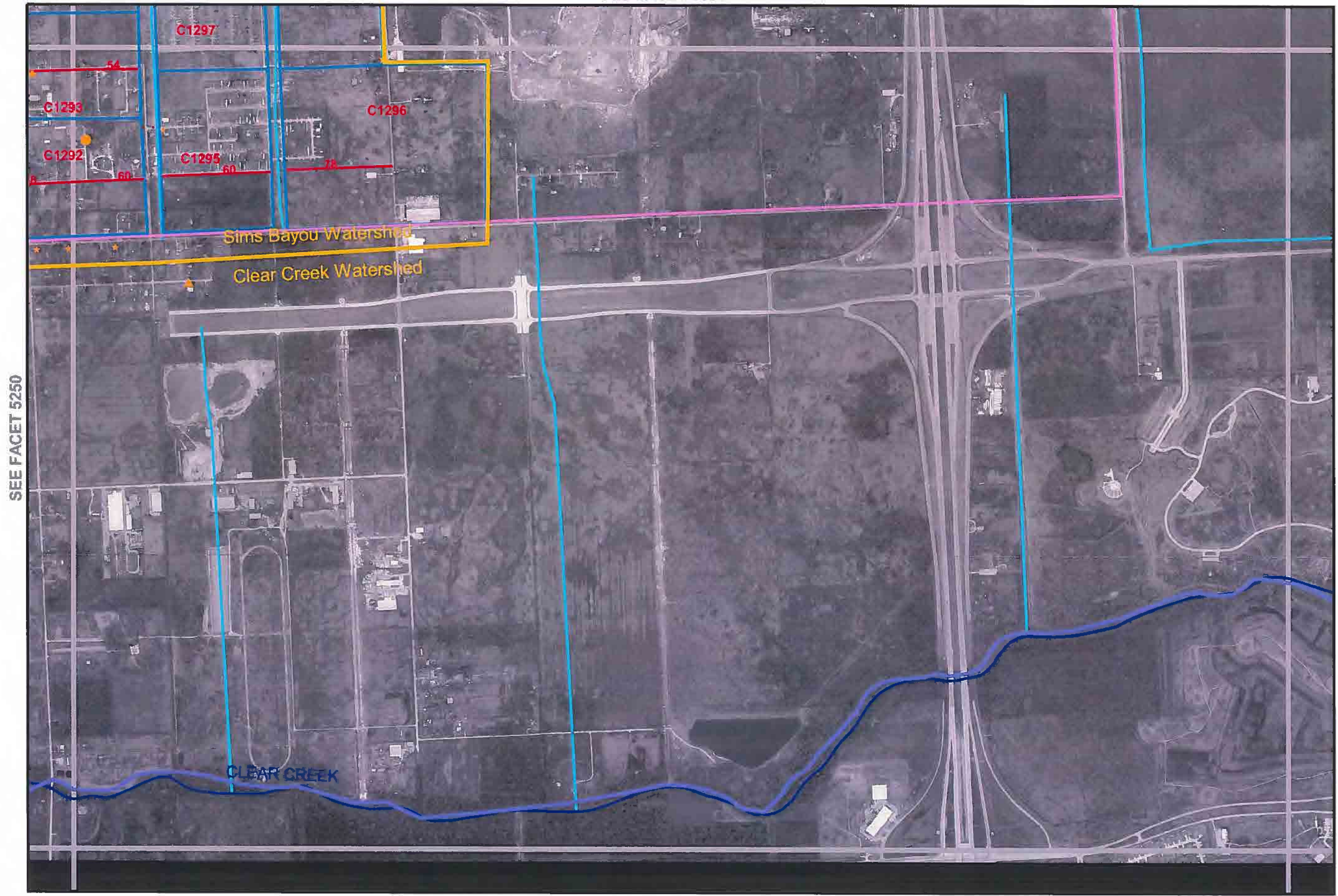
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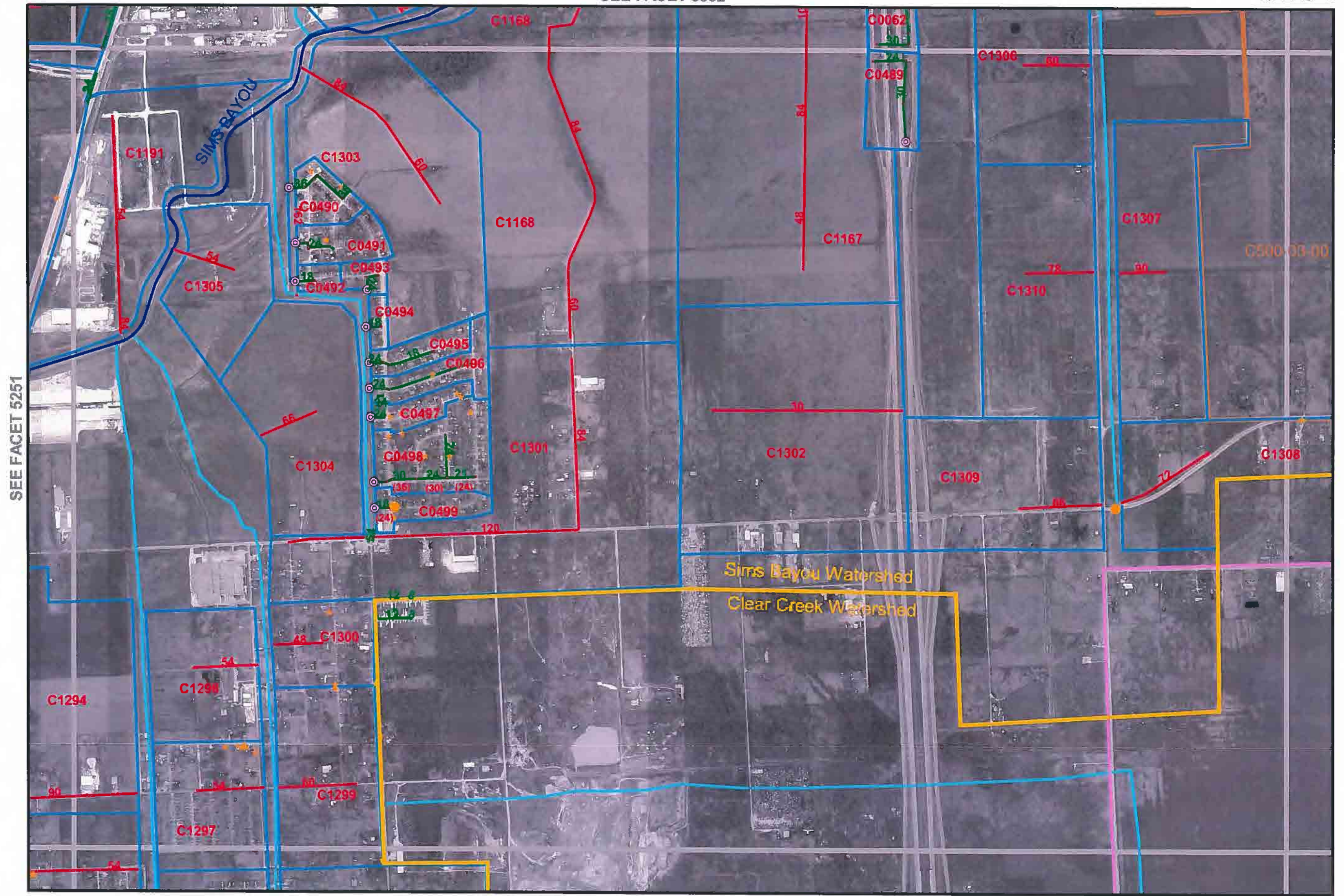
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Date: September 1999

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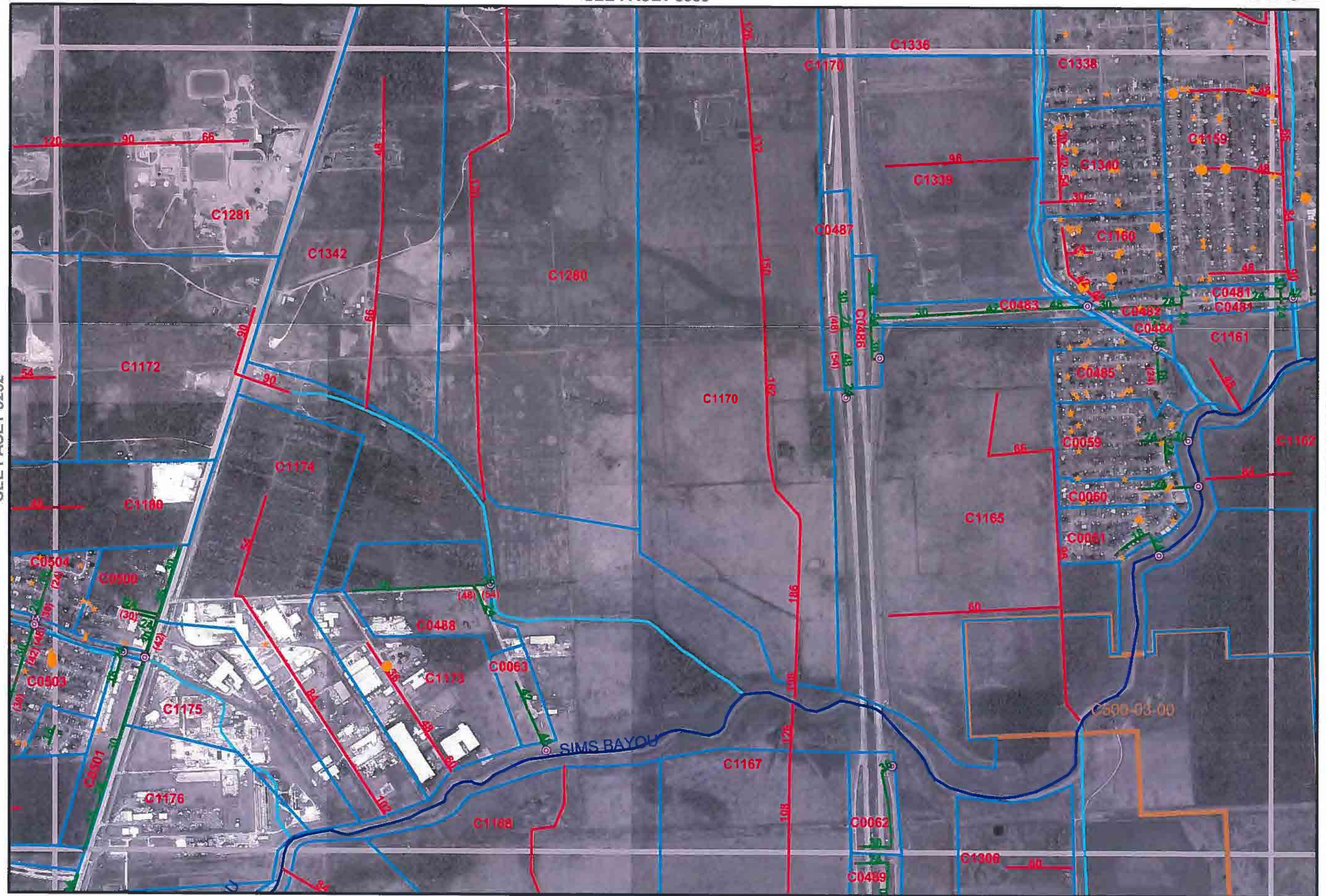
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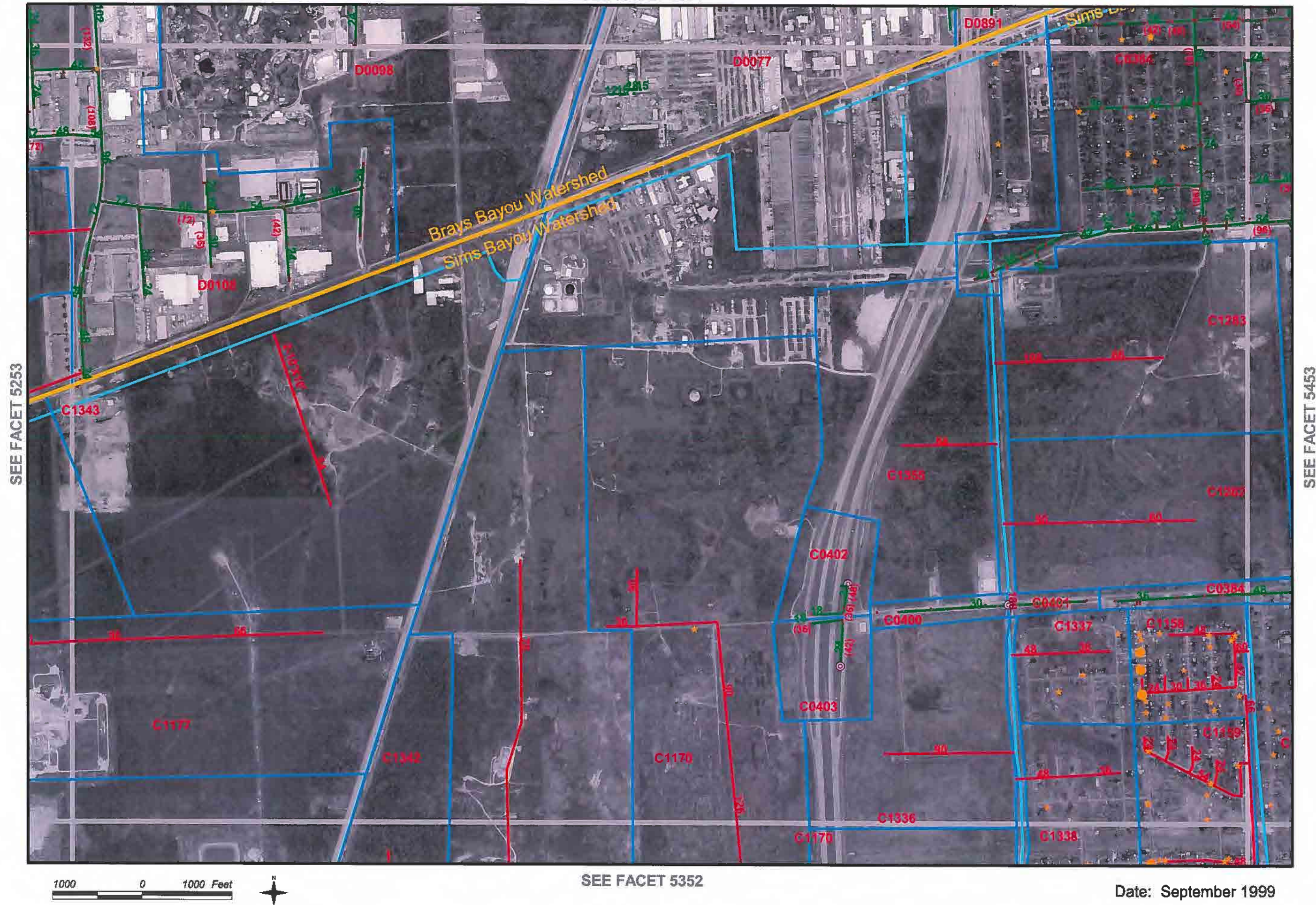


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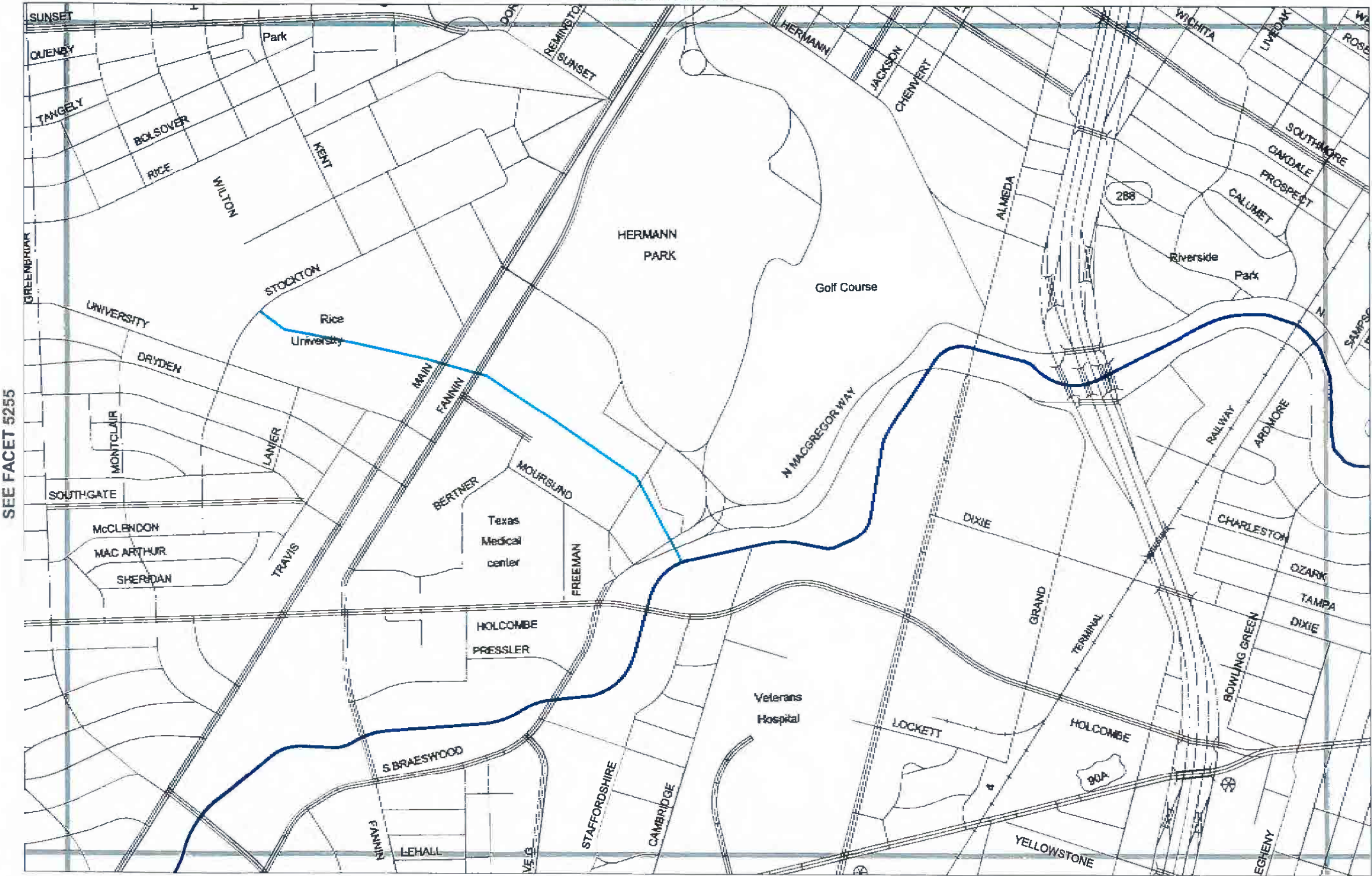
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SEE FACET 5456

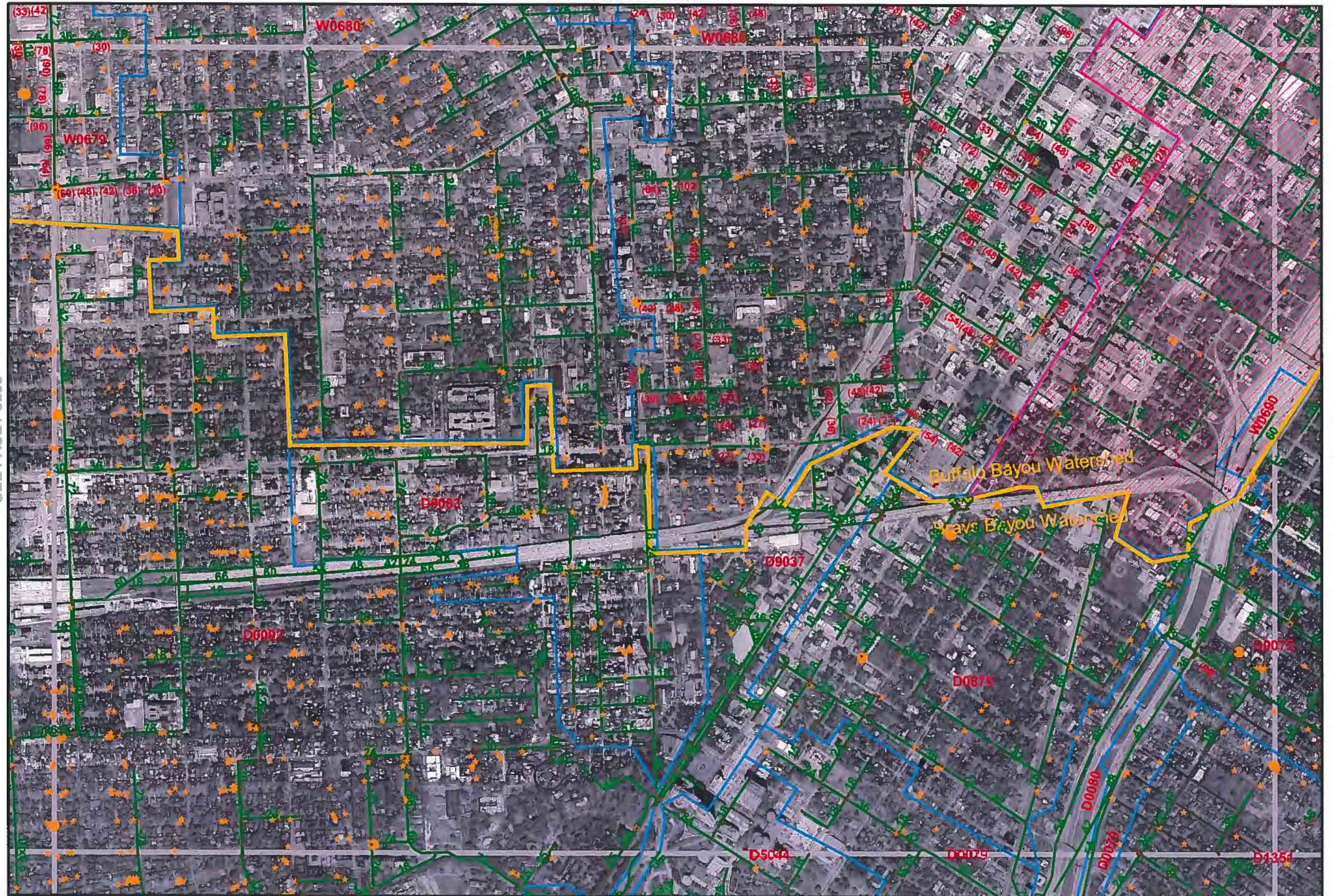


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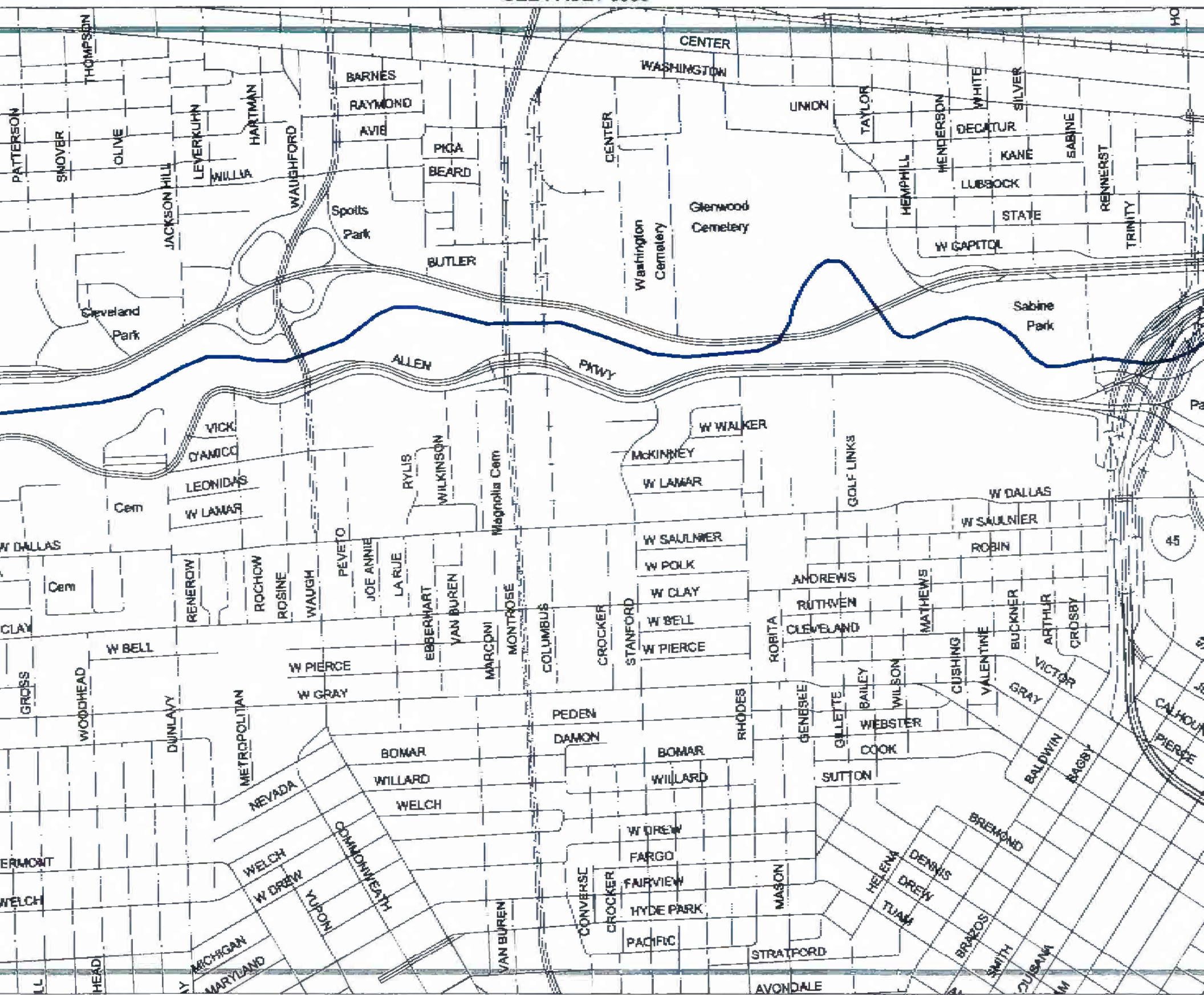
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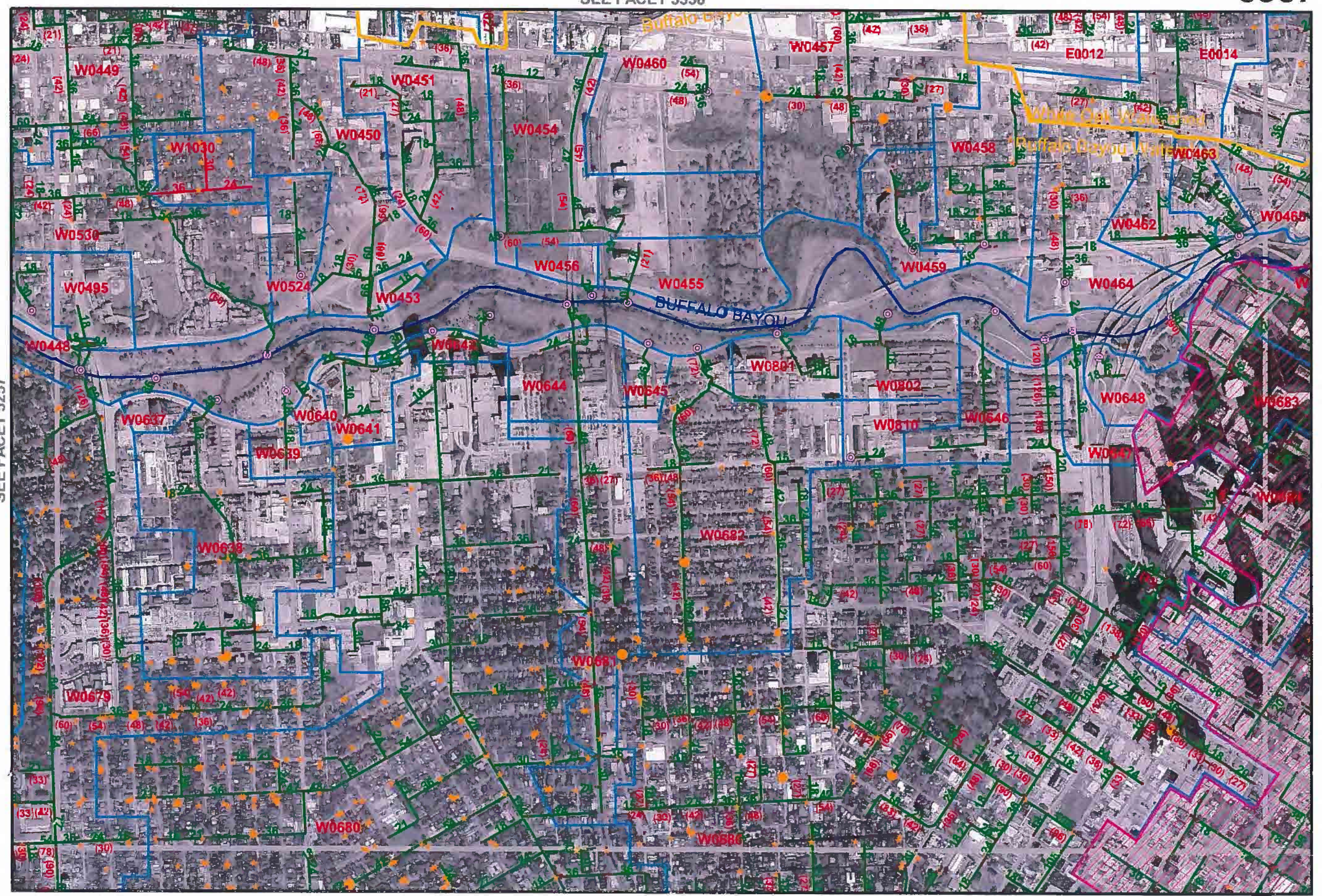


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SEE FACET 5457



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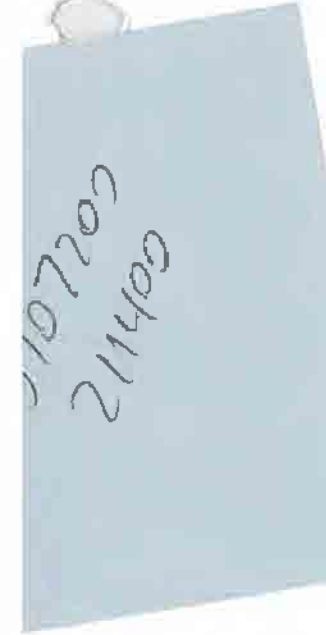
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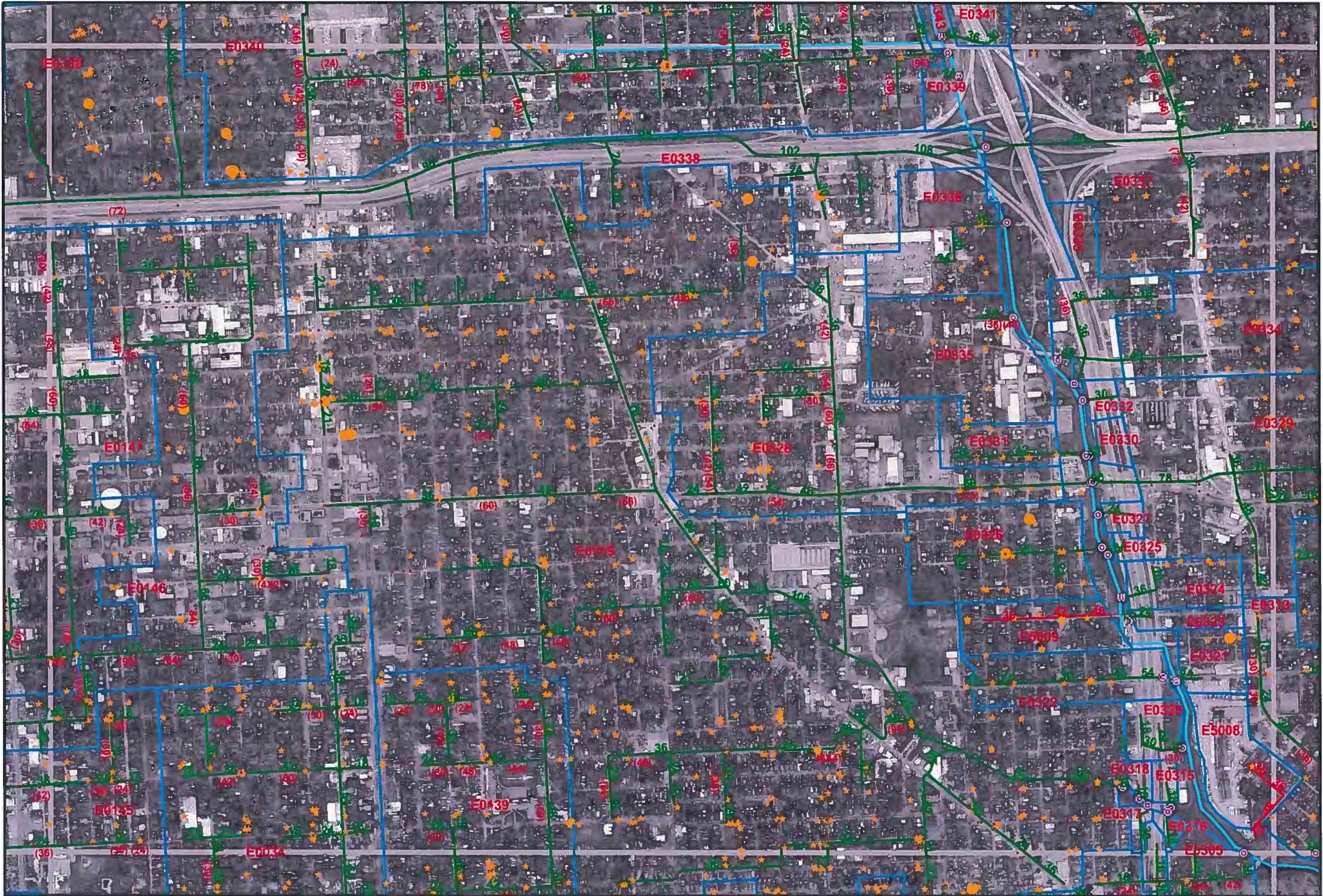
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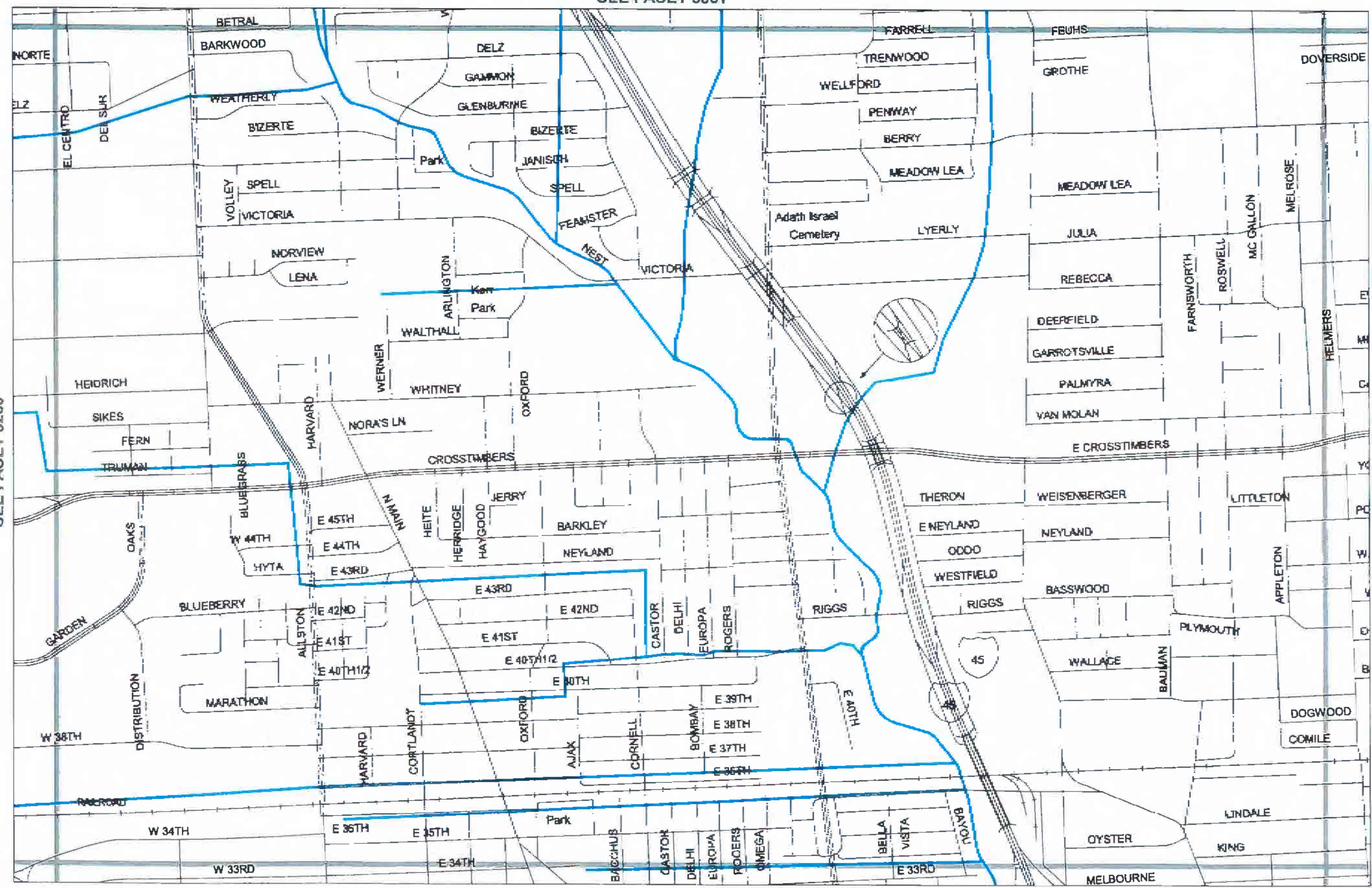
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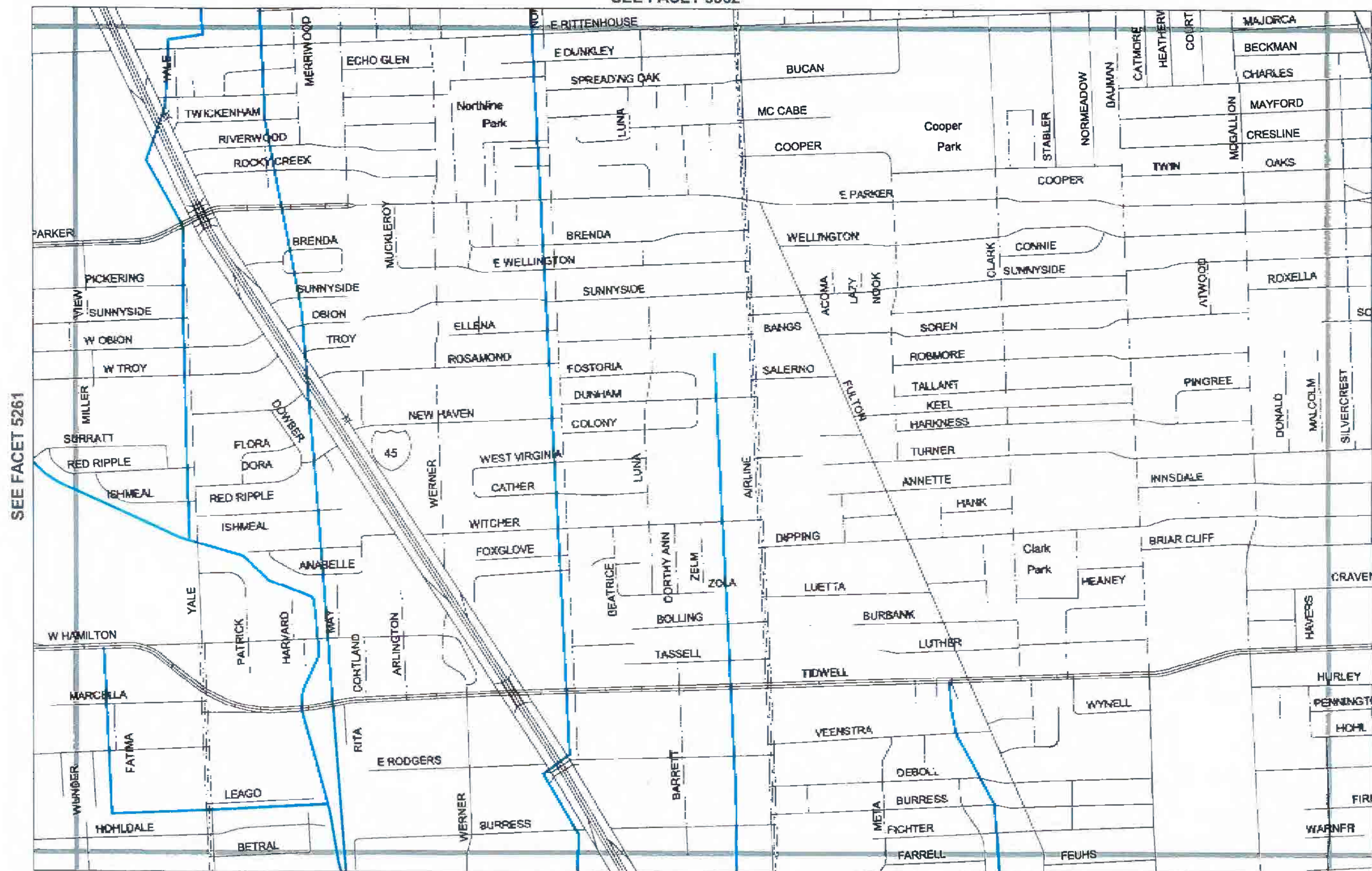
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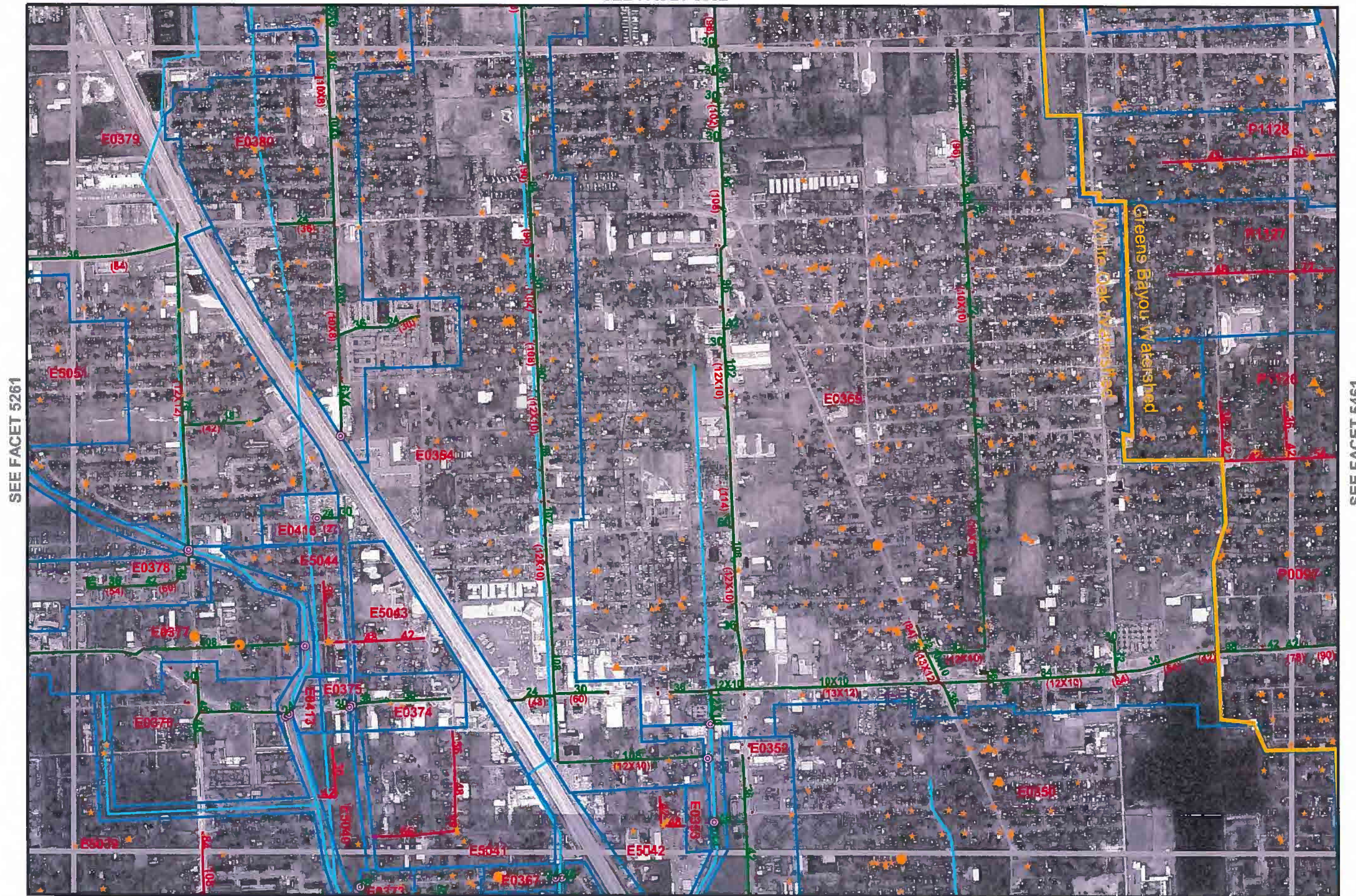




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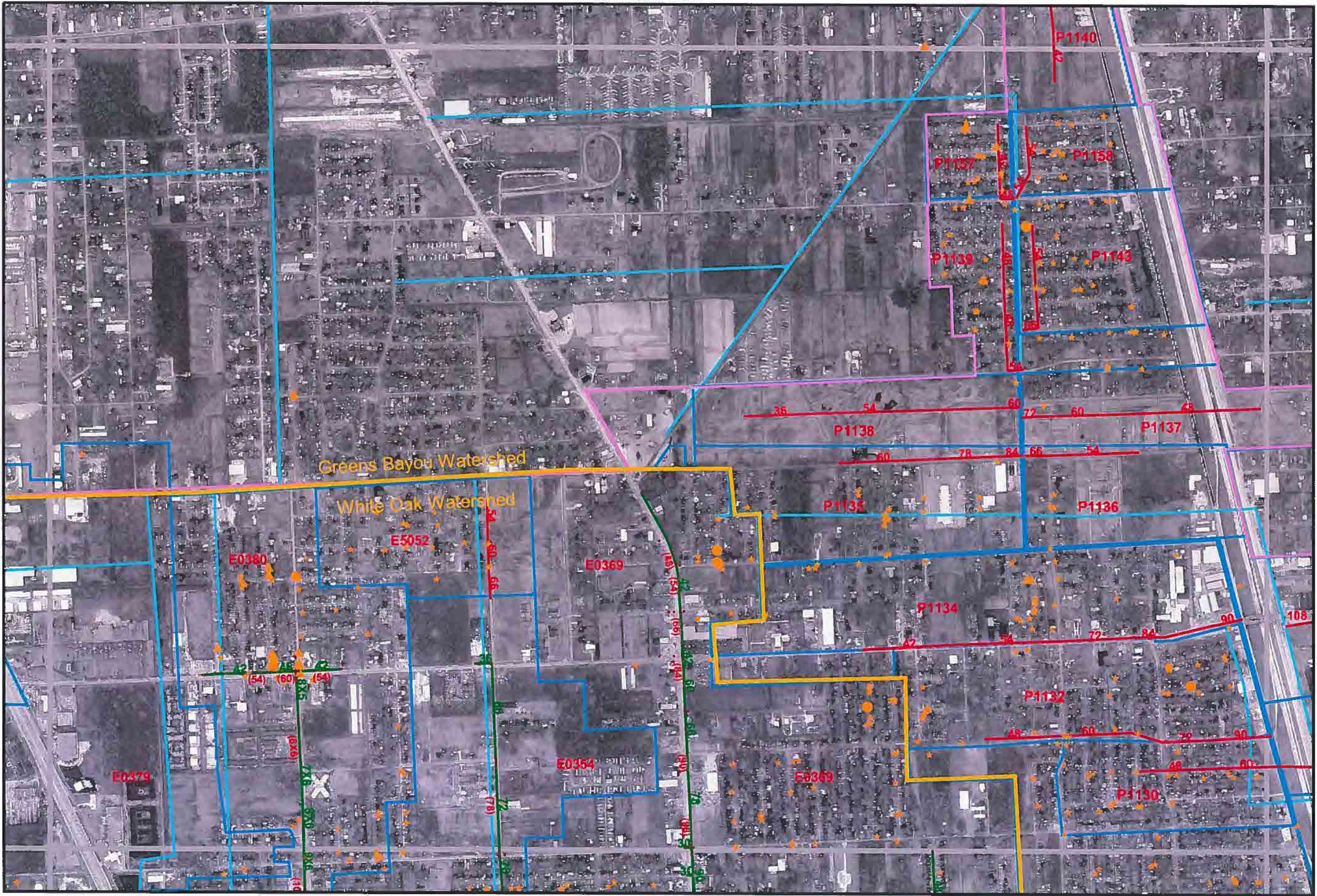
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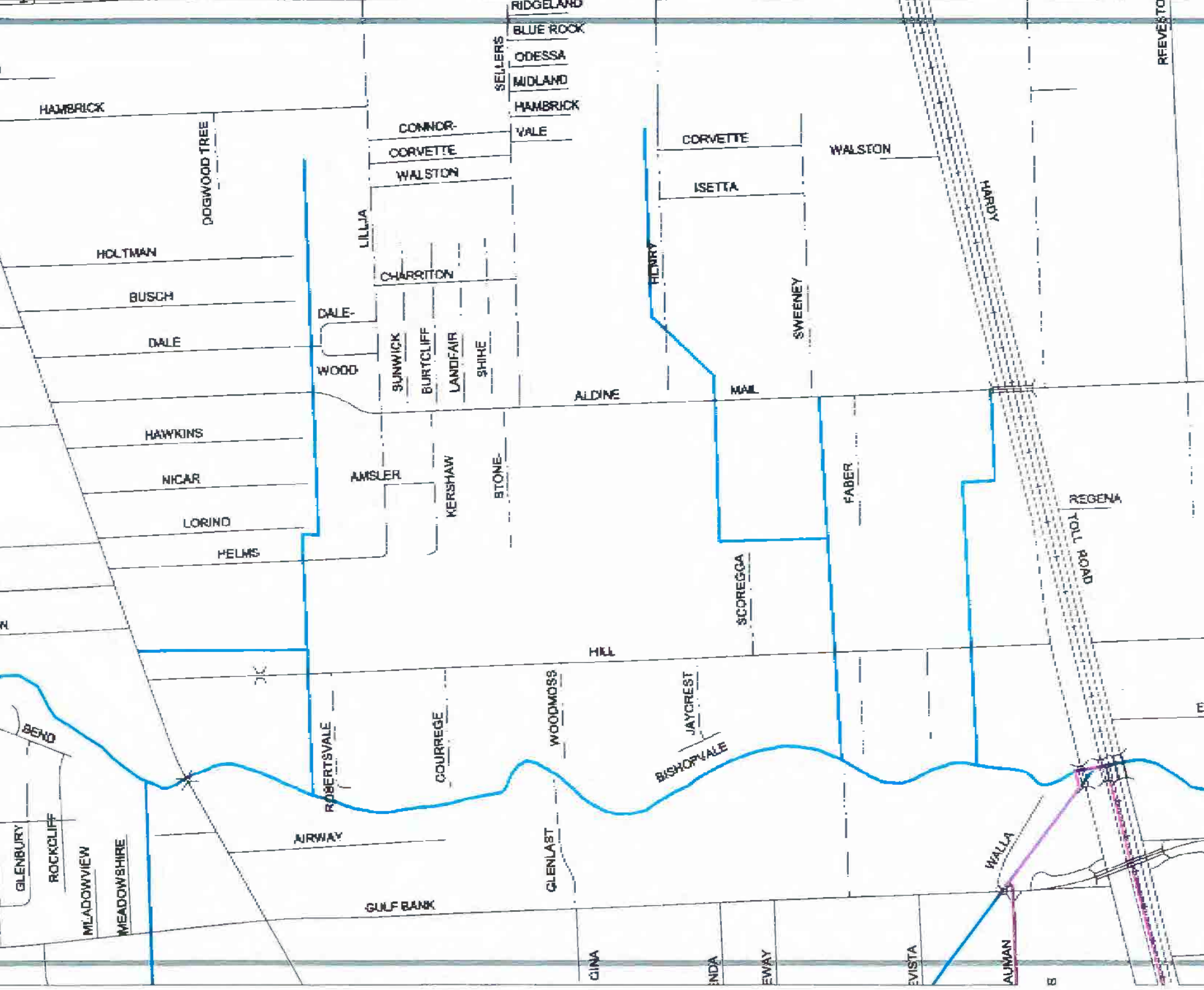
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Date: September 1999

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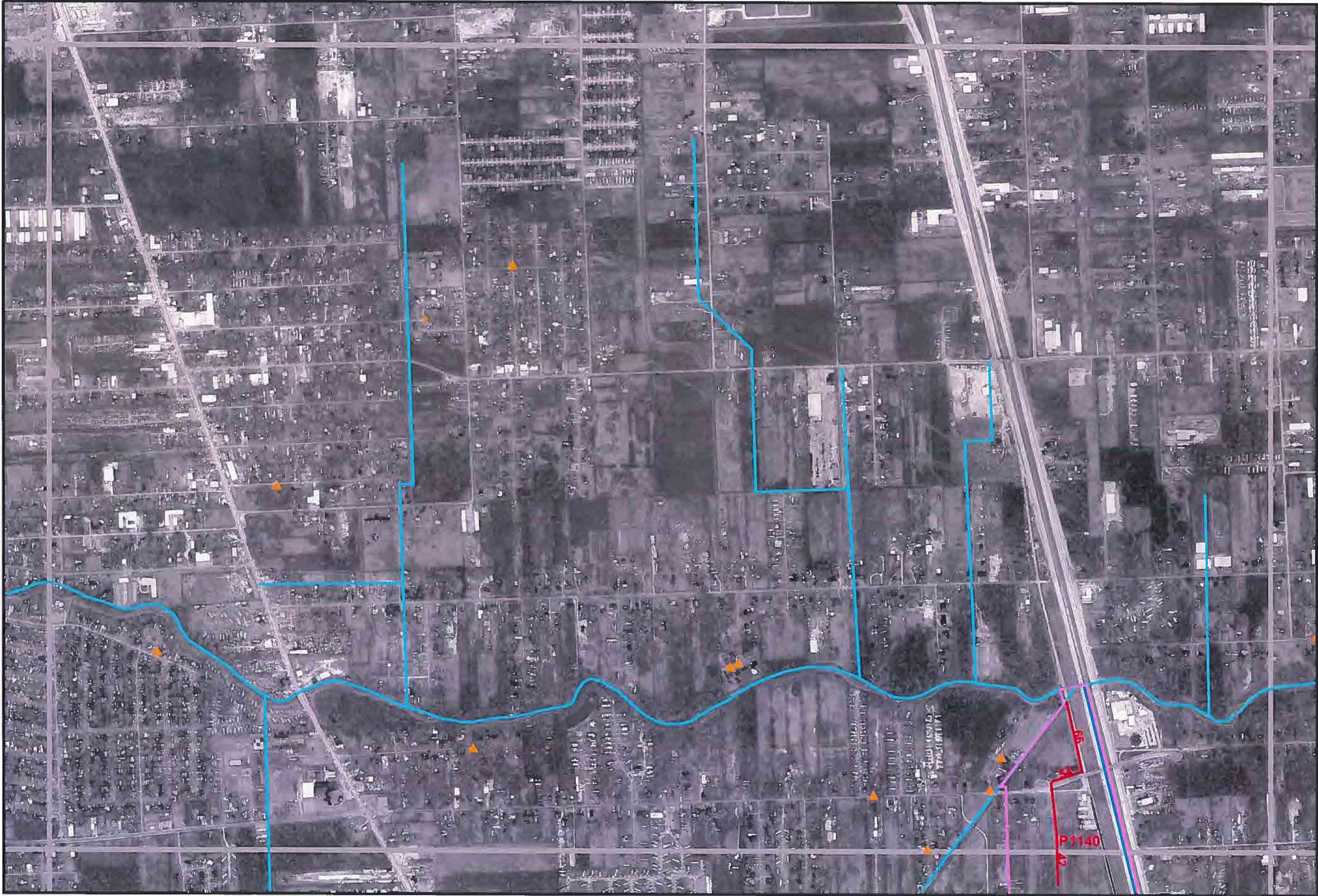


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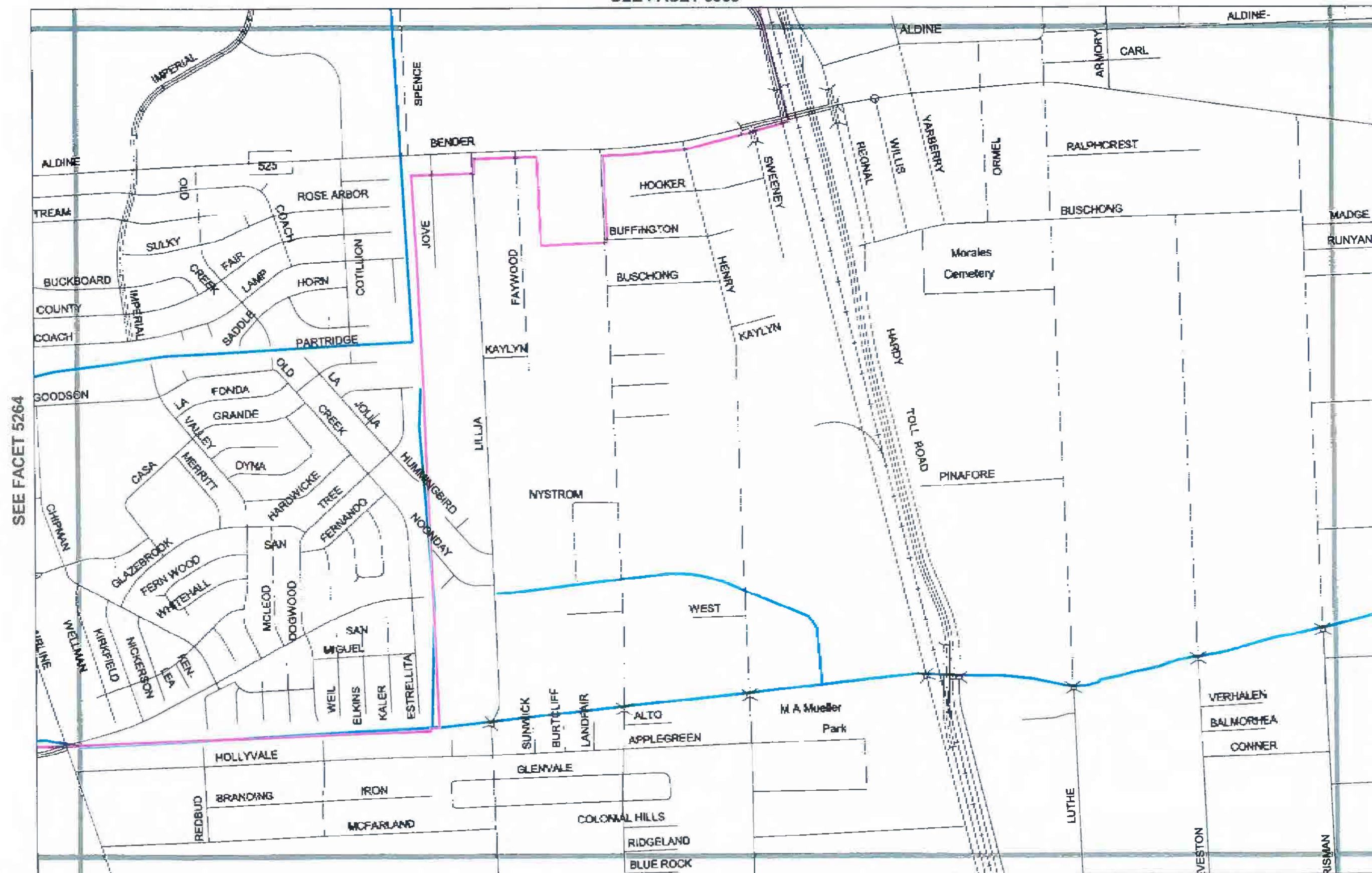
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Date: September 1999

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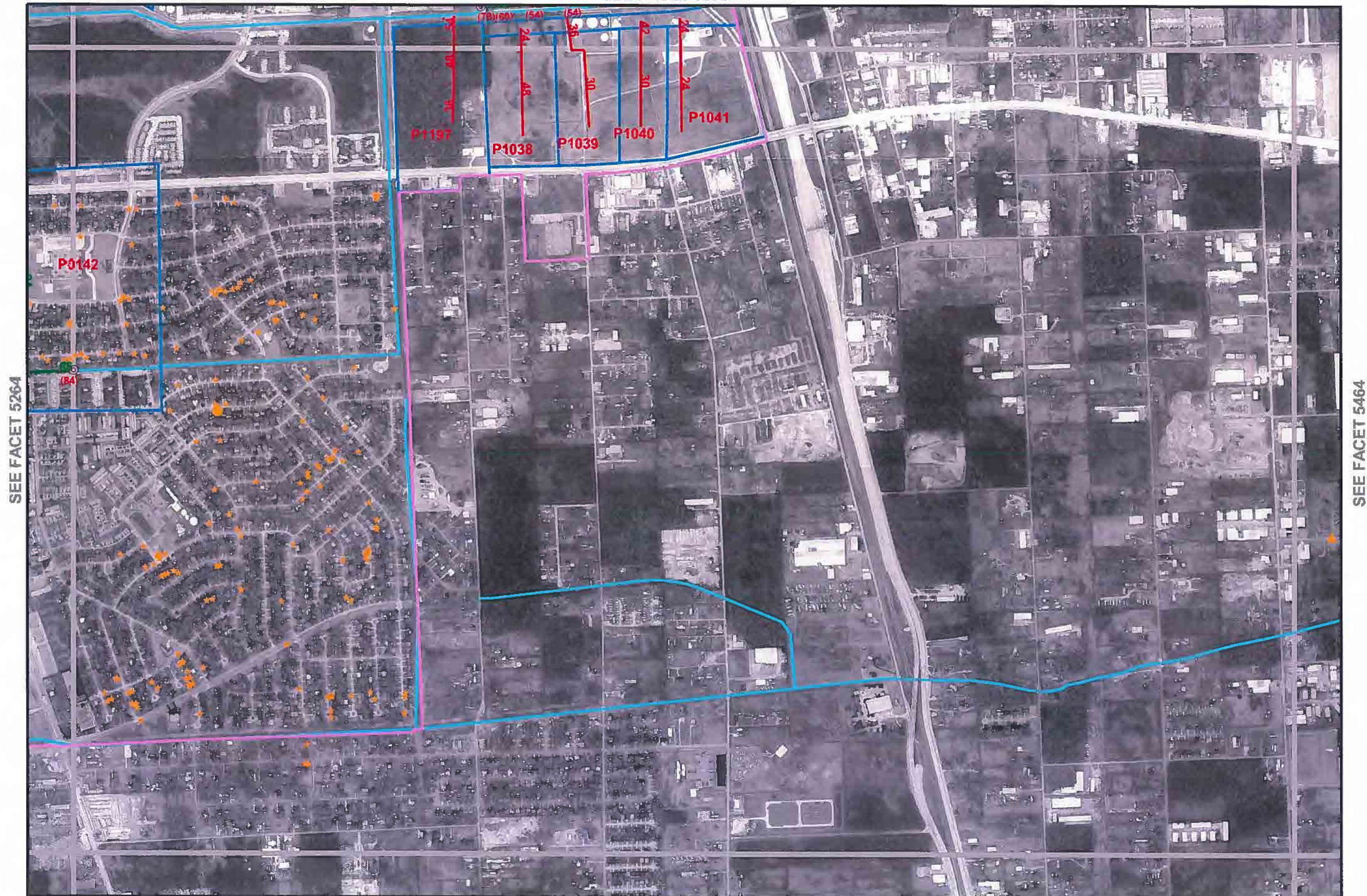


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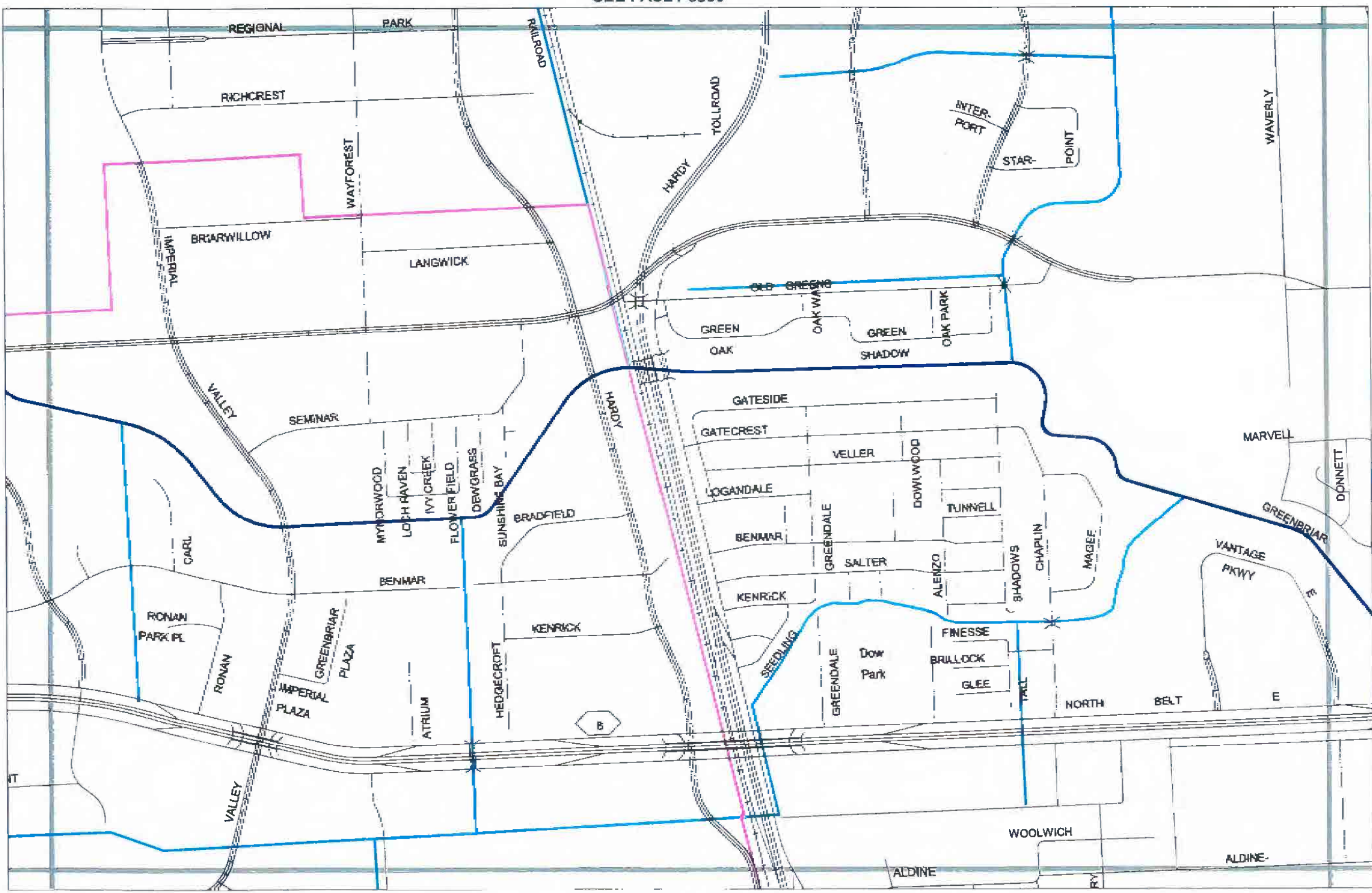
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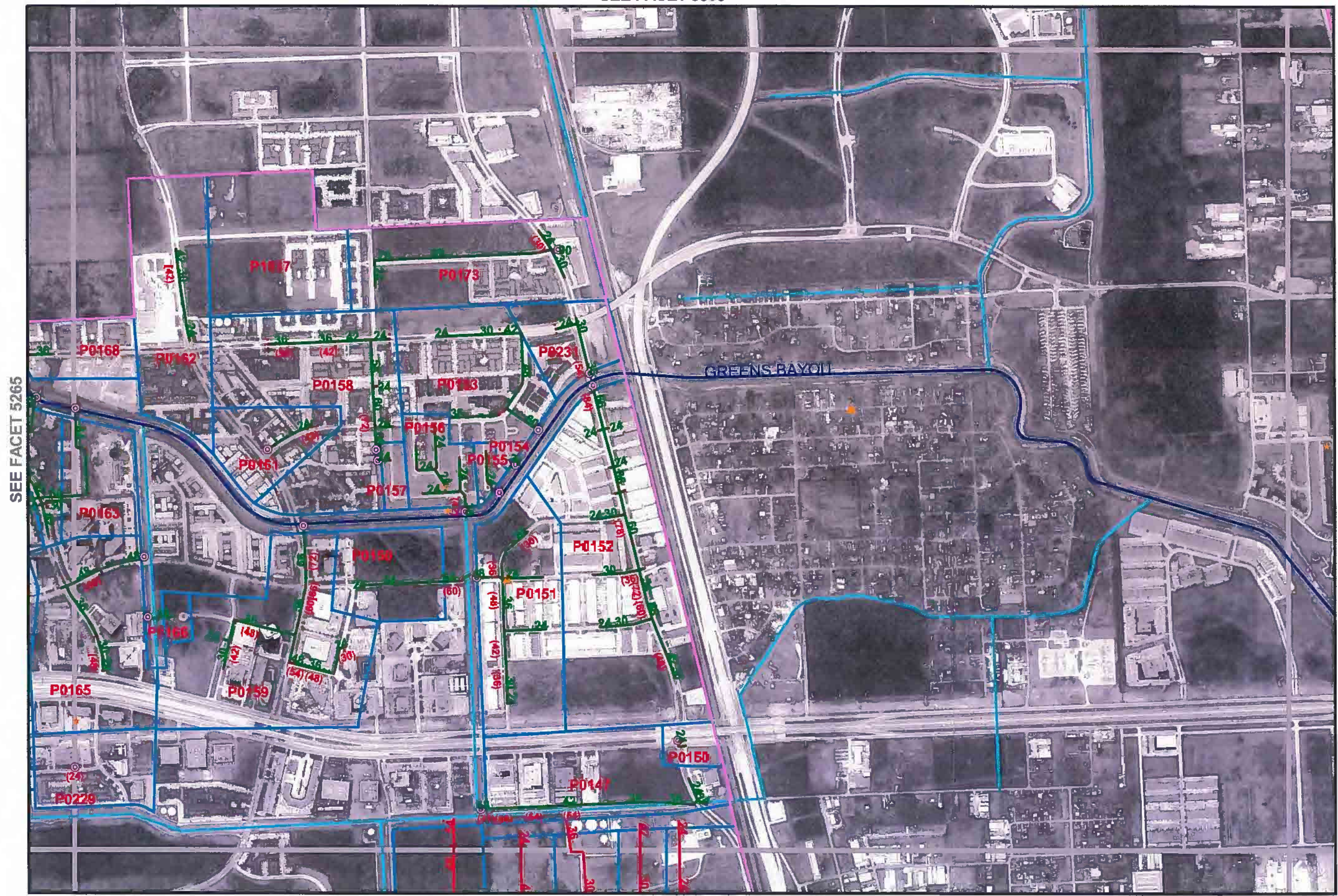
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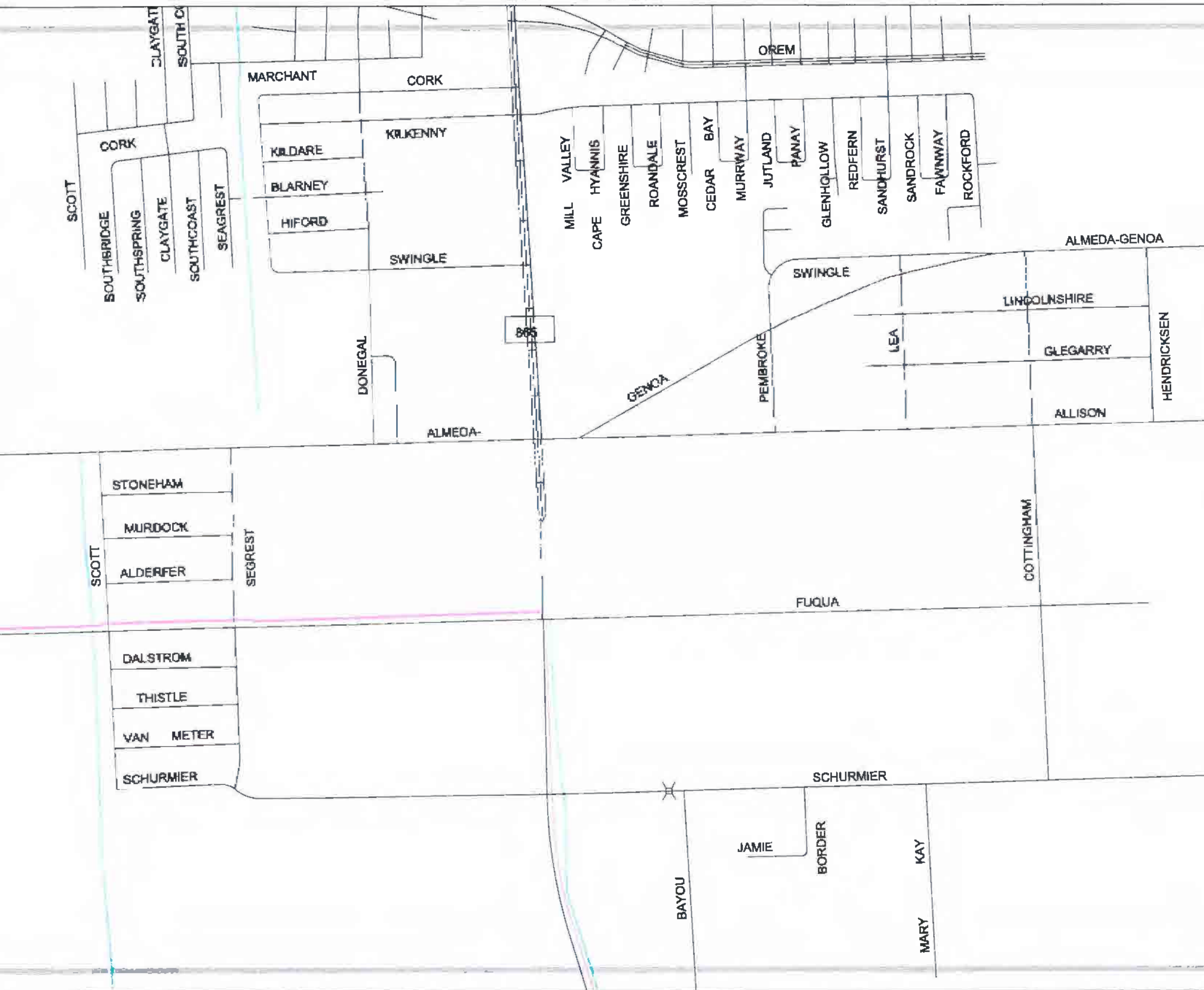
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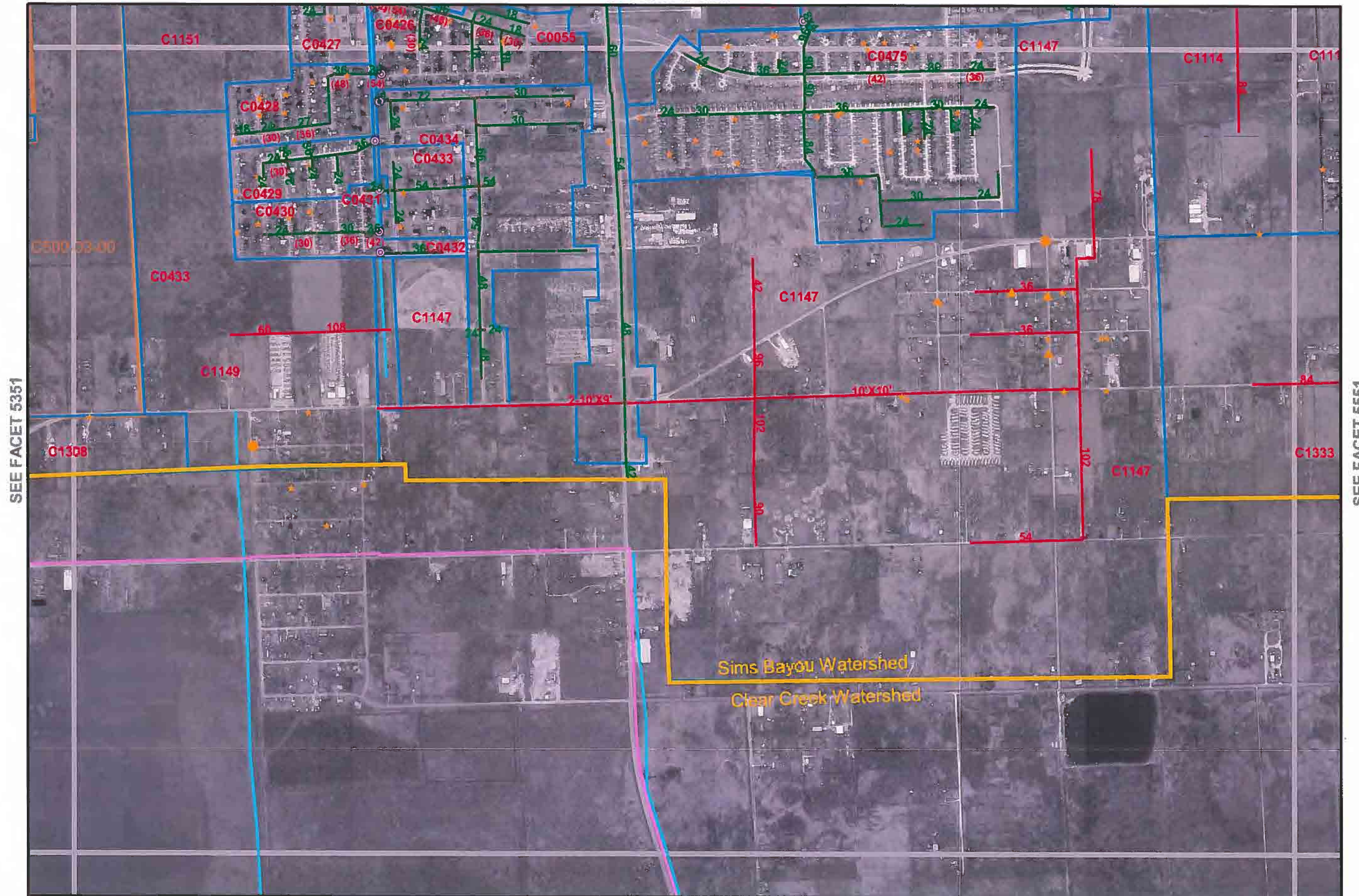
Date: September 1999

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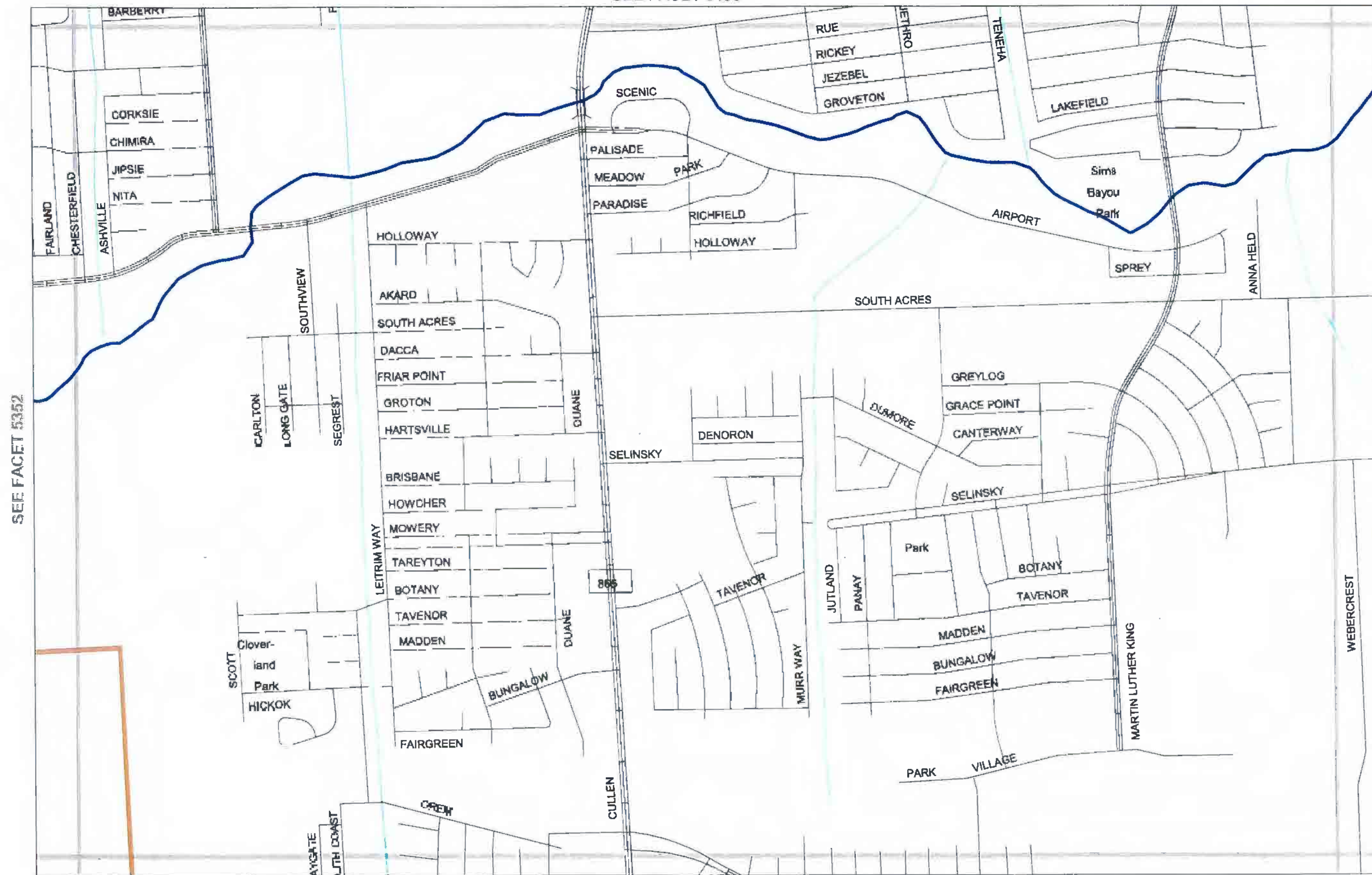


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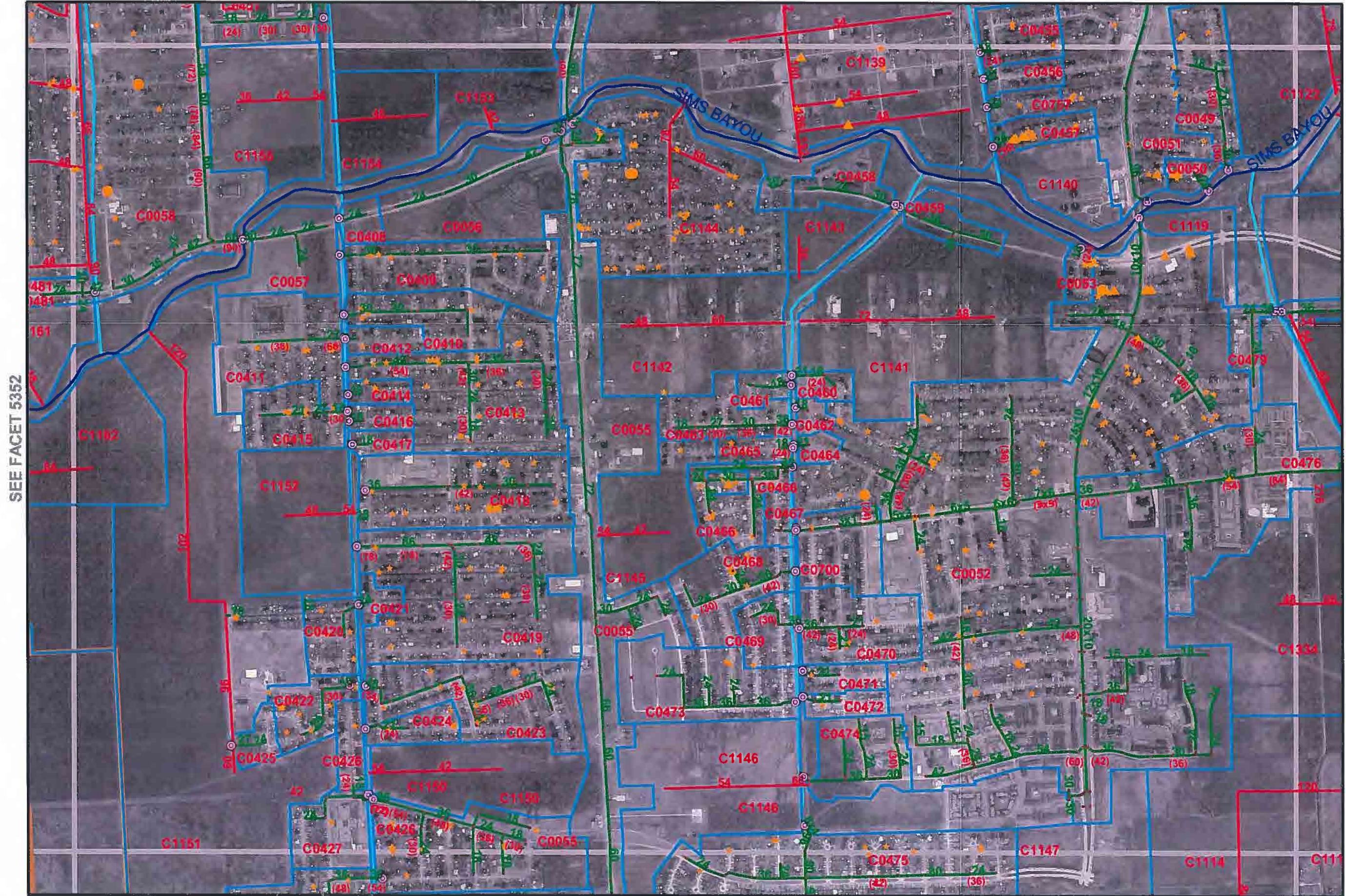


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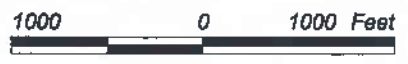
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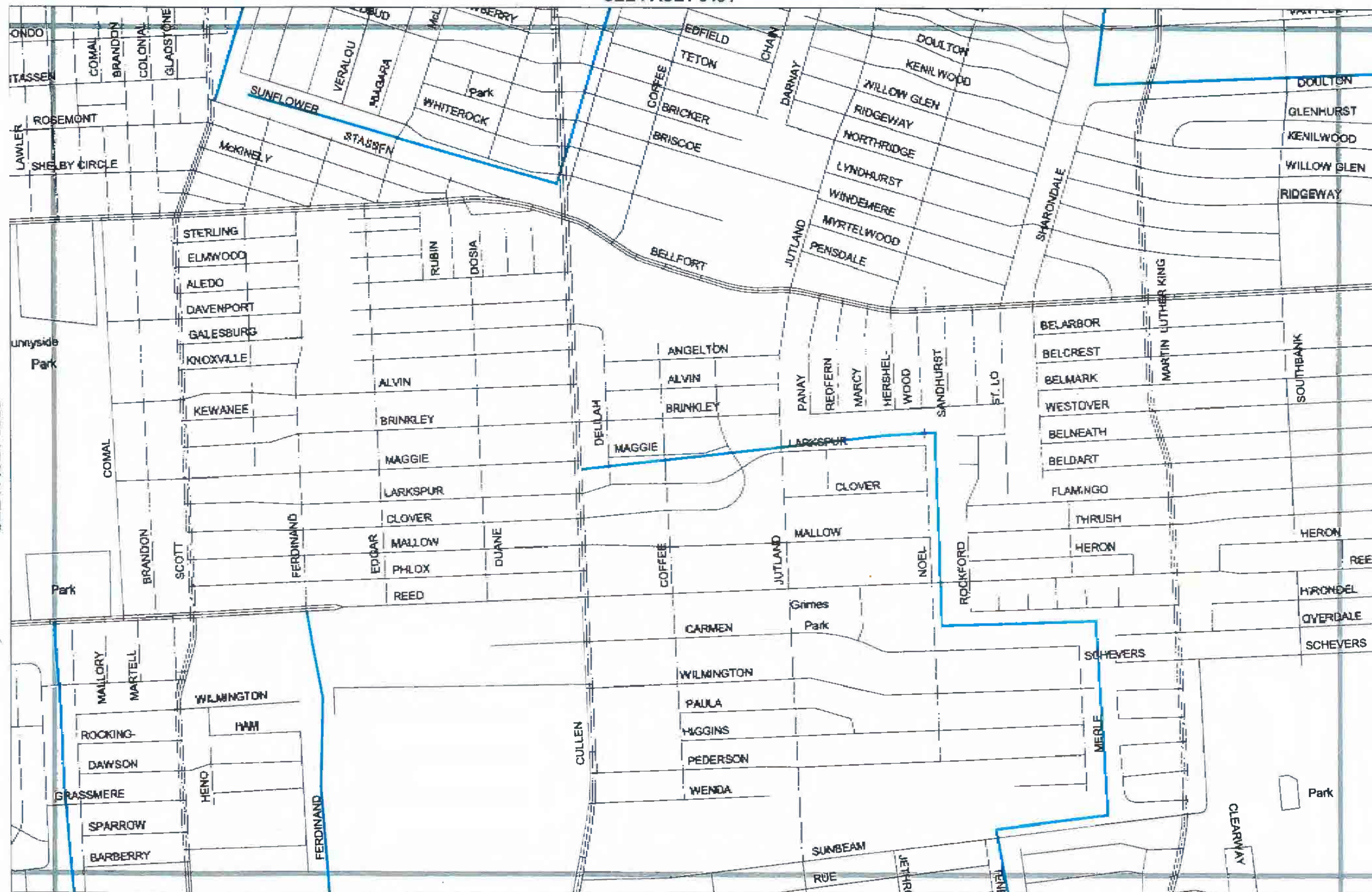


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Date: September 1999

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Date: September 1999



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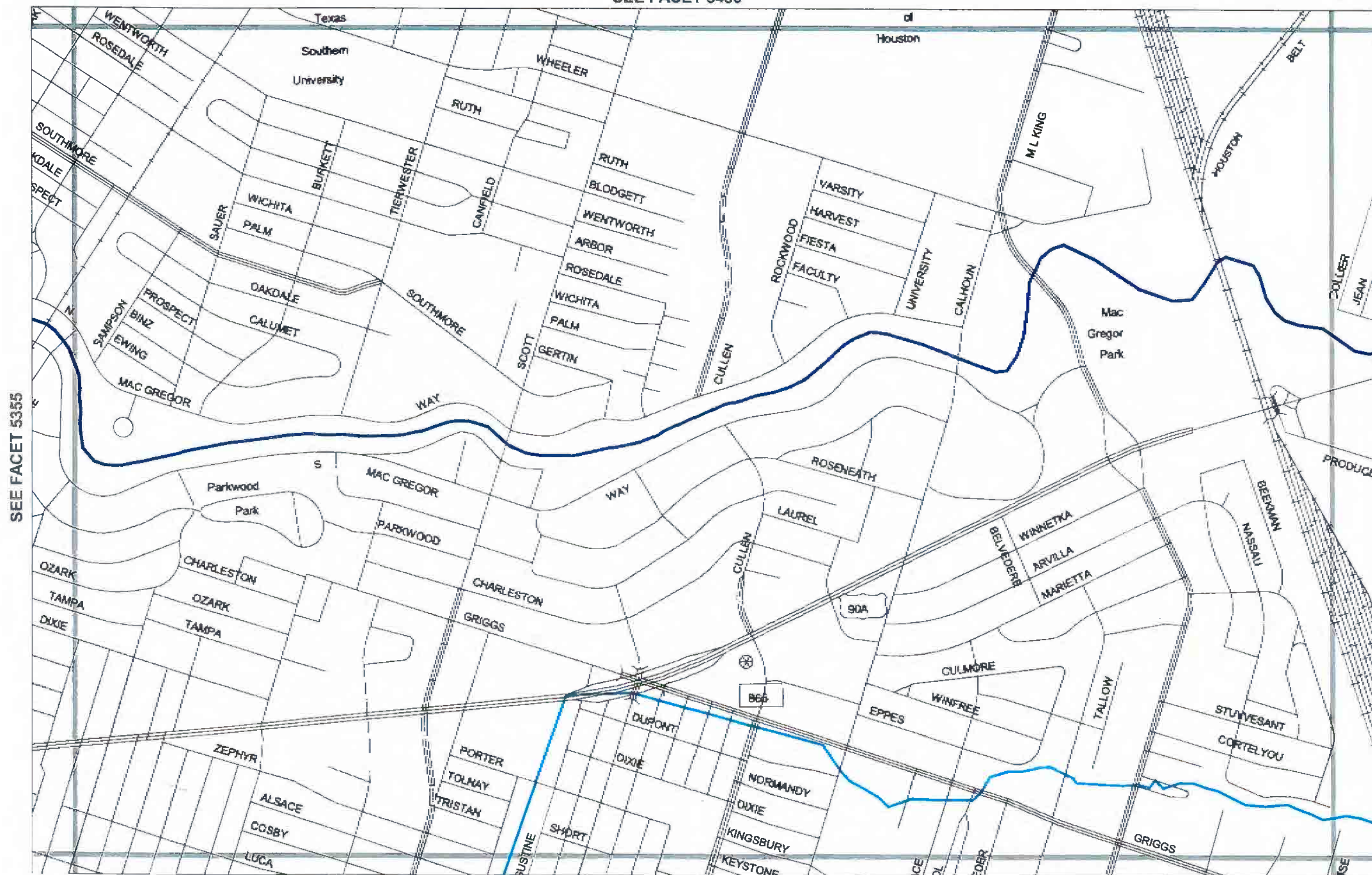
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Date: September 1

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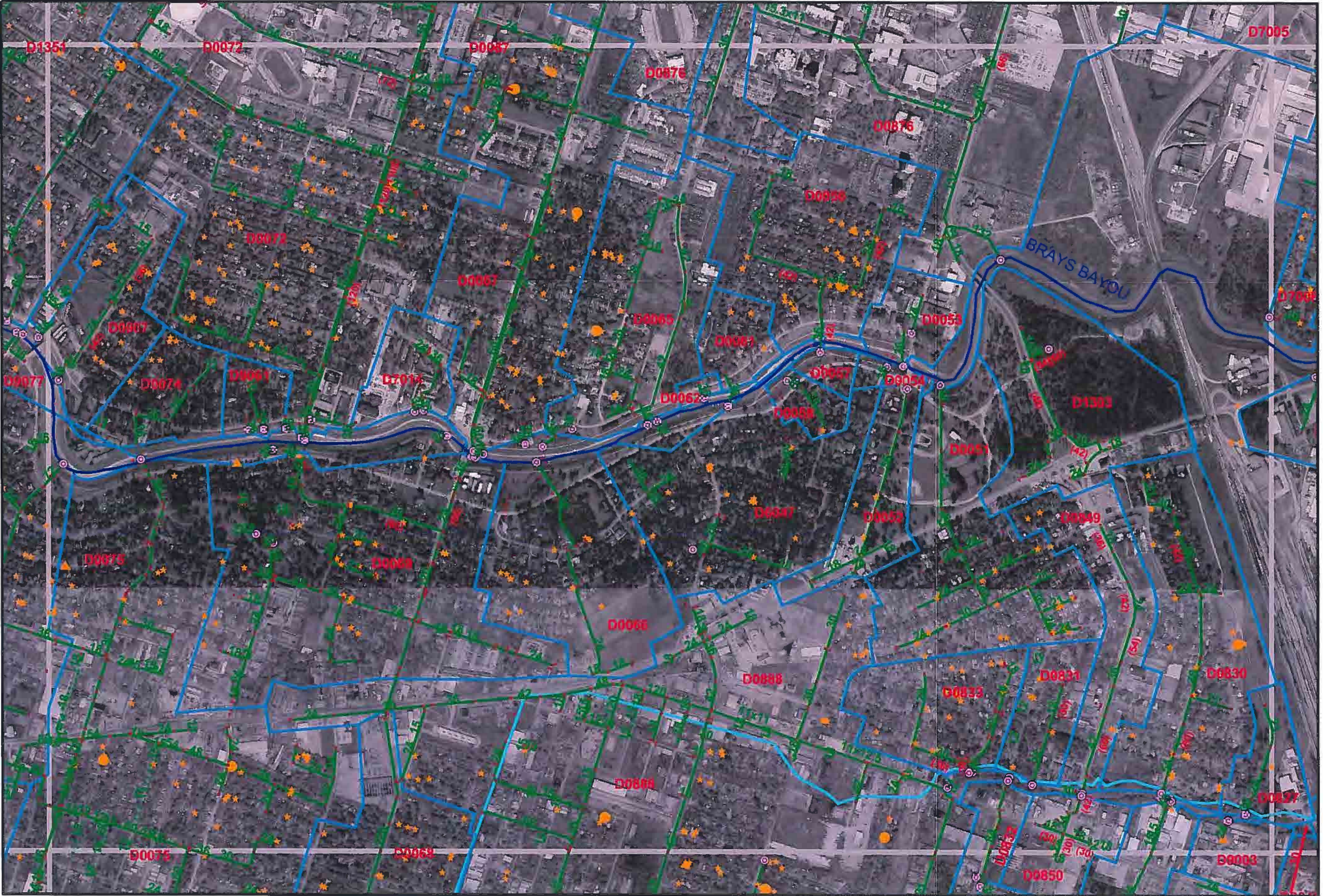
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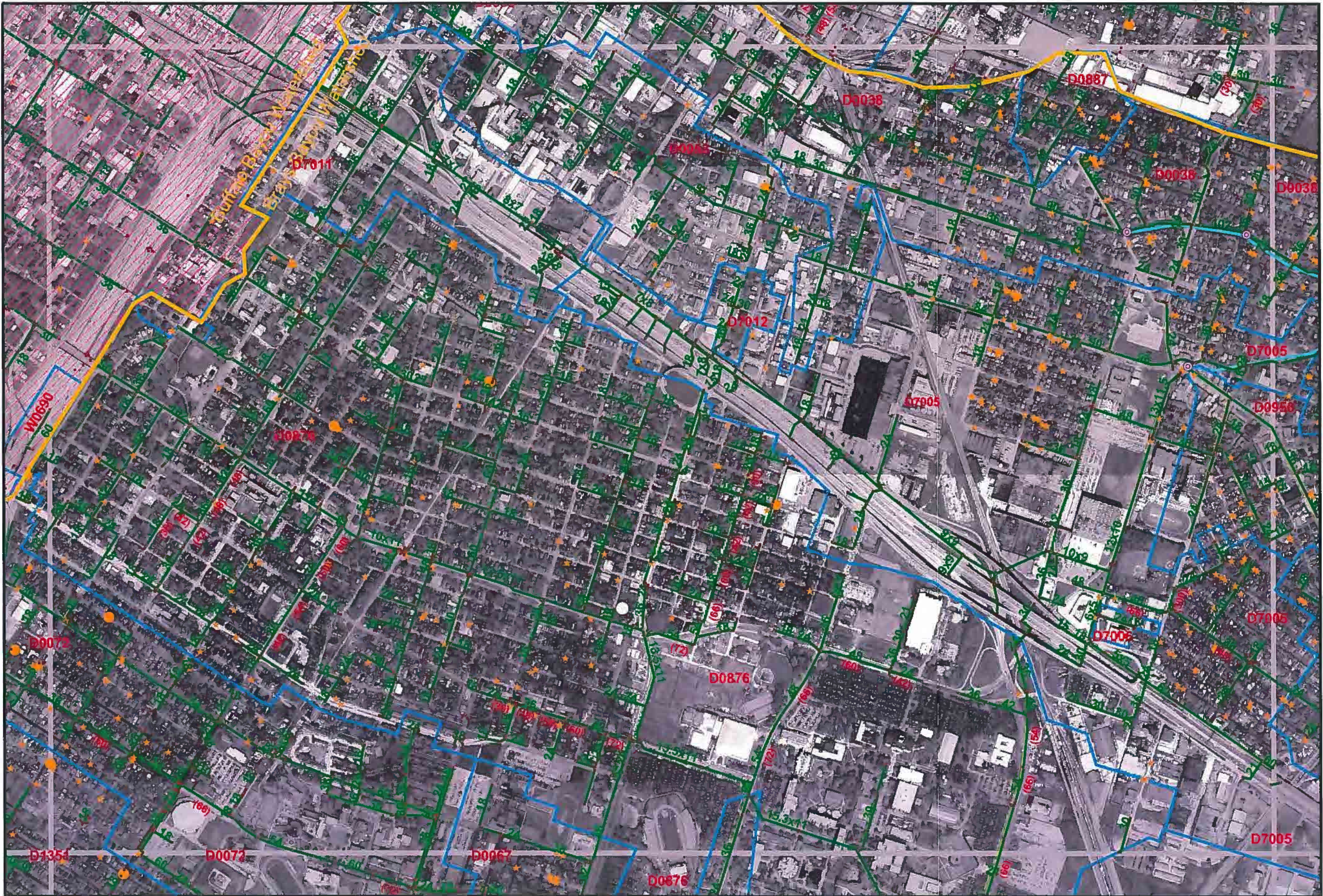
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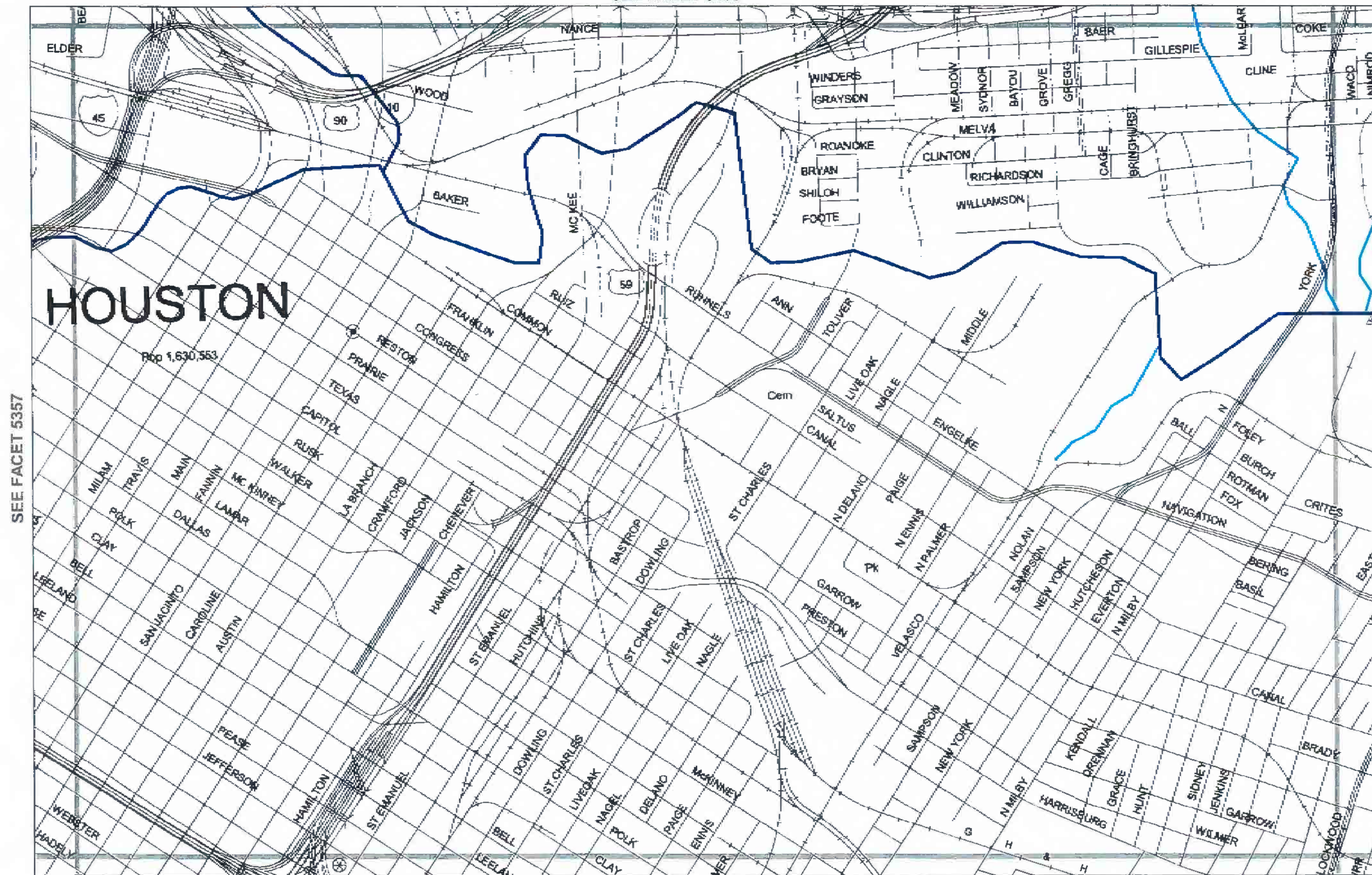
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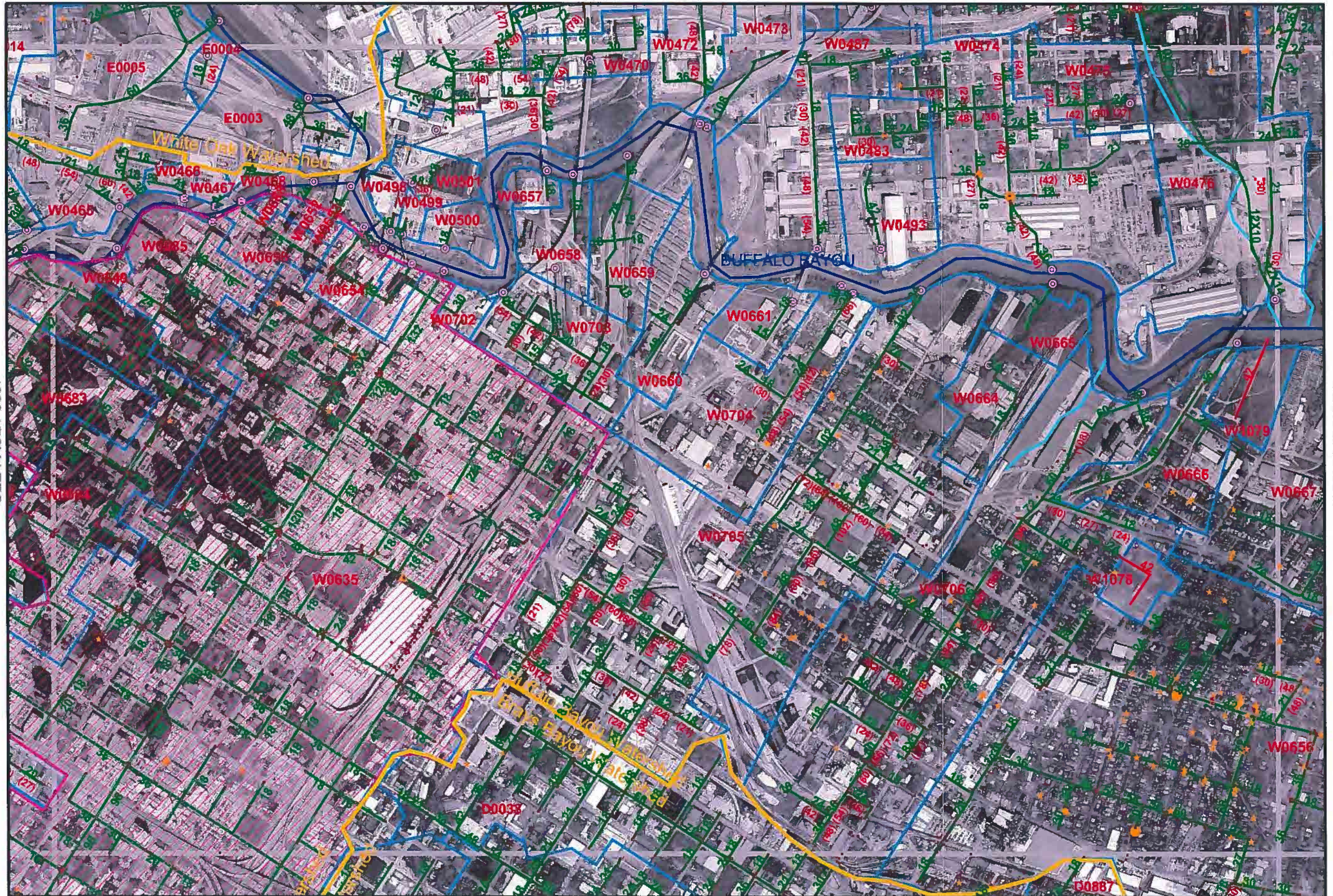
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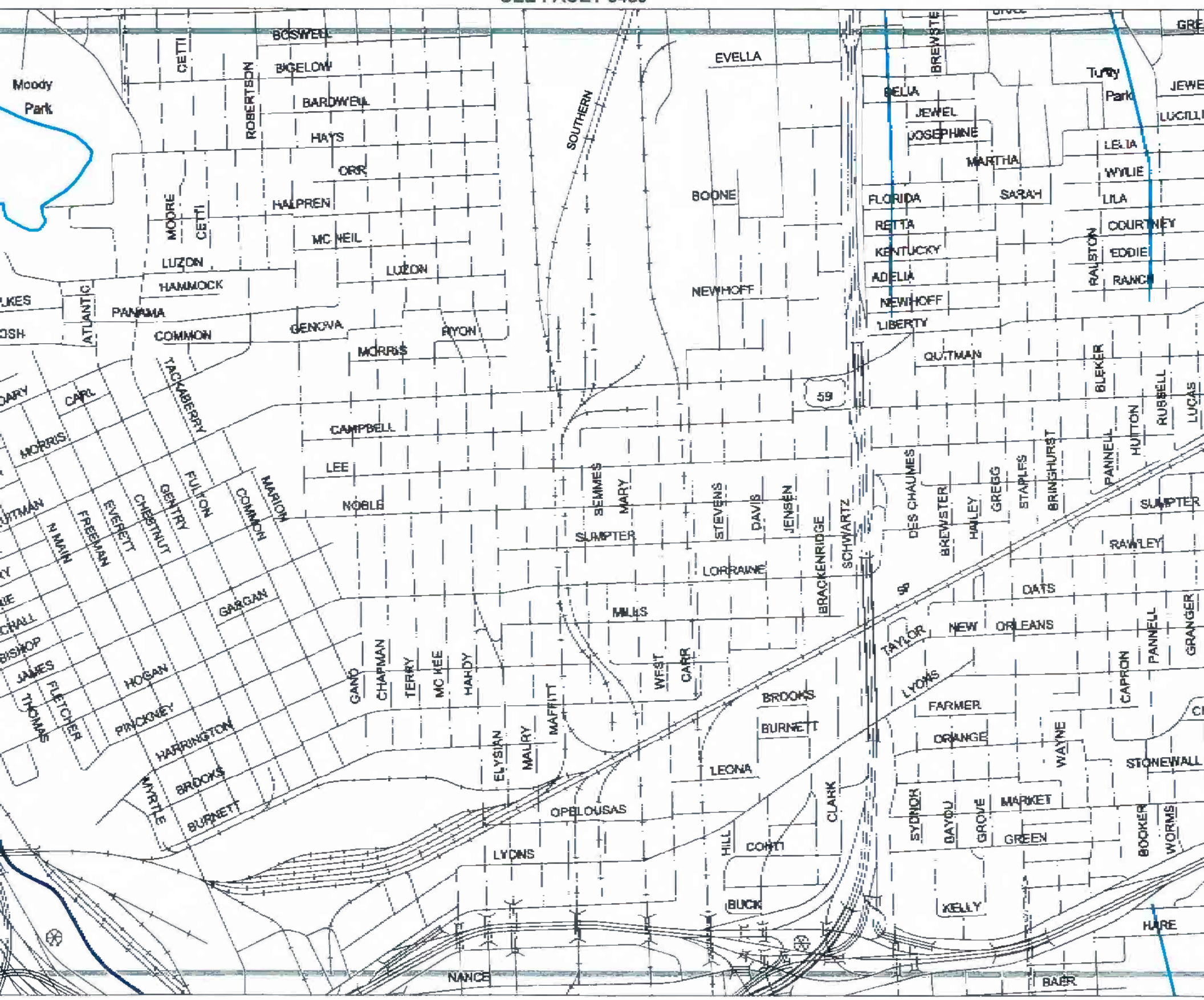
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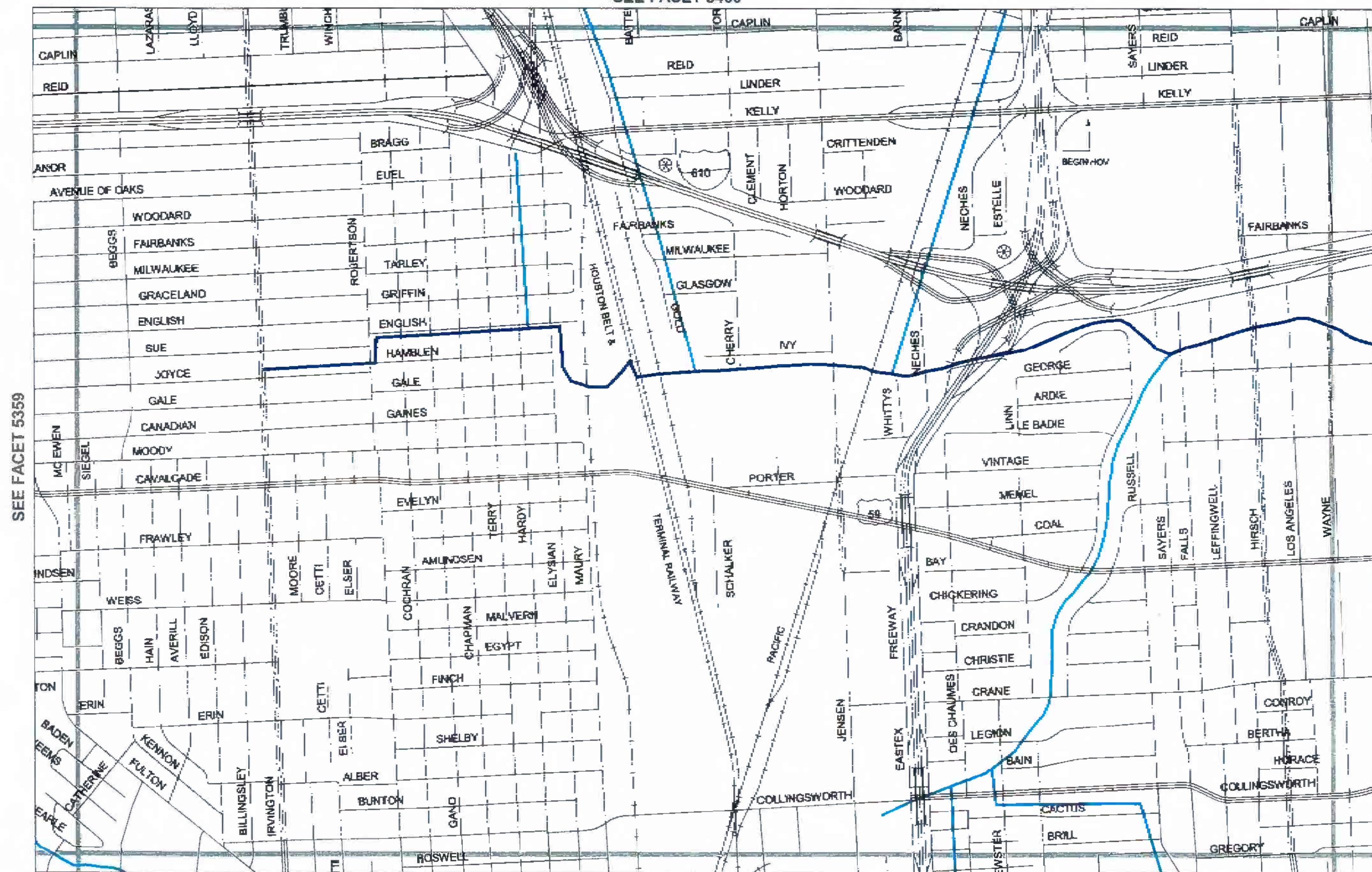


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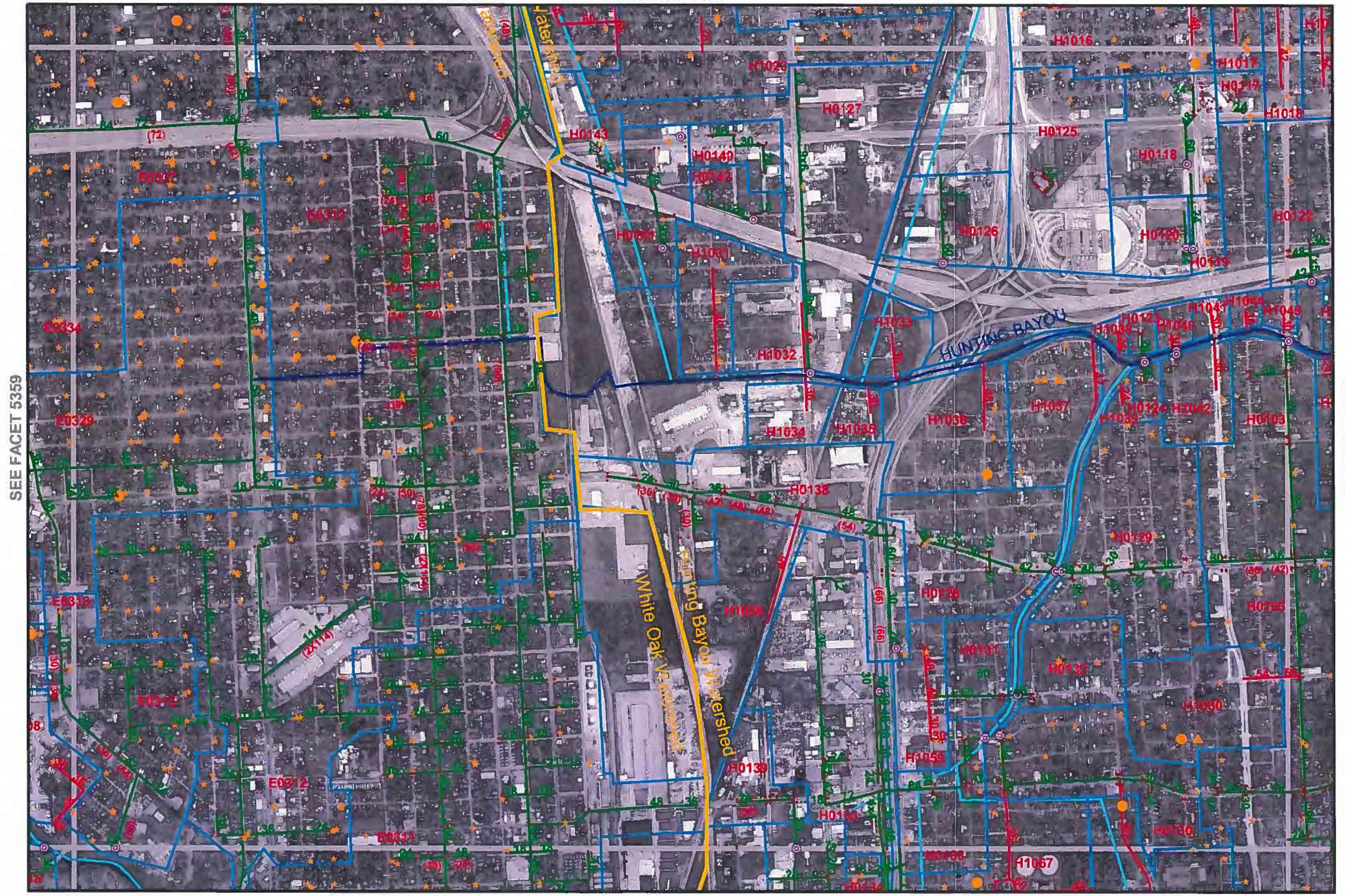


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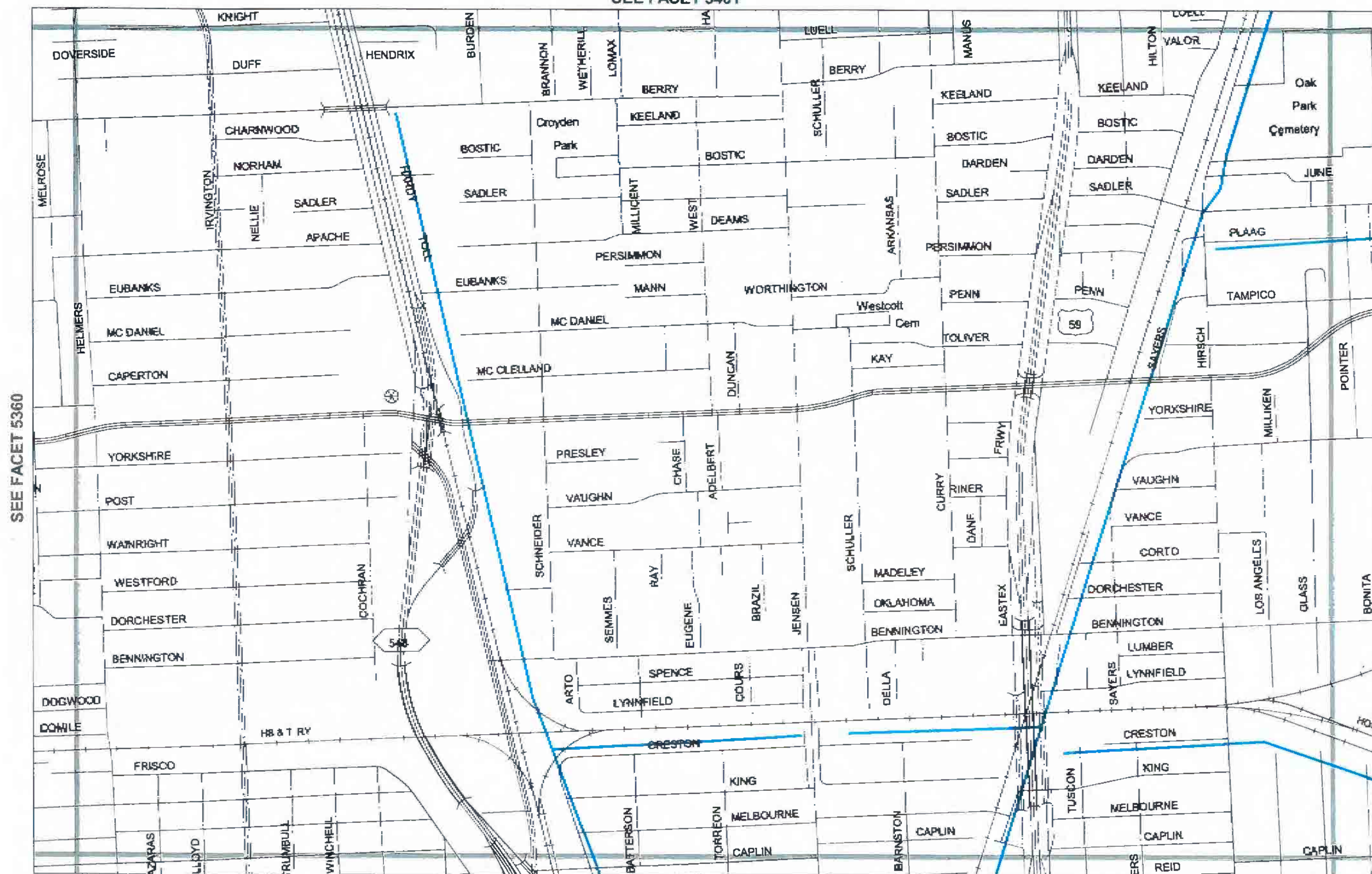


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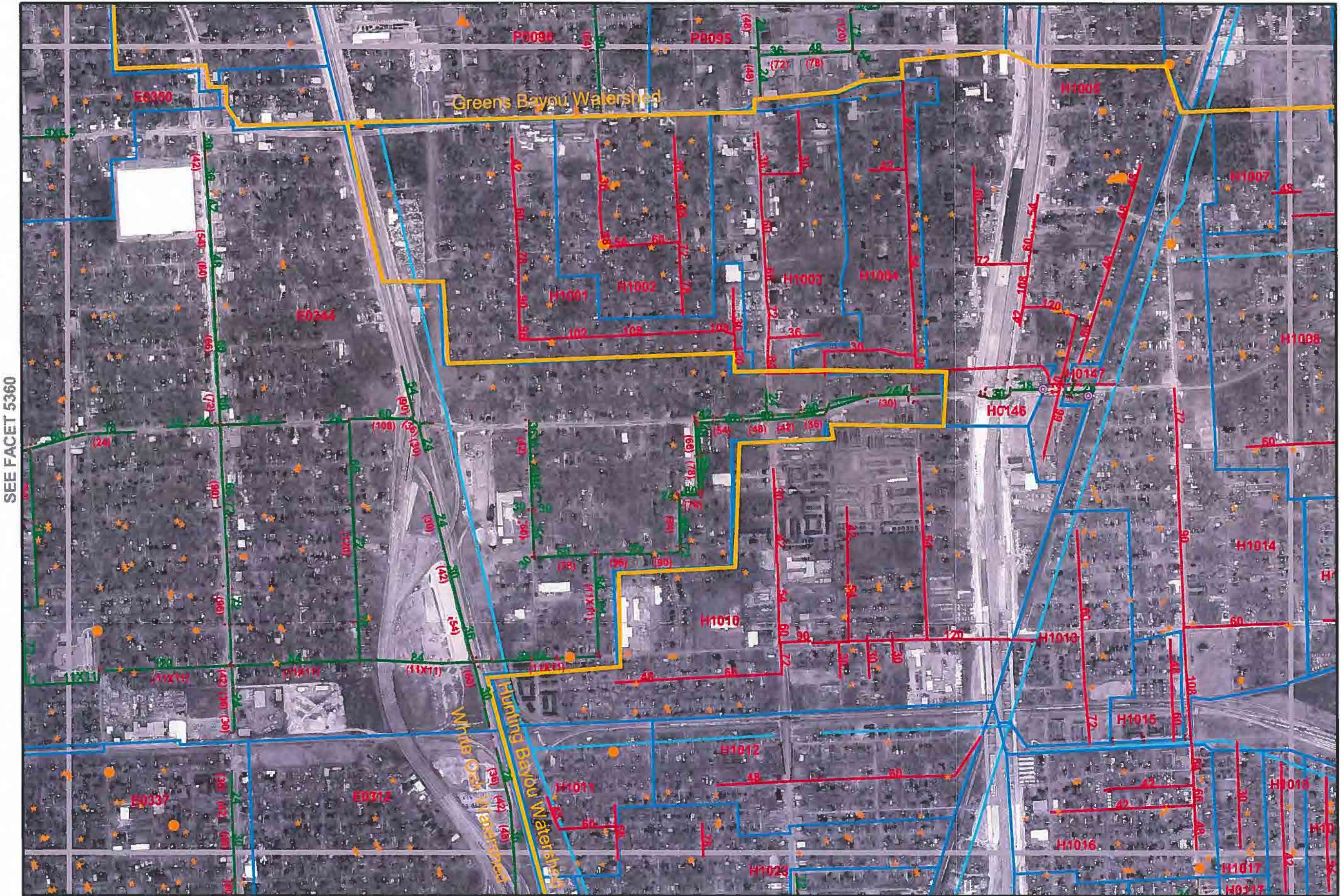
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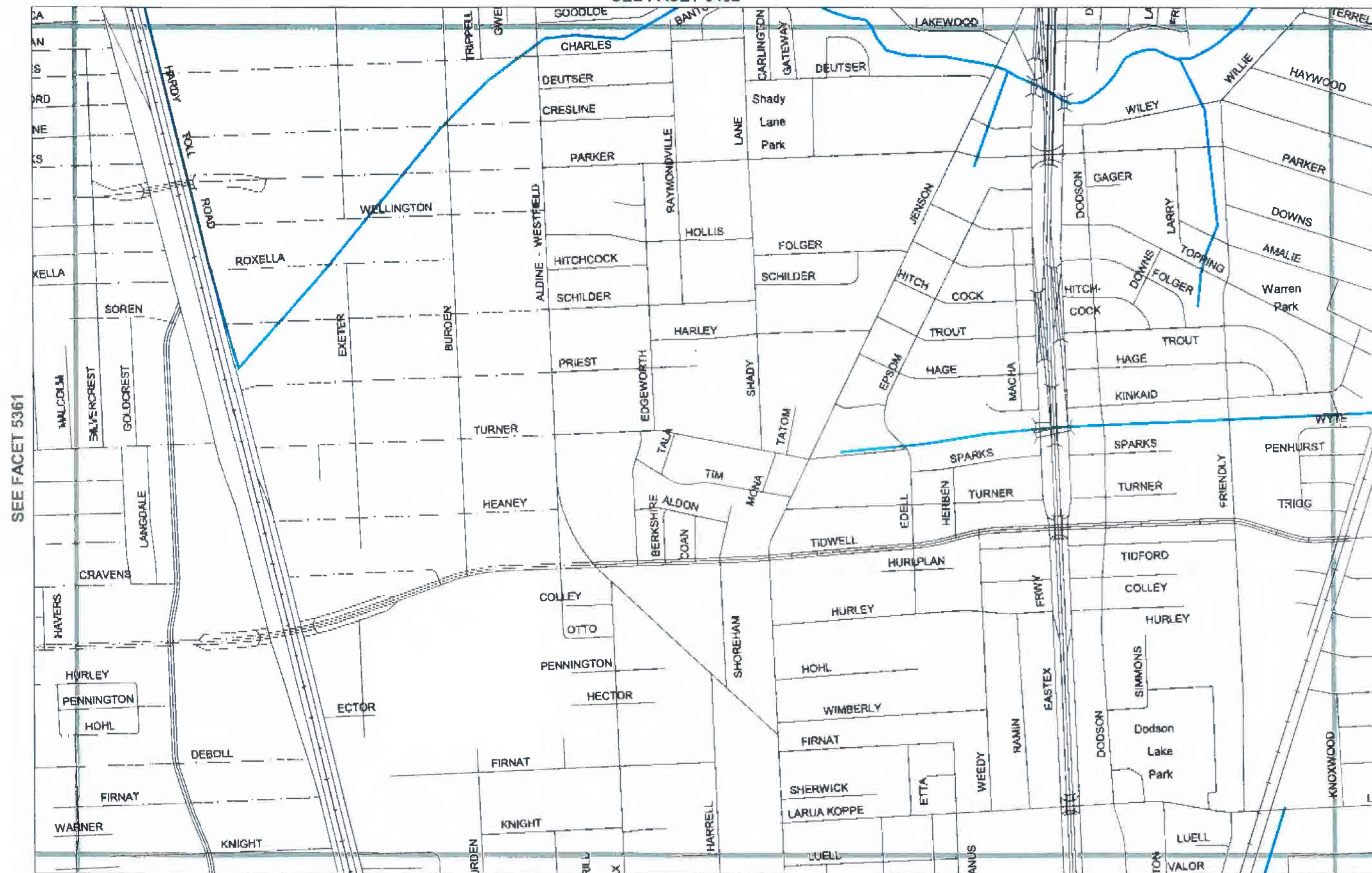
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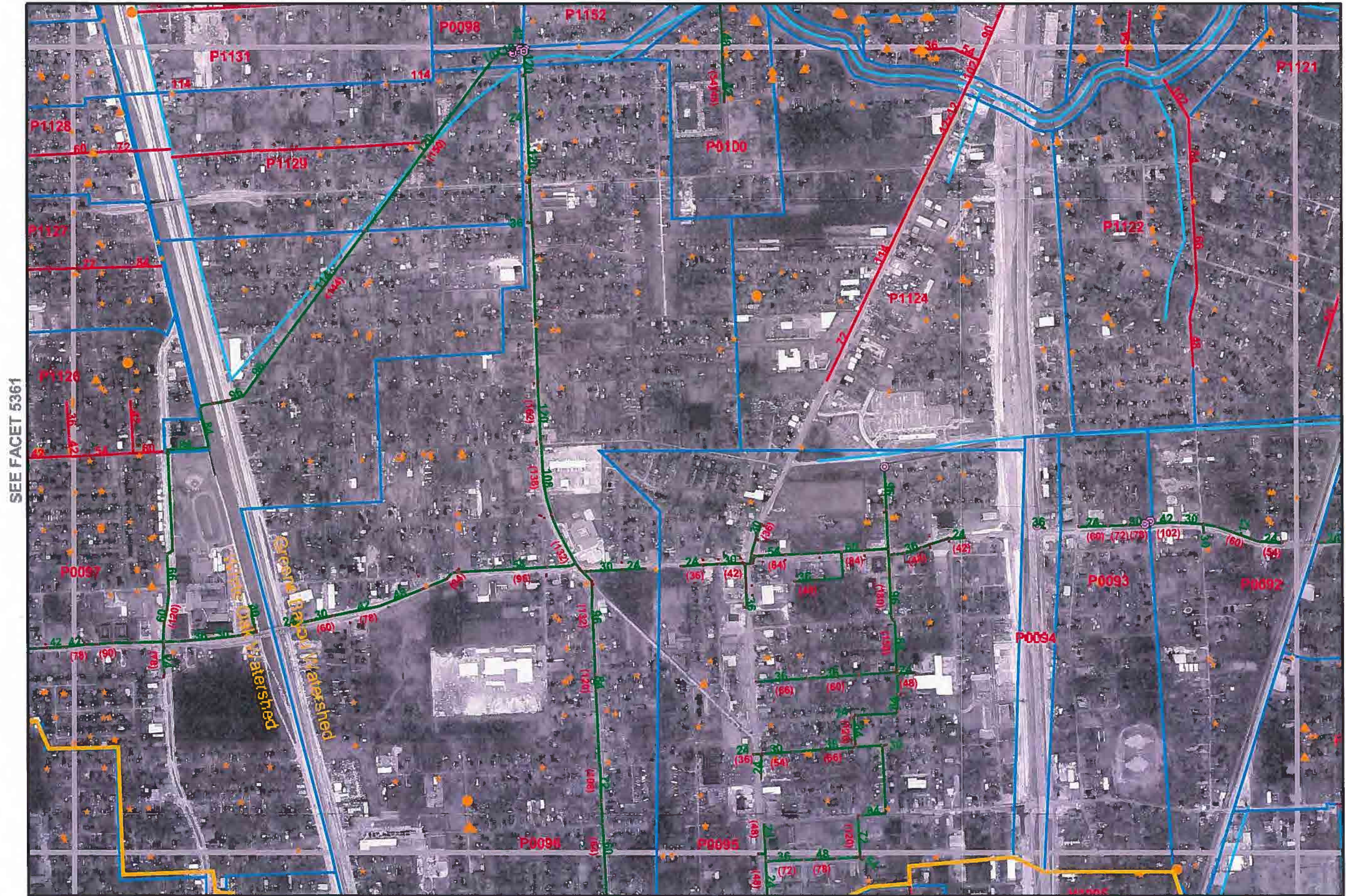
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SEE FACET 5460

SEE FACET 5561

SEE FACET 5462



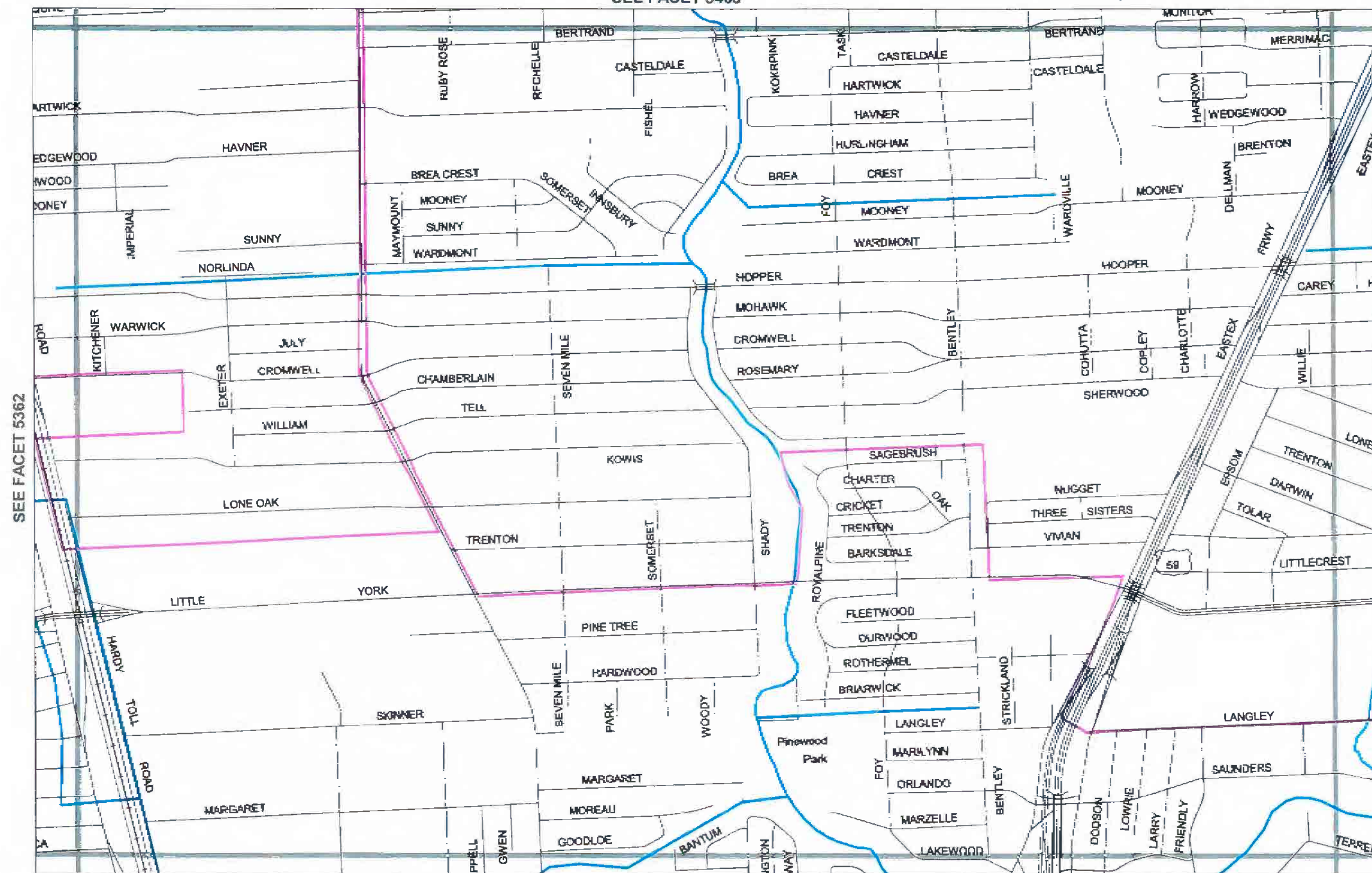
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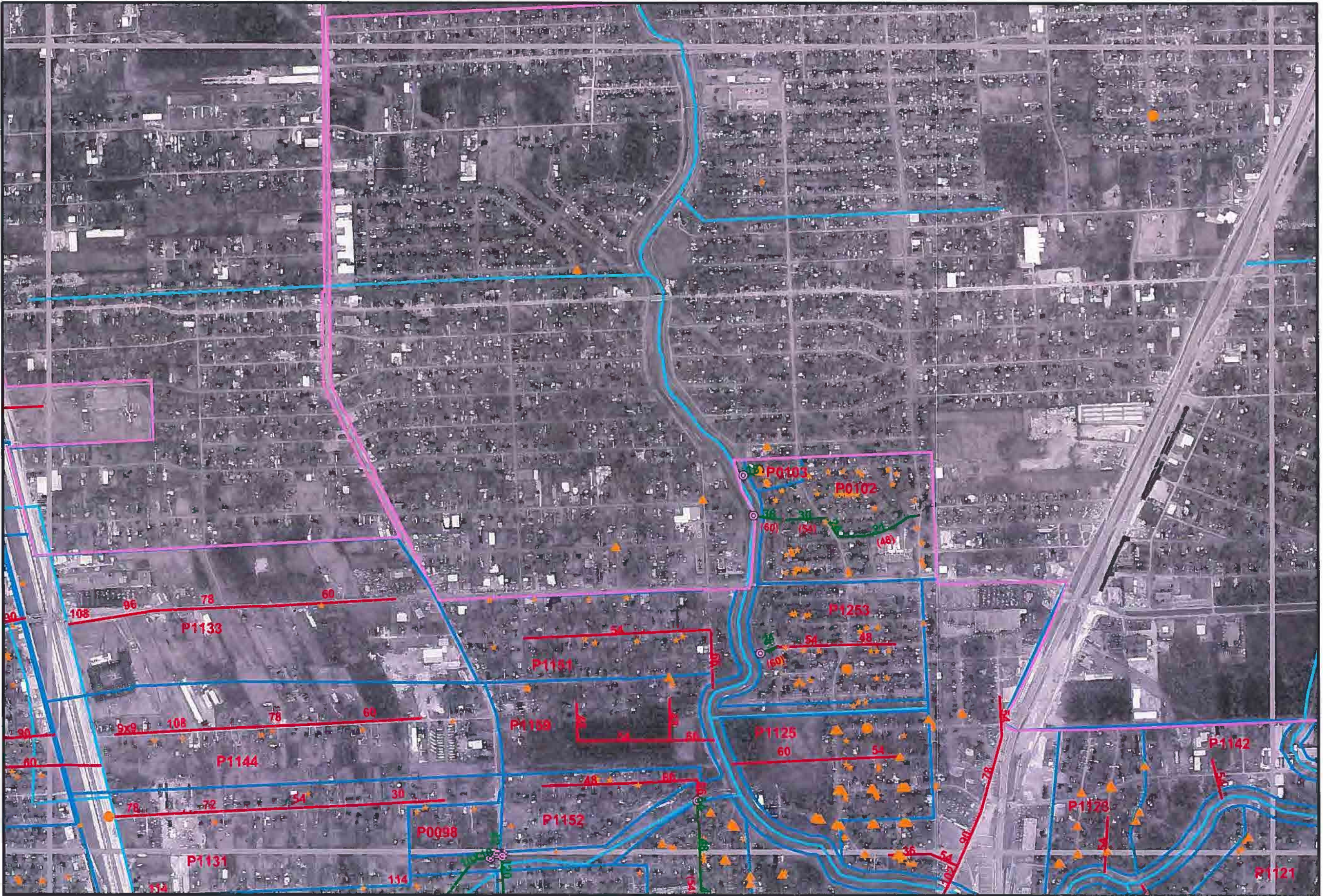
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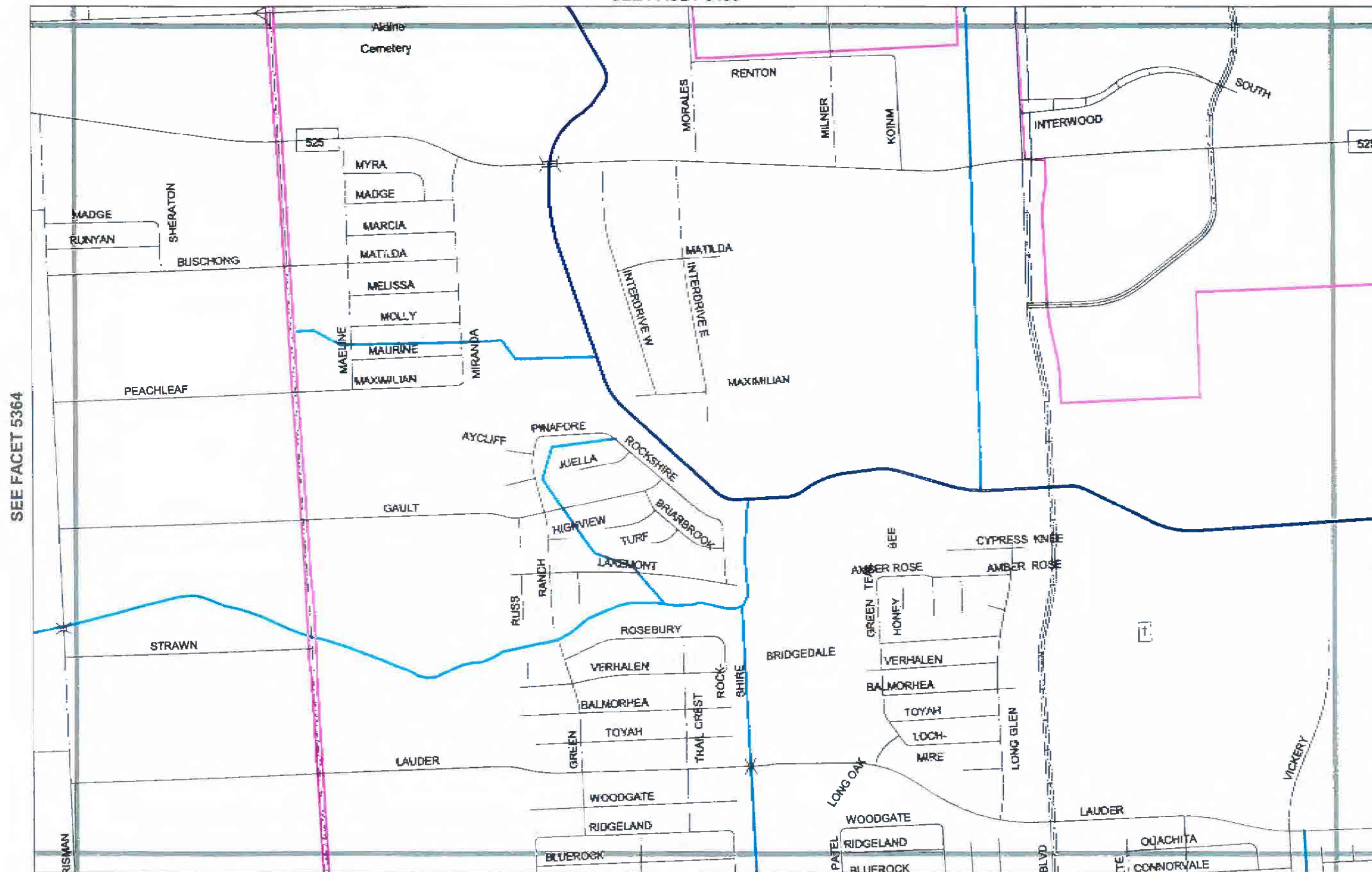
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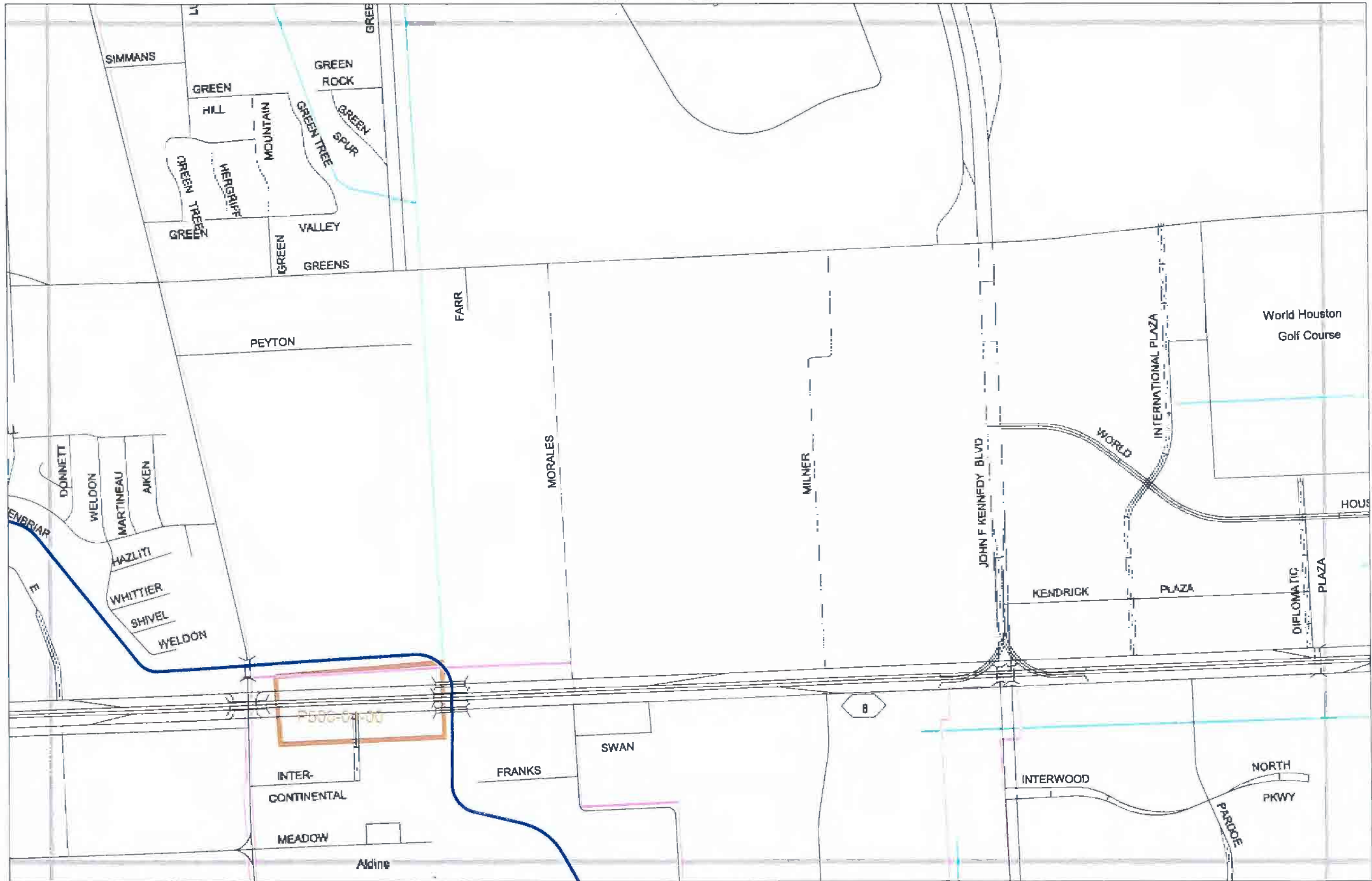


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Date: September 1999

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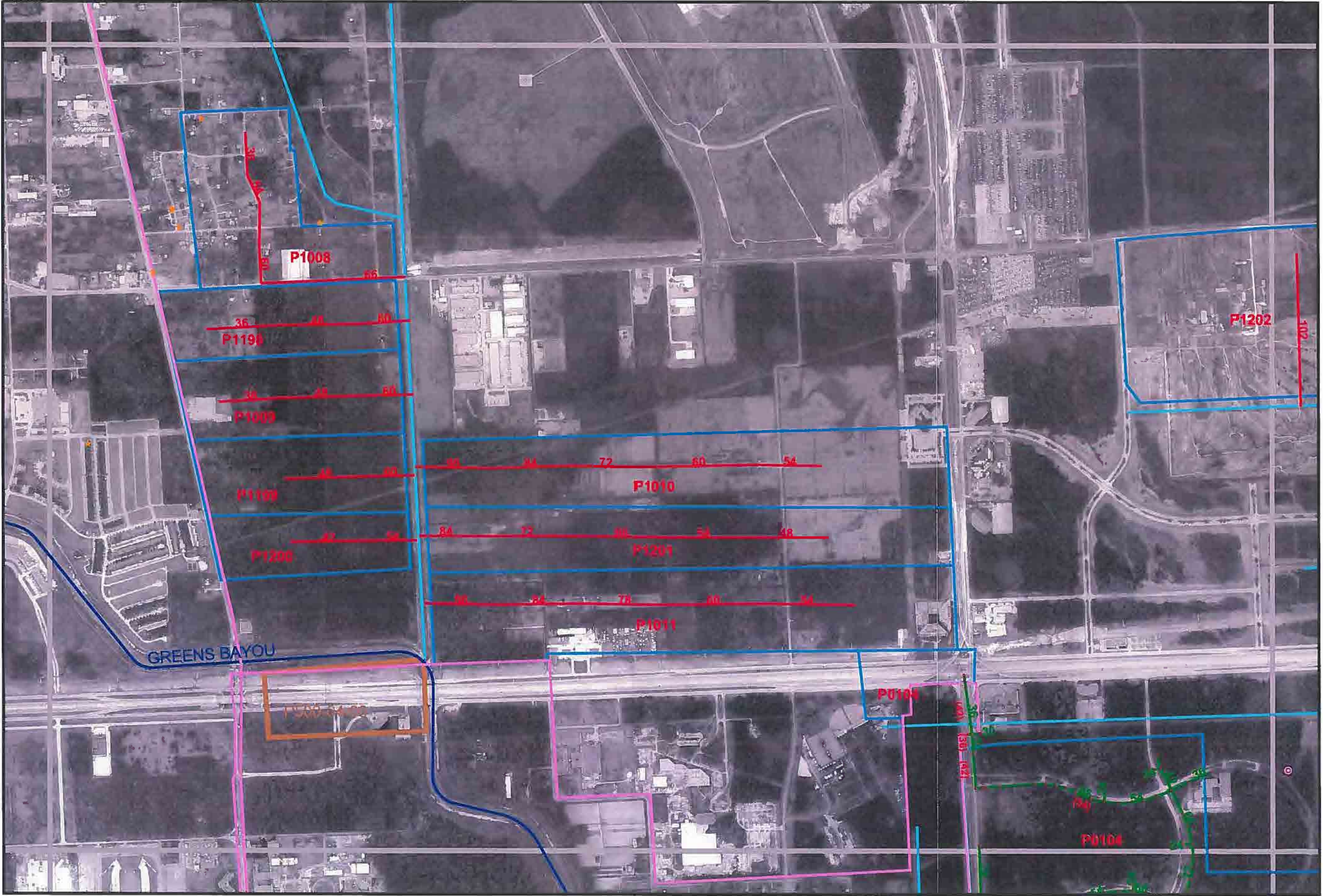
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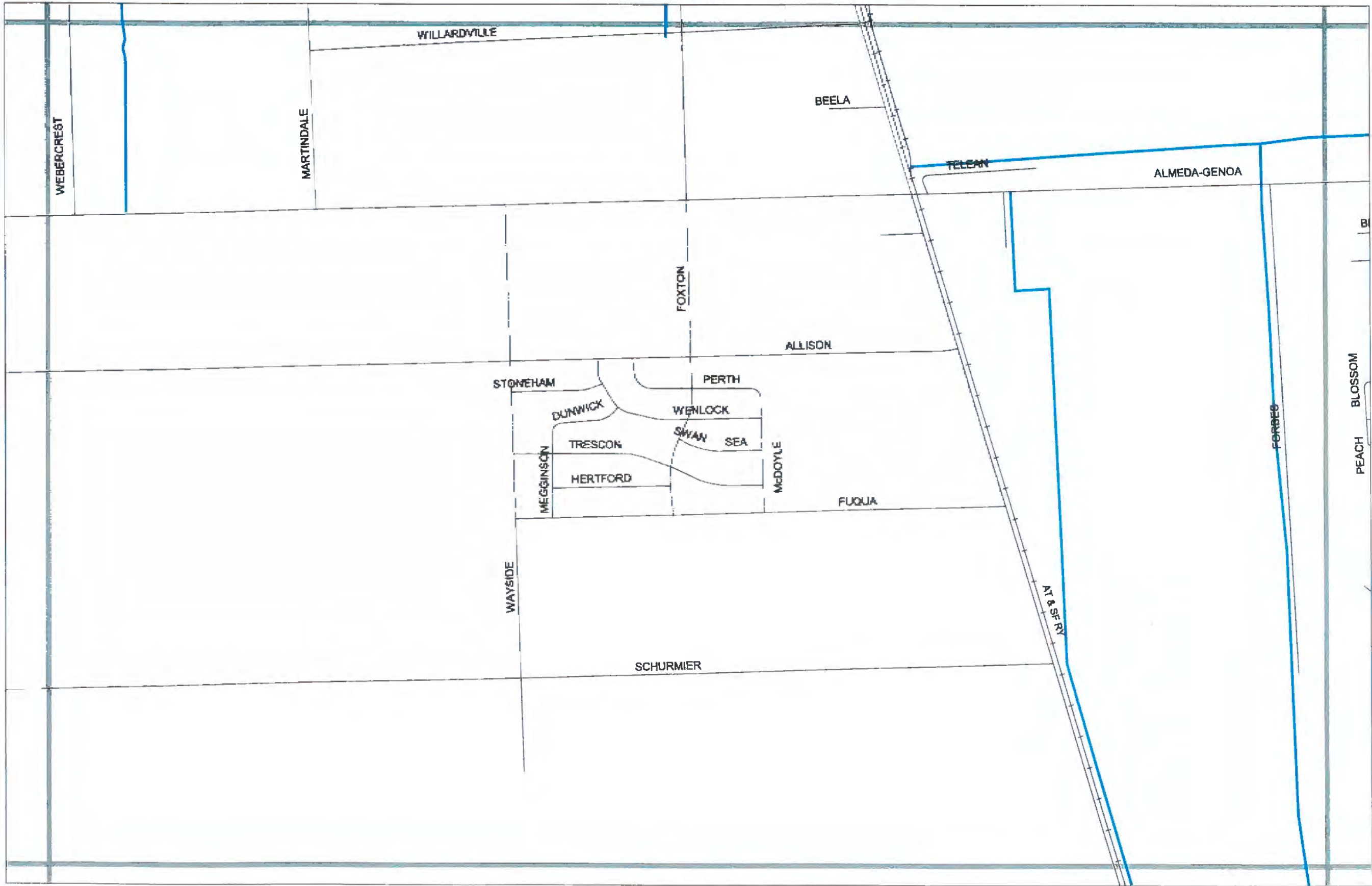
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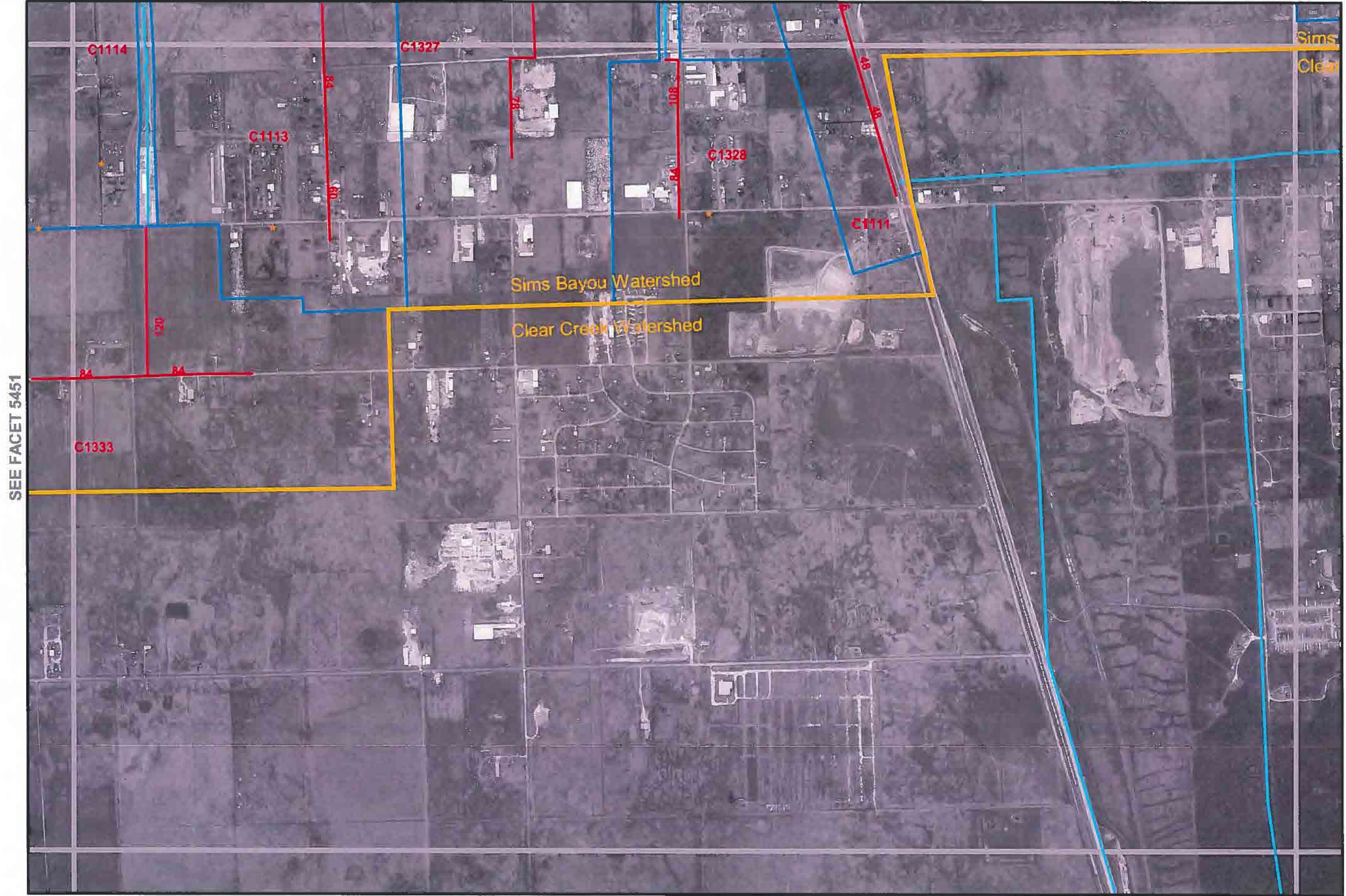
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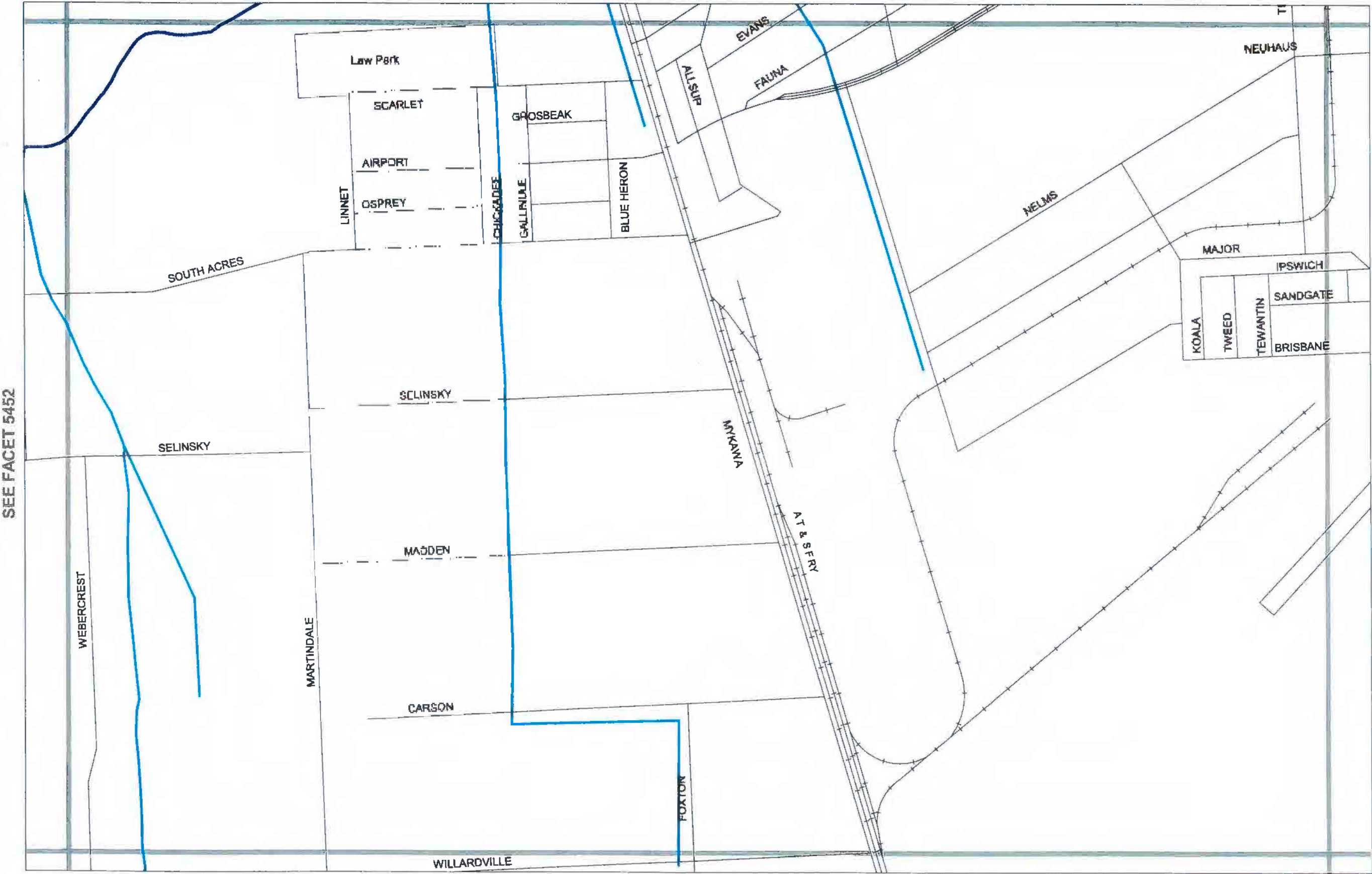


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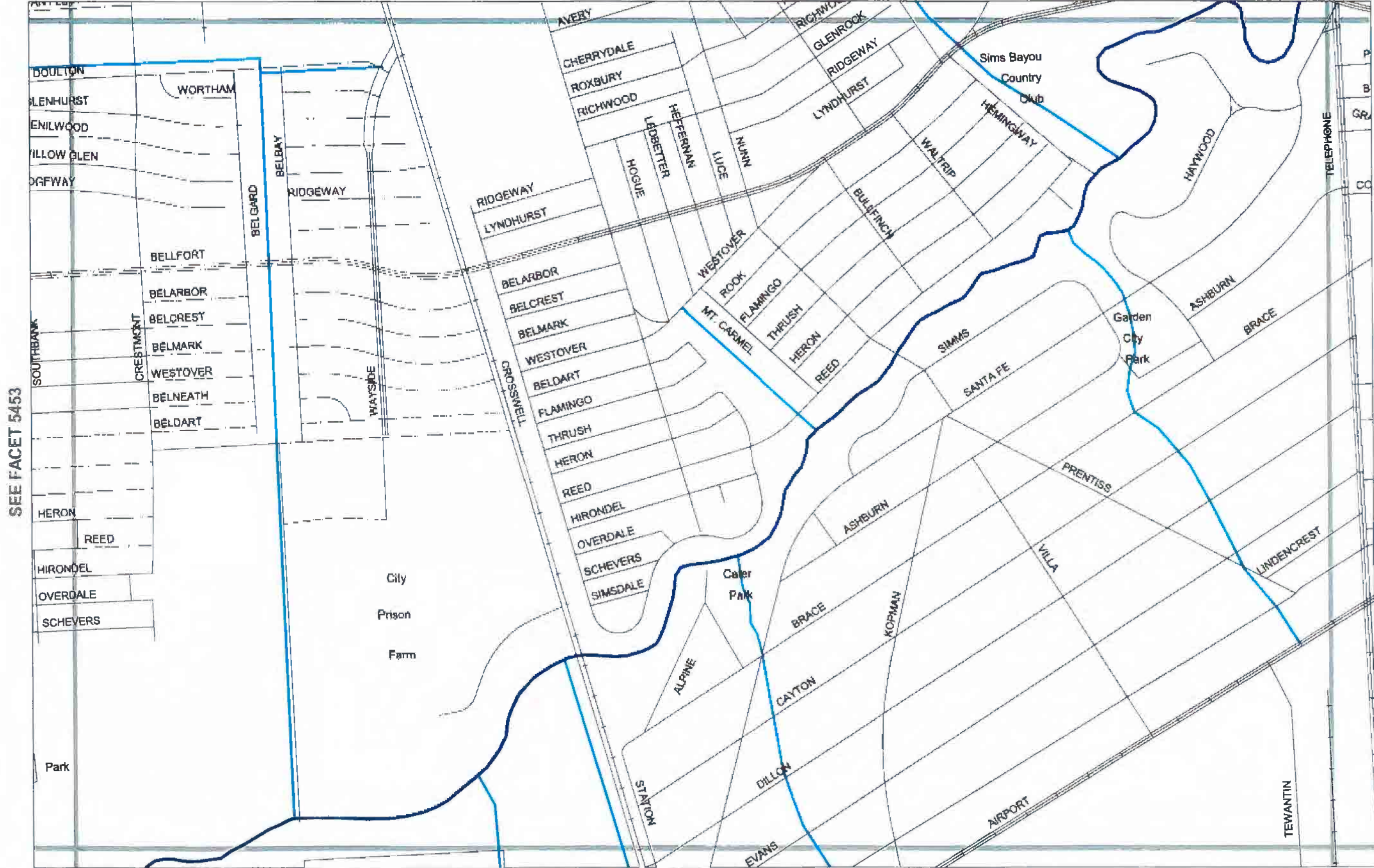
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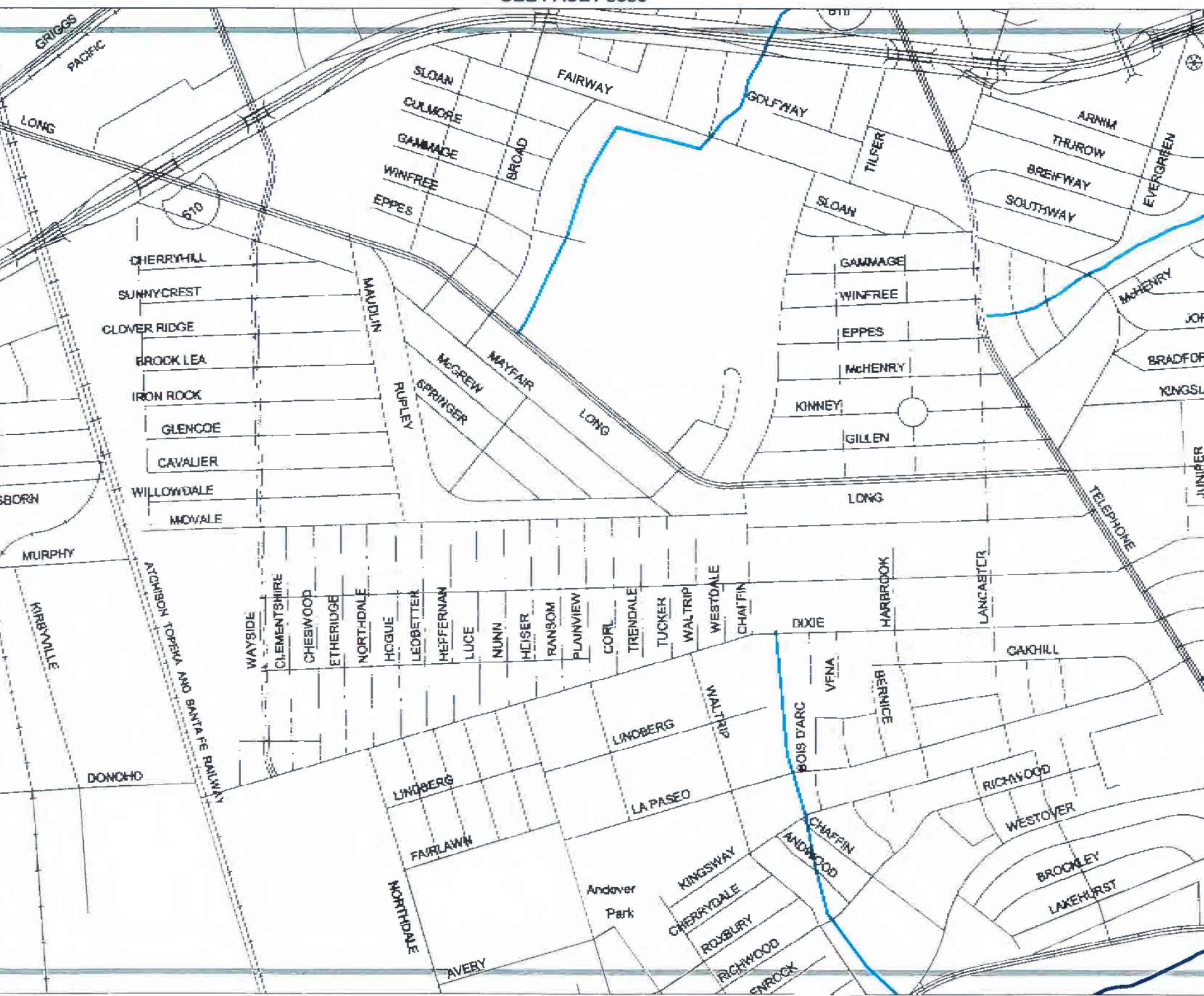


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Date: September 1999

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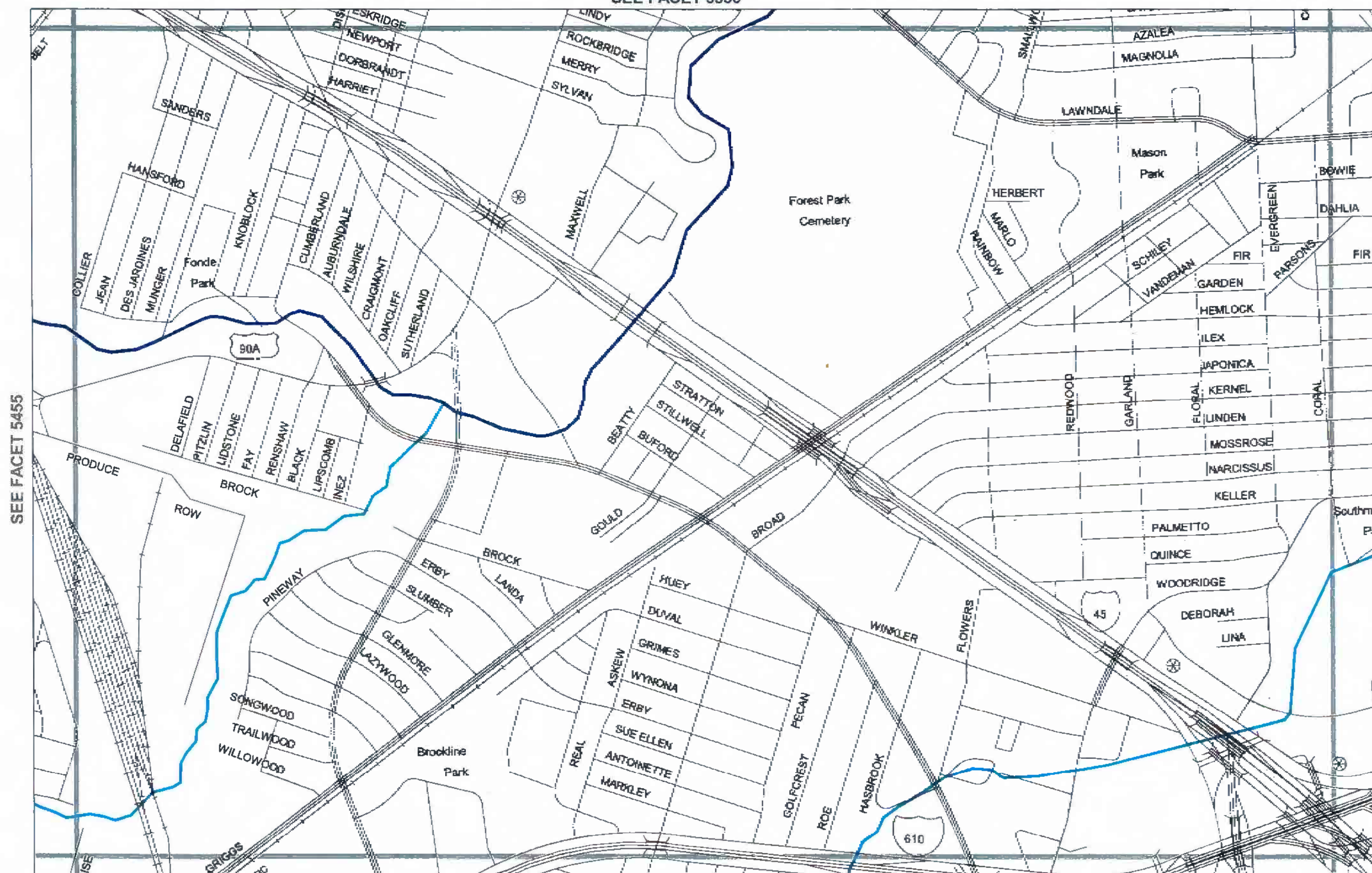
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Date: September 1999

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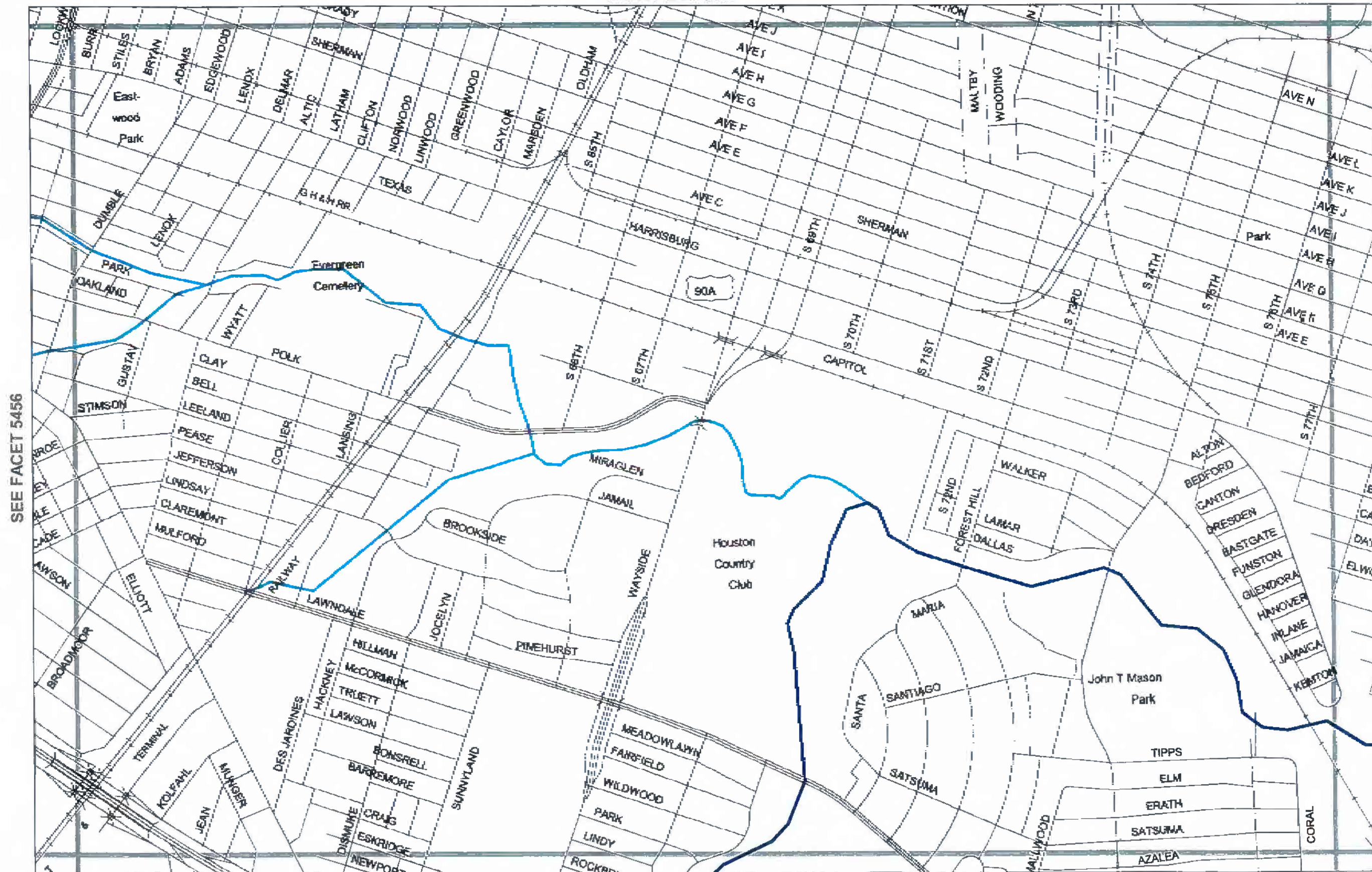
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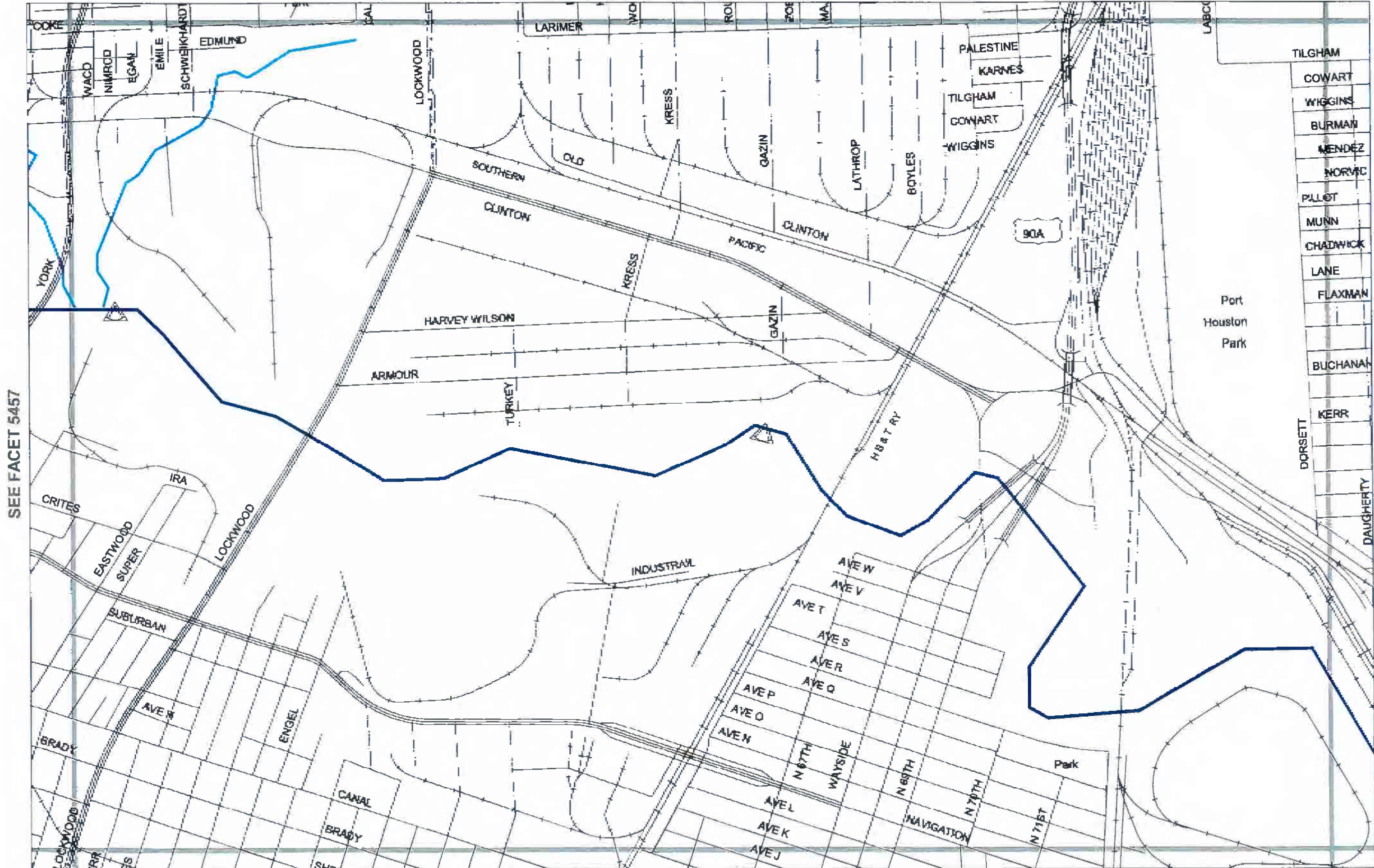


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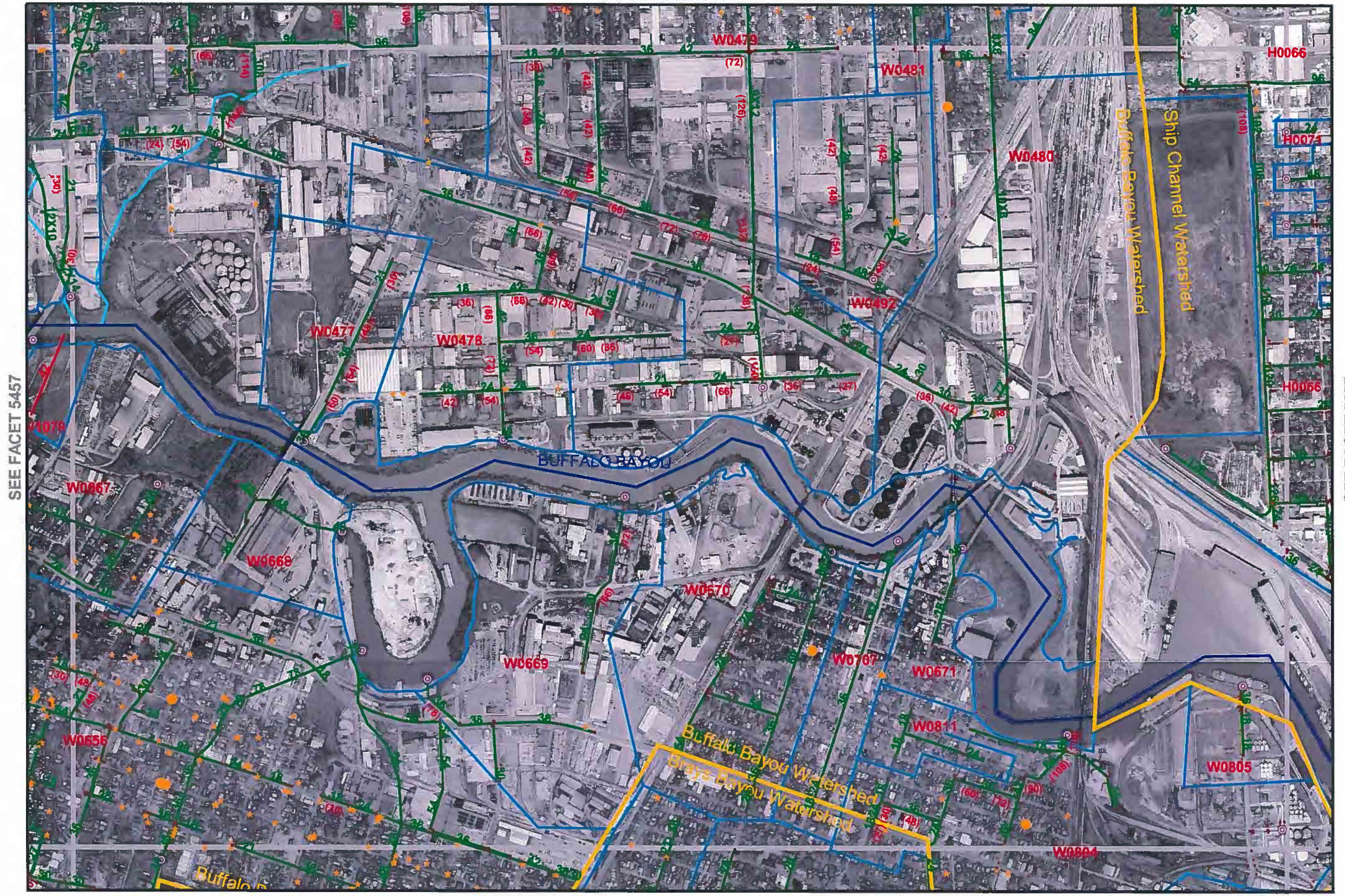


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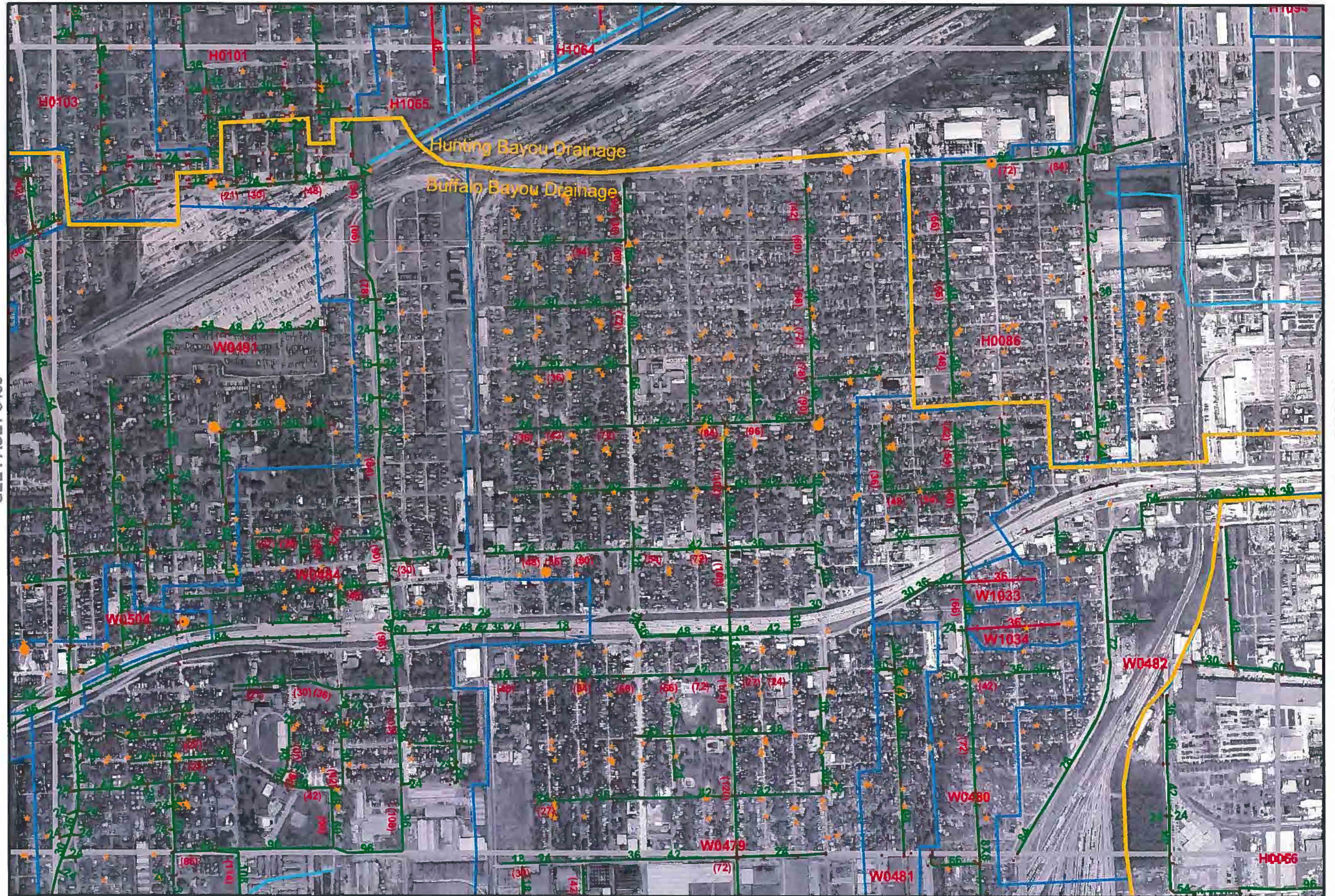
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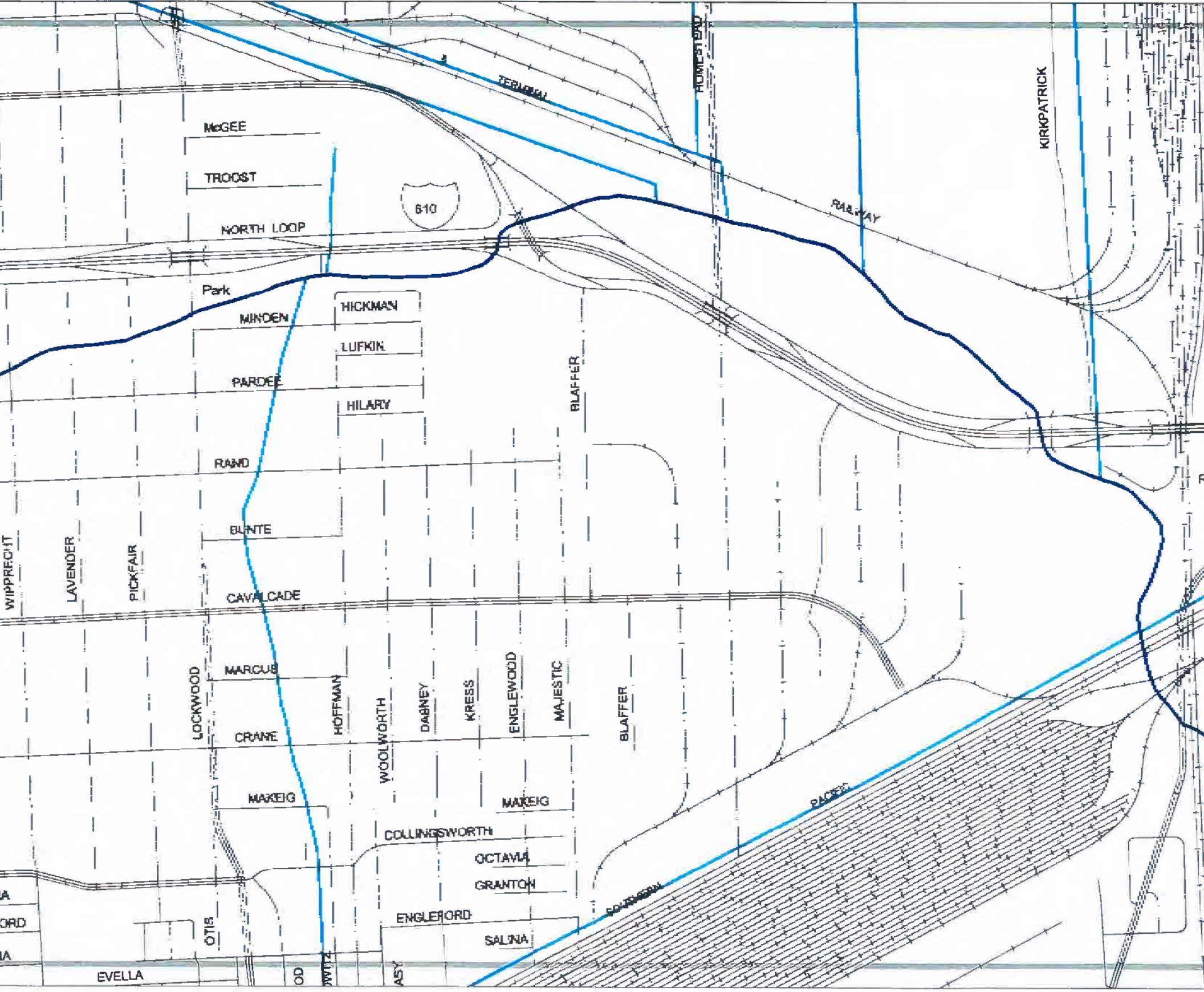
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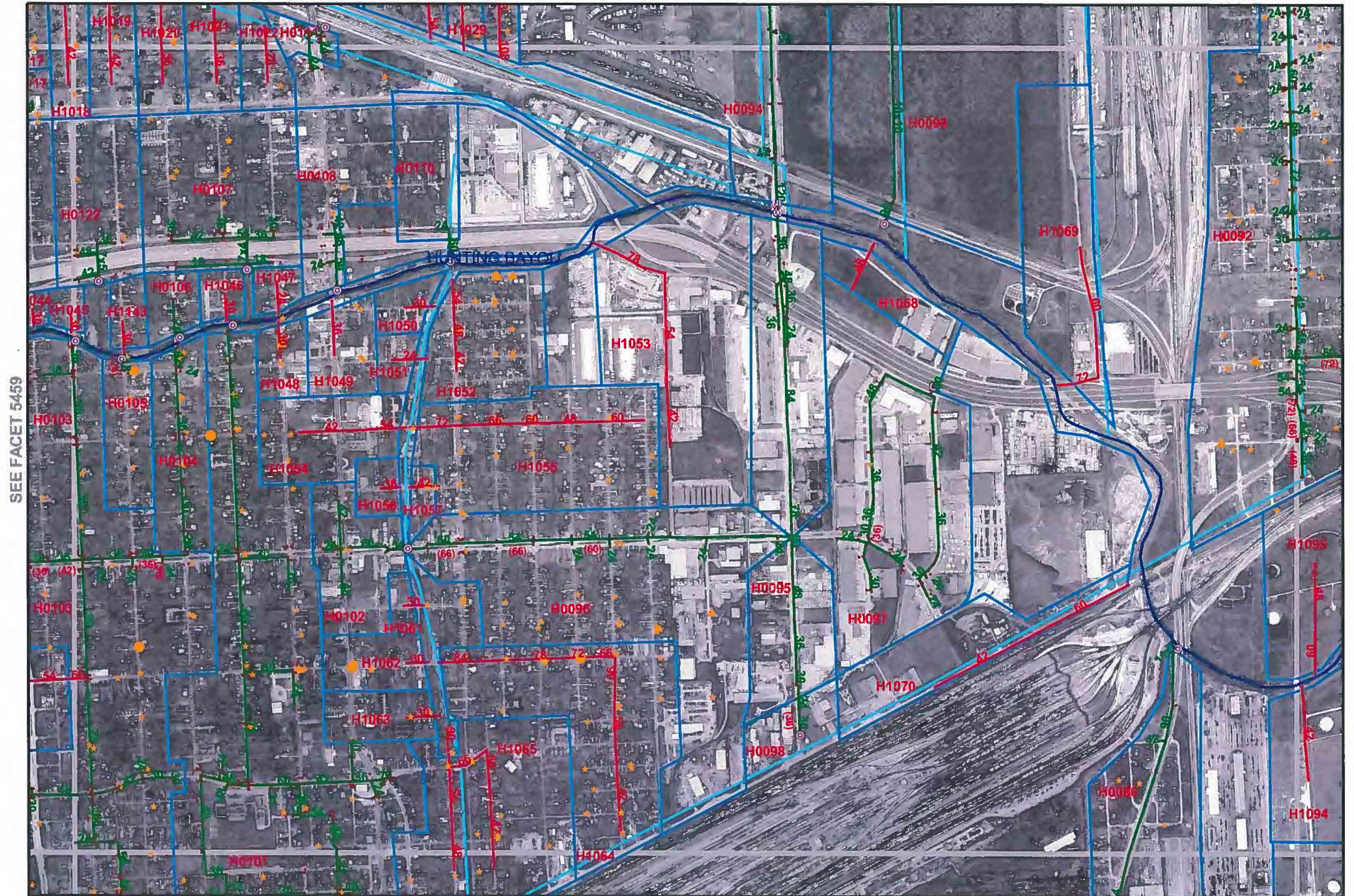
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Date: September 1999

SEE FACET 5561

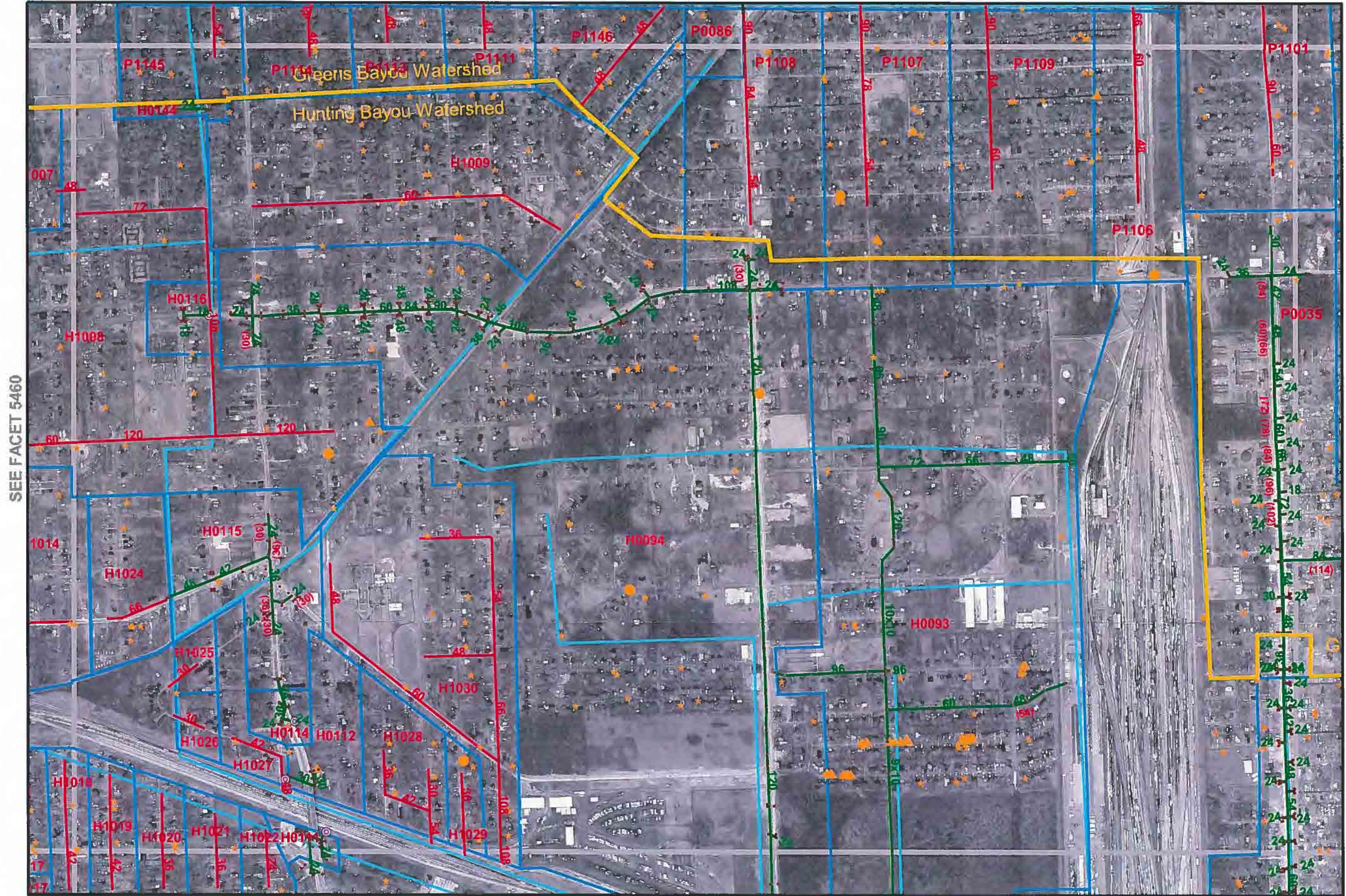
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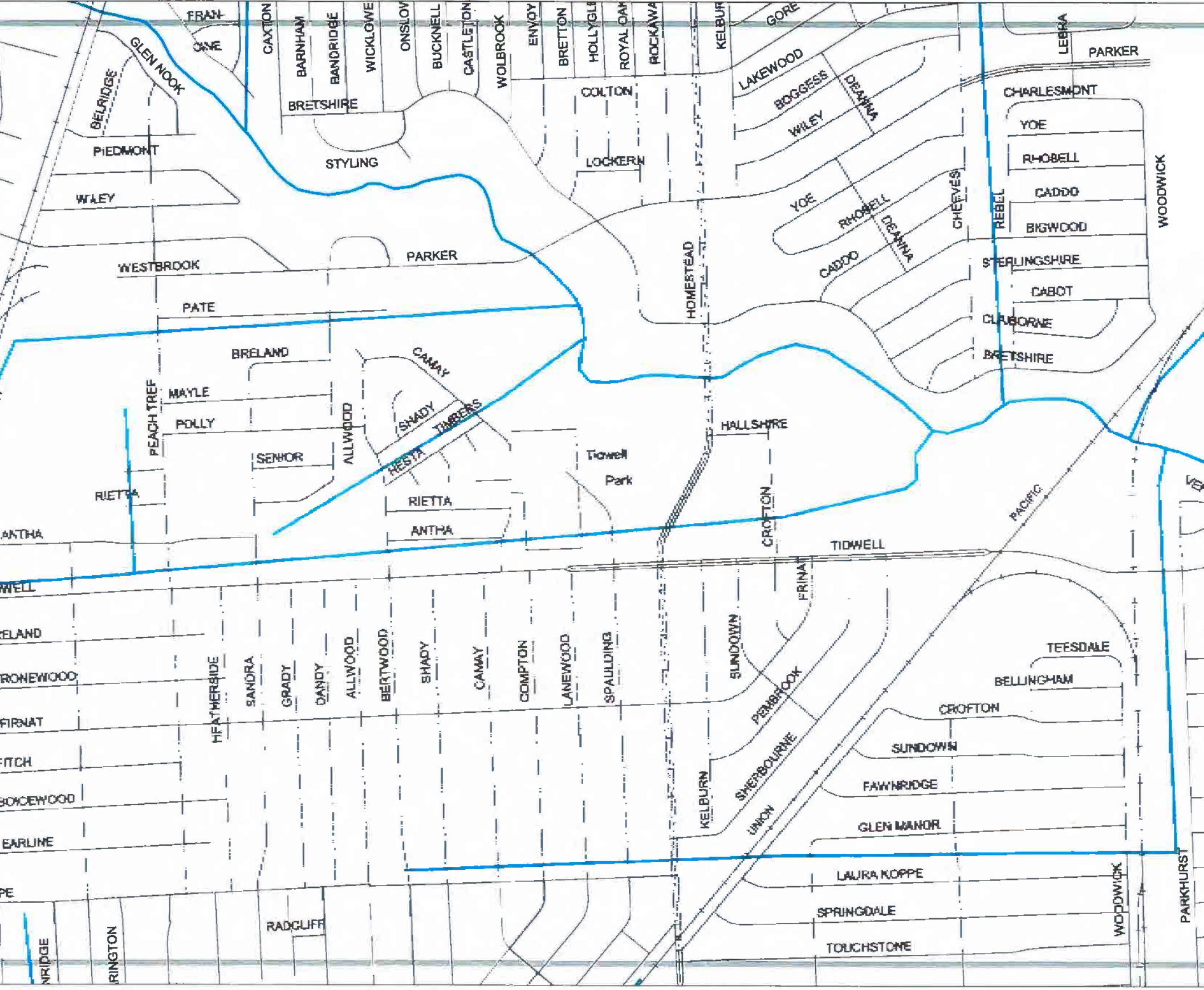
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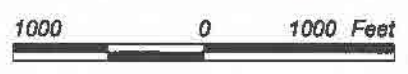
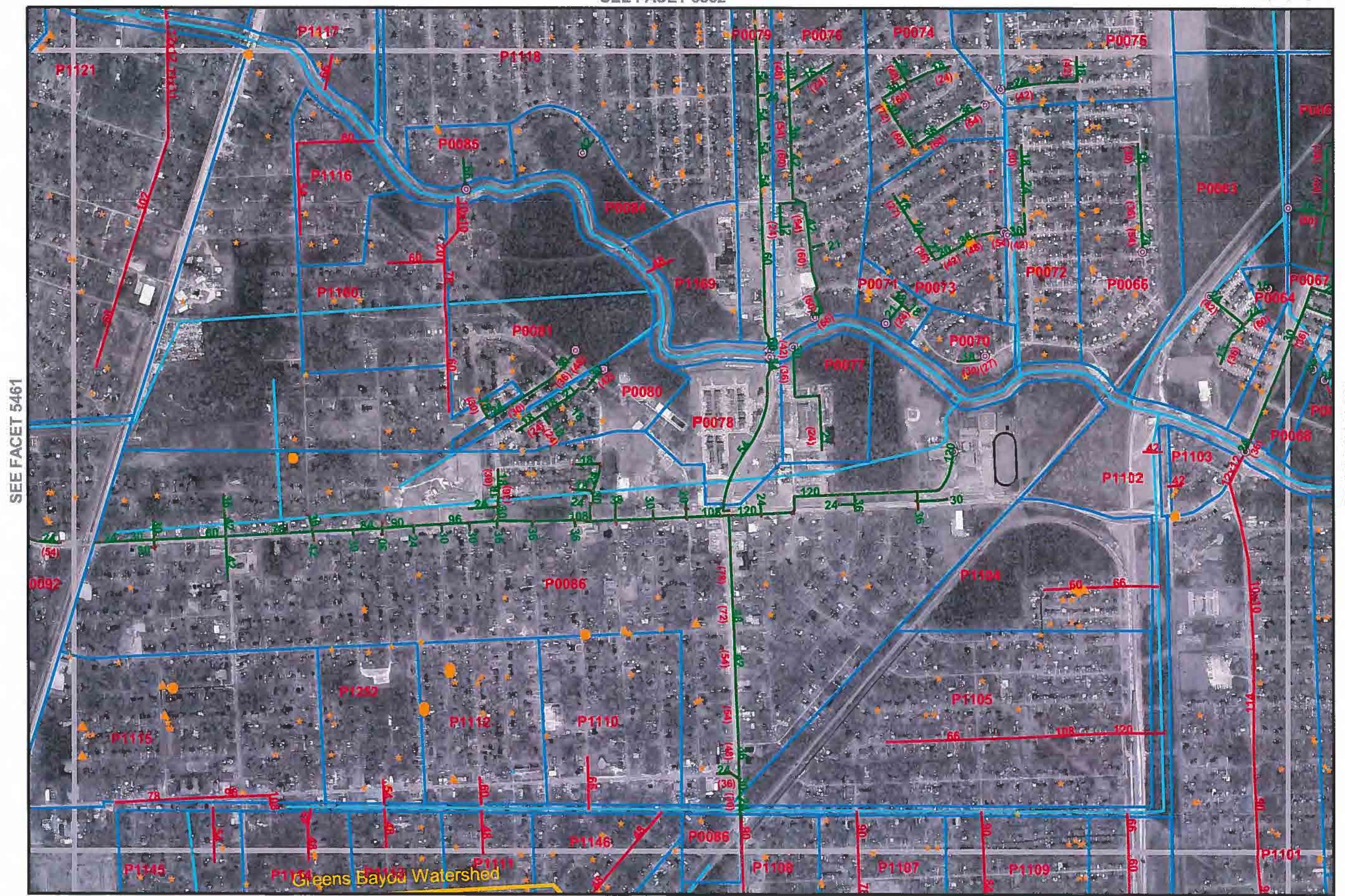
Date: September 1999

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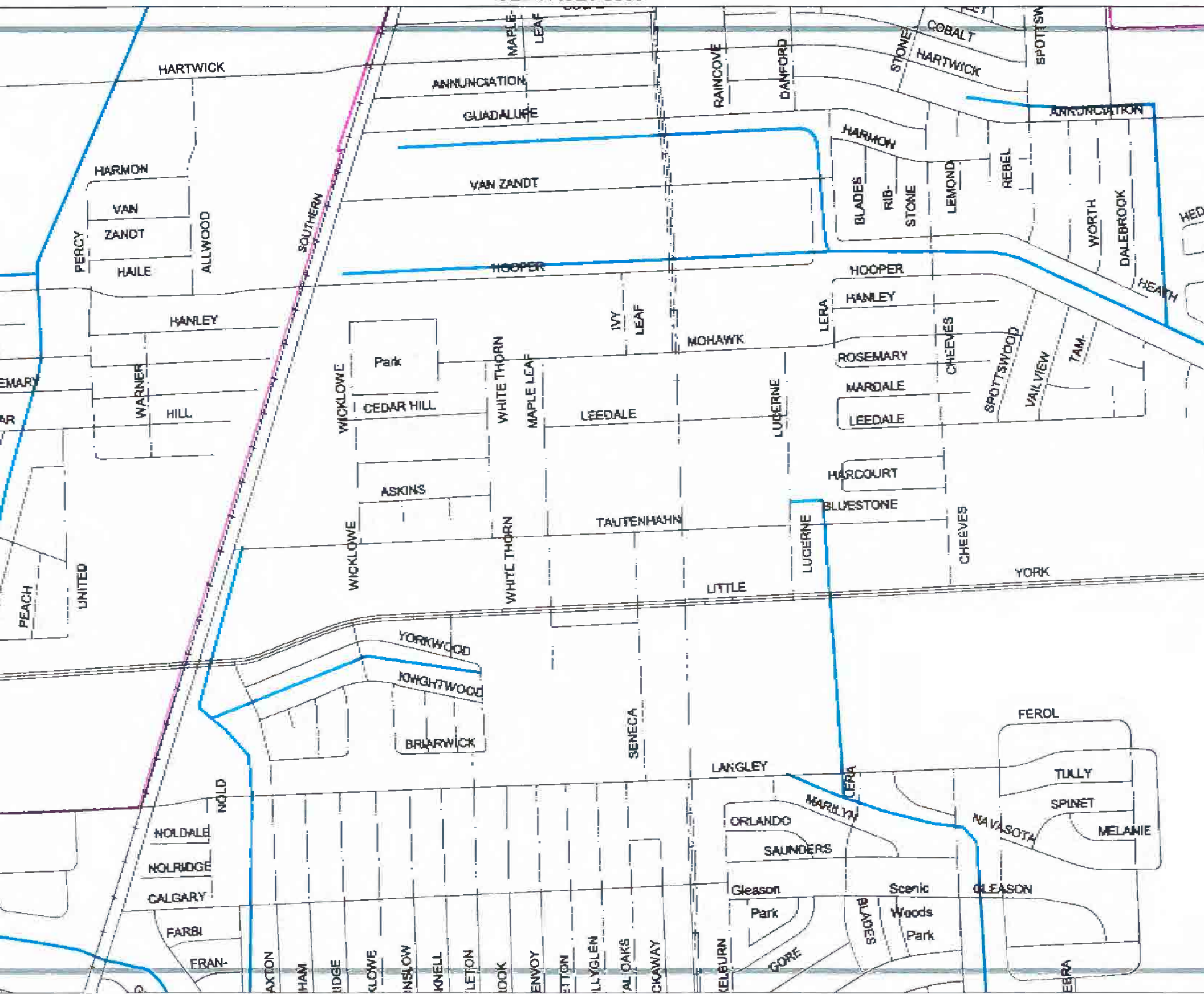
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Date: September 1999

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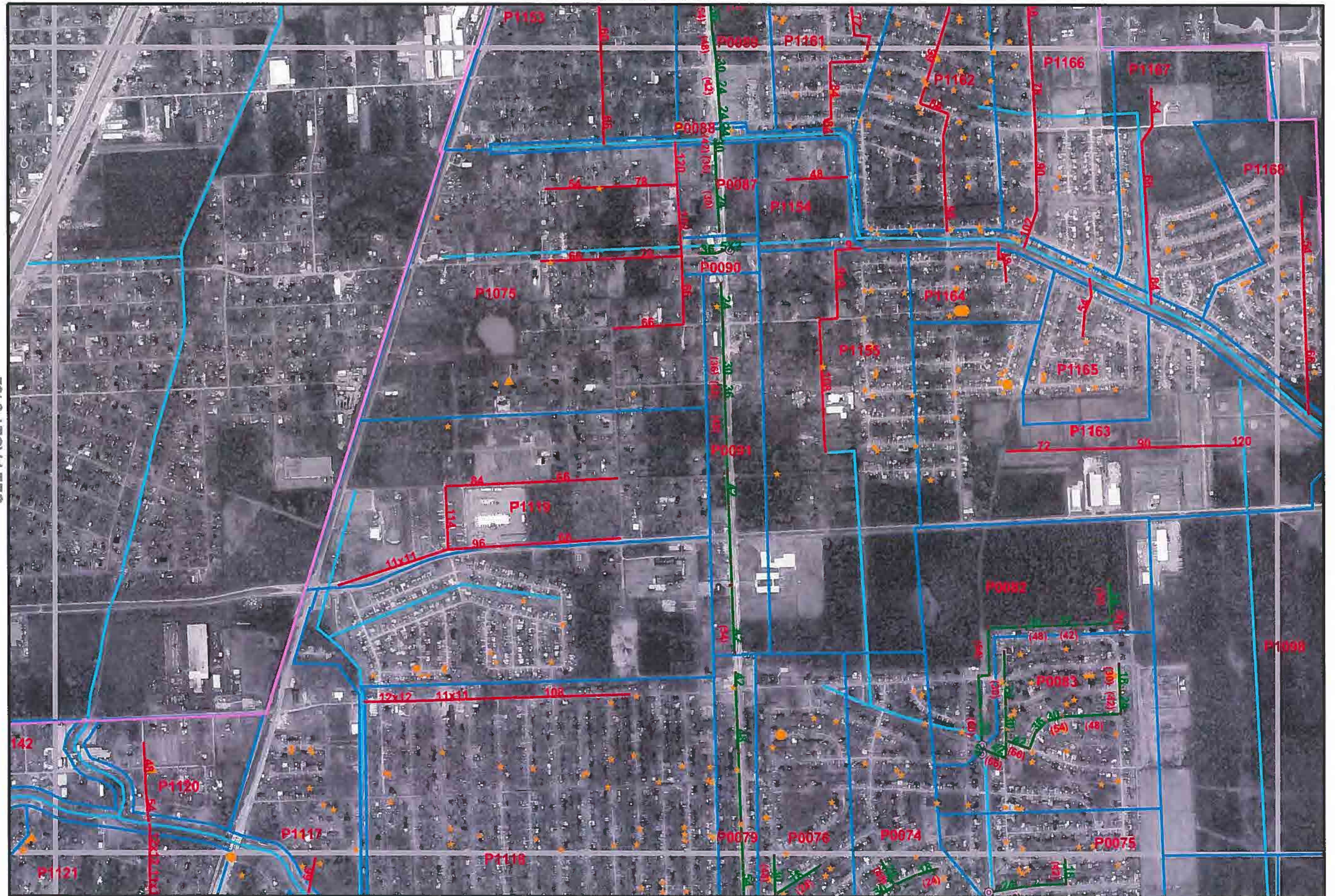


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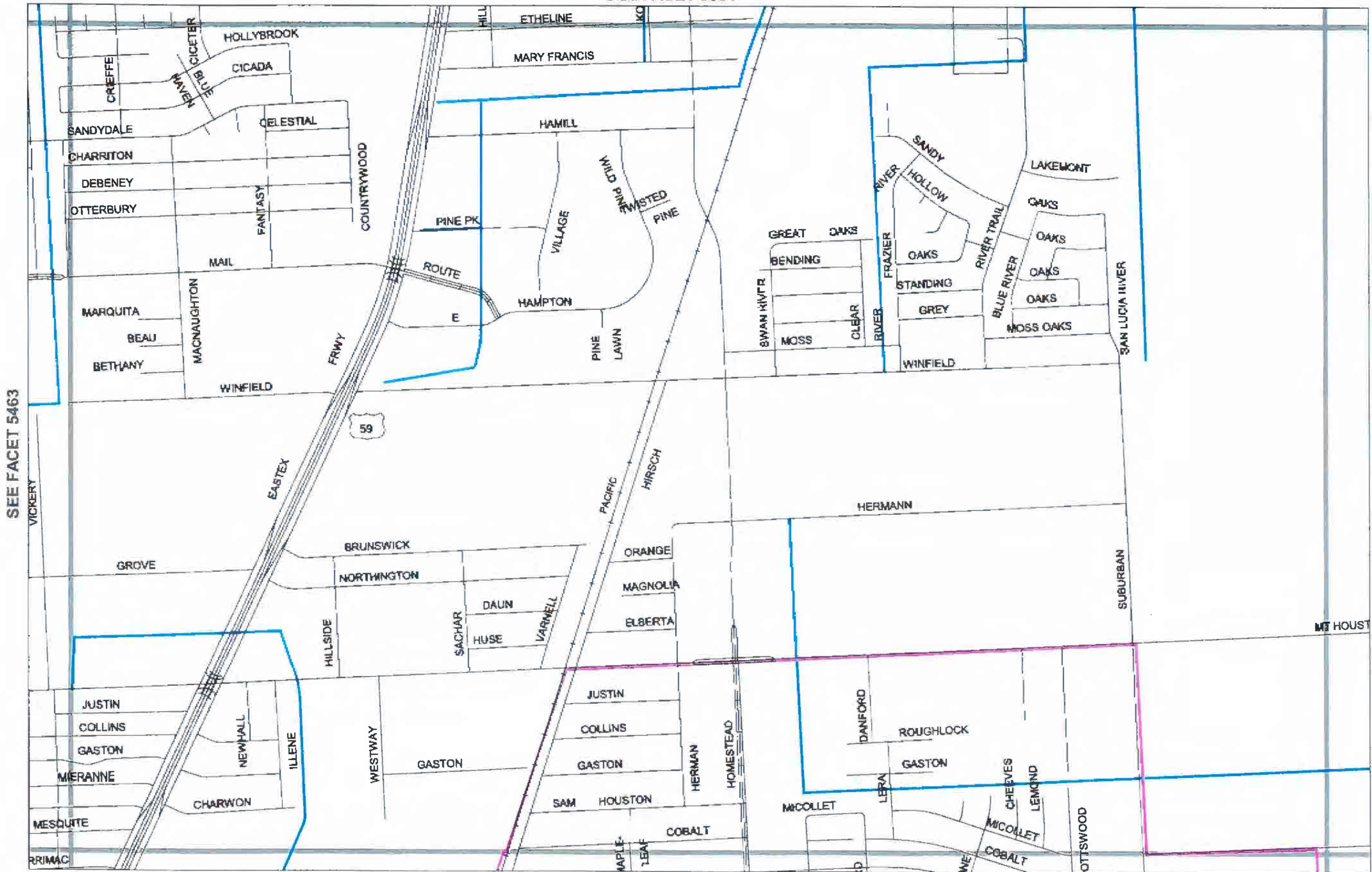
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Date: September 1999

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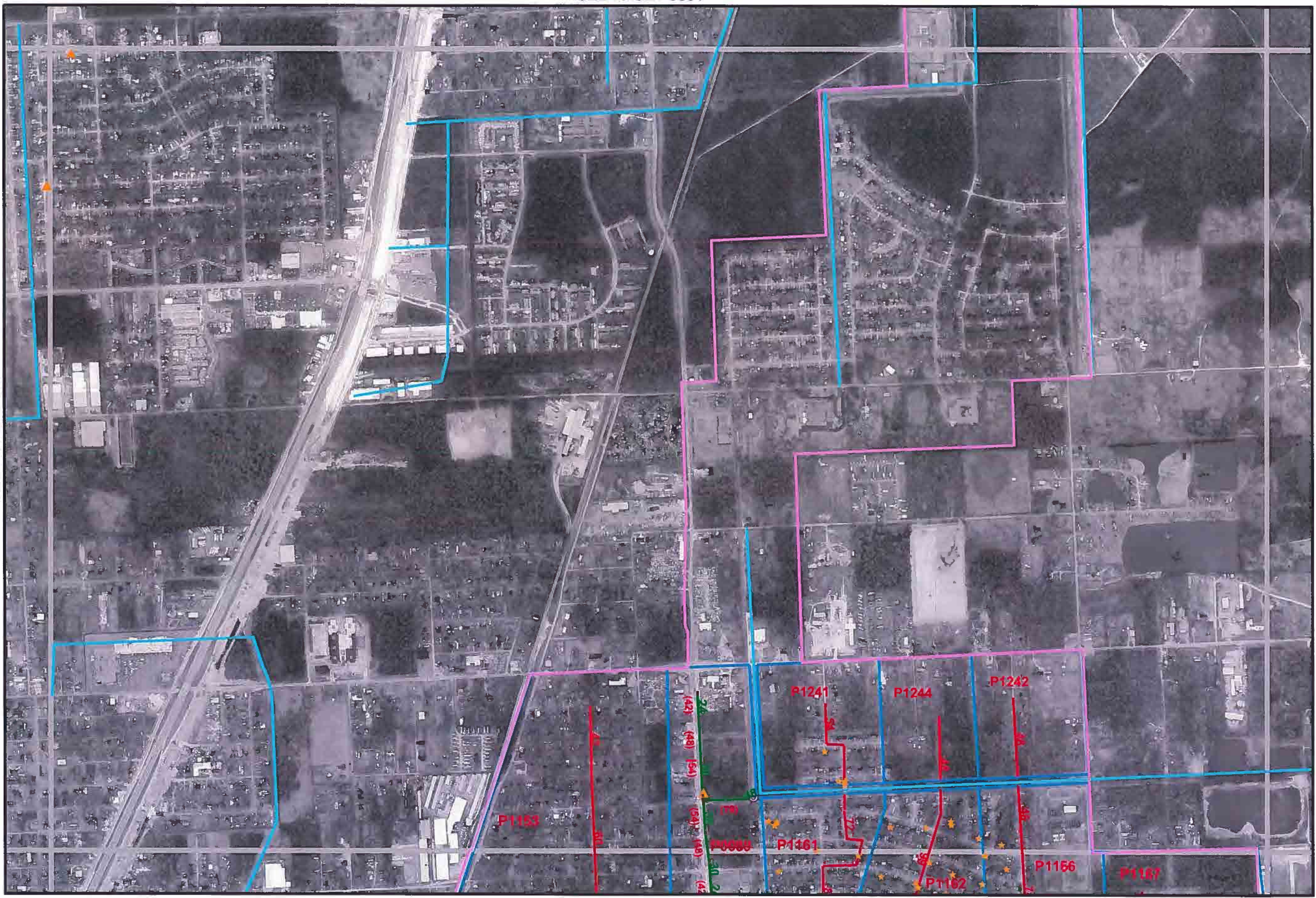
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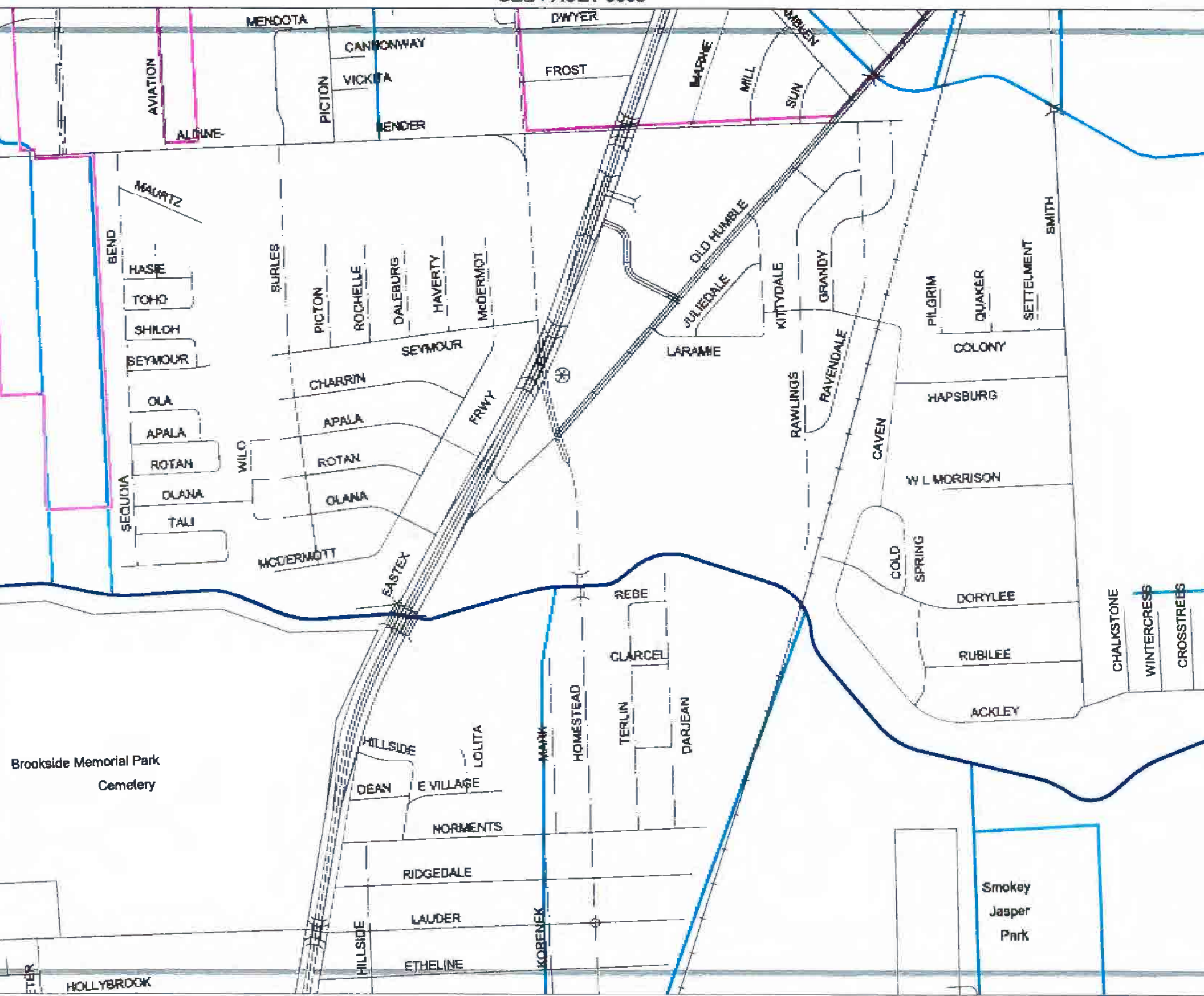
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Date: September 1999

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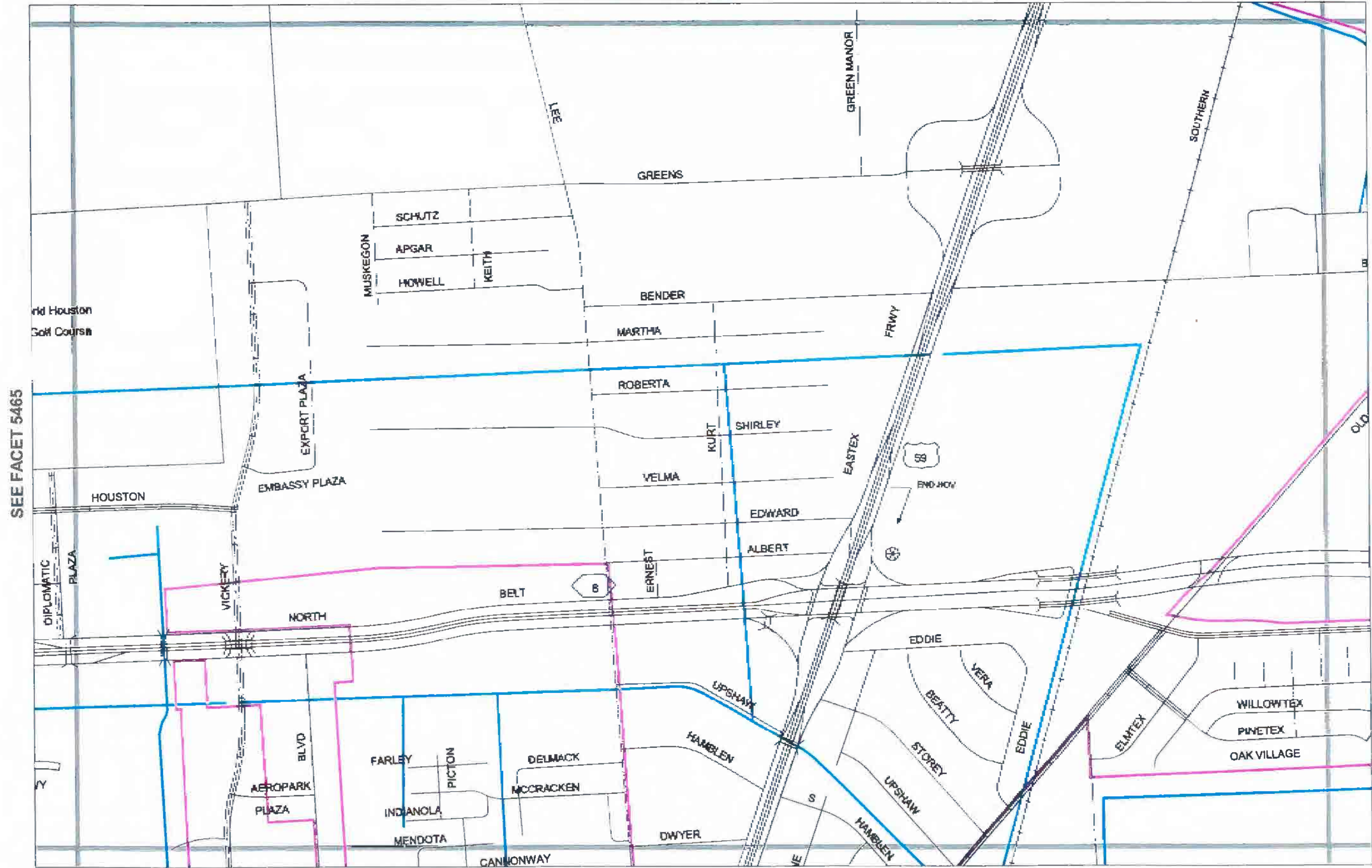


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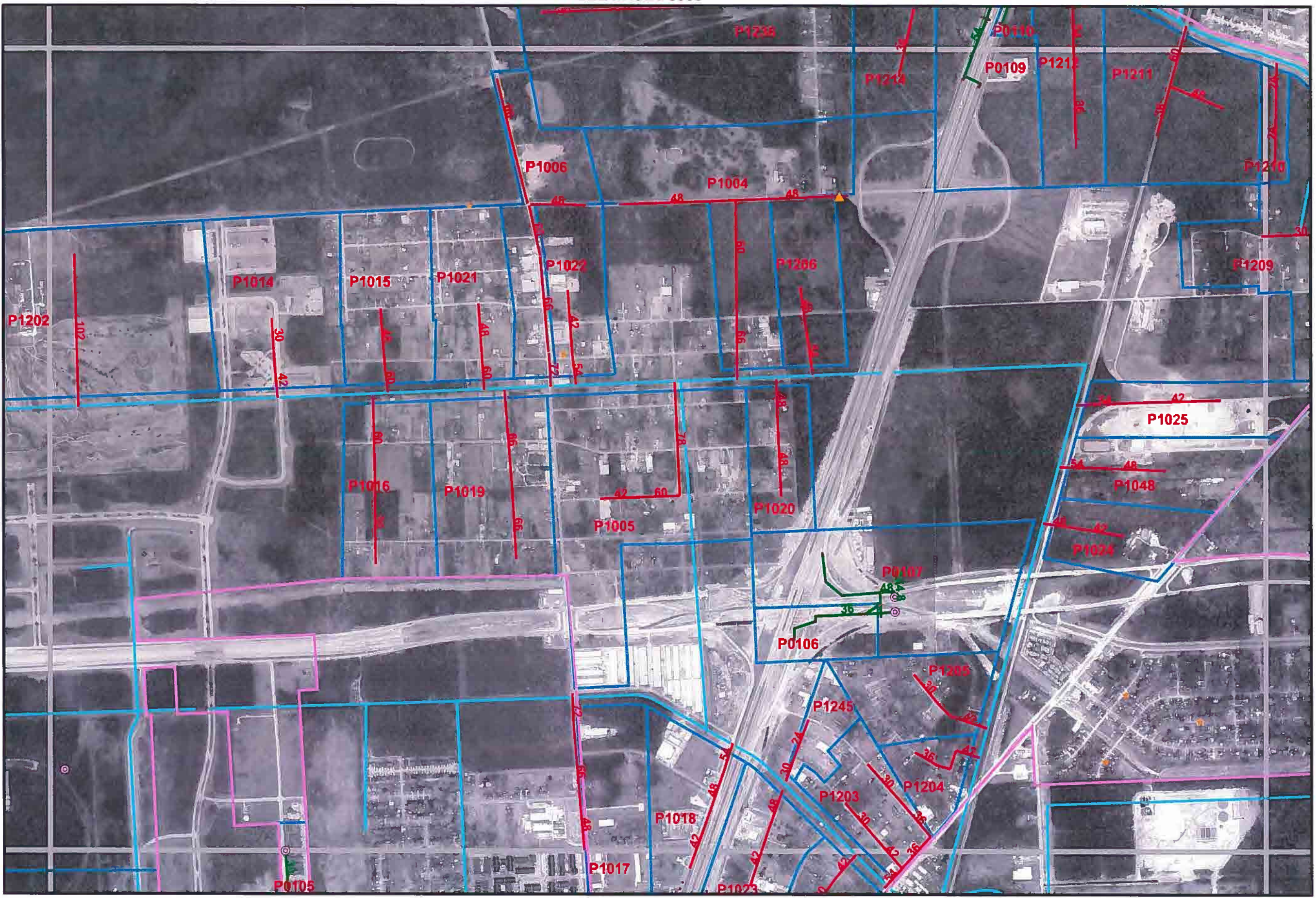
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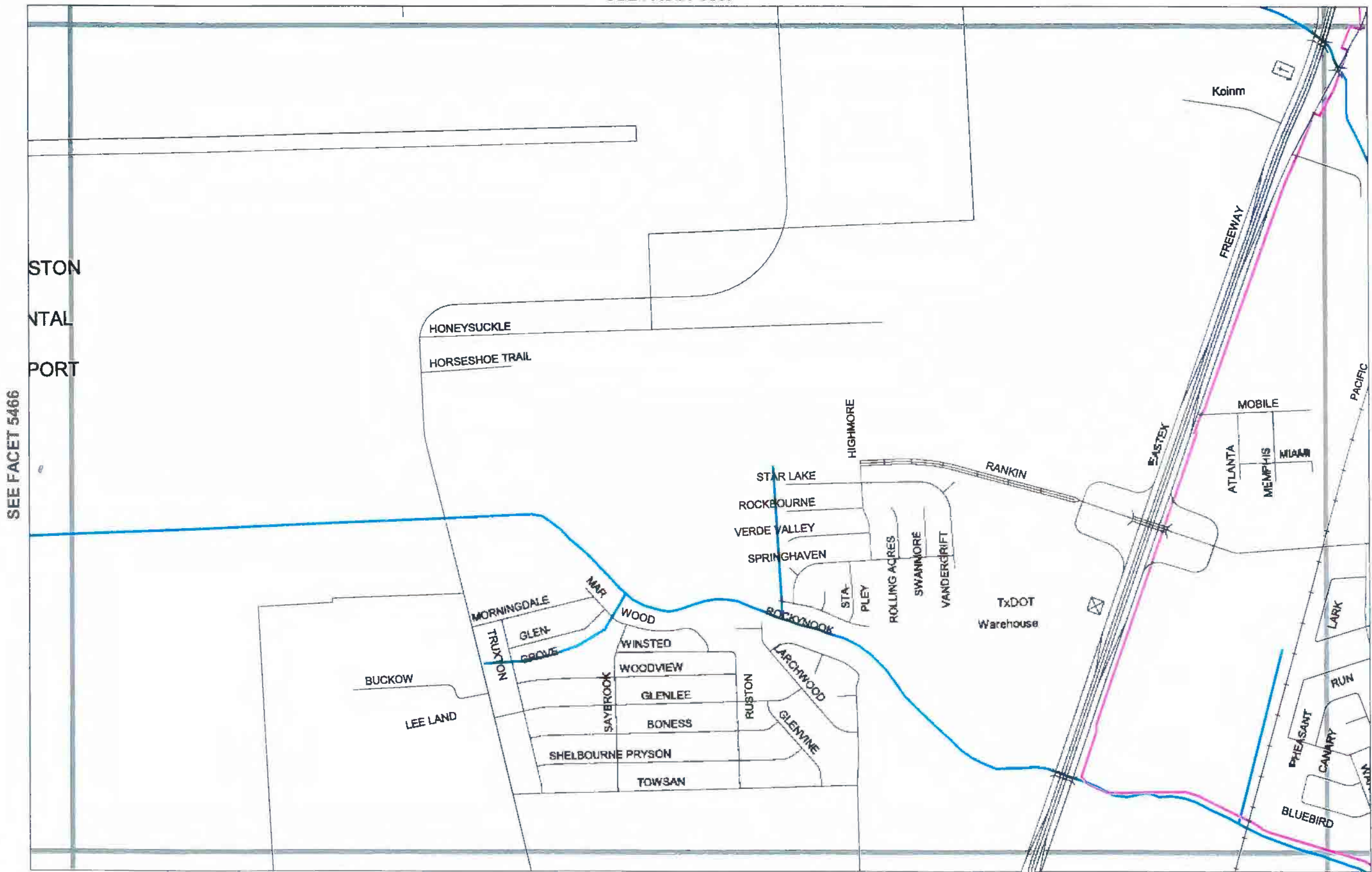
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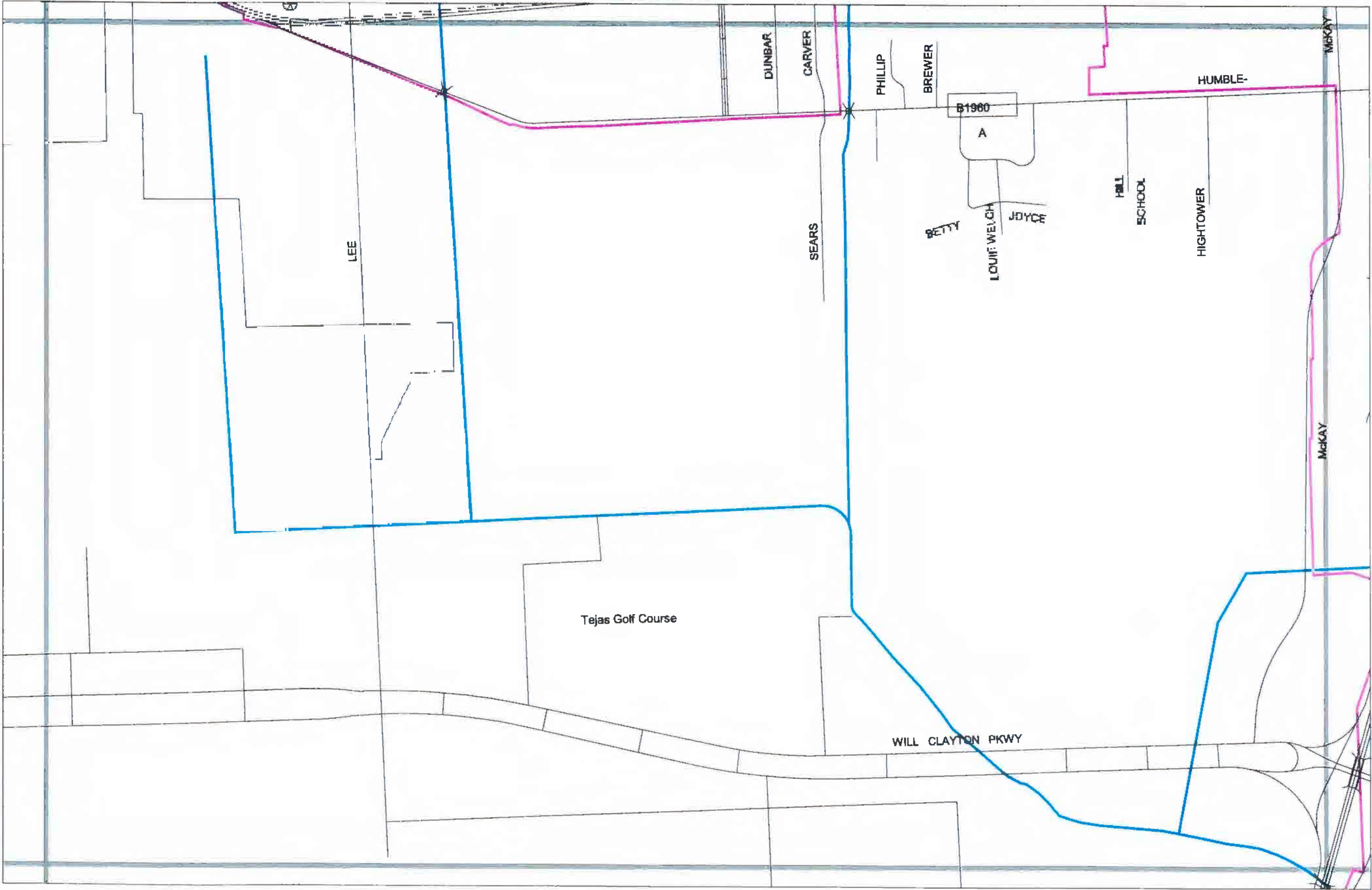
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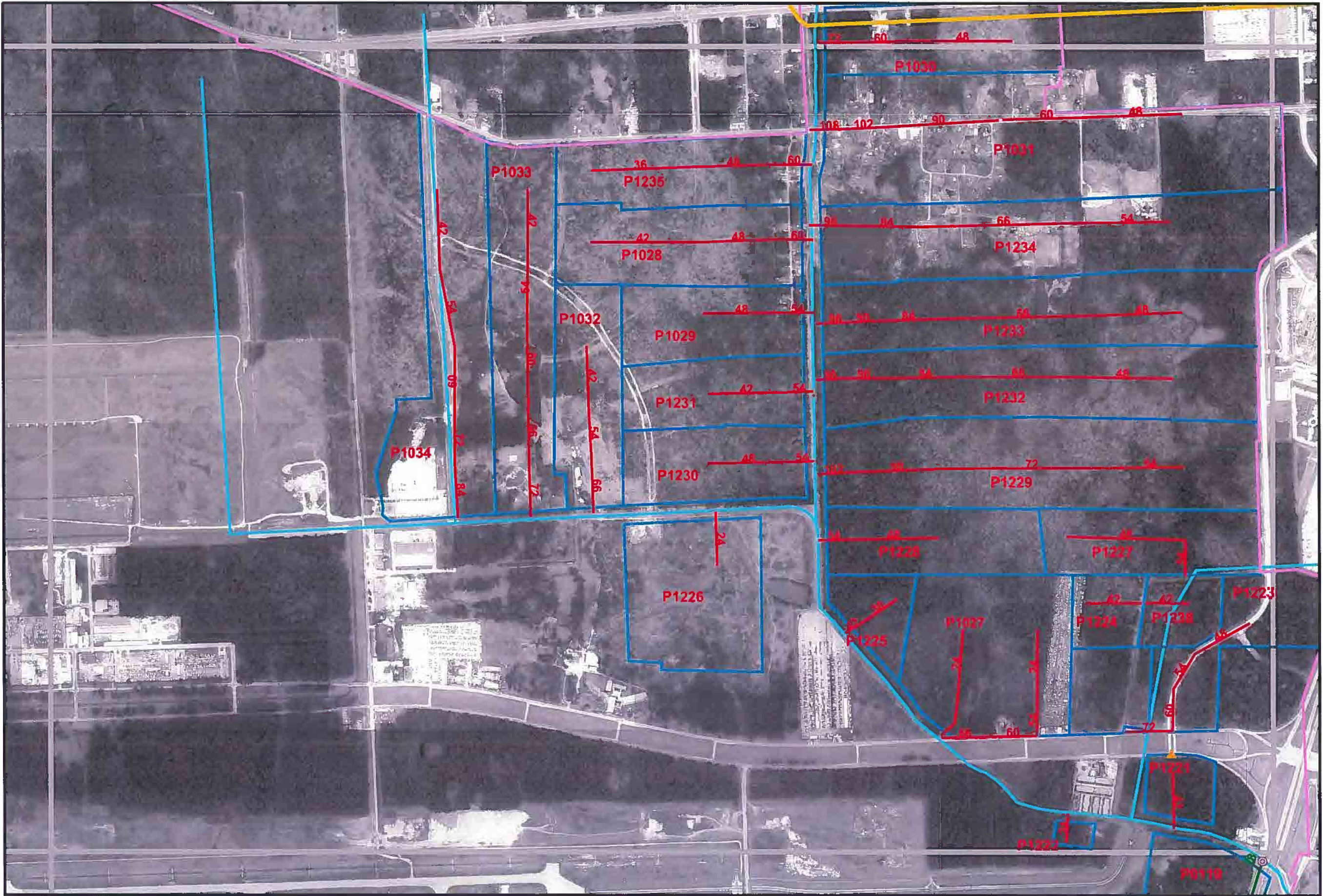
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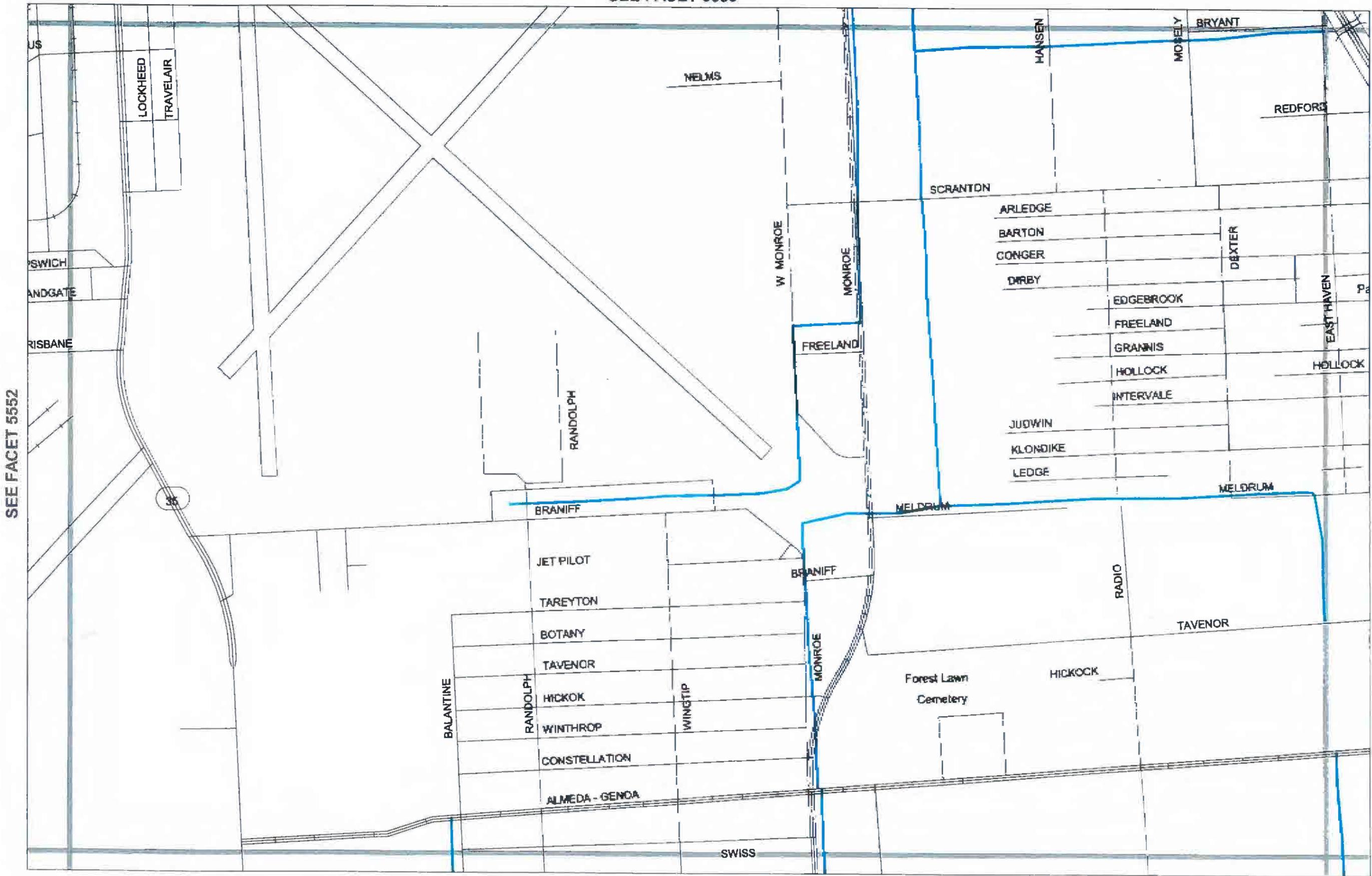
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Date: September 1999

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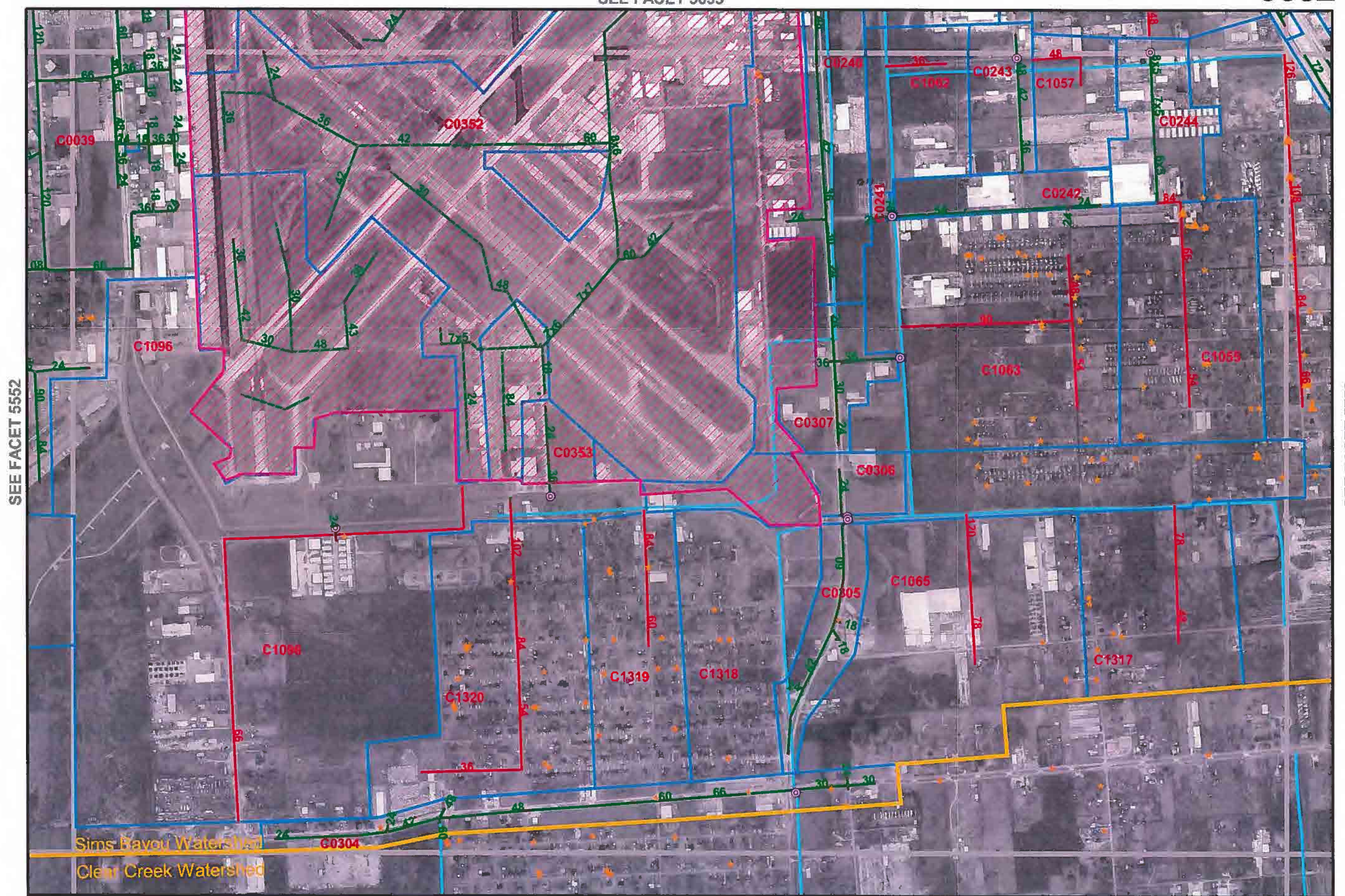


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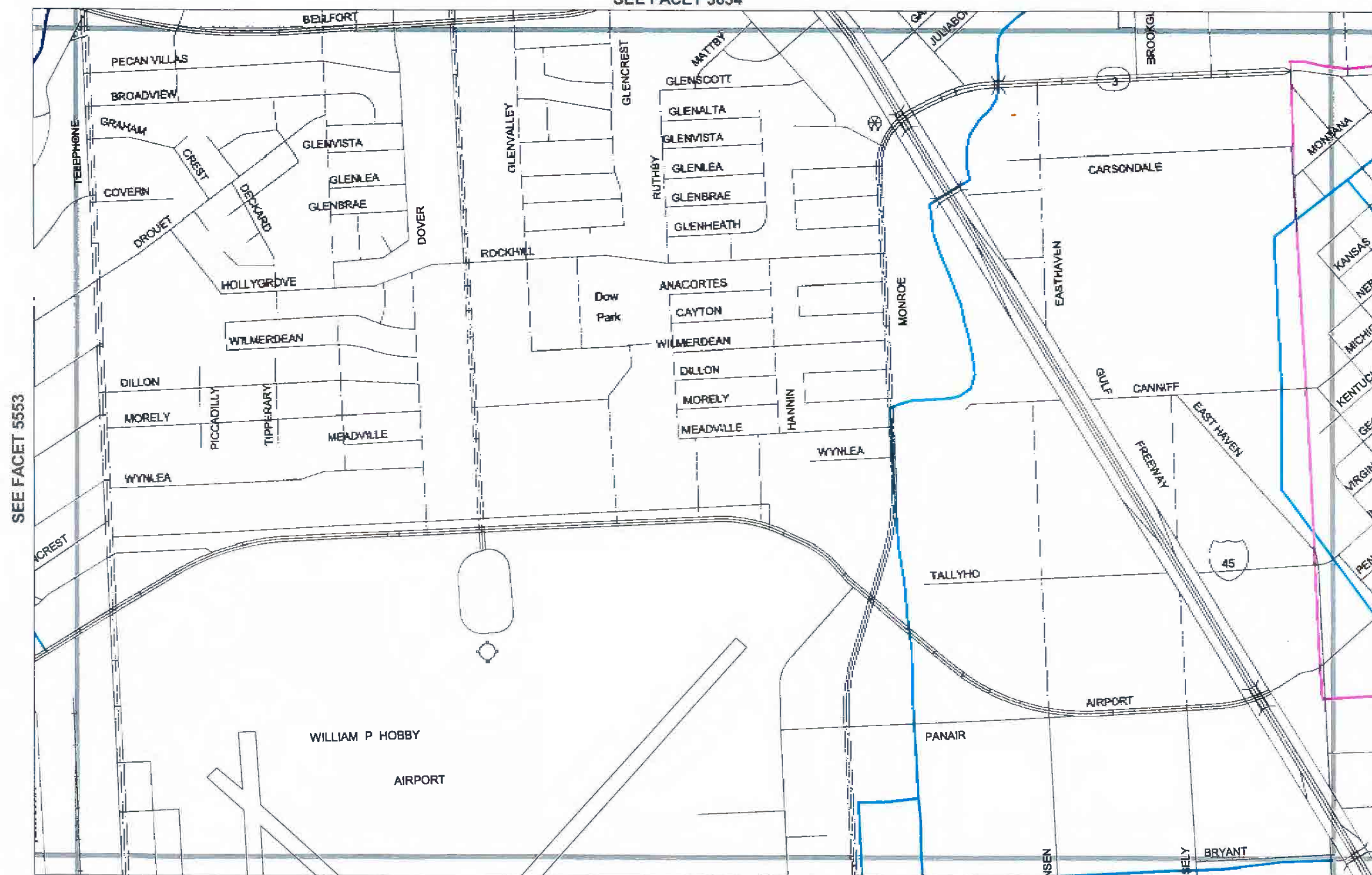


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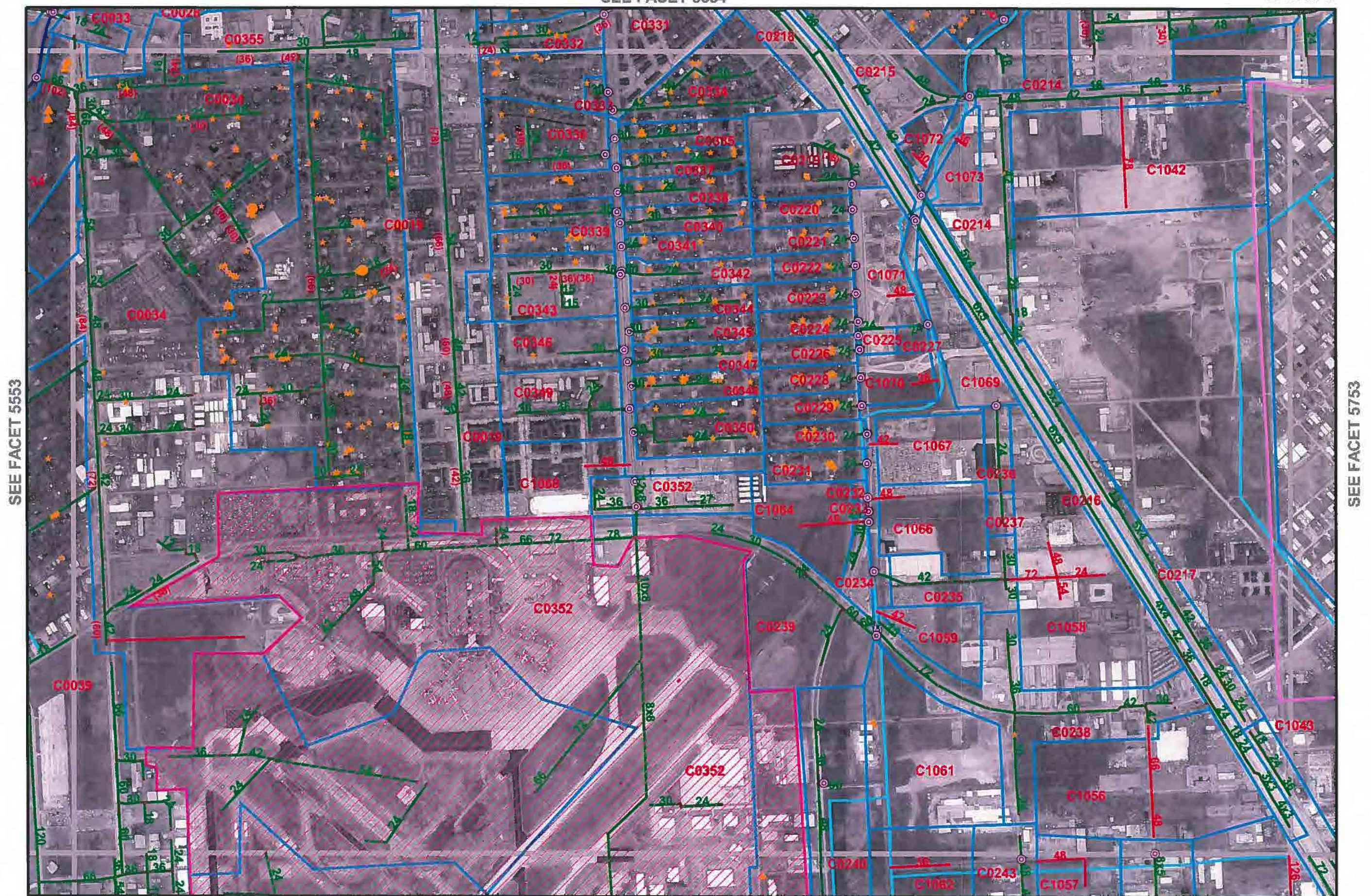
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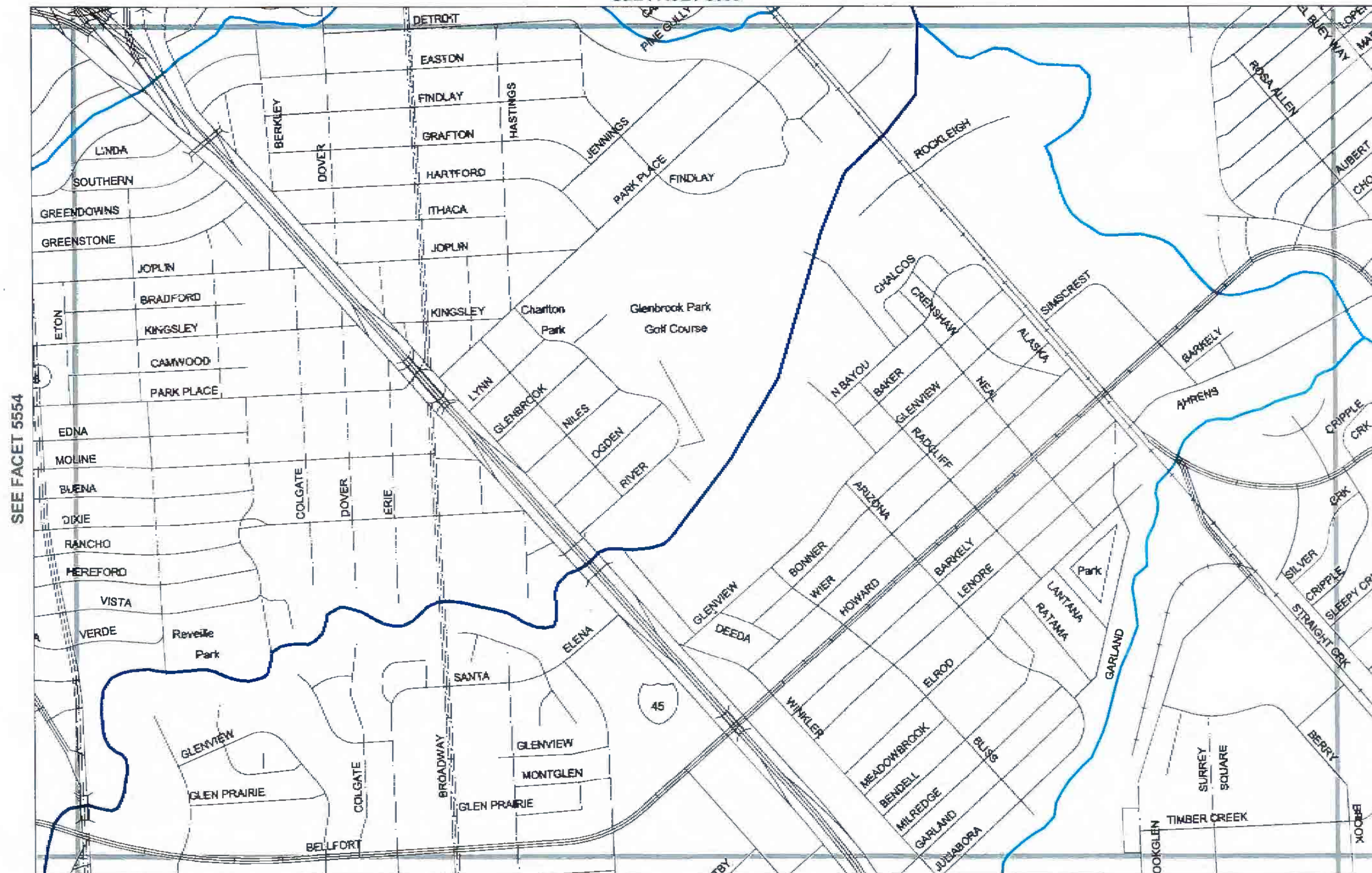
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Date: September 1999

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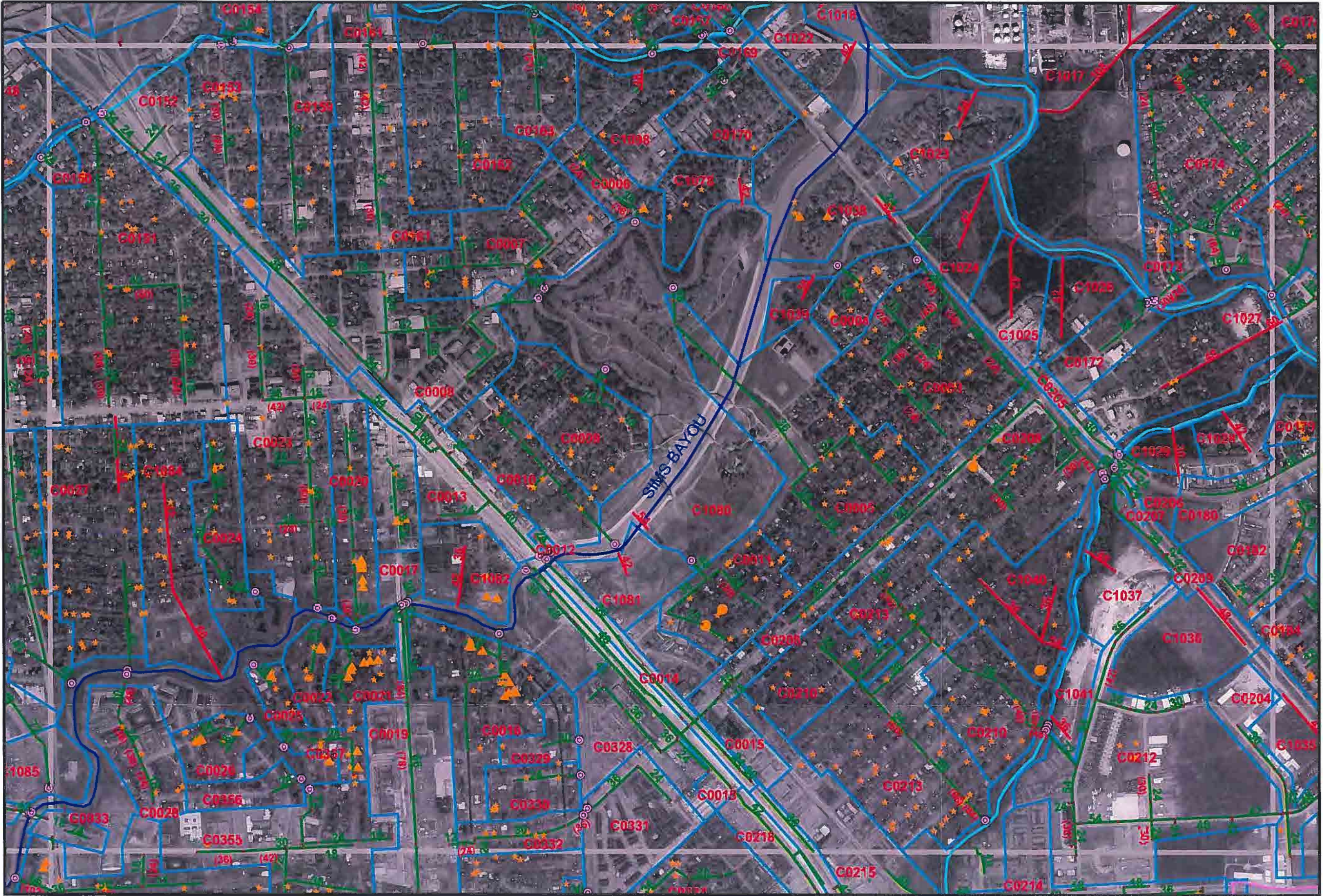
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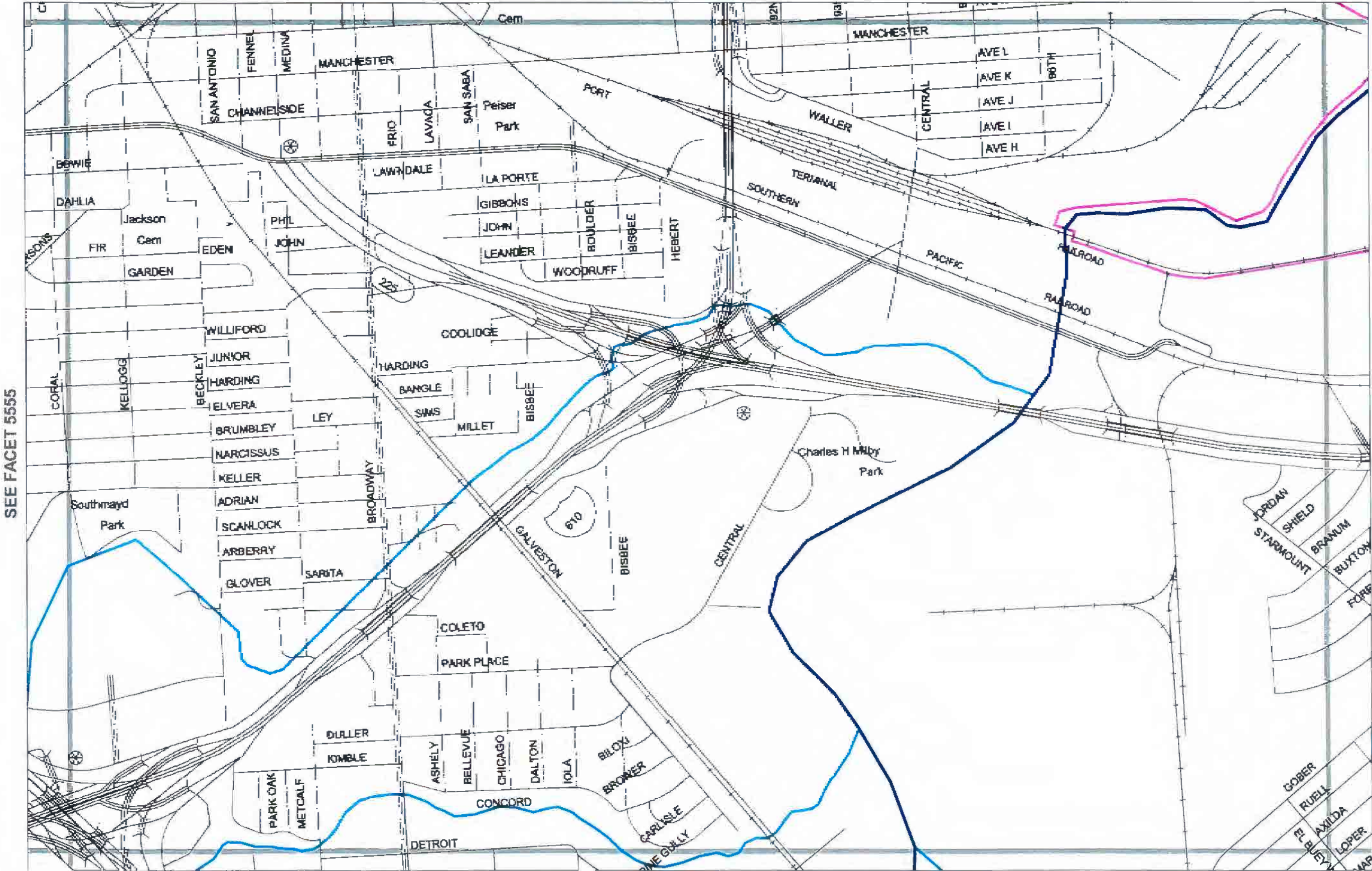
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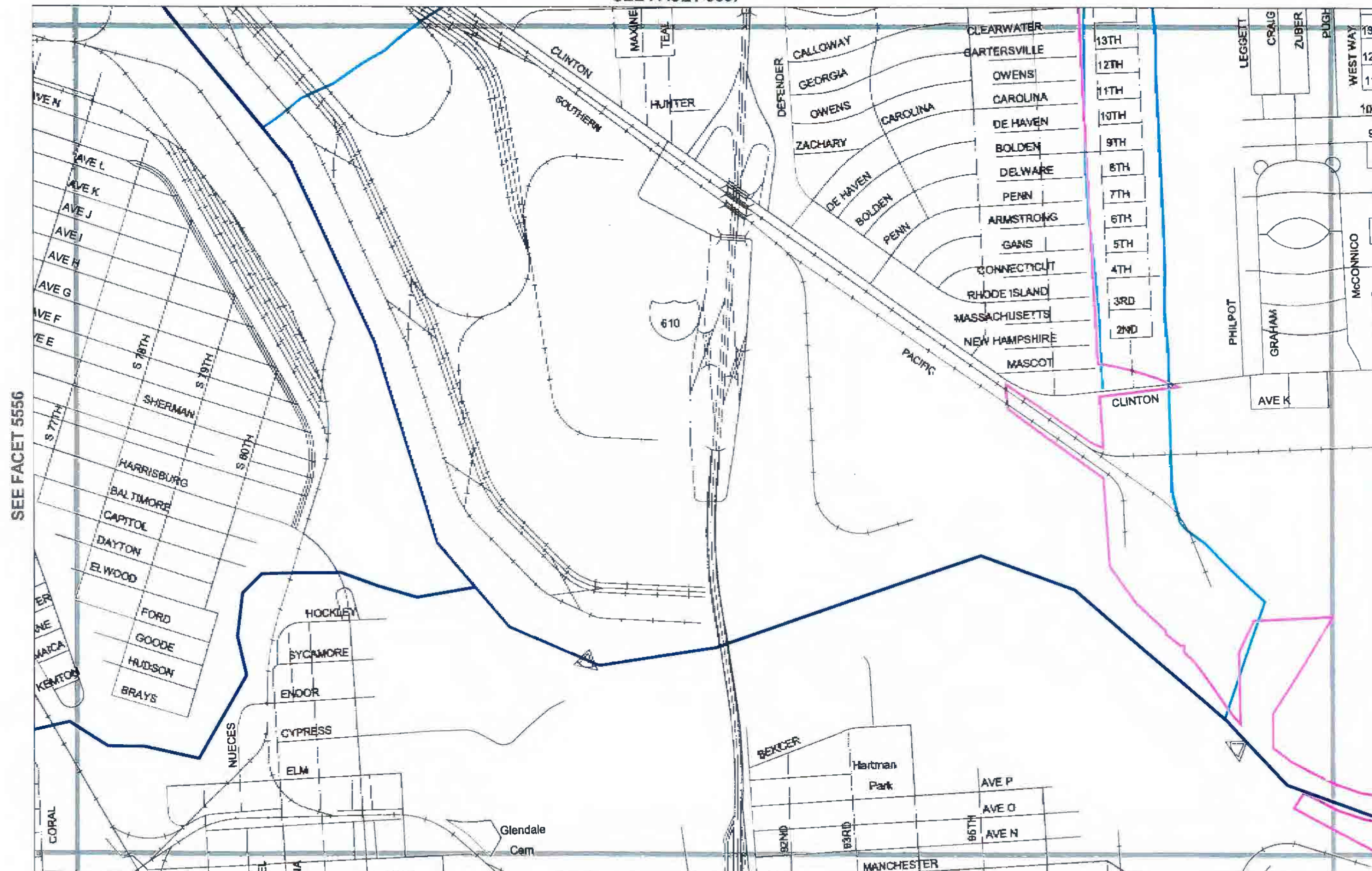
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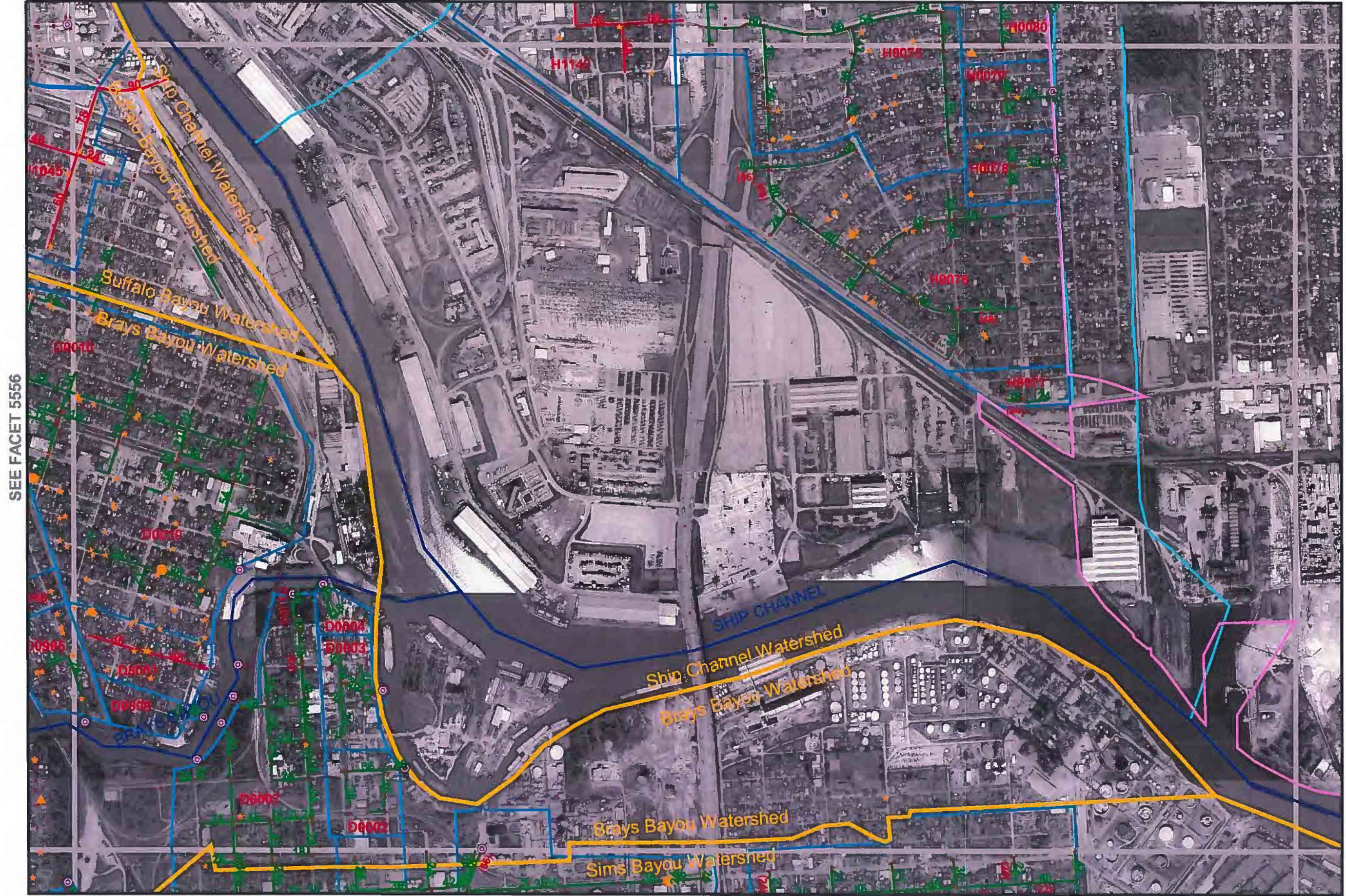


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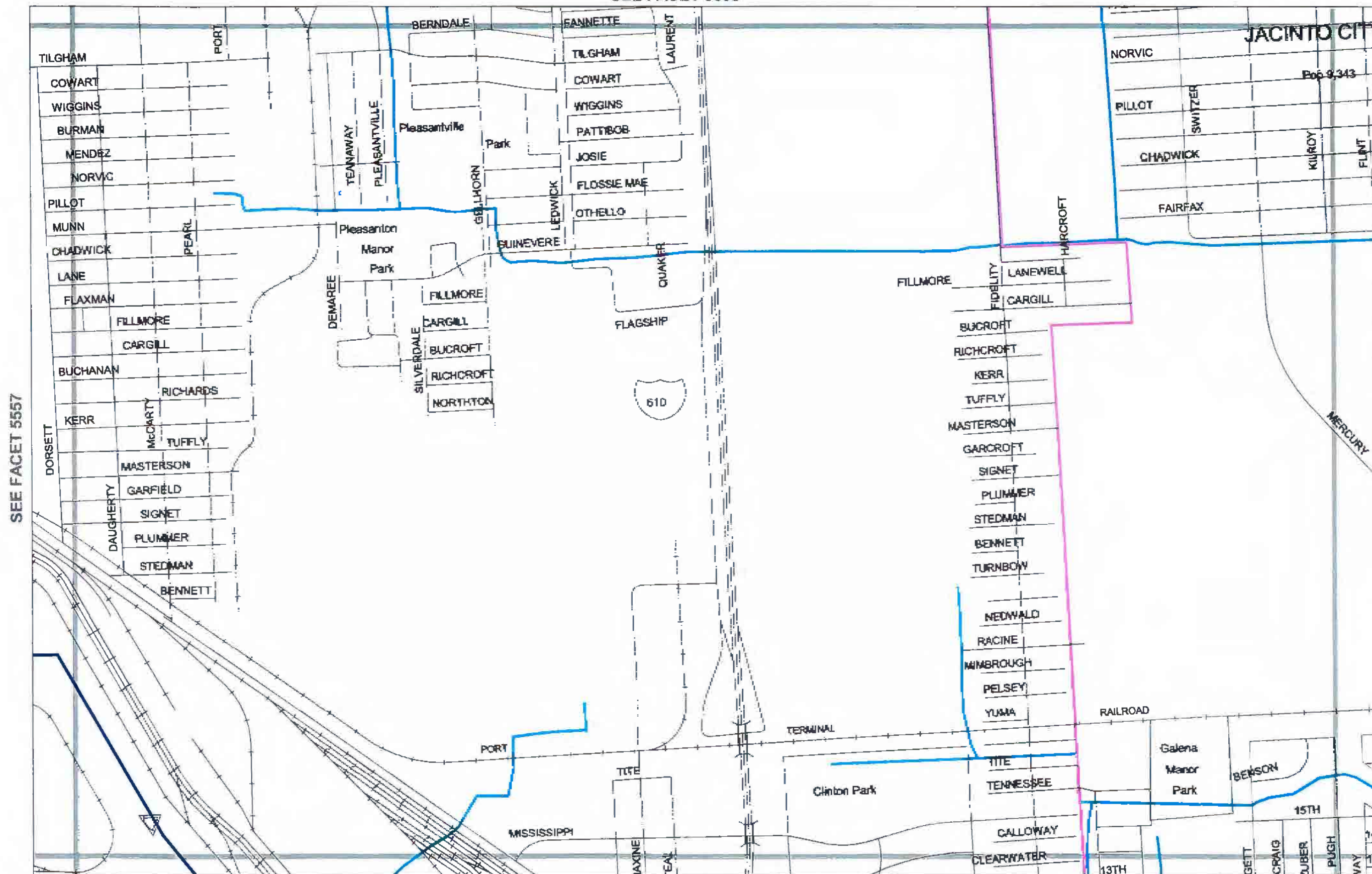
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Date: September 1999

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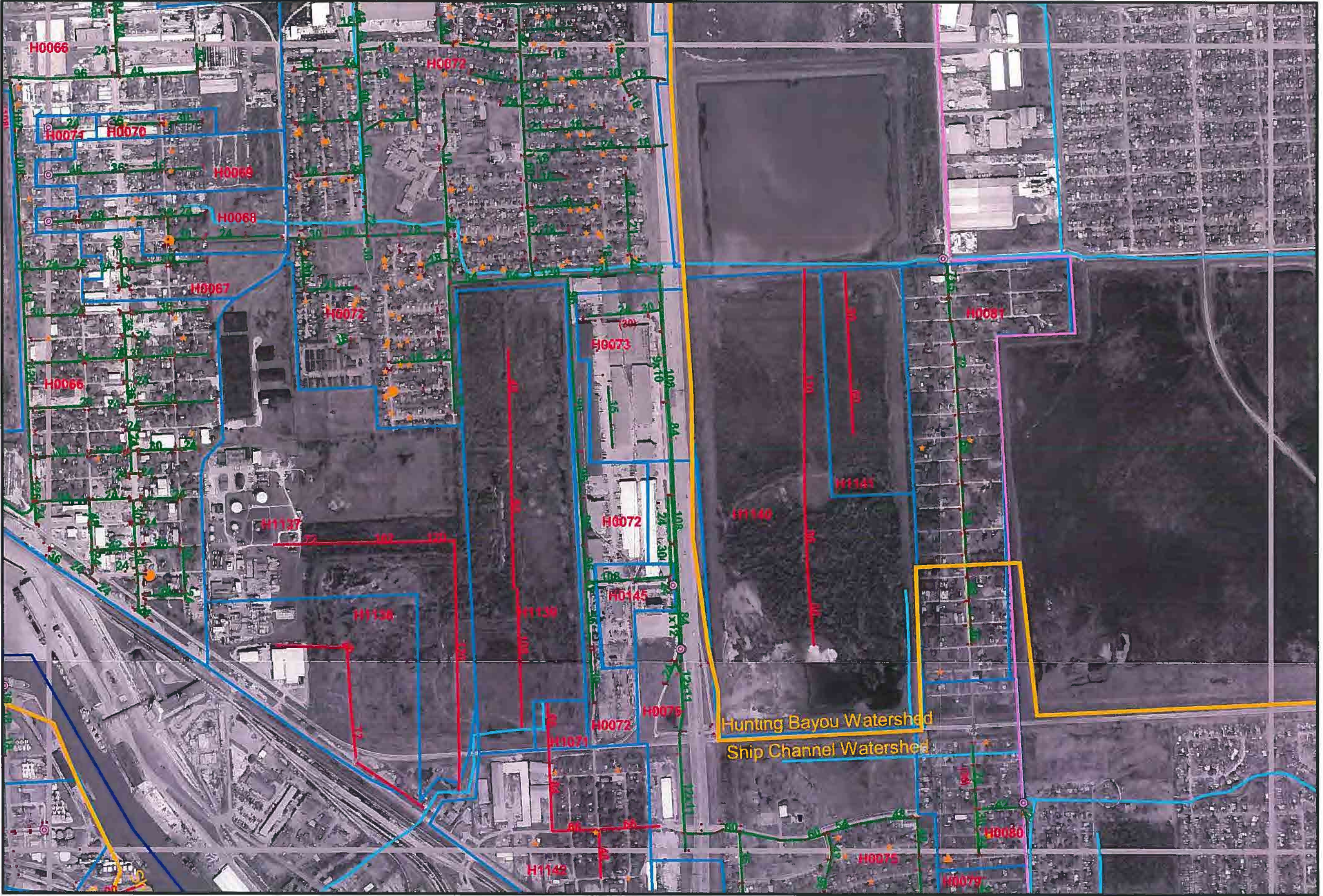
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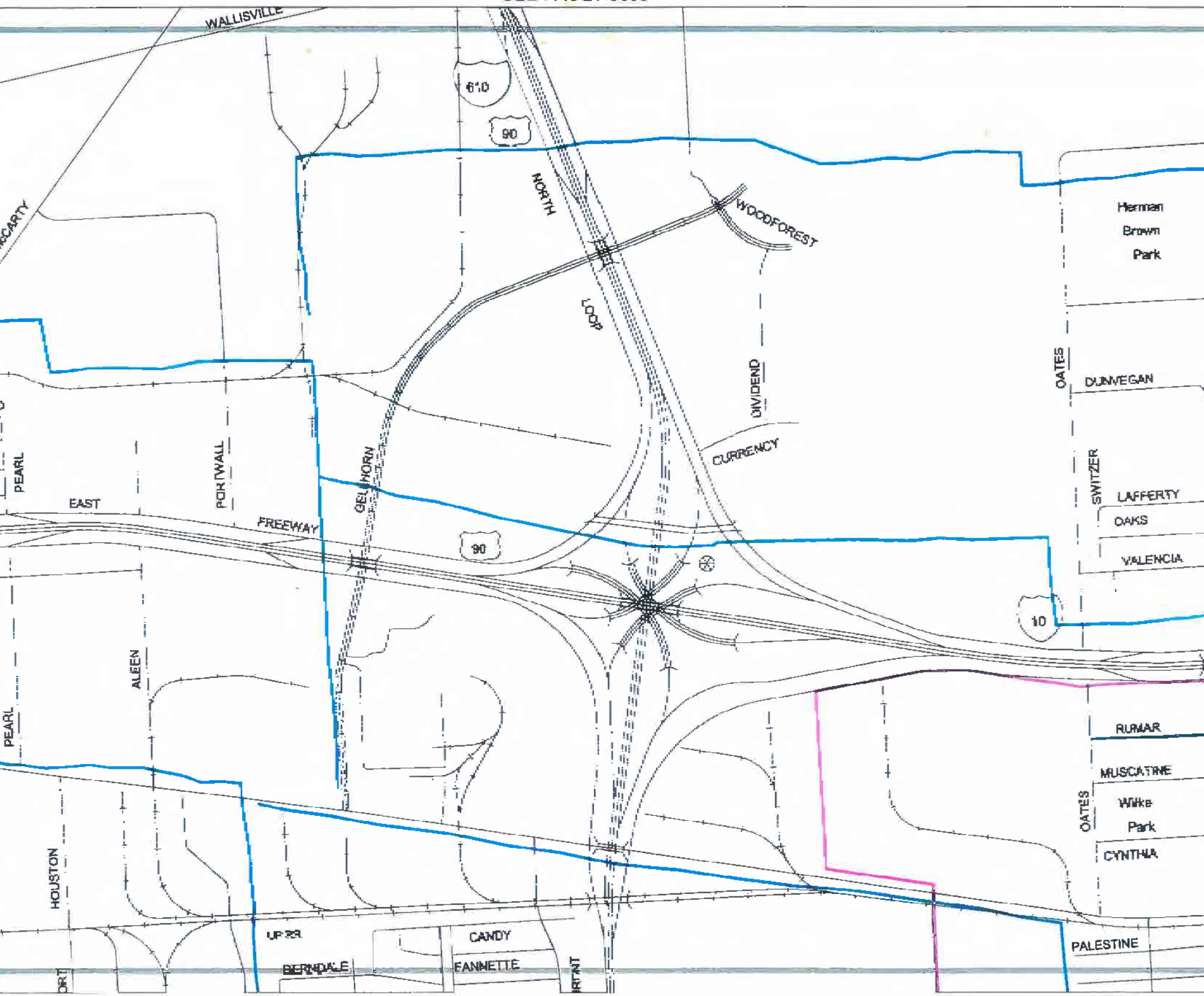
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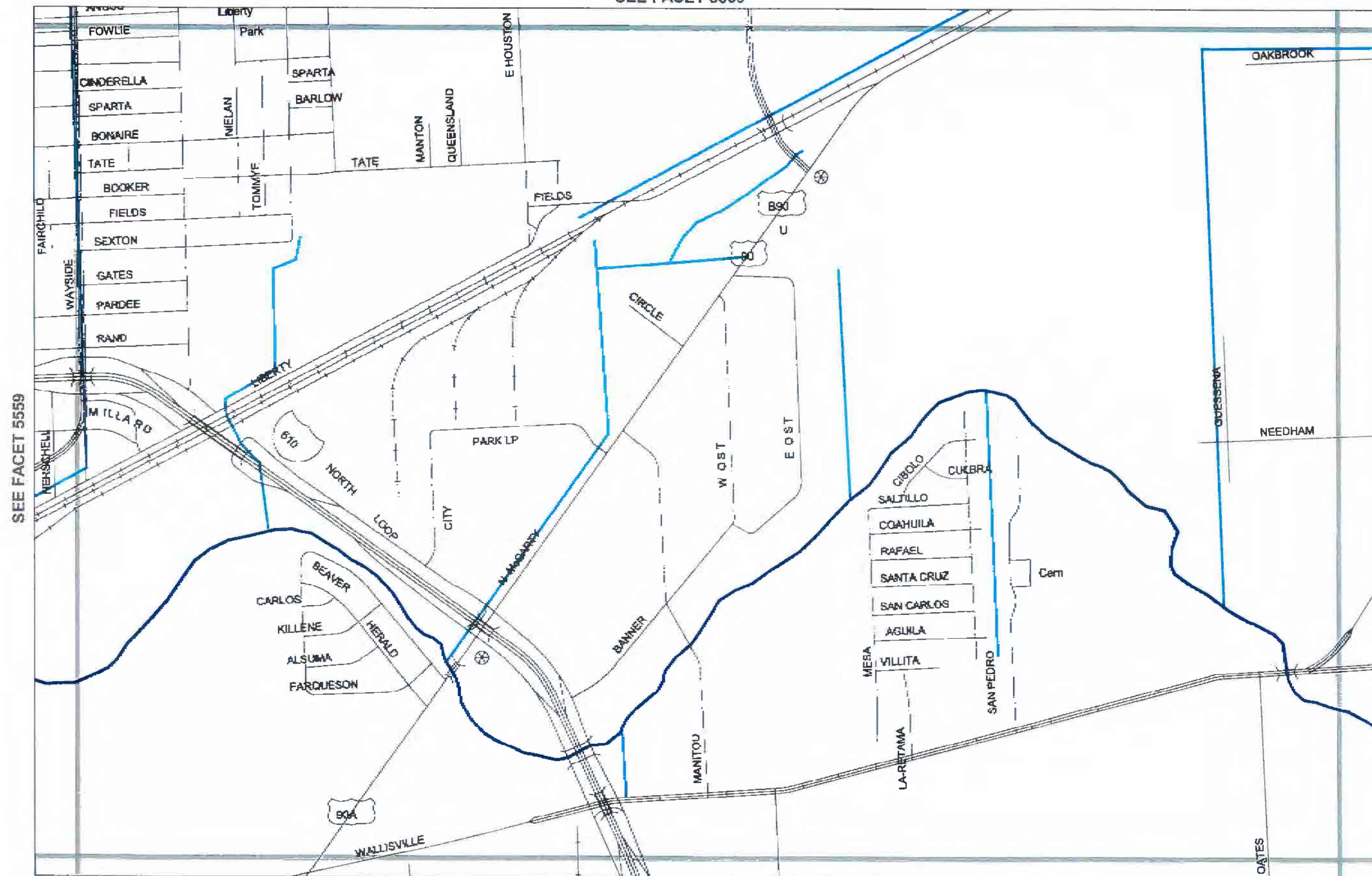


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Date: September 1999

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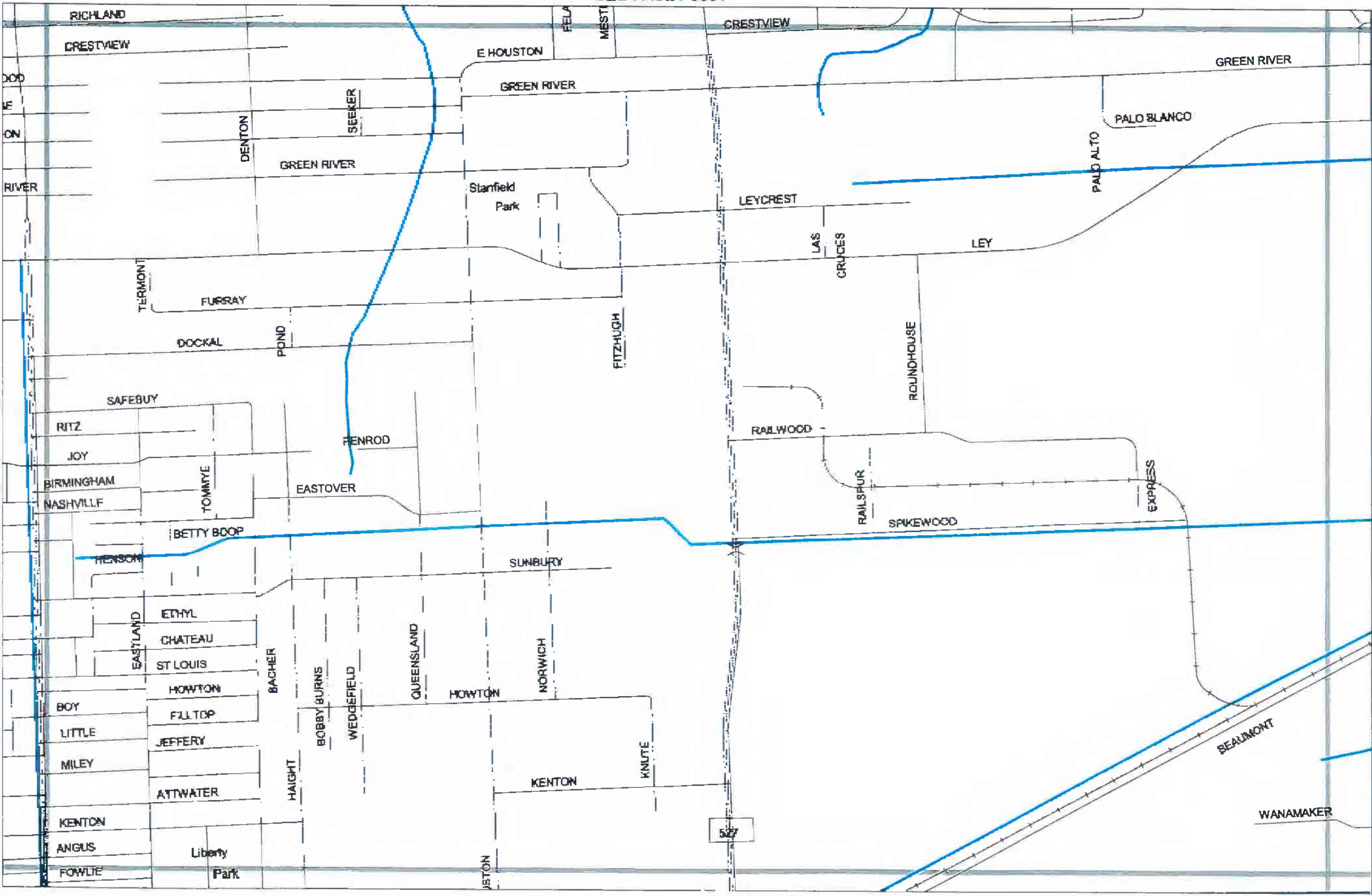
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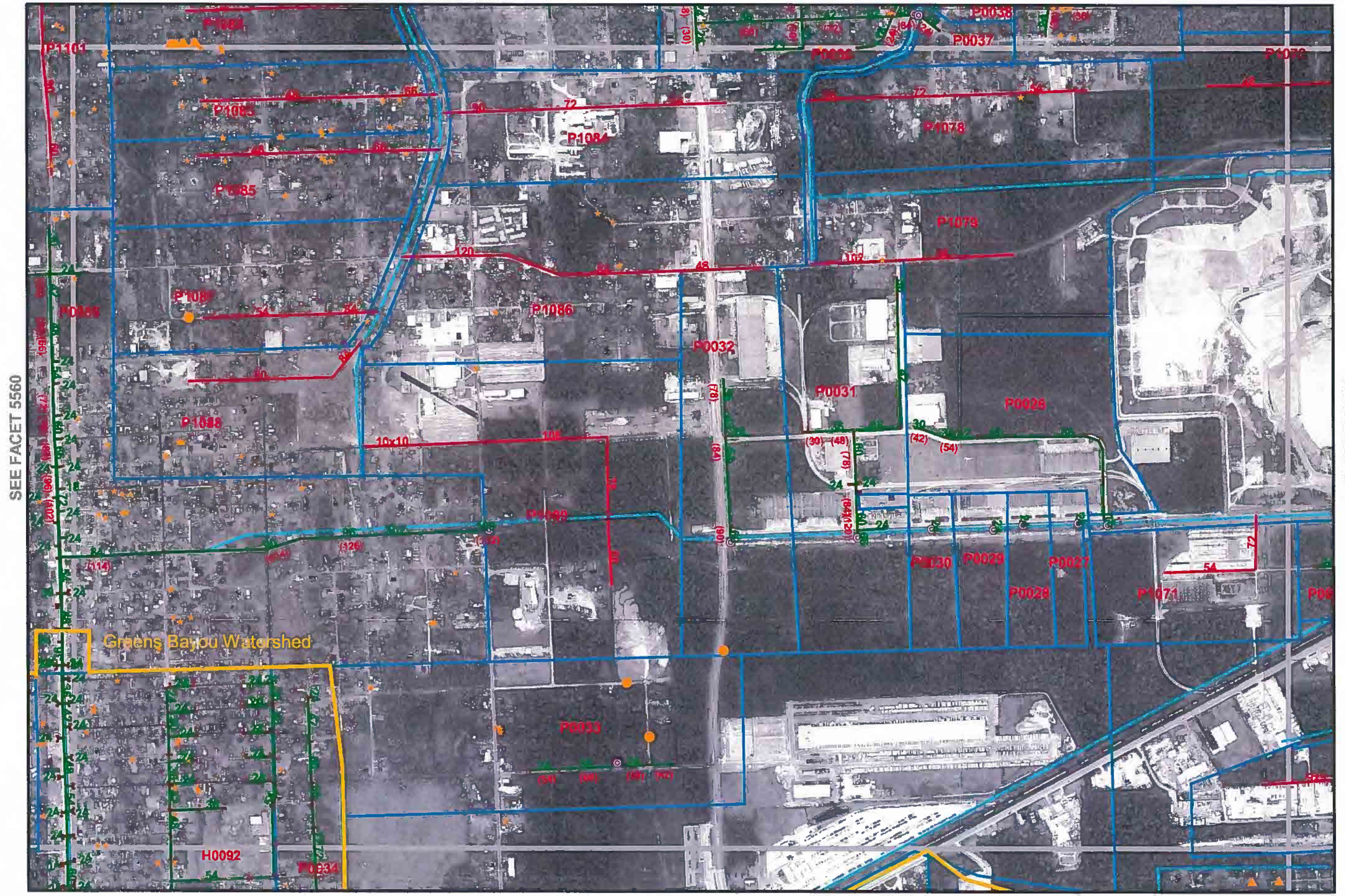
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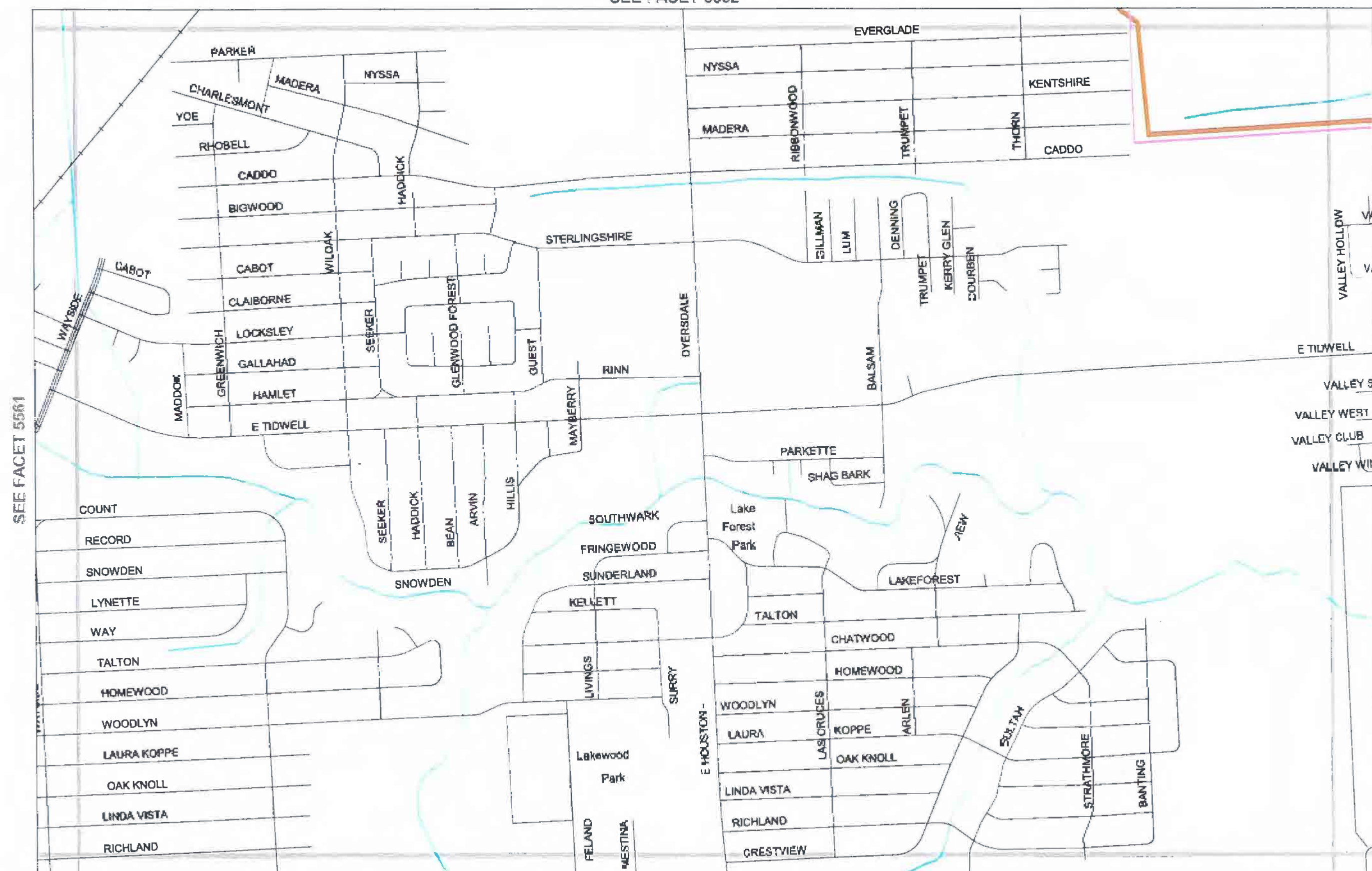
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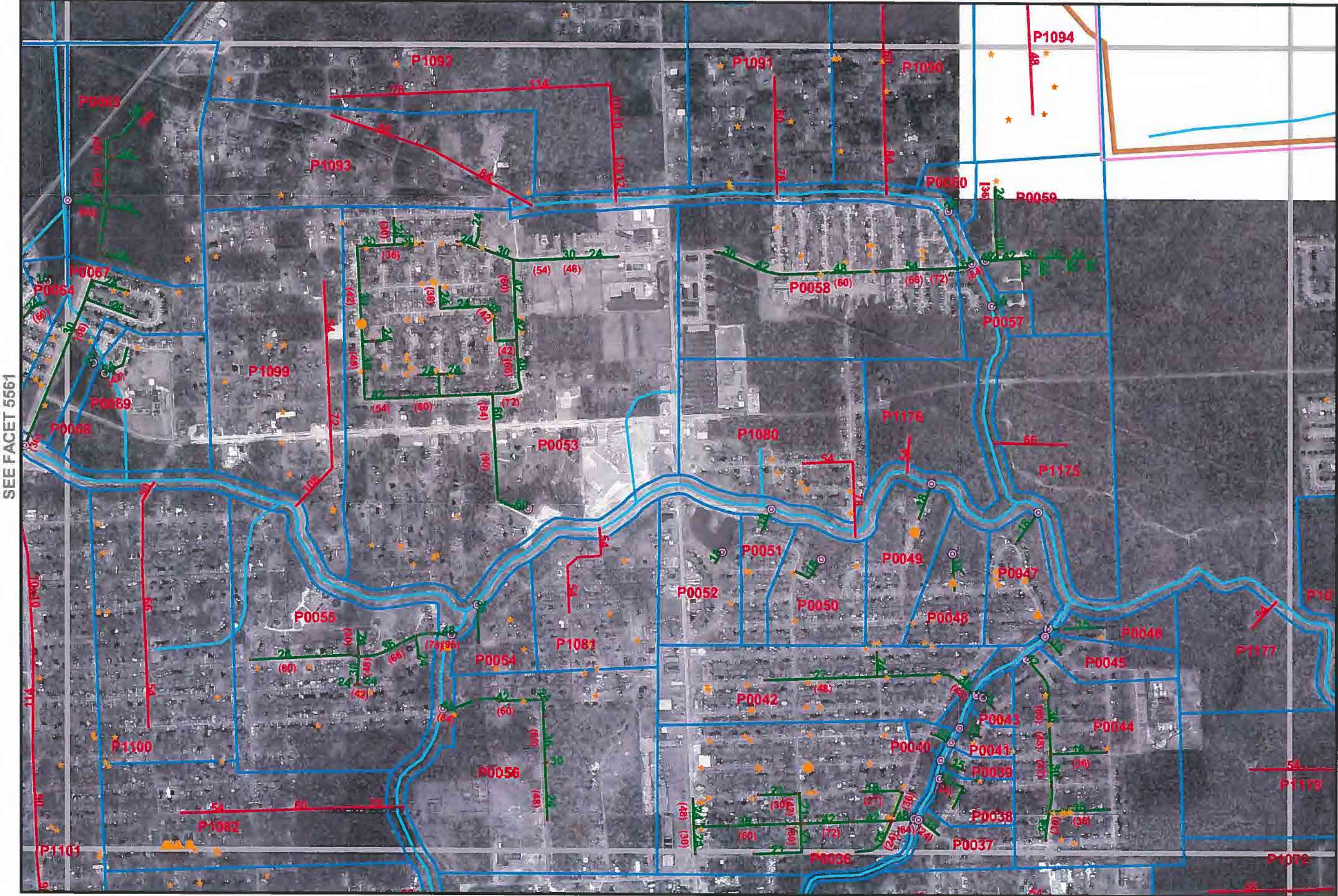
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Date: September 1999



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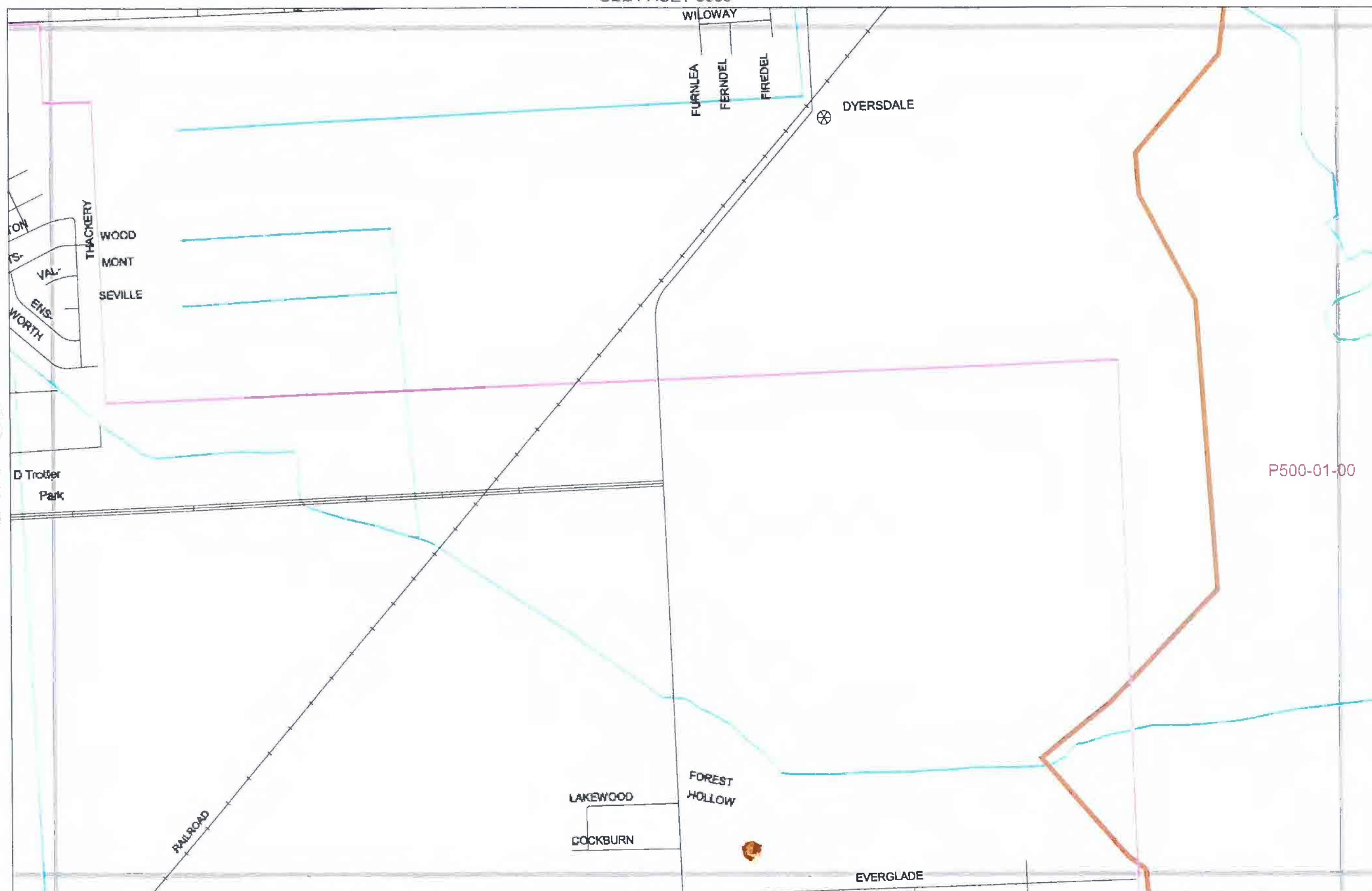


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Date: September 1999

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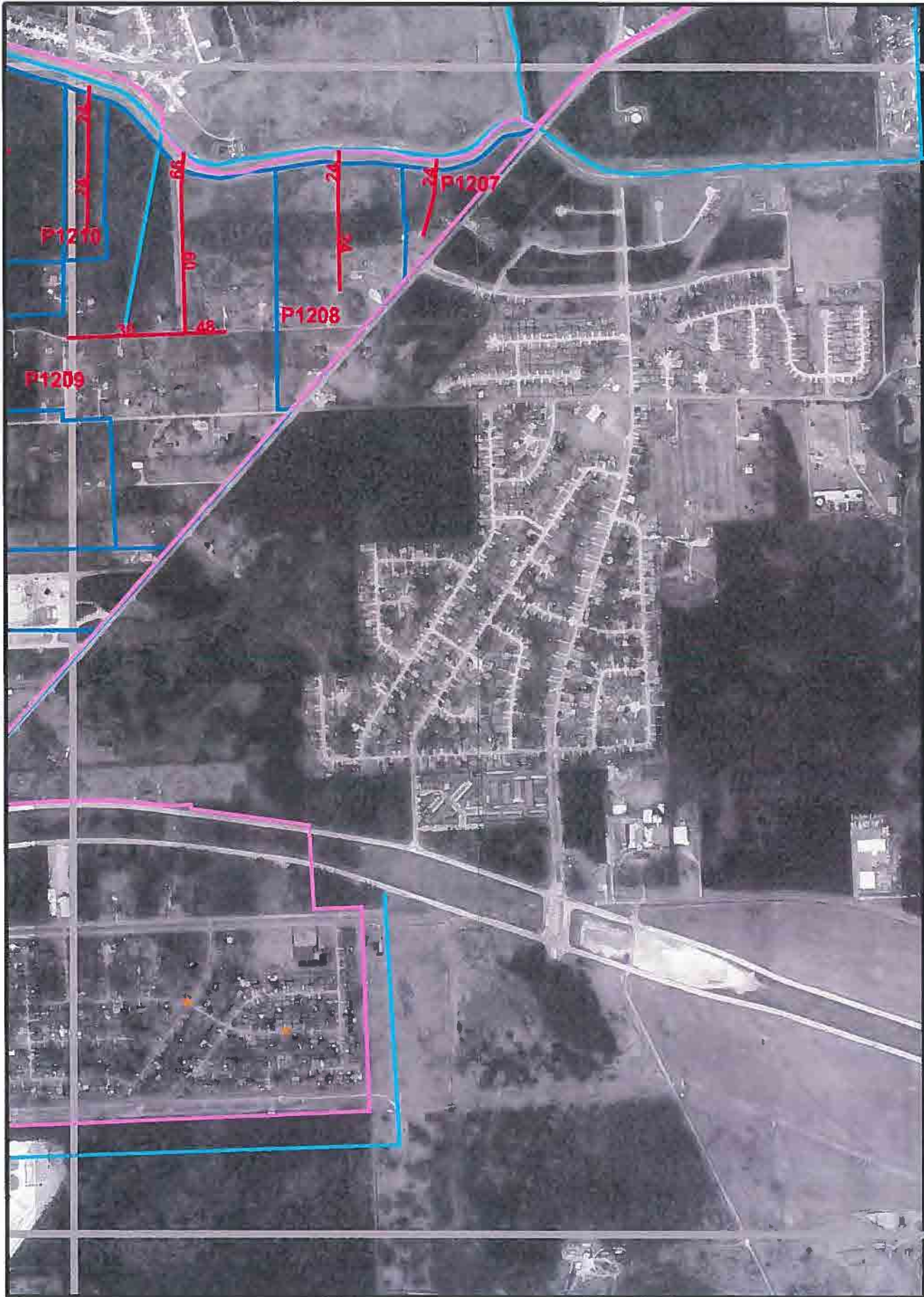
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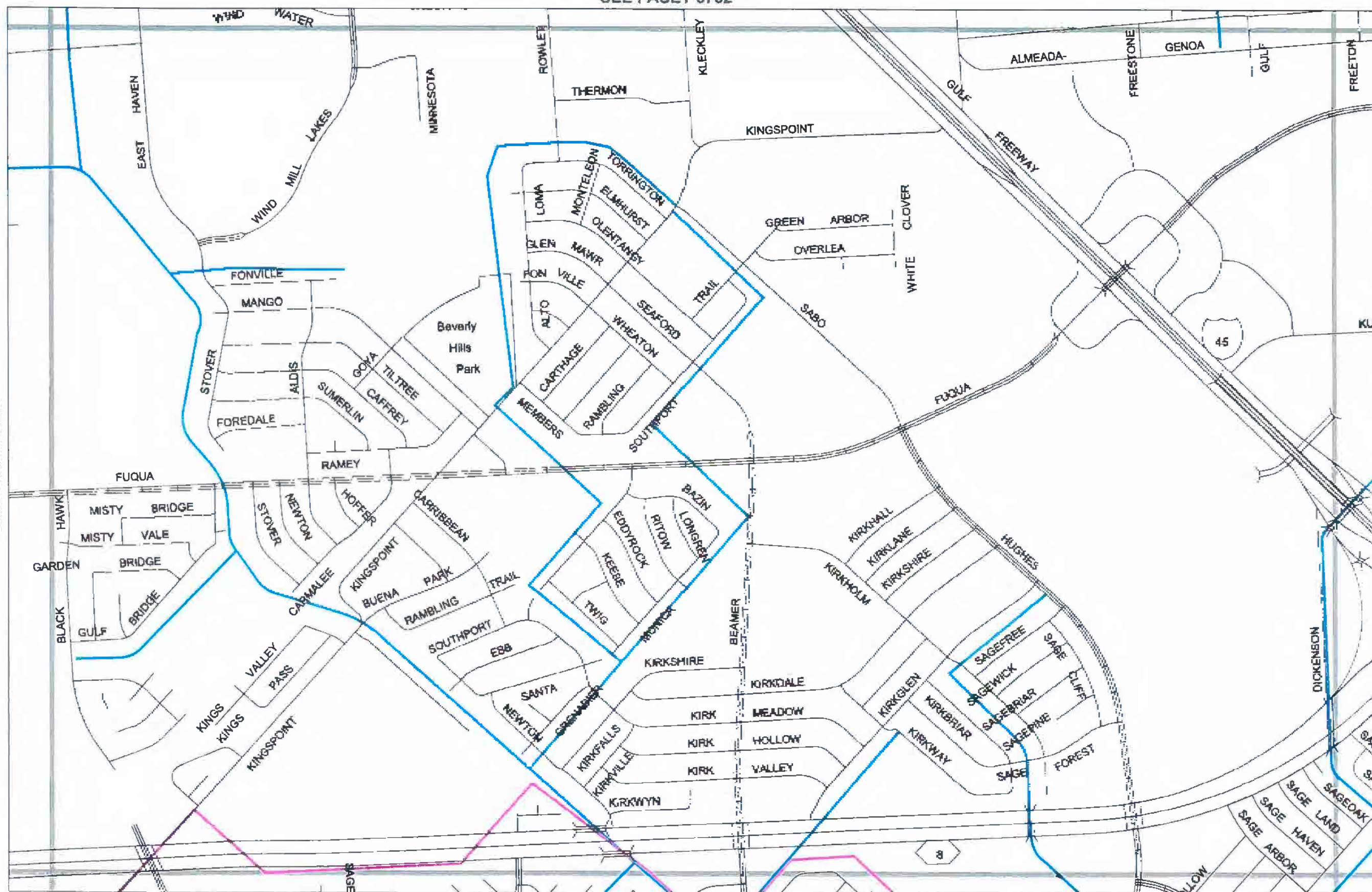
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Date: September 1999

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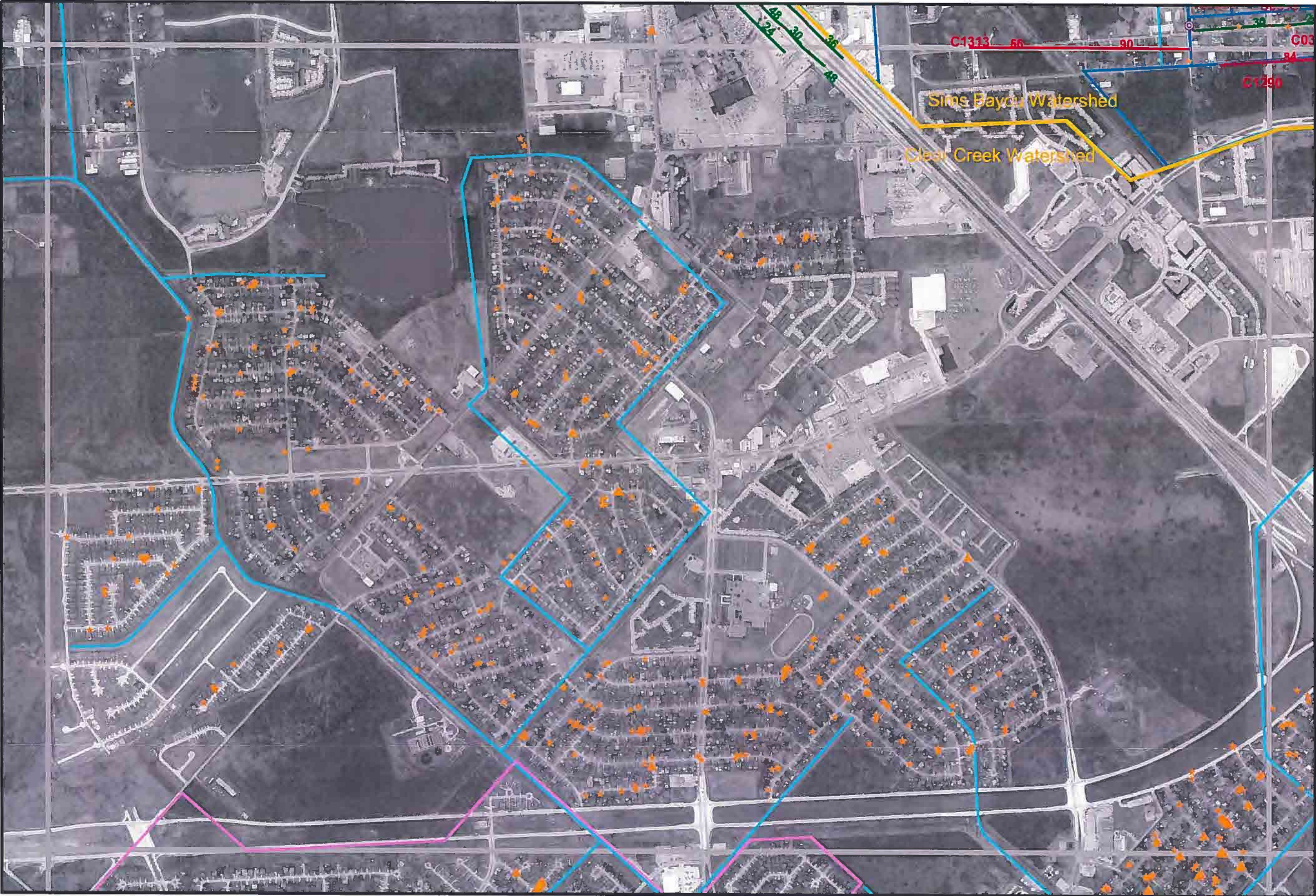
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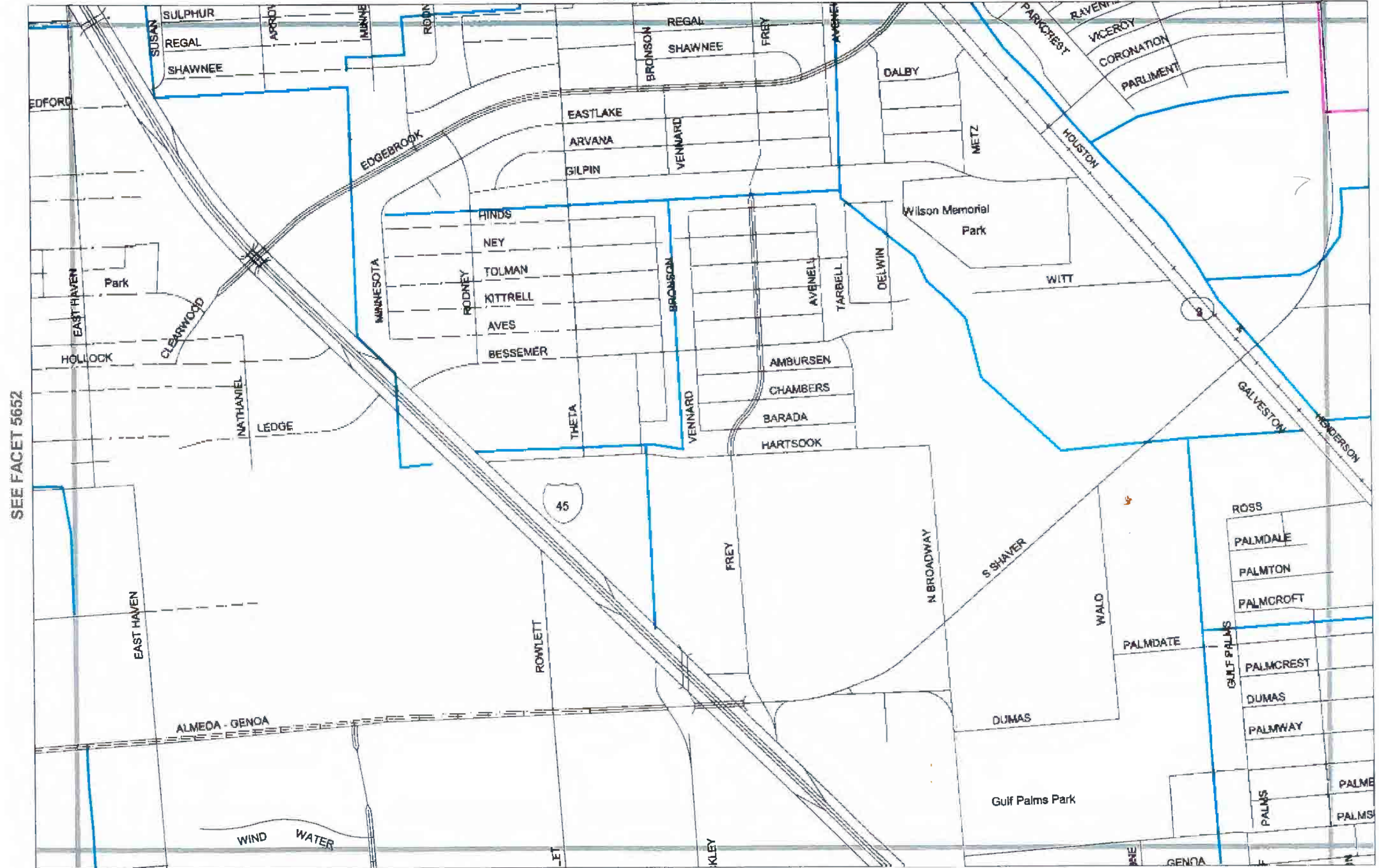
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Date: September 1999

SEE FACET 5753

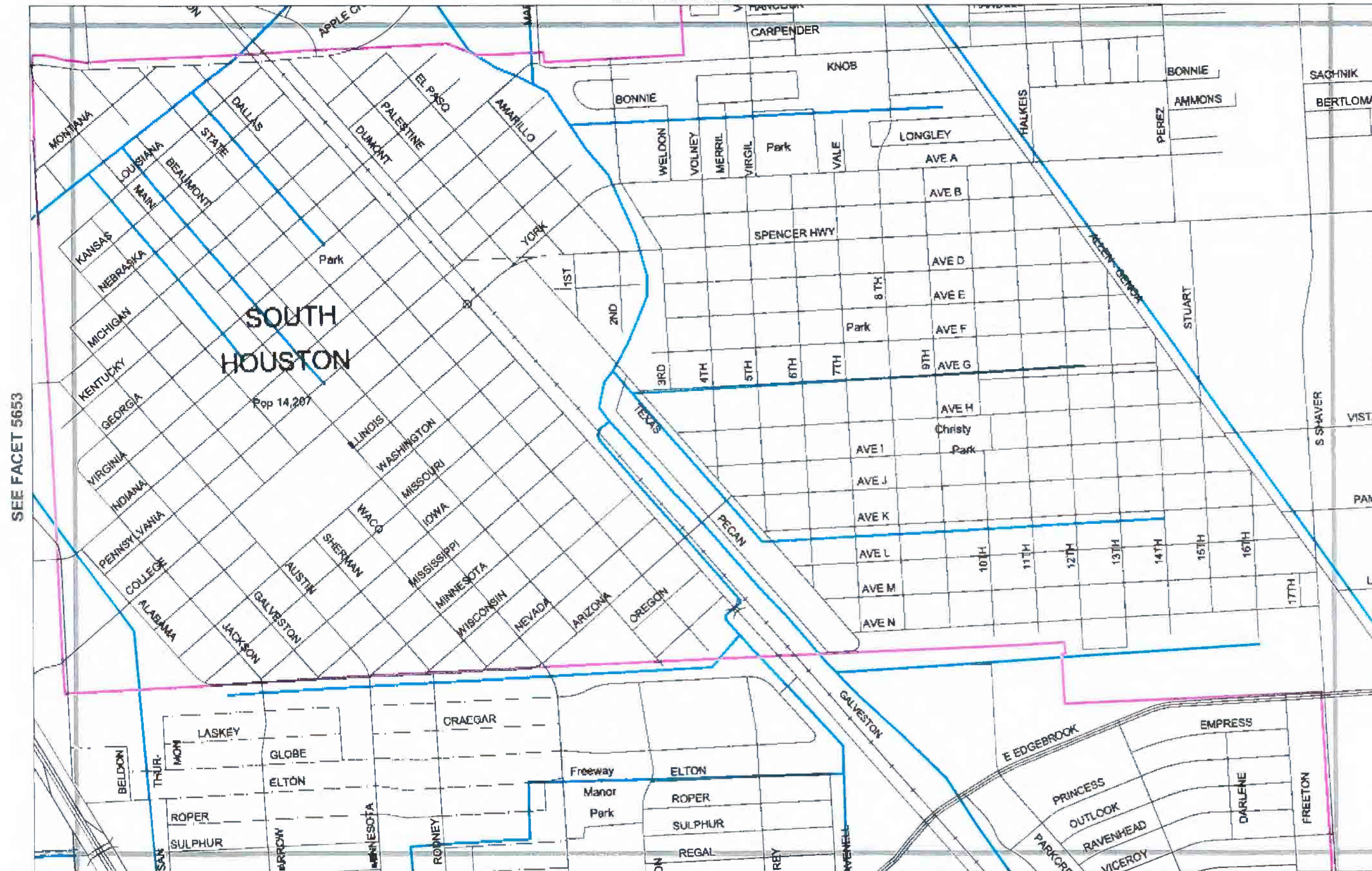


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SEE FACET 5852



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SEE FACET 5752

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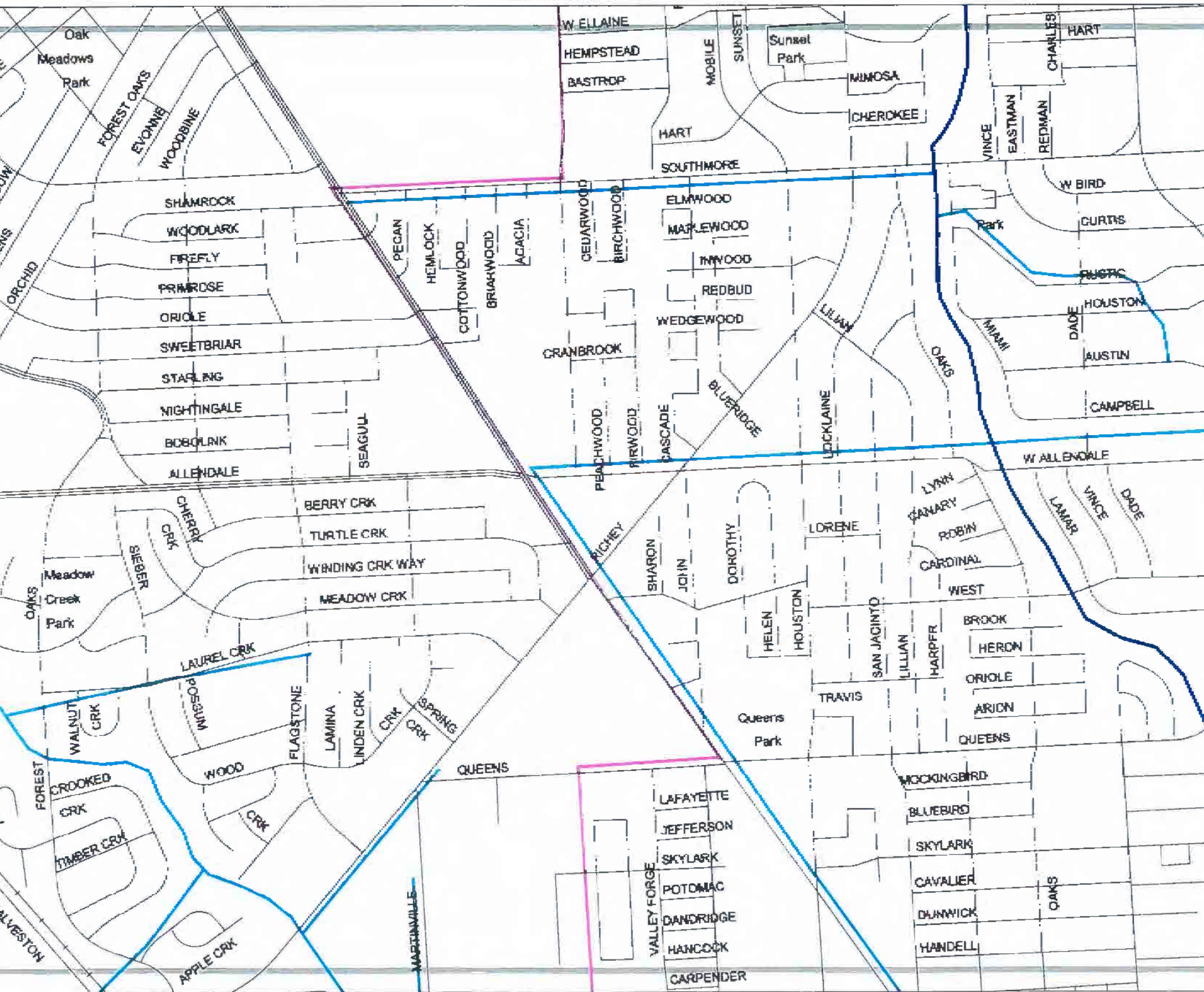
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Date: September 1999

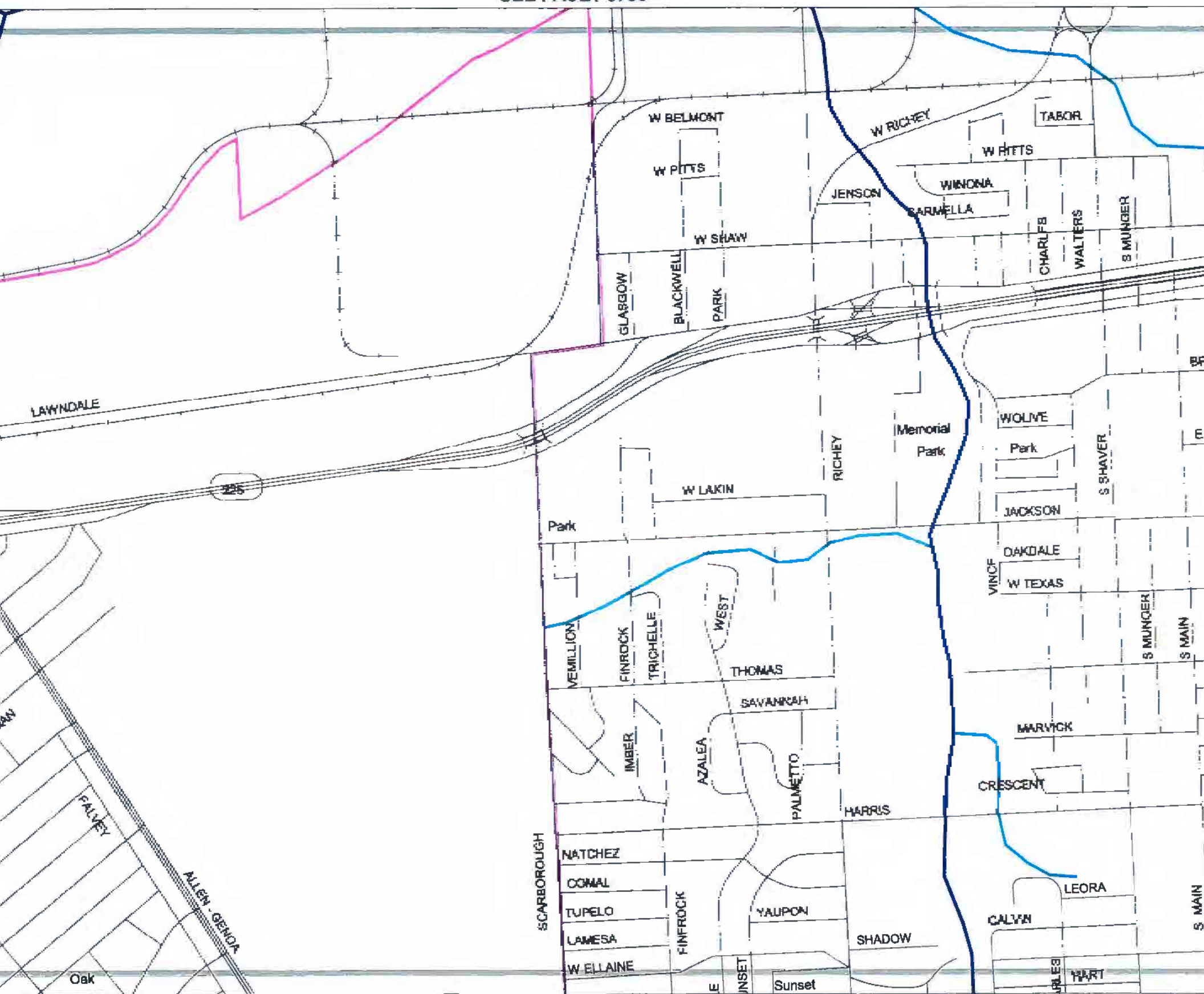
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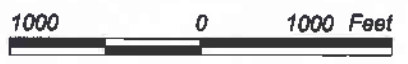


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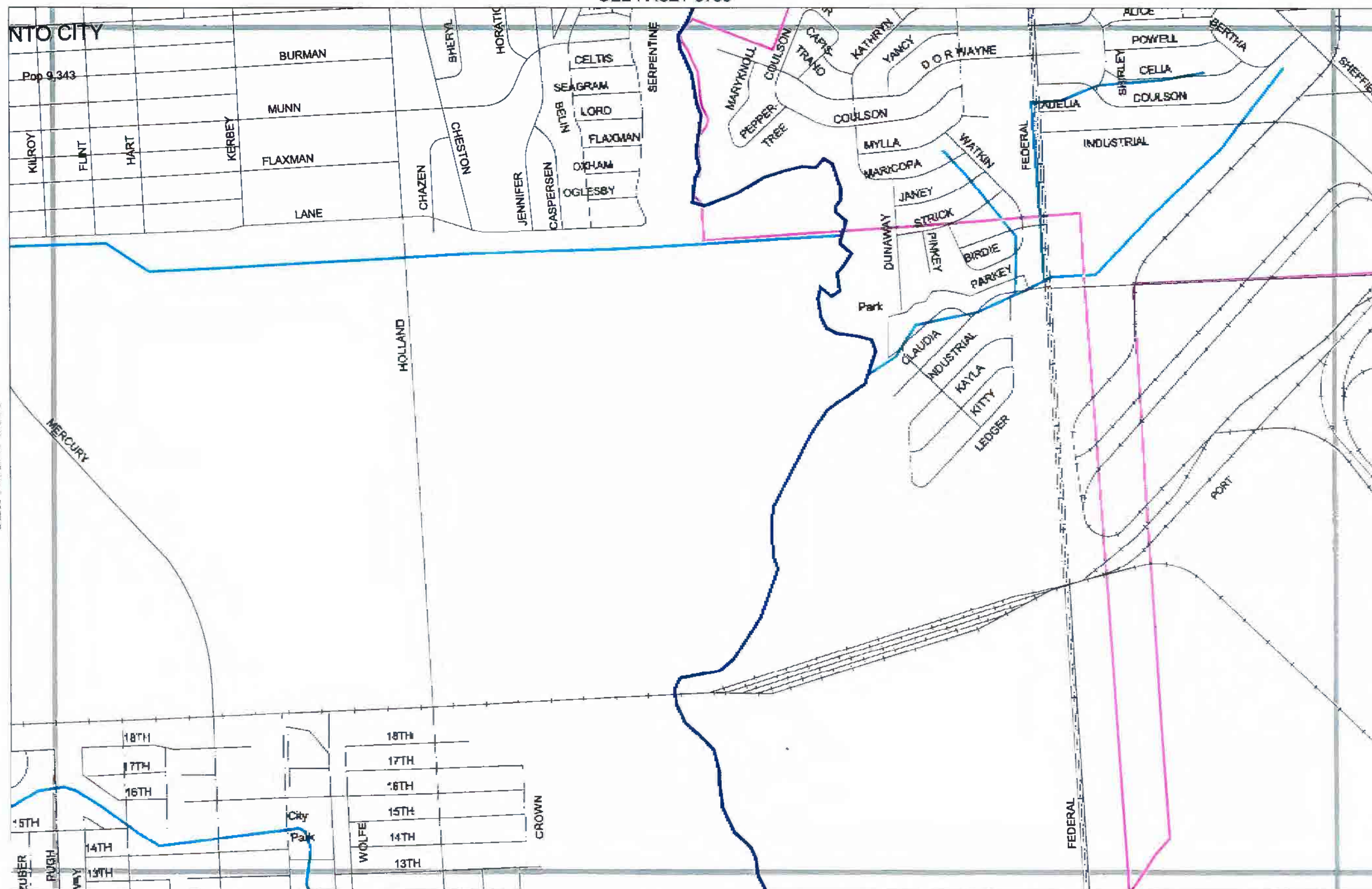
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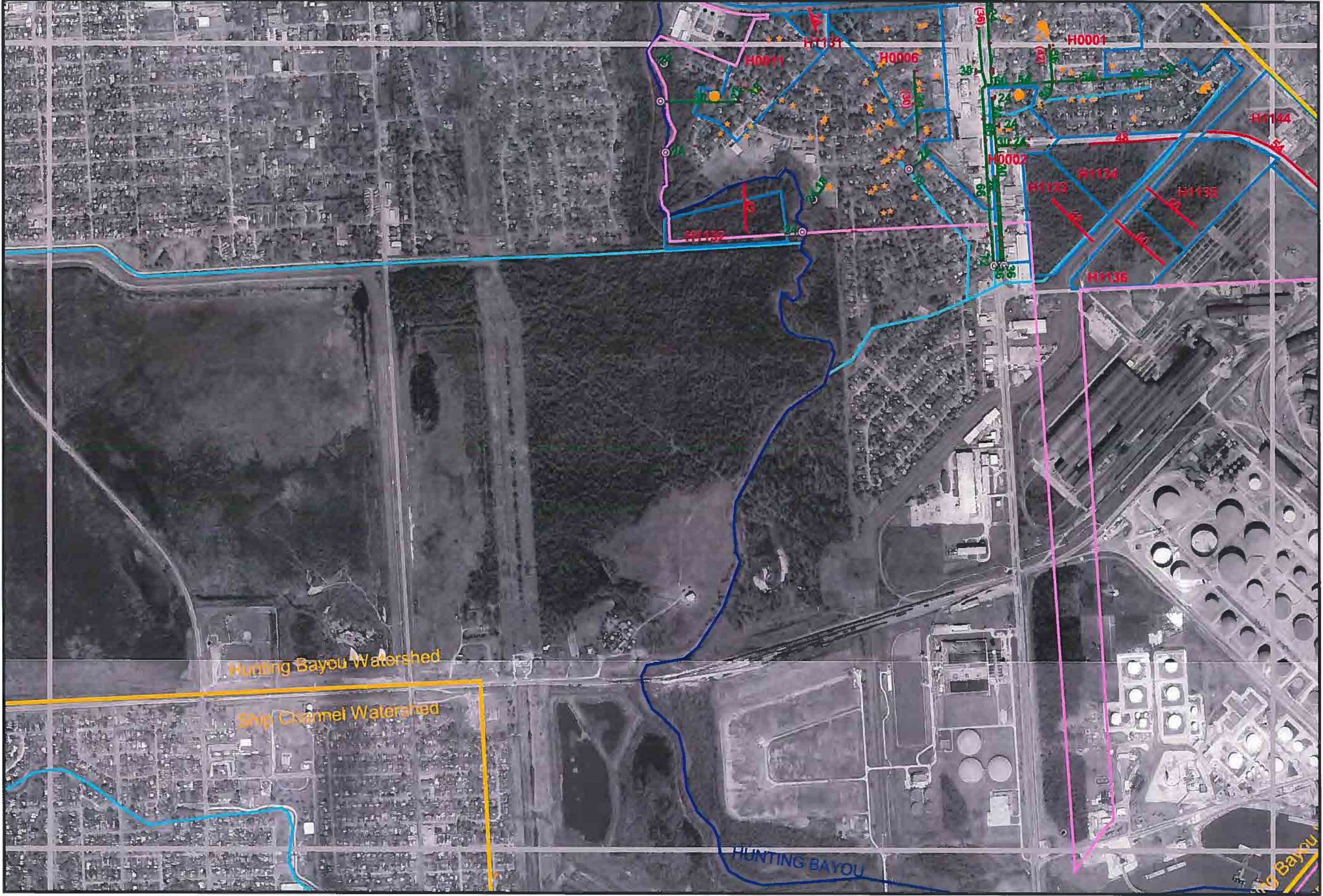
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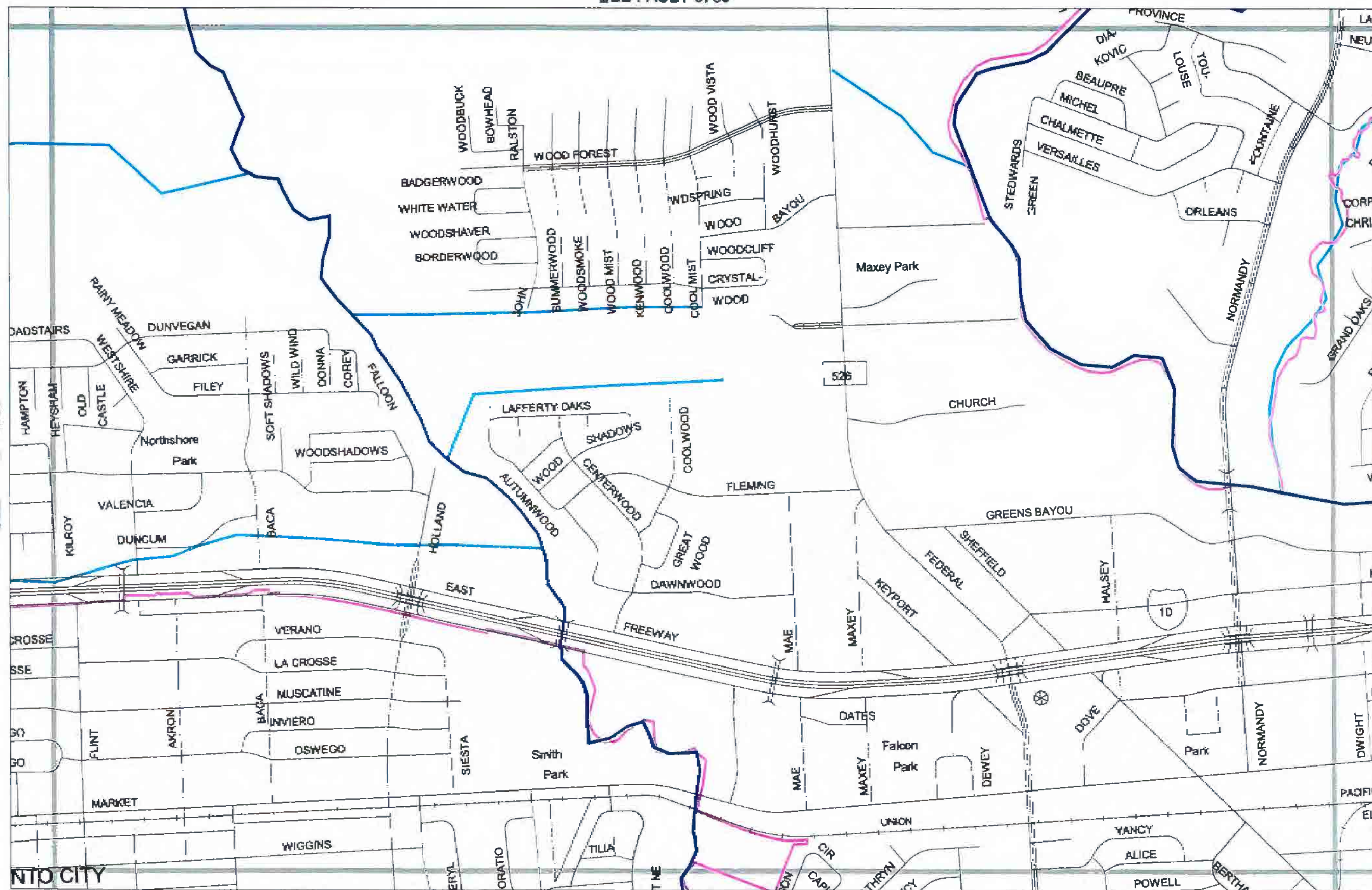
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SEE FACET 5858

SEE FACET 5757



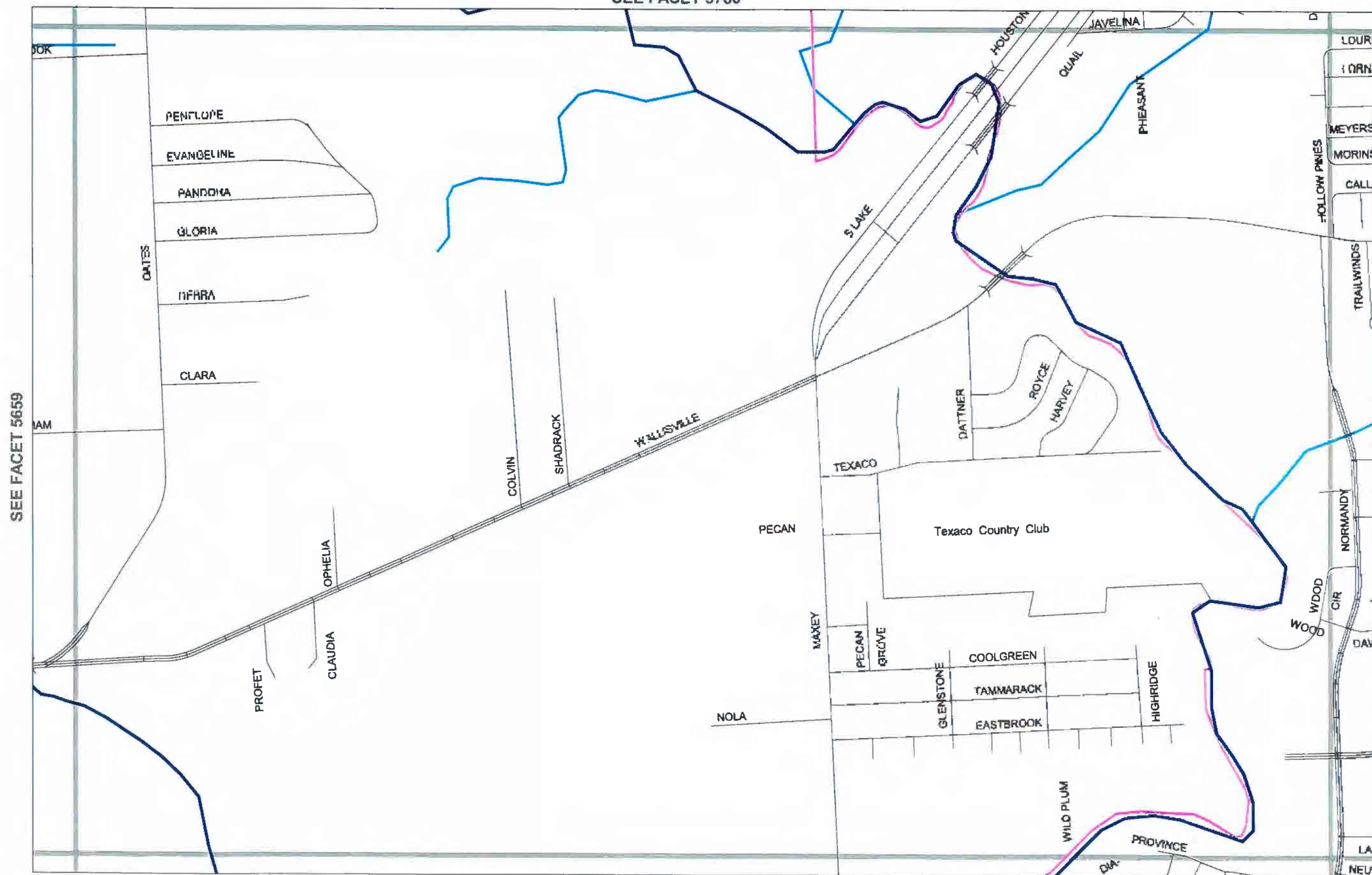
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Date: September 1999

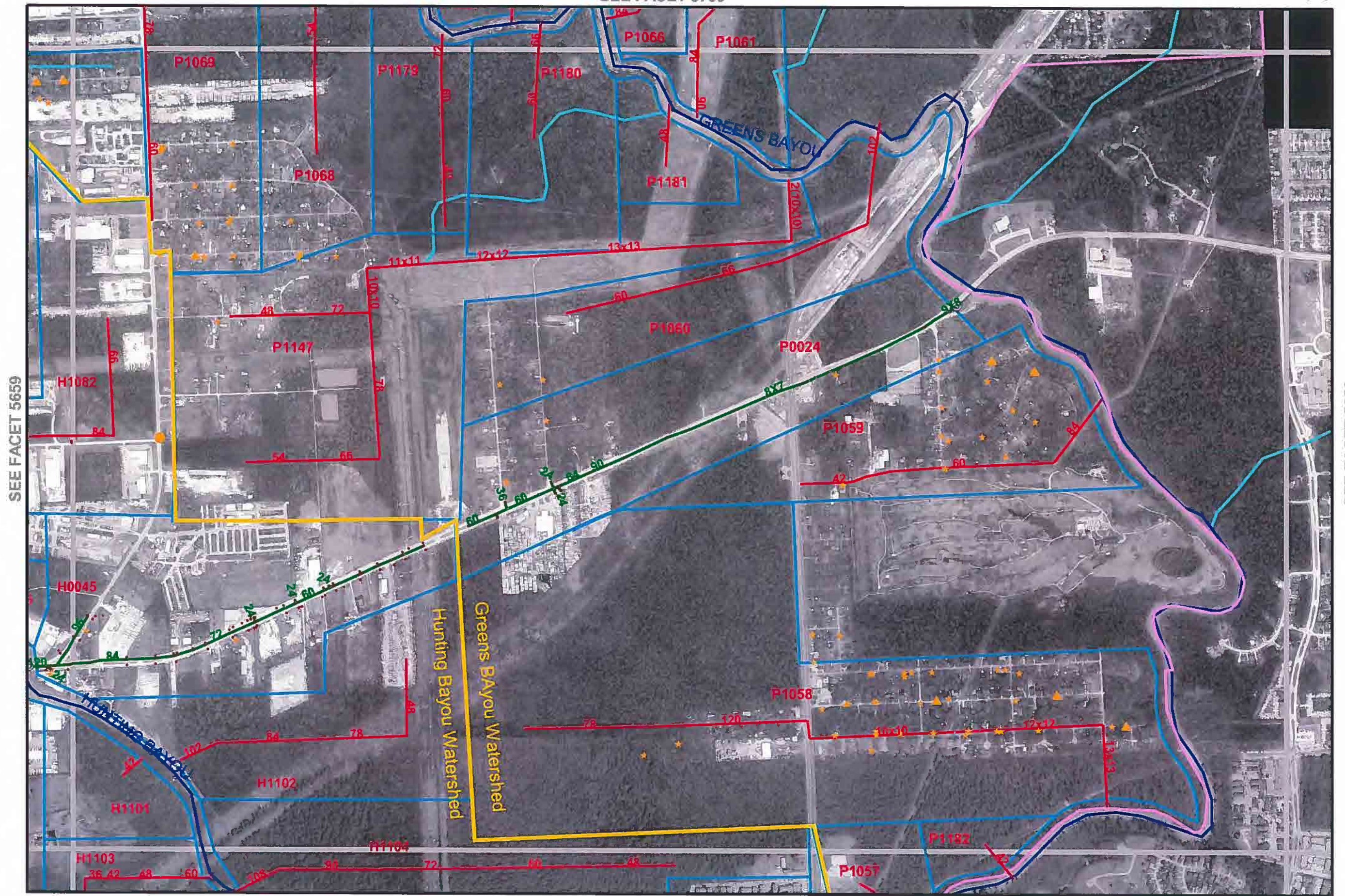
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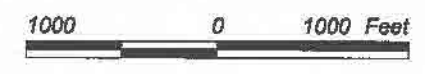
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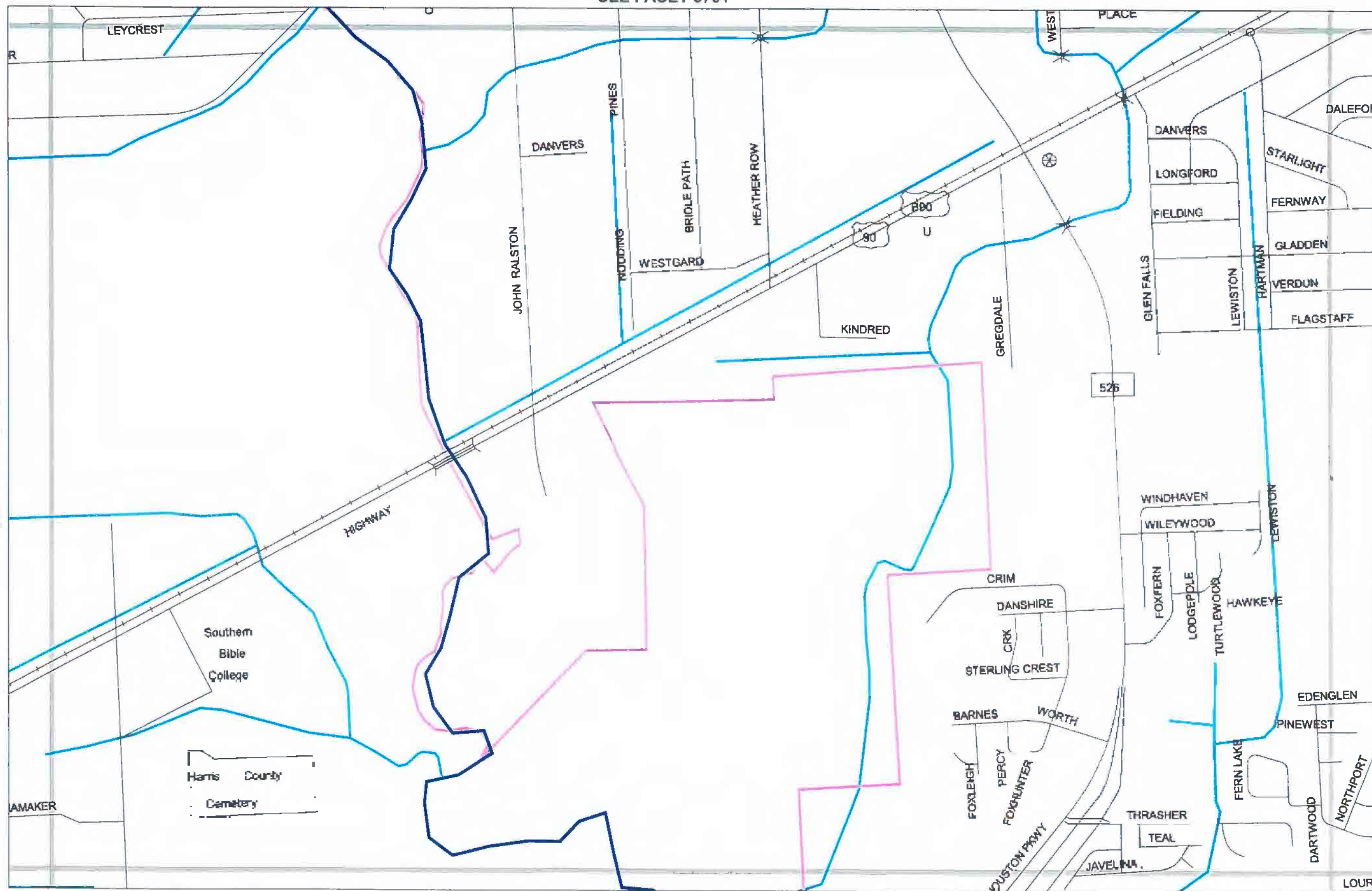


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SEE FACET 5761

SEE FACET 5660



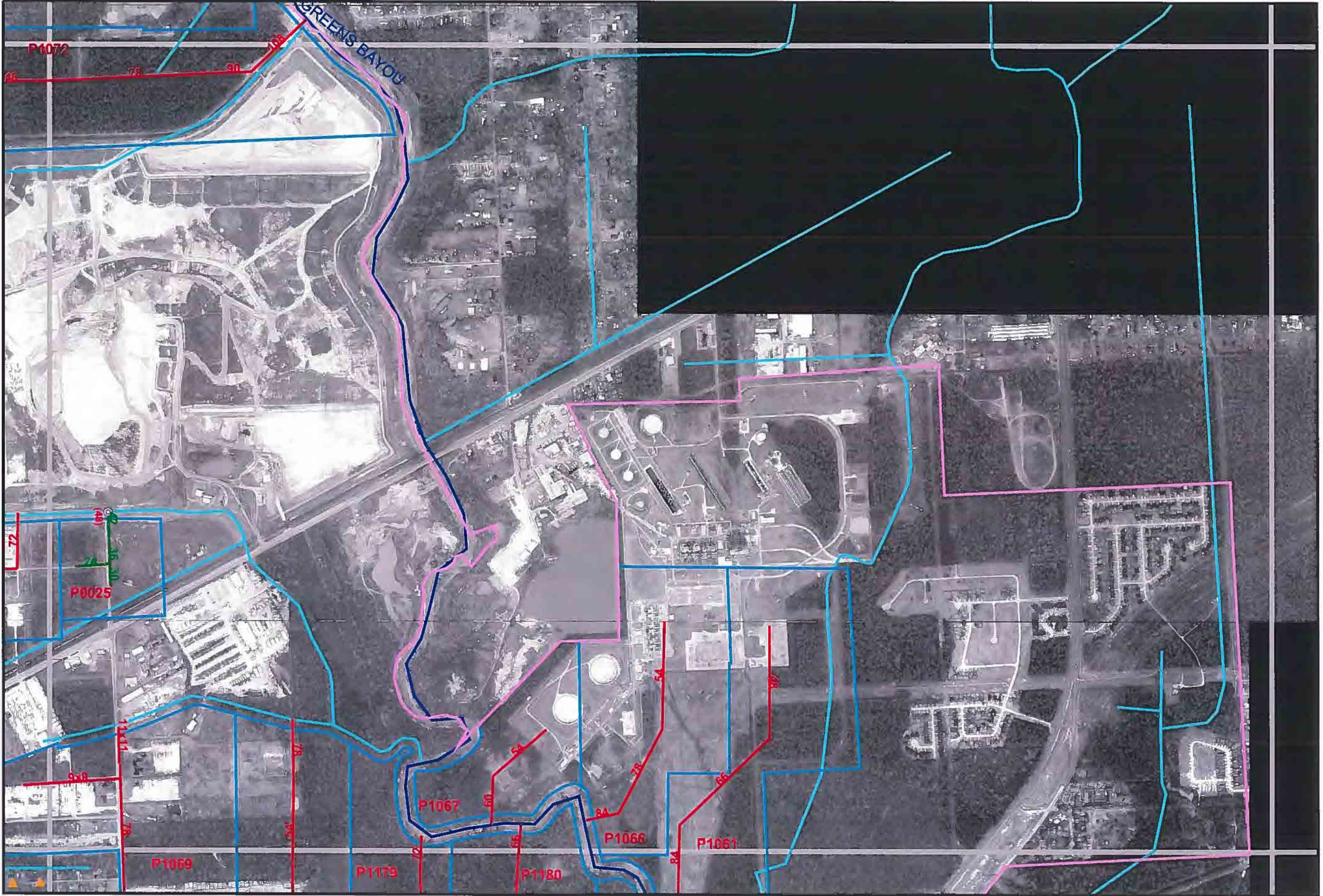
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Date: September 1999

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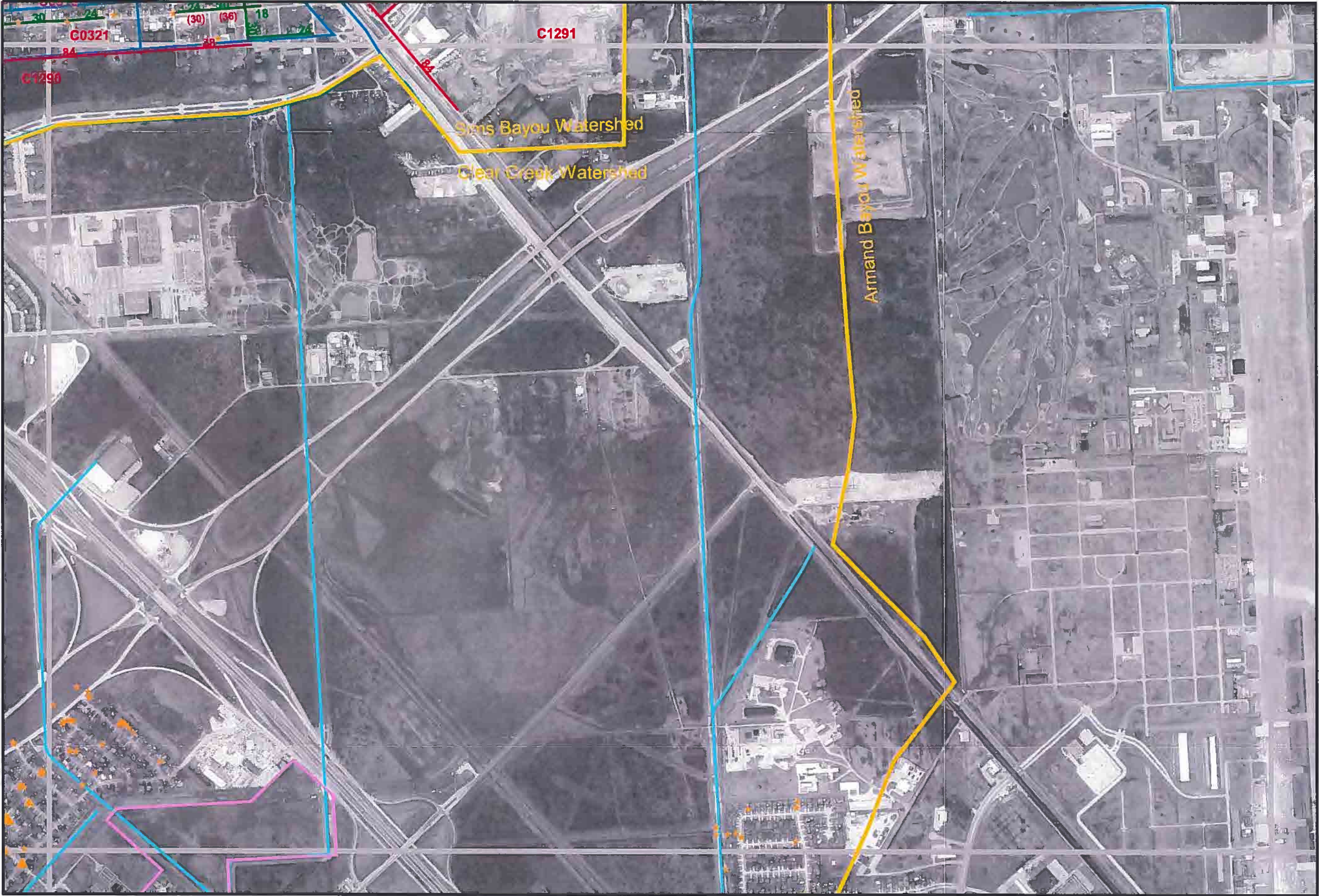


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Date: September 1999

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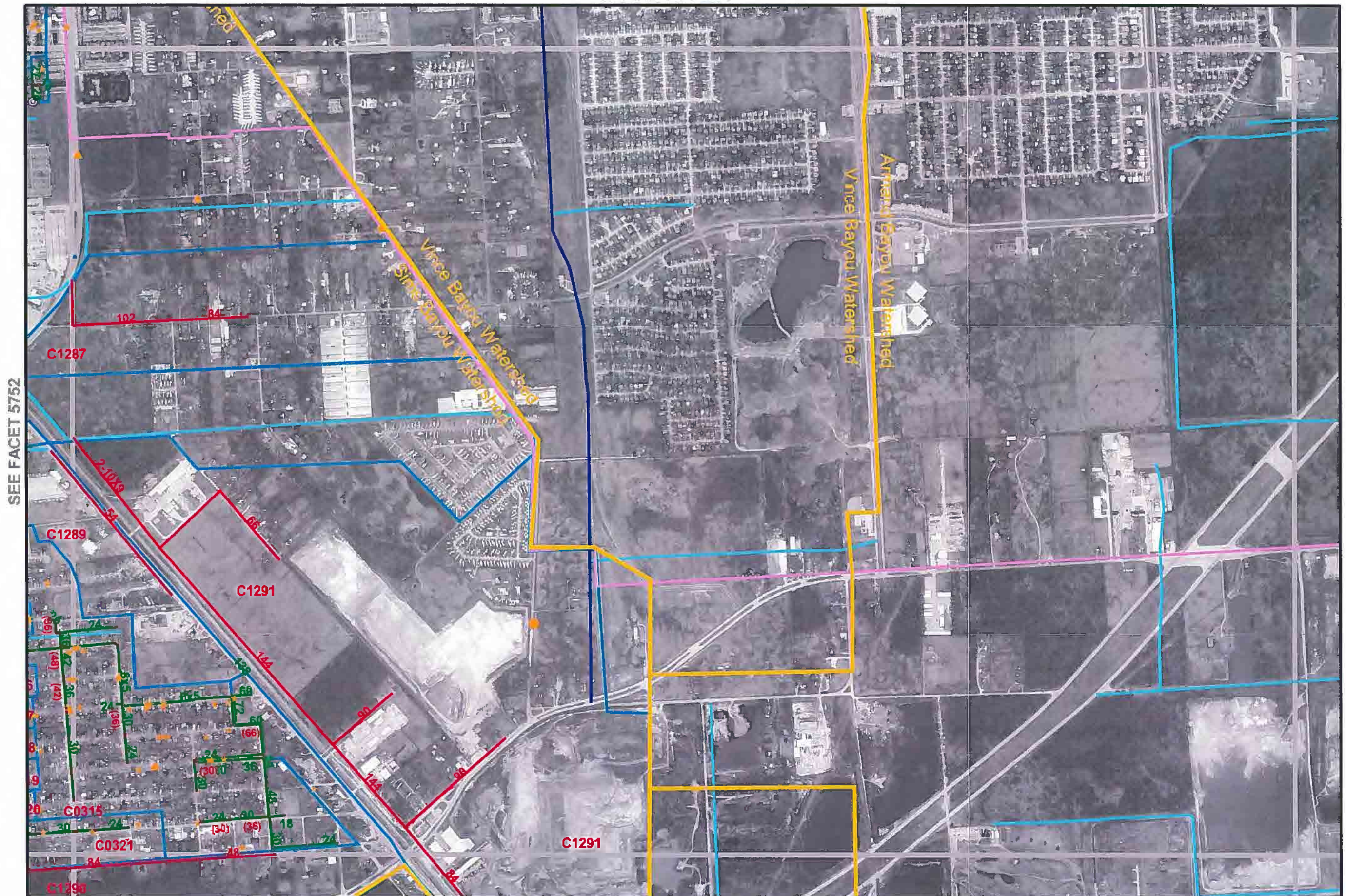
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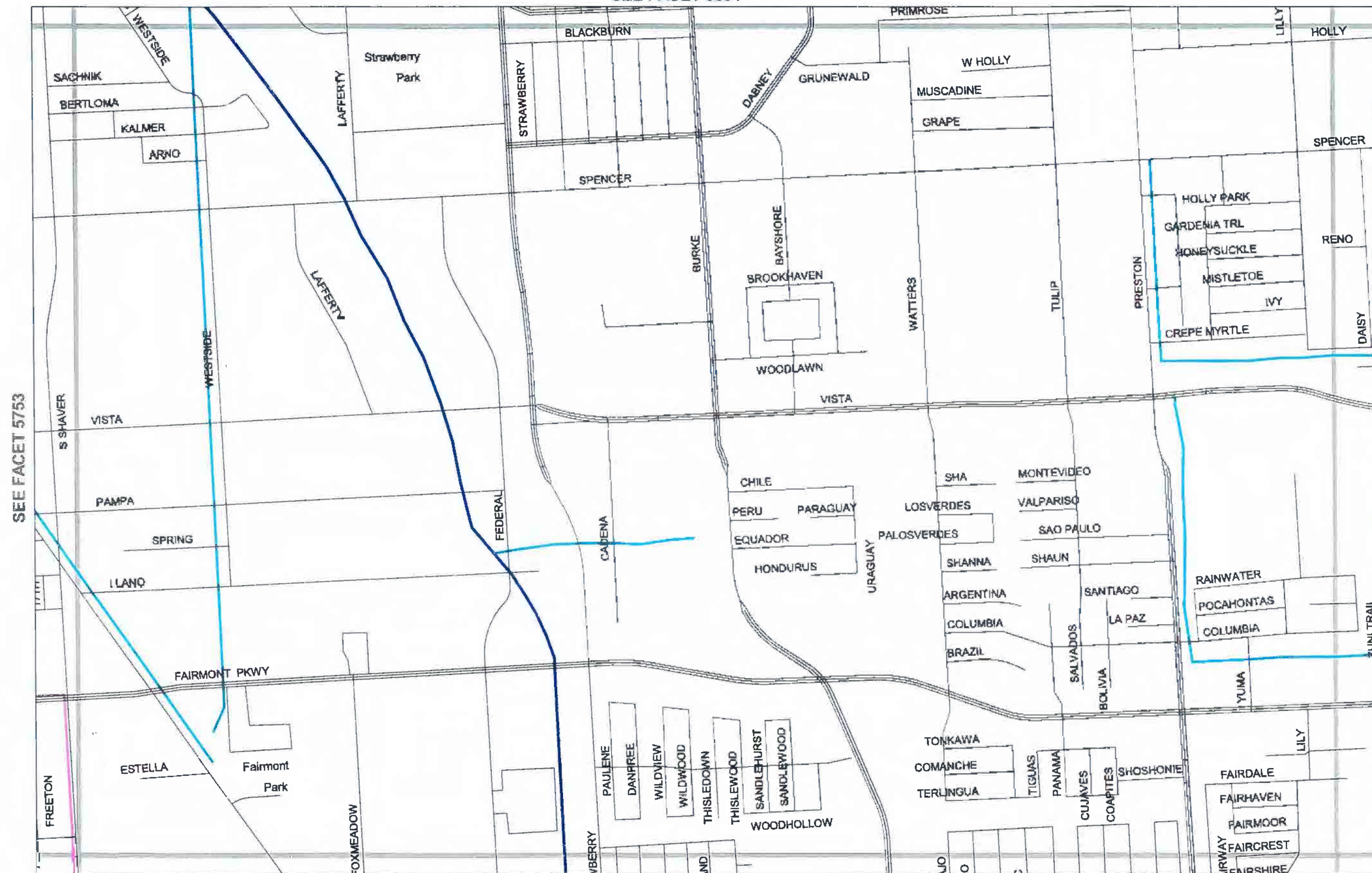
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Date: September 1999

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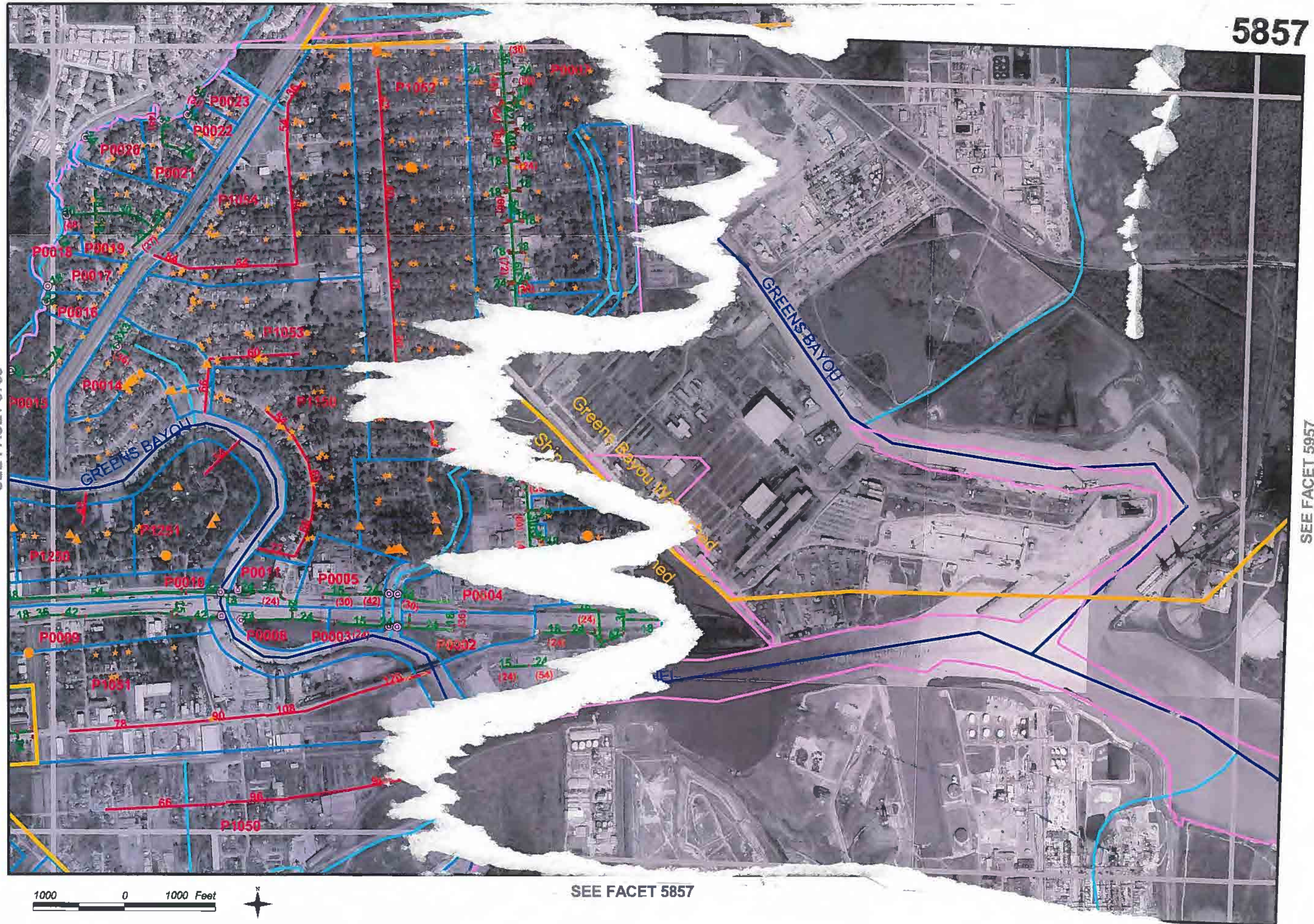
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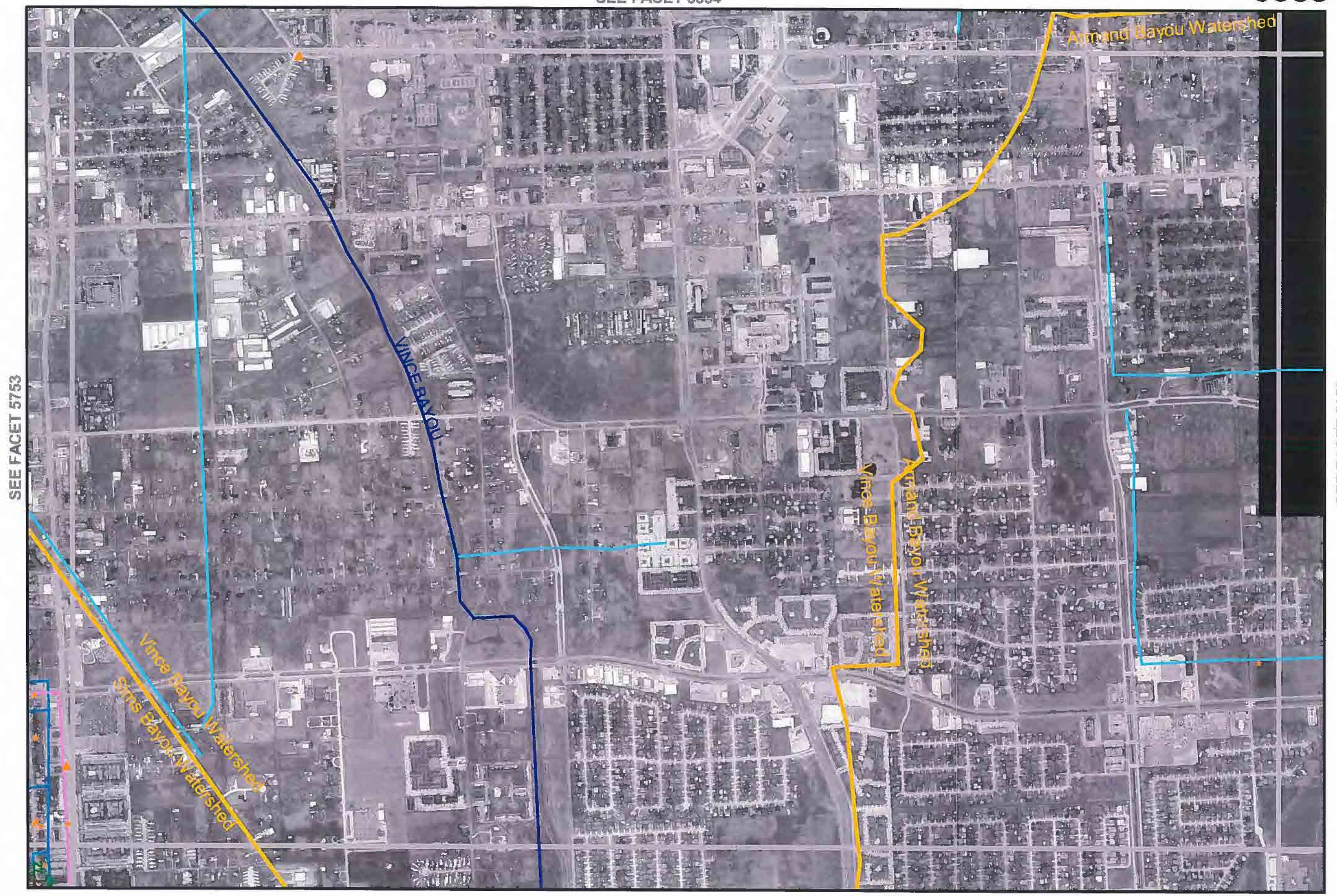
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Date: September 1999

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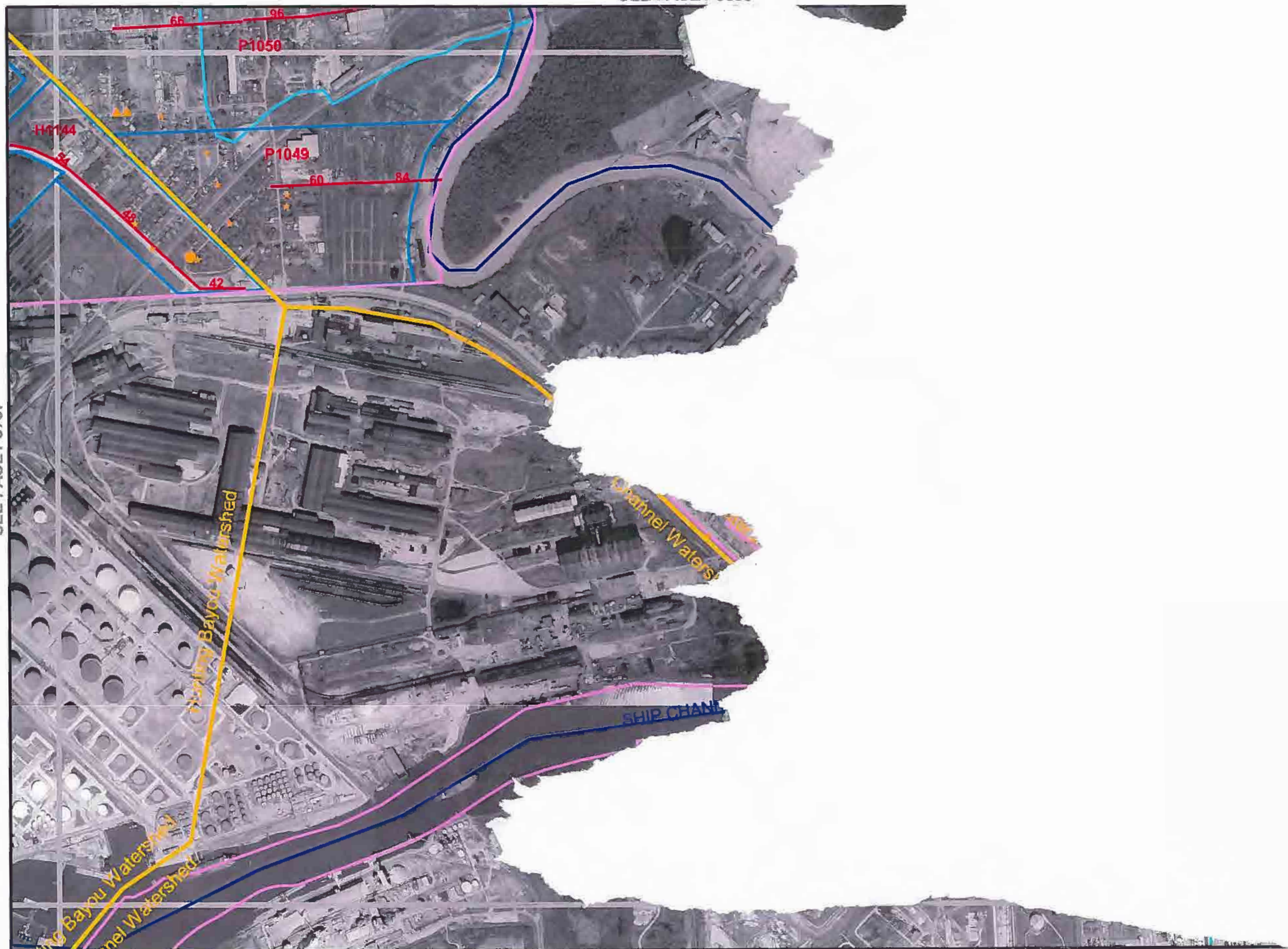
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Date: September 1999