City of Corpus Christi

Wastewater Master Plan, Land Use Assumptions, and Capital Improvements Plan

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PAPE-DAWSON ENGINEERS

Transportation | Water Resources | Land Development | Surveying | Environmental

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1. INTRODUCTION

Corpus Christi Water (CCW) is responsible for the maintenance, operation, management, and expansion of wastewater collection systems that transport flows generated within the City of Corpus Christi, Texas (City). Wastewater collection withing the City must meet local, state, and federal regulatory requirements and the reasonable expectations of the public for a healthy, safe, and thriving community. This Wastewater System Master Plan is an overarching planning document intended to guide policy on maintenance, improvement, and expansion of wastewater services through a foreseeable planning horizon (ten years), and for the long term beyond the initial horizon. This plan sets forth identified areas where repair, replacement or upgrades of existing infrastructure are recommended to maintain service at acceptable levels and where upgraded and new infrastructure may be required to support ongoing growth and development. Proposed capital improvement, repair, and upgrade projects are recommended and general cost data is provided.

1.1. General Overview

On February 9, 2021, the City Council of the City of Corpus Christi, by Resolution 032350, approved Pape-Dawson Engineers to develop Master Planning and Impact Fee Studies for water, wastewater, stormwater and transportation.

This Wastewater System Master Plan has been developed in accordance with Texas Local Government Code Title 12, Planning and Development, Subtitle C, Planning and Development Provisions Applying to More Than One Type of Local Government, Chapter 395 – Financing Capital Improvements Required by New Development in Municipalities, Counties, and Certain other Local Governments (Chapter 395). In addition, existing local codes and regulations including the City's Infrastructure Design Manual (IDM), Unified Development Code (UDC); minimum standards set forth by the Texas Commission on Environmental Quality (TCEQ), and other relevant state and federal codes and regulations were considered in providing development, upgrade, and maintenance recommendations. Existing system conditions, The City's Comprehensive Plan, Area Development Plans, current and past Master Plans, Master Plan amendments, existing studies, billing information, usage and flow data, and land use information have been collected, reviewed, and assessed to develop planning and development guidance through a ten-year planning period and an ultimate buildout condition. This Master Plan meets the requirements of Chapter 395 for use in evaluating impacts related to development and identified projects

and related costs are apportioned for maintenance and improvement of existing service separately from projects and costs related to new development. Where projects address both current needs and development costs are apportioned accordingly.

1.2. Outline of Scope

Development of this comprehensive master plan for the City Corpus Christi Wastewater System was accomplished through a series of tasks as outlined below:

1.2.1. *Land Use Assumptions Update*

Updated Land Use Assumptions (LUAs) are necessary to accurately assess current and future wastewater system demand and infrastructure needs. Comprehensive master plans, Area Development Plans, platting and building permit history, along with adopted current and future Land Uses from the City were reviewed to provide updated LUAs. Land use assumptions are based on past and present development patterns, current and projected land use, current and projected zoning, projected population growth and patterns, and input from city Staff and the community.

1.2.2. *Collect and Review of Existing Data*

Data and documents reviewed in conjunction with the development of this Master Plan include, but are not limited to:

- City of Corpus Christi wastewater network GIS files.
- City of Corpus Christi SewerGEMS models provided for evaluation of current and future wastewater flows.
- Wastewater flow monitoring and rainfall data.
- Infiltration / Inflow (I/I) study results.
- Topographic mapping for the City and Extra Territorial Jurisdiction (ETJ).
- Wastewater flow records (Monitoring, Wastewater Treatment Plant (WWTP) flows, TCEQ special Use Permit flows).
- Wastewater collection system plans (as-built drawings, record drawings, construction plans), including plans for currently proposed projects.
- Lift station record drawings.
- Collection system operation and maintenance (O&M) records.

- Available Closed-Circuit Television (CCTV) inspection data.
- Existing design standards and operation procedures.
- Sanitary Sewer Overflow (SSO) records.

1.2.3. *Wastewater Mapping System Update*

Existing information was used to update wastewater system maps, GIS data, and the SewerGEMS Model to at least 2019 conditions. This process included:

- Using available wastewater system design plans to update mapping and the associated database.
- Comparison of manhole (MH) and line elevations with updated topography.
- Update of MH elevations and inverts, where information was available from previous studies, record documentation, and maintenance and repair records.

1.2.4. *Flow and Usage Development*

Data from this City provided SewerGEMS model and water usage data, and existing wastewater system data were used to develop initial wastewater flow factors. The flow factors were then compared with recorded wastewater treatment plant flows and adjusted to provide consistent assumptions across the components of the wastewater system. Lift station sewershed areas Flow factors were also assumed to include a reasonable assessment of the inflow and infiltration component.

1.2.5. *Wastewater System Modeling*

Existing wastewater flow data from the Wastewater Treatment Plants, available information and records, and recent study and investigation results were used in conjunction with the hydraulic model to evaluate current, ten-year, and ultimate predicted flow rates. Ultimate flows are defined for this plan as the predicted flows that would result from every lot identified on the Future Land Use map being developed.

1.2.6. *Wastewater Treatment Plant Asset Evaluation*

There are currently six wastewater treatment plants in the City wastewater system including Allison, Broadway, Greenwood, Laguna Madre, Oso, and Whitecap. Current condition and capacity of each WWTP was assessed. The City of Corpus Christi Wastewater Management Plan, conducted by Stantec

and LNV in 2016, which projected flows through 2045 was used as the initial basis for this assessment. Other reports, master plans, permits and third-party evaluations were also reviewed. Previous recommendations that have been implemented and remining recommendations from the previous evaluations were identified. Projected flows from the 2016 report were compared to the those developed from the collection system modeling, and the information used to assess the capacity of the existing WWTPs to treat current, 5-year, and ten-year projected flows. Recommendations for improvements were identified and included in the proposed Capital Improvement Plan (CIP).

1.2.7. *Review and Assess Wastewater Design Criteria*

Existing design standards and requirements were reviewed and compared to accepted standards used in similar areas and to applicable state and federal requirements including TCEQ standard as stated in Texas Administrative Code Section 30, Part 1, Chapters 217 and 317. Existing policies and standards were also compared to the current best management practices including Capacity, Management, Operations, and Maintenance (CMOM) and common asset management programs. Recommendations from this review are included herein.

1.2.8. *Capital Improvement and Master Plan development.*

The current Capital Improvement Plan was reviewed with the information developed under the previous tasks. Projects that were included in this review are:

- Citywide Collection System Indefinite Delivery / Indefinite Quantity Program
- Citywide Lift Station Repair
- Citywide Wastewater Lift Station Alternate Power Supply
- Wastewater Treatment Plants and Lift Station supervisory control and data acquisition (SCADA) Improvements
- Allison WWTP Lift Station Upgrade and Process Improvements
- Greenwood WWTP Flood Mitigation
- Greenwood WWTP Electrical Improvements to Ultraviolet (UV) System
- Greenwood WWTP Process Upgrades
- Greenwood Flow Diversion to New Broadway WWTP
- McBride Force Main and Lift Station
- Broadway WWTP Rehabilitation
- Oso Water Reclamation Plant (WRP) Headworks and Lift Station
- Oso WRP Process Upgrade and BPC Facility Decommission

- Williams Lift Station Force Main (Line A)
- Laguna Madre Plant Rehabilitation
- Laguna Shores Road Force Main Replacement
- Whitecap Odor Control, Process and Bulkhead Improvements
- Whitecap WWTP Improvements

These projects and associated projected costs were reviewed to assess the overall impact to the wastewater system and to provide an apportionment of maintenance and service improvement related costs separately from development related costs.

New projects were identified and developed to meet projected wastewater maintenance and service needs for the 10-year horizon and ultimate buildout conditions. Probable costs for identified projects were developed using historic costs data from recent projects in the city, information provided by local construction contractors, and accepted costs estimating methods.

This Master Plan was then developed by compiling the information, data, analysis, and results from the various tasks as described.

1.3. Capital Improvement Advisory Council

In accordance with Chapter 395, the City established a Capital Improvement Advisory Council (CIAC) that was tasked with overseeing and guiding the development of the Master Plan and the associated Capital Improvement Program. Composition of the CIAC is fifteen members appointed by the City council of which at least six members represent the real estate, development, or building industry. AS noted by the City's description of the CIAC:

"The committee shall serve in an advisory capacity; advise and assist the City Council in adopting land use assumptions; review the capital improvements plan, land use assumptions and impact fees, and file written comments in accordance with Chapter 395 of the Texas Local Government Code; monitor and evaluate the implementation of the capital improvements plan; file semiannual reports with respect to the progress of the capital improvements plan and report to City Council any perceived inequities in implementing the plan or imposing the impact fee; and advise the City Council of the need to update or revise the land use assumptions, capital improvements plan, and impact fee."

Members of CIAC were regularly briefed on the development of the Master Plan, provided information as it was developed, and provided input and recommendations.

2. WASTEWATER COLLECTION AND TREATMENT SYSTEM

A general description of the wastewater collection and treatment assets is provided as a baseline for planning and proposed development. As maintenance, modification, upgrades, and new development are ongoing activities, conditions as described in this section are general in nature and will change with time.

2.1. Wastewater Assets

Wastewater services are provided within the City Limits of Corpus Christi and cover approximately 160 square miles (103,000 acres) as shown in Exhibit 1.

The wastewater service area is bounded on the north by Corpus Christi Bay, Nueces Bay, and the Nueces River to the east the city extends across the Flour Bluff peninsula and onto Padre and Mustang islands. Padre and Mustang Islands, generally the eastern extent of the service area, are part of the coastal island system on the Texas coast and the wastewater system on one of these islands is generally bonded to the north by the City of Port Aransas and on the east by the Gulf of Mexico, on the west by Corpus Christi Bay and the Laguna Madre, and to the south by the Padre Island National Seashore. Wastewater on the islands is routed to and treated at the Whitecap WWTP. The Flour Bluff Area (Serviced by the Laguna Madre WWTP is a peninsula that lies between the Laguna Madre and Oso Bay. Oso creek is a major stream drainage the runs along the southwest side of the current City limits. Development is occurring south and west of Oso Creek and wastewater systems are being extended into these areas. To the west and northwest, the wastewater system is limited only by the current state of development and the limits of the Extra Territorial Jurisdiction (ETJ).

Topographic relief in the area is limited with elevations ranging from sea level at the Gulf of Mexico, Oso Bay, Corpus Christi Bay, and Laguna Madre to approximately 130 feet above sea level in the northwest (Allison) area. With a few exceptions such as the bluff in the downtown area, elevation changes are gradual and there are large areas where the topography is level. Elevation and limited topographic relief present significant constraints on wastewater system development limiting the length of gravity collection pipes that can effectively be implemented.

2.1.1. *Wastewater treatment plants.*

Wastewater is collected and treated at six Wastewater Treatment Plants (WWTP) located throughout the city. Locations and areas served by each treatment plant are shown on Exhibit 2 and current capacity information is provided in the Table 2-1.

Table 2-1 Water Treatment Plants

Treatment Plant	Construction	Last Modified	Average Flow Capacity (MGD)	Peak Flow Capacity (MGD)
Allison	1966	1984	5	15
Broadway	1938	2016	8	20
Greenwood	1957	1980	8	24
Laguna Madre	1971	2022	3	9
Oso	1941	2018	16.2	98
Whitecap	1974	2018	2.5	7.5

Repair and upgrade work is currently planned or underway at each WWTP.

An evaluation of current capacity and condition, future treatment flows, along with maintenance and capacity needs has been completed by Lockwood, Andrews and Newnam, Inc. (LAN) in support of this Master Plan. Information on the WWTPs is taken from that study and the document titled “Wastewater Treatment Plant Asset Evaluation” is included as Appendix A.

Each WWTP receives flow from a network of Lift Stations, force mains, and gravity flow pipe within a basin defined by topography, existing development, and the extent of the wastewater system associated with an individual lift station. The area feeding a WWTP is denoted as a sewershed. Each of the six seweresheds in the City are designated as service areas for the purpose of developing maintenance, upgrade, repair and expansion projects and associated costs for the wastewater system.

2.1.2. *Lift Stations and Force Mains*

The low overall elevation of the City and the flat topography requires a significant number of lift stations and associated force mains to move wastewater flows to the WWTPs. The City currently has 106 lift stations, including those located at each WWTP, and over 100 miles of force mains. Each service area is subdivided into sub-basins to identify the gravity lines that flow to each Lifts station. Information on the current size and capacity of the lift stations are provided in Appendix B. Lift stations and the associated

sub-basins for each Service Area are shown on Exhibit 3 through Exhibit 8. Lift stations at each WWTP are part of the WWTP evaluations.

2.1.3. *Gravity collection system*

Gravity collection of wastewaters is limited by the level topography and the practical depth of installation for gravity flow pipe. The City operates and maintains approximately 1,195 miles of gravity sewer lines with over 62,630 manholes in the system. Pipe diameters in the current system range from 2-inches to 60-inches. Around 78 percent of the gravity lines are 8-inches or less in diameter with 17 percent in the 10- to 18- inch range and the remaining 5 percent are 24-inches in diameter or larger.

2.2. Consent Decree

Aging infrastructure and increasing demands on the wastewater system resulted in a substantial number of Sanitary Sewer Overflows (SSOs) during rain events. In 2008, the U.S. Environmental Protection Agency (EPA) informed that City of Corpus Christi that the SSOs violated the Clean Water Act and the significant repairs and upgrades to the Wastewater system were required. After a decade of negotiations, a 15-Year Consent Decree was agreed to by the City of Corpus Christi, the EPA, and the Texas Commission on Environmental Quality (TCEQ). The agreement was executed in January of 2021.

Under the terms of this agreement, the City will, over the 15-year term of the agreement, inspect, clean and repair wastewater pipes, manholes, and force mains, and upgrade lift stations and wastewater treatment plants to improve capacity and overall system performance to limit the potential for SSOs and to improve overall operations of the wastewater system. Requirements of the consent decree were reviewed and incorporated in this master plan so that repairs, upgrades, modification, and expansion of wastewater assets under the master plan are consistent with, and supportive of, compliance with the Consent Decree. Requirements of the Consent Decree will prevail in the event of any discrepancy.

Modeling of the wastewater system was also a requirement of the consent decree. The SewerGEMS Hydraulic model used in the development of this master plan was developed, calibrated, and approved by the EPA for use in addressing the requirement of the Consent Decree.

3. LAND USE ASSUMPTIONS

Demand on public infrastructure is a function of the population, where that population lives and works, and how the land within the service area of the public system is used. Evaluation of the future demands on the Wastewater System related to development requires a reasonable assessment of the increase in population, where and how new development occurs, and changes in land use and population density. Taken together these parameters are referred to as Land Use Assumptions (LUAs).

Projections for growth in employees and households are regularly conducted by the Corpus Christi Metropolitan Planning Organization (MPO). Current projections were used as an initial point in the development of Land Use Assumptions and evaluating future demands on the wastewater system.

3.1. Area Development Plans

To improve City-wide planning, zoning, and land use assumptions the City Planning Department has divided the city into nine planning areas (Bayside, Corpus Christi Airport, Downtown, Flour Bluff, London, Northwest, Padre/Mustang Island, Southside, and Westside) and has developed planning documents for each area. These Area Development Plans (ADPs) are based on current and projected land usage and on projected needs based on the character, land use, population, and anticipated development of the individual areas. Projections for each area can be combined to provide overall City-wide Land Use Assumptions.

In addition to the ADPs currently in place, a tenth planning area located between the Northwest ADP, the City of Robstown, Texas, and west of Interstate 69 has been identified and used in the master plan development. This tenth planning area is referred to as the Calallen Planning Development Area. Exhibit 9 shows the PDAs used in developing the land use assumptions.

Both the London and Calallen planning areas extend into the City's ETJ outside of the City Limits. Development in these areas is occurring and is expected to continue to occur with related annexation of the land and extension of City services. Master planning for extension of wastewater services in these areas is provided like planning within the city limits. Additional development of land in the ETJ is expected to follow the growth patterns of the adjacent ADP and is assumed to follow the established land use patterns. Significant portions of the ETJ are located north of Corpus Christi Bay and Nueces Bay (See Exhibit 10).

There are no City owned services in these areas and development is not expected to be significant within the planning horizons of this Master Plan. Planning efforts have not been included for areas of the ETJ where costs to extend wastewater services are high and significant development is not expected to occur for an extended period.

3.2. Projected Growth Rate

Growth projections are developed and updated by the Metropolitan Planning Organization. Data from the MPO projections was initially used to calculate a predicted annual growth rate based on increase in households and the projected increase in employees from 2021 to 2031. Project growth rates were calculated using the following equation.

$$Percent\ Annual\ Growth\ = \left[\left\{\left(\frac{2031\ households/employees}{2021\ households/emplyees}\right)^{\frac{1}{number\ of\ years}}\right\} - 1\right]100$$

As an example, in the Downtown ADP, the number of current households is 3,794. In 2031, it is projected that the number of households in this ADP may be 4,919. This is a difference of 1,124 and correlates to a 2.6 percent growth per year in households. A similar methodology was used for projected increases in employees.

Projected annual growth based on households and employees are shown in Table 3-1 and Table 3-2.

Table 3-1 Projected Annual Growth by households

ADP	2021 Households	2031 Households	2031 Less 2021	Annual Growth in households
Bayside	31,508	32,478	970	0.3%
Calallen	1,310	2,201	891	5.3%
CC Airport	1,582	2,228	646	3.5%
Downtown	3,794	4,919	1,125	2.6%
Flour Bluff	8,006	8,573	567	0.7%
London	1,100	1,720	620	4.6%
Northwest	12,152	15,194	3,042	2.3%
Padre/Mustang Island	5,987	7,295	1,308	2.0%
Southside	41,601	47,130	5,529	1.3%
Westside	18,533	19,978	1,445	0.8%
Total	125,573	141,716	16,143	1.2%

Table 3-2 Projected Annual Growth by Employees

ADP	2021 Employees	2031 Employees	2031 Less 2021	Annual Growth in Employees
Bayside	25,887	26,342	455	0.2%
Calallen	3,502	4,093	591	1.6%
CC Airport	8,927	10,755	1,828	1.9%
Downtown	17,328	17,450	122	0.1%
Flour Bluff	11,725	12,077	352	0.3%
London	423	732	309	5.6%
Northwest	11,536	13,307	1,771	1.4%
Padre/Mustang Island	2,666	3,431	765	2.6%
Southside	26,898	30,226	3,328	1.2%
Westside	31,253	33,767	2,514	0.8%
Total	140,145	152,180	12,035	0.8%

According to the US Census Bureau, the City of Corpus Christi had an annual growth rate of 0.4 percent from 2010 to 2020. The data from the MPO projections shows a more robust growth rate is anticipated over the next ten-year period.

City records of lots added in each ADP from January 1, 2020, to January 25, 2022, were then used to generate an annual growth rate for the last two years. The MPO baseline number for 2021 households was used in conjunction with the lots added data from the city using the same formula to generate an annual growth rate based on the lot added information. The growth rate from lots added is compared to the MPO Households growth rate in Table 3-3.

Table 3-3 MPO Annual Growth Rate vs. Annual Growth Rate by Lot Additioins

ADP	MPO Annual Residential Units Added	MPO Annual Growth Rate	Average Annual Lot Addition	Annual Lot Addition Growth Rate
Bayside	97	0.3%	60	0.2%
Calallen	80	5.3%	24	1.8%
CC Airport	65	4.1%	0	0.0%
Downtown	112	3.0%	5	0.5%
Flour Bluff	57	0.7%	112	1.4%
London	288	4.6%	225	4.5%
Northwest	304	2.5%	71	0.6%
Padre/Mustang Island	131	2.2%	36	0.6%
Southside	553	1.3%	421	1.0%
Westside	145	0.8%	70	0.4%
Total	**1,832**	**1.3%**	**1024**	**0.8%**

In addition, the City provided growth rate information from previous time periods for six of the ADPs, which was included in the overall evaluation of growth rates. Historic growth rate and the associated period are provided in Table 3-4.

Table 3-4 Historic Growth Rate by ADP

ADP	Time Period	Growth Trend
Bayside	2010-2021	0.15%
Calallen	No Data	
CC Airport	No Data	
Downtown	No Data	
Flour Bluff	2010-2019	0.67%
London	2000-2018	7.2%
Northwest	No Data	
Padre/Mustang Island	2000-2019	2.48%
Southside	2000-2018	2.04%
Westside	2000-2019	0.36%

This information was considered along with the other data discussed to develop a baseline and a reasonable prediction of projected growth. Growth trends were discussed with City Staff and the CIAC, who provided input from the builder, developer, engineering, business, and general citizen communities. Growth rates were adjusted based on the input from the CIC and based on the reviews and the discussions noted, a growth rate for each ADP was selected with the following rational:

- Bayside is judged to have minimal growth and there is no current indication this growth rate may increase in the ten-year planning period. A growth rate of 0.2 percent is used.
- Conditions and growth in Calallen are like those in the Northwest ADP and the same growth rate of 1.5 percent is used.
- Based on discussions with the CIAC, residential development in the CC Airport ADP may not occur at an appreciable rate during the planning horizon of this Master Plan and no growth (0.0 percent) is used.
- The Downtown rates have a broad range; however, there is an ongoing effort to encourage “redevelopment” in the downtown areas, necessitating consideration of a higher growth rate. A rate of 2.0 percent is used.
- In the Flour Bluff area, the MPO and City growth rate are similar, but there is an increase in growth occurring recently based on the lot added information. This observation is consistent with recent development activity in the area. A rate of 1.0 percent is used for this area.

- For the London area there is currently strong interest in development, the past observed growth rate as identified by the City is 7.2 percent. After discussions and review with the CIAC, an annual growth rate of 10.6 percent has been applied in this area.
- The Northwest area has a significant range of available data. An average growth rate between the MPO household data and the lot addition data of 1.5 percent is used.
- In the Padre/Mustang Island ADP, the MPO growth rate and the City's growth trend are consistent. The growth rate in lot count may be minimal due to the type of growth (i.e., planned use developments). A growth rate of 2.4 percent is used.
- The Southside area has experienced a higher rate identified by City data than either the MPO or the added lot count data. Interest in development in this area is strong and a conservative 2.0 percent growth rate has been selected.
- The Westside lot count rate and growth trend identified by the City are consistent. A growth rate of 0.4 percent was selected for the Westside.

The growth rates developed and considered and the selected growth rates for use as the basis of this Master Plan are shown in Table 3-5.

Table 3-5 Growth Rates Reviewed and Selected

ADP	Annual Growth in Employees	Annual Growth in households	Annual Lot Addition Growth Rate	Historic Growth Rate	Selected Growth Rate
Bayside	0.2%	0.3%	0.2%	0.15%	0.2%
Calallen	1.6%	5.3%	1.8%		1.5%
CC Airport	1.9%	3.5%	0.0%		0.0%
Downtown	0.1%	2.6%	0.5%		2.0%
Flour Bluff	0.3%	0.7%	1.4%	0.67%	1.0%
London	5.6%	4.6%	4.6%	7.2%	10.6%
Northwest	1.4%	2.3%	0.6%		1.5%
Padre/Mustang Island	2.6%	2.0%	0.6%	2.48%	2.4%
Southside	1.2%	1.3%	1.0%	2.04%	2.0%
Westside	0.8%	0.8%	0.4%	0.36%	0.4%
Total	0.9%	1.3%	1.8%		1.5%

For commercial development, the growth rates taken from the MPO data are used. Table 3-6 provides the 2021 and 2031 data for residential and commercial growth used for evaluating future wastewater demands and proposed Projects to meet current and future needs.

Table 3-6 Projected 10-Year Commercial and Residental Growth by ADP

ADP	2021 Households	2031 Households	2021 Employees	2031 Employees
Bayside	31,508	32,144	25,887	26,342
Calallen	13,310	1,520	3,502	4,093
CC Airport	1,585	1,582	8,927	10,755
Downtown	3,794	4,625	17,328	17,450
Flour Bluff	8,006	8,844	11,725	12,077
London	1,100	3,000	423	732
Northwest	12,152	14,103	11,536	13,307
Padre / Mustang Island	5,987	7,589	2,666	3,431
Southside	41,601	50,711	26,898	30,226
Westside	18,533	19,288	31,253	33,767
Total	**129,485**	**147,886**	**142,214**	**155,164**

3.3. Land Use

With the annual growth rate for the ADPs selected, the next step is to identify where the anticipated growth may occur to facilitate planning for future wastewater system expansion. Vacant land that could develop withing the planning horizon of the master plan is assessed by comparing the anticipated growth with current land use density and use. For example, residential growth can be assessed in ADPs by determining the overall density and then using the number of projected new households to calculate how much undeveloped land may be impacted by the predicted development. As an example, for residential development, there are 8,006 residences in the Flower Bluff ADP in 2021, the current density across residential land use types is three units per gross acre. The predicted growth by 2031 in households is 567, which equates to 189 acres of currently undeveloped or agricultural land being developed into some type of residential use. Similar evaluations have been conducted in each ADP.

Current land use maps and information from ADPs were used to identify currently vacant and agricultural areas within the ADPs and future land use mapping based on current land use zoning and previous master planning efforts have been developed by the City to facilitate practical and efficient

development. The existing and future land use maps were overlayed to identify currently vacant and agricultural land that could be developed, and what the anticipated land use for the area would be.

Maps have been prepared for the ADPs identifying currently undeveloped land. The base color of the vacant lands correlate to the zoned land use (see map legends) and the outline color for parcels indicates whether the current land use is vacant (orange outline) or agricultural (green outline). Due to their size, this information is maintained in a shapefile provided to the City.

New lot information provided by the City was then reviewed to assess where potential growth would occur and to identify overall growth patterns. For a new development outside of the City limits to have wastewater services, the land must be annexed, and the wastewater collection system extended, so growth outside of the City is assumed to occur adjacent to existing development within the City Limit or to follow patterns like current development and then to move outward into the ETJ. Other development factors, such as properties within the Air Installation Compatible Use Zones (AICUZ) around military air installation and Accident Potential Zones (APZ) around the Corpus Christin international Airport. Such zoning and use restrictions were assumed to delay development and limit the land use density in the associated areas. For developing ten-year projections, development in areas with land use restrictions was assumed to remain stagnate and no contributions were included for the ten-year flows.

It should also be noted that areas within defined 100-year flood zones is anticipated to develop eventually. Based on conversations with the CIAC, development in these areas would be larger lots and wastewater system needs will be minimal.

4. WASTEWATER FLOWS

4.1. Master Plan methodology

Land use assumptions are used to develop a general prediction of where growth will occur, both in residential and commercial / industrial areas, how fast that growth will occur, and the impact predicted growth patterns will have on the wastewater collection and treatment system. General guidelines have been developed and presented for use in planning and guiding future expansion of the wastewater system. These guidelines are not intended to be prescriptive as to exact location and specific route of future improvements while providing guidance on flows that can be anticipated and how to manage increased flows due to development.

4.1.1. *Wastewater Flows*

Wastewater in the Corpus Christi Wastewater System is derived from residential, commercial, and industrial use of water. Water entering the Wastewater system from outside sources must also be considered. Inflow and infiltration (I/I) is water that enters the system through aged and damaged infrastructure and flows to, and through WWTPs and can significantly impact the capacity of WWTPs and collection systems. Evaluation of I/I consist of dry weather infiltration and rainfall derived inflow and infiltration (RDII). Methodology for addressing flow sources for this master plan are discussed below.

4.1.2. *Domestic Wastewater*

Residential and commercial wastewater contributions are considered as domestic wastewater in the evaluation of current and anticipated flows. Flows from residential and commercial sources are similar in composition. In evaluating future flows and infrastructure needs, growth in the commercial and residential sectors is considered separately in evaluating volume increases.

4.1.3. *Industrial Wastewater*

Industrial sources can produce large volumes of wastewater with more complex composition that may require additional treatment processes or that may tax existing treatment processes reducing the available capacity of the treatment system. Industrial sources of wastewater are currently accepted and treated within the wastewater treatment system; however, these flows are part of the current baseflow and have been included with the domestic wastewater in evaluating current conditions. At the time this plan was prepared, there were potential large volume user developments; however, the probability of these developments being realized was considered low. Should industrial development occur that has

the potential to significantly impact the flow and / or treatment capacity of the associated WWTP, those impacts will need to be assessed and the timeline of upgrades, process improvements, or capacity expansion adjusted as necessary to address the demand.

4.1.4. *Inflow and Infiltration*

Low ground elevations, level topography, proximity to the ocean, bays, rivers and streams, and the depth of the wastewater collection lines places a significant amount of collection piping below groundwater levels. Groundwater can infiltrate wastewater systems through open pipe joints, damaged pipe and manholes, leaky lateral connections, and other causes related to aging or misuse of the system. Older infrastructure also lacks the advantages of modern materials and updated construction methods intended to reduce infiltration. Dry weather infiltration is a function of ground water elevation and will fluctuate seasonally and annually depending on rainfall amounts and weather patterns in general. Lack of topographic relief, aging and inefficient storm water drainage systems, and the nature of rainstorms in the area also make the wastewater system vulnerable to additional infiltration during rain events and to direct inflow of stormwater into the system through damaged cleanouts and manholes, manhole covers, and undocumented storm drain connections to the wastewater system. Discharge of stormwater into the wastewater system is prohibited by city codes and ordnances; however, such connections often exist and may be a significant source of inflow.

Evaluation and understanding of the I/I are important for future planning. A reasonable estimate of the amount of I/I that will enter a system over time impacts the sizing of pipes, the capacity of lifts stations and the capacity and treatment requirements at WWTPs. Infiltration and inflow have been a significant factor in past SSOs, and a significant effort has been initiated, and is ongoing, to address I/I through replacing aged pipes and manholes, maintaining, and upgrading lift stations, and reducing the potential for inflow from areas prone to highwater during storm events. The current efforts to respond to the Consent Order include reducing I/I in the overall wastewater system by 35 percent. New infrastructure installed to support development or to replace existing infrastructure will be less susceptible to I/I; however, as systems age, the potential for I/I will increase. Sizing of improvements recommended herein assume that the 35 percent reduction goal will be achieved, and an allowance has been included for some I/I as systems age.

4.2. Hydraulic Model

As part of the Consent Order response, the City developed and calibrated a hydraulic model using the SewerGEMs platform to evaluate capacity restraints in the system that could be contributory to SSOs. The model is capable of estimating flows with or without I/I and separating dry weather infiltration from RDII. Modeling for this Master Plan was completed using the SewerGEMS hydraulic model as provided by the City.

Development of baseline current flows and predicted future flows started with an assessment of the SewerGEMS model. Available information from recent inspections, repairs, upgrades, and expansions were used to update the model; however, flows in the model are representative of 2019 conditions. Meter data, billing records, water use records and other data were used to compare and adjust model results with observed and documented flows. There were areas of the model where the baseline data provided inconsistent results and the available information was not sufficient to address the inconsistencies. Interpretation and interpolation were necessary in some areas to provide consistent planning across the wastewater system.

4.3. Current Flows

Wastewater flows can be derived from potable water demands as a consistent amount of provided water returns to the WWTPs along with I/I flows. Water billing and use records were evaluated and compared to treatment records from the WWTPs to establish a water recovery rate, i.e., amount of water used that enters the system as wastewater. The results are presented in Table 4-1, Water Recovery Rates.

Table 4-1 Water Recovery Rates

ADP	Water Use (MGD)	Treatment Flow (MGD)	Percent Recovery
CC Airport	1,133,839	660,000	58.2%
Downtown	2,343,531	1,450,000	61.9%
Flour Bluff	2,658,608	2,350,000	88.4%
Bayside	8,598,299	5,520,000	64.2%
Northwest	3,459,051	2,860,000	82.7%
Padre/Mustang Island	1,426,415	920,000	64.5%
Southside	10,682,315	8,450,000	79.1%
Westside	6,532,813	3,960,000	60.6%
Total	**36,834,871**	**26,170,000**	**71.0%**

A wide range of variation in recovery between ADPs is evident. With ten ADPs and six WWTPs some variation in the locations of recorded water demand and wastewater treatment may exist, and variations in the amount of the I/I in each ADP may also contribute to the variation. Some discrepancies within the billing, flow monitoring, or other data may also contribute to the variations. In addition, aging systems, both water and wastewater, may contribute to losses or gains in volume. However, when the recovery rate over the full system is considered, there is a 71 percent water recovery, which is consistent with an industry accepted average rate of 70 percent.

Using the available information, water demand for the city is estimated as 240 gallons per day (GPD) for each residential unit and 170 Gallons per day per employee. A standard recover rate of 70 percent is used in developing future wastewater flows.

4.3.1. *Infiltration and Inflow*

An understanding of the impact of I/I in the system was estimated by comparing several years of meter data to measured flow data from each of the WWTPs. The infiltration estimate was then used to model current system flows and to provide dry weather infiltration modeling in the SewerGEMS model.

The impact of I/I was evaluated by comparing modeled base flows at the WWTPs with the dry weather domestic wastewater loads from the SewerGEMS model. Table 4-2 provides a comparison of flows at the WWTPs and the modeled flow without I/I.

Table 4-2. I/I Evalauation

WWTP	Modeled WWTP Flow (gpm)	Modeled Flow Without I/I (gpm)	I/I Contribution (gpm)	Percent of Base Flow
Allison	2,275	2,197	78	3.4%
Broadway	2,264	2,182	82	3.6%
Greenwood	4,058	2,985	1,073	26.4%
Laguna Madre	1,556	1,320	236	15.2%
Oso	9,204	7,997	1,207	13.1%
Whitecap	983	662	321	32.7%
Total	**20,340**	**17,343**	**2,997**	**14..7%**

Significant impacts from I/I are notable in the Greenwood and Whitecap basins. Also of note is that the flows in the Model at the WWTPs do not fully correlate with the 2021 observed flow data. As noted, the hydraulic mode was not fully updated to current conditions as part of this study and annual variations around a general mean flow is common for WWTP flows. For the purposes of this planning effort, the model data is used to evaluate flow contribution from I/I and overall impacts to the system. System capacities and future flows are developed using the observed 2021 flows as base line and the model used to predict future flow requirements.

4.4. Future Flows

Future flows were developed and evaluated for a ten-year planning horizon and an ultimate build-out condition. By looking at each parcel on the land use map and assigning a flow to the parcel based on the anticipated land use, flows can be assigned to individual lift station basins and then to the associated WWTP and routed through hydraulic model for the collection system pipe network. For the ultimate flow condition, the exercise is academic as each parcel can be assigned a flow based on the anticipated land use, the flow can then be allocated to the appropriate lift station sub-basin and the WWTP basin.

For undeveloped areas without an existing collection system, the topography of the area was used as a general guide as to the probable direction of flow from each parcel and the efficient locations for trunk lines and new lift stations. Flows were then allocated to the appropriate WWTP by the defined service areas. Smaller collection lines are not shown to minimize undue influence or restriction on designs. The general principles of efficient design and development should be followed for new development to provide adequate pipe sizes for proposed development and for future development that could occur upstream. Changes in the locations of the future trunk lines and lift stations are acceptable to accommodate development requirements.

For ten-year flows, the process is similar; however, since not all the land is developed, there is some variability in flows based on where development actually occurs. The Area Development Plans provide some guidance as to anticipated growth patterns, and these general patterns were used in developing the ten-year flows. Properties with existing large lot development using on-site sanitary sewer systems, within an AICUZ, APZ or with other restrictions on development were assumed to not develop during the ten year horizon. Information provided by the CIAC on areas with low potential for development in the near term was also taken into consideration in developing ten-year flow demands.

With ten ADPs used to evaluate potential growth and development and six wastewater service areas there is not a direct correlation in the boundaries. While growth is evaluated for each ADP, future wastewater flows are associated with each WWTP. Predicted growth rates vary between ADPs, and wastewater service areas overlap ADPS. Future flows were developed by evaluating flows based on the ADP growth at each lot within the Service Areas to arrive at predicted 10-year, and ultimate buildout flows for the service areas.

By applying the growth rate determined for each ADP and land use category to lots and current flows within a service area, flows can be predicted for each parcel. Summing these flows provides a corresponding flow for the service area.

As an example, the Broadway WWTP serves parcels in the Bayside, Downtown, and Westside ADPS. Table 4-3 shows how growth rates are applied to arrive at a predicted 10-year flow at WWTP.

Table 4-3 Projected 10-Year Flows for Broadway WWTP

ADP	Land Use	ADP Flow at the Broadway WWTP (%)	Current Flow per Land use Category (GPM)	ADP Growth Rate (%)	Predicted 10-Year Flow (GPM)
Bayside	Commercial	14.3	229	0.2	234
	Residential	25.3	310	0.2	316
Downtown	Commercial	56.5	908	0.1	917
	Residential	24.5	300	2.0	366
Westside	Commercial	29.3	470	0.8	509
	Residential	50.2	614	0.4	639
Broadway WWTP Subtotals	Commercial		1608		1660
	Residential		1224		1321
Total			**2832**		**2982**

Applying this procedure to each service area provides the projected ten-year flow for each service are shown in Table 4-4.

Table 4-4 Current and 10-Year Flows

WWTP	Current WWTP Flows (gpm)	Predicted 10-year Flow (gpm)	Difference (gpm)	Percent Change
Allison	2,275	2,753	478	21.0
Broadway	2,832	2,982	150	5.3
Greenwood	4,058	4,814	330	18.6
Laguna Madre	1,556	1,886	1,1	21.2
Oso	9,204	10,498	1,294	14.1

WWTP	Current WWTP Flows (gpm)	Predicted 10-year Flow (gpm)	Difference (gpm)	Percent Change
Whitecap	983	1,177	194	19.7
Total	**20,908**	**24,110**	**3,202**	**15.3**

4.4.1. *Ultimate Flows*

Ultimate buildout for the purpose of this plan is defined as that point where each parcel of land identified on the City's Future Land Use Map is developed and is being used for the planned. By looking at each parcel on the land use map and assigning a flow to the parcel based on the anticipated land use, flows can be assigned to individual lift station basins and then to the associated WWTP for the Ultimate conditions. Table 4-5 provides the current flow used as a basis for developing future flows, the predicted 10-year flow and the ultimate flow condition.

Table 4-5 Predicted Flows by Service Area

WWTP	Current WWTP Flows (GPM)	10-Year Additional Flows (GPM)	Predicted 10-year Flow (GPM)	Ultimate Additional Flows (GPM)	Predicted Ultimate Flows (GPM)
Allison	2,275	478	2,753	1,584	4,337
Broadway	2,832	150	2,982	568	3,550
Greenwood	4,058	330	4,814	2,398	7,212
Laguna Madre	1,556	1,1	1,886	662	2,548
Oso	9,204	1,294	10,498	627	11,125
Whitecap	983	194	1,177	1545	2,722
Total	**20,908**	**3,202**	**24,110**	**7,384**	**31,494**

The predicted flows included I/I contributions based on the City achieving the 35 percent reduction in accordance with the Consent Order goals, new infrastructure being well constructed and maintained and the overall maintenance of the system keeping pace with aging of the system to keep the I/I levels constant or decreasing.

5. WASTEWATER SYSTEM EVALUATION

Each service area was further divided into sub-sewer basins according to the areas contributing to each left station. Existing wastewater assets were first evaluated for current conditions and capacity to identify projects that are currently needed to provide and maintain adequate service under existing conditions. Future flow conditions were then applied to the system to evaluate infrastructure needs for the ten-year and ultimate flow conditions.

Planning for the ultimate buildout provides an understanding of the overall system needs against which shorter term planning can be evaluated to provide overall efficiency and economy. For example, if a new collection pipe or new lift station is required to meet ten-year development needs, the ultimate condition should be taken into account to determine if a larger pipe should be installed to address long term demand, or the lift station should be designed to allow for expansion to accommodate long term needs.

An extensive inspection and condition assessment program has been initiated by the City and is congoing. Available data from the City assessments were made available for use in evaluation and recommendations of upgrades, additions, and new construction of wastewater assets. Additional condition assessments were not within the scope of this Master Plan study.

5.1. Wastewater Treatment Plants

A detailed analysis of the six existing WWTPs is provided in Appendix A, a summary of that information is presented here. Several capital improvement projects are currently planned or underway and many of the WWTPs and the capacity data presented is based on the assumption that those projects have or will be completed. Table 2-1Table 5-1provides the current and anticipated Average Daily flows as compared to the current average daily capacity.

Table 5-1 WWTP Current and Projected Flows

Treatment Plant	Current Average Flow Capacity (MGD)	Current Average Daily Flow (MGD)	Projected 2031 Average Daily Flow (MGD)	Projected Ultimate Average Daily Flow (MGD)
Allison	5.0	3.28	3.96	6.25
Broadway	8.0	4.08	4.29	5.11
Greenwood	12.0	5.84	6.93	10.39
Laguna Madre	3.0	2.24	2.72	3.67

Treatment Plant	Current Average Flow Capacity (MGD)	Current Average Daily Flow (MGD)	Projected 2031 Average Daily Flow (MGD)	Projected Ultimate Average Daily Flow (MGD)
OSO	18.0	13.25	15.12	16.02
Whitecap	2.5	1.42	1.69	3.92

With completion of projects currently planned or underway at the six WWTPs, all six plants currently have sufficient capacity for current and the projected ten-year growth. Three plants, Allison, Laguna Madre, and Whitecap will require expansion to add additional capacity to address the ultimate build-out condition.

Under regulations of the TCEQ (Texas Administrative Code (TAC) Section 305.126(a), expansion planning must be initiated by a municipality when the average daily flow reaches 75 percent of the existing plant capacity. Evaluation of the WWTPs includes capacity need and planning needs based on the TCEQ rule. Table 5-2 provide a comparison of 75 percent capacity flow and the approximate time frame when expansion planning would need to be initiated and the approximate time frame when expansion would need to be completed (WWTP flow reaches 100 percent of current capacity), based on the projected growth used herein.

Table 5-2 Expansion Planning Timing

Treatment Plant	Current Average Flow Capacity (MGD)	75% of Current Average Flow Capacity (MGD)	Years to 75% Capacity	Year 75% Capacity Reached	Years to 100 % Capacity	Year 100 % Capacity Reached
Allison	5.0	3.75	7.8	2029	20.9	2042
Broadway	8.0	6.00	26.6	2048	46.0	2067
Greenwood	12.0	9.00	29.2	2050	56.9	2078
Laguna Madre	3.0	2.25	4.4	2025	13.3	2034
OSO	18.0	13.5	5.7	2027	17.7	2039
Whitecap	2.5	1.88	17.6	2039	42.4	2063

Completion of current and planned projects to increase capacity at the Greenwood and Oso WWTPS is assumed in the timelines presented.

Three of the WWTPs would require expansion planning to start within the ten-year planning horizon, Allison, Laguna Madre, and Oso. Land is available for expansion of the WWTPs except for the Oso plant. Land around the Oso WWTP is developed, and expansion potential is limited. Based on the current and future land use projections used for this Master Plan, the capacity improvements currently underway or planned at the OSO plant will be sufficient to manage the predicted ultimate flows. Broadway and Greenwood WWTP will also have sufficient capacity for the ultimate buildout condition with the currently planned improvements.

The Oso plant will exceed 75 percent of the current capacity within the ten-year planning period and should expansion of capacity be necessary to meet TCEQ requirements, this planning effort may require plans to divert flows from the Oso Service Area to the Greenwood WWTP or to consider process improvements to provide the required capacity. Infrastructure is currently in place to allow for flow diversion from the Oso Service Area to the Greenwood WWTP.

Projected future flows from the London Area ADP are included in the projected Greenwood WWTP data. As development beyond the current land use plan could occur in the London area, the capacity and future flows for the Greenwood plant should be re-evaluated in the 5 to 10 year time frame.

5.2. Lift Stations and Force Mains

Lift station pump capacity, wet well volume, and force main capacity were evaluated for current, ten-year, and ultimate flow conditions to determine current adequacy and upgrades necessary to address future flows. Where force main flow velocities exceeded six feet per second (FPS), replacement with a larger pipe size is recommended to achieve velocities within the regulatory acceptable range.

Operational parameters for lift station pumps, as provided within the hydraulic model result in indicated surcharging of gravity collection lines in some areas. Operational parameters of the lift stations were evaluated, and recommendations for adjustment, where needed, are indicated. Information on the operational parameters that were provided in the hydraulic model, and the related recommendations are provided in Appendix B.

5.2.1. *Allison Wastewater Basin*

The Alison Service area includes fifteen lift stations. Anticipated future flows from the Calallen Planning Area are included in the Allison Service area for the evaluation of ten-year and ultimate flows.

Hydraulic modeling of peak wet-weather flows indicates that the lift stations currently have sufficient capacity. Wet wells at the Clarkwood North, Cynthia, Ramos, River Canyon, and Sharpsburg lift stations are undersized for the current modeled flows and expansion is recommended. Force main velocities, as modeled, at the Clarkwood South and Cynthia lift stations exceed acceptable limits and upgrading these force mains with larger pipes is recommended. Lift station control adjustments are indicated at the River Canyon and Highway 77 lift stations. Proposed improvements and flow data for the current conditions are shown on Exhibit 9. Area Development Plans

Exhibit 10. **Extraterritorial Jurisdiction**

Exhibit 11

For ultimate build out conditions, upsized wet wells are recommended for Clarkwood North, Highway 77, and Lakes Northwest. Force main upgrades are recommended at Highway 77 and Lakes Northwest along with increased pump capacity at Highway 77. Three new Lift Stations are recommended to accommodate future Development. Figure 5.2 provides information on the proposed upgrades for future flows and proposed locations for new lift stations. Table 5-3 Provides a summary of the proposed upgrades for the existing lift stations.

Table 5-3. Allison System Summary

Lift Station	Existing		Recommended				Ultimate		
	Wet Well (FT)	Force Main (In)	Wet Well (FT)	Force Main (In)	Upsize Pumps	Pump Controls	Wet Well (FT)	Force Main (In)	Upsize Pumps
Clarkwood North	8	12	10			Yes	14		
Clarkwood South	8	4				Yes			
Cynthia	4	2	8	4		Yes			
Highway 77	8	2		4			16	12	Yes
Lakes Northwest	8	8					16	14	
Northwest Crossing	12	12							
Nueces Acres	8	6				Yes			
Ramos	4	6							
River Canyon	6	8				Yes			
Sharpsburg	15	24	24			Yes	24		
Solar Estates	6	6							
Stillwell	10	10							
Upriver Road	19	8							
Wood River	12	16							
De Dietrich	6	8							

Specific capacities, sizes, timing, and other information are provided on the individual project sheets in Appendix C.

The Highway 77 lift station is being replaced with a new, larger station which will be called the CR 52 Lift station. An existing 6-inch force main will be utilized and the new pump station is designed with an initial capacity to match the capacity of the existing force main. The design also allows for expansion to meet future needs.

5.2.2. *Broadway*

The Broadway Service area includes 17 Lift Stations. Model results indicate that one lift station, Arcadia, where current flows exceed capacity and pump, wet well, and force main upgrades are recommended. Arcadia is included in the Broadway Service Areas as flows are currently directed to the Broadway WWTP. Currently flows from Arcadia can be directed to Broadway, Greenwood, or Oso WWTPs. Plans are in place to abandon the Arcadia – Oso force main, and flows are currently directed to Broadway WWTP. Modeling for this station showed flows going to greenwood. As the City intends to direct flows to Broadway WWTP, the information for this station has been moved to the Broadway Service Area. Future modeling updates should direct flows to Broadway WWTP.

For the remaining system, lifts stations, force mains, wet wells, and gravity piping have adequate capacity under current flow conditions. Adjusting the lift station operational controls would improve service in seven sub-basins; Coopers Alley L-Head, Lawrence Stret T-Head, Magee Beach, Morgan, Peoples Street T-Head, Studebaker, and North Beach C. See Exhibit 12 for location and flow data.

Under Ultimate flow conditions the model results indicate lift stations, force mains and wet wells have adequate capacity and no additional lift stations are required. See Exhibit 13. Table 5-4 provides a summary of proposed actions.

Table 5-4 Broadway System Summary

Lift Station	Existing		Recommended				Ultimate		
	Wet Well (FT)	Force Main (In)	Wet Well (FT)	Force Main (In)	Upsize Pumps	Pump Controls	Wet Well (FT)	Force Main (In)	Upsize Pumps
Arcadia	22.75	16	22.75*	24	Yes				
Coopers Alley L-Head	9	6				Yes			
Lawrence St. T-Head	7	6				Yes			
Magee Beach	6	4				Yes			
Morgan	17	12				Yes			
Peoples Street T-Head	7	6				Yes			
Studebaker	12	8				Yes			
North Beach C	12	8				Yes			
North Beach D	12	12							
North Beach B	12	8							
North Beach E	6	4							
Nueces Bay	7	6							

Lift Station	Existing		Recommended				Ultimate		
	Wet Well (FT)	Force Main (In)	Wet Well (FT)	Force Main (In)	Upsize Pumps	Pump Controls	Wet Well (FT)	Force Main (In)	Upsize Pumps
Rincon South	6	4							
Rincon North	6	4							
Cole Park	NA	NA							
Brownlee	NA	NA							
Resaca	NA	NA							

*Rebuild Wet Well with other upgrades

See Appendix B for details.

5.2.3. *Greenwood*

The greenwood Service area includes thirteen lift stations. Current flow model results indicated that peak flows at three lift stations exceed current capacity and pump, wet well, and force main upgrades are recommended at Kostoryz, McBride, and Port/Pearse stations. Upgrades were recently completed by the city at the McBride Lift station. However, these upgrades may not fully meet the requirements as provided in the model. Recommended improvements have been left in place; however, current costs have been adjusted to reflect current work completed.

An additional force main upgrade is recommended for the Sacky lift station. System performance in the sub-basins for the Highway 9 and Sacky lift stations would also benefit from revising the lift station controls. See Exhibit 14.

Under ultimate buildout conditions the Coastal Meadows lift station will require an upsize to the force main and the Highway Nine and Sacky lift stations will require upsized wet wells. The highway nine lift station will also need to increase pump capacity. In addition, up to six new lift stations will be required to provide future service as the area develops as shown on Exhibit 15. Table 5-5presents a summary of the Greenwood lift station conditions and recommendations.

Table 5-5 Greenwood System Summary

Lift Station	Existing		Recommended				Ultimate		
	Wet Well (FT)	Force Main (In)	Wet Well (FT)	Force Main (In)	Upsize Pumps	Pump Controls	Wet Well (FT)	Force Main (In)	Upsize Pumps
Airport	9	10							
Coastal Meadows	6.5	6						8	
Highway Nine	8	8				Yes	14		Yes
Kostoryz	21.85	2@16; 1@12	24	30	Yes				
Levi County Jail	11.1	6							
McBride*	16.6	20	24	24	Yes	Yes			
Sacky	12	16		20			20		
Trojan	9.85	6							
Lexington	14.15	6							
Port/Pearse	15.6	24	24	30	Yes				
Charlies Place	NA	NA							
Rose Acres	NA	NA							
Westpoint Crossing	NA	NA							

NA = Data not available

*McBride Lift Station – Recent improvements have been completed at this pump station and a recommendation based on the model results for current conditions may not be necessary.

See Appendix C for details.

5.2.4. *London*

Development in the London area is recent and is anticipated to continue at a rate higher than other areas of the city and a separate planning area has been developed to address the anticipated development. There are currently two new Lift Stations, the Oso Creek Lift, and the London East Lift Stations in the London area.

Development in the areas of these lift stations is limited at the present time, and no meaningful current flow data is available. The London East lift station currently sends flows through a temporary force main under Oso Creek to the Oso WWTP. The current capacity of this lift station is limited by the capacity of the receiving system in the Oso Service area. A capital improvement project has been identified and is currently under design to upsize London East lift station and a force main to take flows to the Greenwood WWTP. The Oso Creek lift station currently directs flows to the Greenwood WWTP.

Ten-year flows are anticipated to be within the current capacity of the existing Lift Stations and the upgrade to the London East Lift station will be required to manage ultimate buildout flows. See Exhibit 16 for additional information.

5.2.5. *Laguna Madre*

Laguna Madre is services by twelve existing lift stations. Model results for current flow conditions indicate that improvements to two lift stations are necessary to provide adequate service for current conditions. The Laguna Shores lifts station needs increased pumping and wet well capacity, and the Military and Jester Lift station requires a larger force main and an upsized wet well. Adjusting the operational controls on six lift stations is recommended to reduce surcharging and the potential for SSOs. Adjustments to controls are recommended for laguna Shores, Military and Jester, Rex, Riviera, Turtle Cove, and the Waldron lift stations as shown on Exhibit 17.

At the ultimate buildout conditions, the existing Lift Station will not require any additional upgrades. Three new lift stations and associated force mains are recommended to support future flows beyond the ten-year horizon as shown on Exhibit 18. Table 5-6 provides a summary of proposed upgrades and details are available on the individual project sheets in Appendix C.

Table 5-6 Laguna Madre System Summary

Station	Existing		Recommended				Ultimate		
	Wet Well (FT)	Force Main (In)	Wet Well (FT)	Force Main (In)	Upsize Pumps	Pump Controls	Wet Well (FT)	Force Main (In)	Upsize Pumps
Flour Bluff	10	14							
Gateway Park	10	4							
Jamaica	12	8							
Laguna Shores	14	18	22		Yes	Yes			
Military and Jester	10	10	20	12		Yes			
Purdue	8	6							
Rhetta Place	6	6							
Rex	8	8				Yes			
Riviera	20	12				Yes			
Turtle Cove	10	8				Yes			
Waldron	15	12				Yes			
Walmart	6	8							

5.2.6. *Oso*

Wastewater in the Oso Service Area is transported at twenty-three lift stations. Upgrades are recommended at one lift station to provide adequate service for current conditions, as modeled. Wet well and force main upgrades are recommended at the Perry Place Lift Station. Performance at four lift stations, Country Club, Everhart / Staples, Perry Place, and Station 5, may benefit from adjustments to the controls.

Upgrades at one lift station are recommended to meet future demands. Increased pump and wet well capacity are recommended at the Everhart / Staples lift station. Ultimate buildout conditions are presented on Exhibit 19 and Table 5-7provides a summary of recommended improvements. Details for the upgrades are provided on individual project sheets in Appendix C.

Table 5-7 Oso System Summary

Station	Existing		Recommended				Ultimate		
	Wet Well (FT)	Force Main (In)	Wet Well (FT)	Force Main (In)	Upsize Pumps	Pump Controls	Wet Well (FT)	Force Main (In)	Upsize Pumps
Airline	22	12							
Anchor Harbor	6	8							
Bay Drive	12	10							
Buckingham	15.6	10							
Cimarron	7.67	14							
Country Club	12	24				Yes			
Everhart / Staples	13.12	24				Yes	14		Yes
Greenfield by the Bay	12	12							
Kings Crossing	6	12							
Lakes	6	10							
Oleander	4	4							
Pelican Bay	6	4							
Perry Place	6	10	12	16		Yes			
Schanen	9	8							
Slough	12	10							
Starry	12	12							
Station 5	12.36	24				Yes			
Sugar Tree	6	12							
TAMUCC	6	8							

Station	Existing		Recommended				Ultimate		
	Wet Well (FT)	Force Main (In)	Wet Well (FT)	Force Main (In)	Upsize Pumps	Pump Controls	Wet Well (FT)	Force Main (In)	Upsize Pumps
Webers Glen	11.5	12							
Williams	32	36							
Wooldridge II	12	16							
Wooldridge	26	30							

5.2.7. *White Cap*

White Cap is served by 19 lift stations. Modeling for the current conditions recommends upgrades to the wet well and force main for the Seahorse Lift Station and the Jackfish and Pl Section 4 lift stations both have wet well upgrades proposed. Exhibit 18 provides additional information.

Under ultimate flow conditions upgrades to the force main for Seahorse and Pl Section 4 are recommended along with an additional upgrade to the Pi Section 4 wet well. Up to ten additional lifts stations may be required to meet future growth conditions in the White Cap Service area as shown on Exhibit 20. Table 5-8 provides a summary of the proposed upgrades.

Table 5-8 White Cap System Summary

Station	Existing		Recommended				Ultimate		
	Wet Well (FT)	Force Main (In)	Wet Well (FT)	Force Main (In)	Upsize Pumps	Pump Controls	Wet Well (FT)	Force Main (In)	Upsize Pumps
Aquarius	10	12							
Coquino Bay	11.5	6							
Cumana	6	6							
Gypsy	7.92	8							
Jackfish	7.67	10	10						
Kennedy Causeway	6	4							
Lake Padre South	7.67	8							
Leeward	11.5	10							
Park Road 22	15.5	16							
Park Road 53	6	6							
Pl Section 4	4.2	14	20				24	18	
Sea Pines	8	6	10	6					
Seahorse	6	4						6	
Swordfish	6	6					10		
Tesoro	6	6							

Station	Existing		Recommended				Ultimate		
	Wet Well (FT)	Force Main (In)	Wet Well (FT)	Force Main (In)	Upsize Pumps	Pump Controls	Wet Well (FT)	Force Main (In)	Upsize Pumps
Verdemar	10	8							
Kennedy Causeway II	NA	NA							
Zahn	6	8							
Packery Pointe	NA	NA							

NA – data not available

5.3. Gravity Collection System

Gravity flow wastewater pipes and manholes, as provided in the SewerGEMs model, were evaluated under current and future flow conditions, and compared to existing capacity of each segment of pipe based on provided size and slope of the pipe. Assets included in the current Capital Improvement plan were included in the overall analysis to the extent that information was available.

Assets that indicated a surcharge or overflow conditions were compared to City data and the currently established or proposed Capital Improvement Project lists, additional projects have been developed to address current inefficiencies and future needs that are complementary to current plans.

Evaluation criteria for recommending up-sizing of pipes was based on providing sufficient capacity to prevent SSOs and to limit surcharging to three feet below the ground surface. Further reductions in surcharging would require upgrades to significant portions of the system.

Recommended gravity pipe upgrades are generally shown on Exhibits 9 through 19 and details are provided on the individual project maps and project sheets provided in Appendices 2 and 3. Areas of specific concern or additional consideration are discussed below.

5.3.1. *Allison*

In the 10-year and ultimate time frames, growth in the areas of the Stillwell, Northwest Crossing, and Solar Estates lift station drainage areas will overwhelm the capacity of the deep 27-inch gravity sewer carrying the flow to the Allison WWTP on the eastern side. Rather than upsizing this large and deep pipe, paralleling it with an 18” gravity sewer would relieve the capacity constraints and would be more economical. Additionally, a parallel pipe is suggested over pipe upsizing near the Sharpsburg / highway 77 area due to slope considerations.

5.3.2. *Broadway*

The 2022 Capacity Constraint Maps show capacity constraints not relieved by a 35% RDII reduction along Antelope Drive and back up onto Mueller Street and Old Robstown Road. The SewerGEMS models of the Broadway Basin, as provided, showed multiple configurations for pipes in the Harbor Bridge area. Harbor bridge construction includes significant changes to utilities and the model contains past, current, and proposed pipes. Information from the City GIS system was used to select pipes and locations to include in the model, although the accuracy of the information has not been field verified. Modeling with the date from the GIS system indicated that the capacity constraints along Antelope, Mueller and Old Robstown roads are relieved until the ultimate time frame.

5.3.3. *Greenwood*

Several pipes near the Kostoryz lift station had negative slopes in the SewerGems model. The resulting model output indicates significant surcharging in the area. Replacement of gravity lines in this area is recommended; however, verification of pipe slopes and inverts should be completed first and the actual extent of upgrades determined.

5.3.4. *Oso*

Gravity piping from the Perry Place Lift Station drainage area to the Oso WWTP are noted to have capacity problems and associated capacity related SSOs are noted in the model. A significant number of properties could connect to the existing system as this area develops. Instead of upsizing major pipes to the WWTP, a proposed solution would be to enlarge the Perry Place lift station and install a force main to Nile Drive. This would relieve the gravity system upstream of Nile Drive and allow for growth in the Perry Place area. Replacement of selected pipe near the Oso WWTP on Nile Drive would release the bottleneck for the rest of the upstream system.

6. COST FACTORS

Proposed projects have been developed to address the identified capacity constraints that currently exist and that are anticipated based on potential development. To provide a reasonable estimate of cost for the proposed projects cost factors have been developed that can be applied proposed work to develop a budgetary level estimate of project costs. Estimates of cost are high level and are based on generally accepted construction practices, overall capacity needs, materials, sizes, and depth of various system components and are not based on a specific design.

Unless otherwise noted, costs were developed based on an estimate of the direct construction costs. Program costs were then added as a percentage of the construction cost as noted in Table 6-1.

Table 6-1 Project Costs

Expenditure	Cost (As a Percent of Direct Cost)
Direct Construction Cost	0 (base cost)
Mobilization	10%
Bonds and Insurance	5%
Overhead and Profit	10%
Design and Inspection	15%
Contingency	30%

Implementation schedules for individual projects will be a function of funding availability, growth, and other factors that are not predictable. Costs are provided in 2023 dollar values and an appropriate time based escalation factor should be included depending on the actual implementation schedule determined by the City. Factors developed and applied to elements of the Wastewater collection and treatment system are discussed in the following sections.

6.1. Wastewater Treatment Plants

Projects are currently underway and planned at each of the WWTPs that will address current capacity concerns and provide adequate capacity for the anticipated growth over the next ten years. Projects to address efficiency and capacity for the long term have been proposed as well.

In general, expanding an existing WWTP or constructing a new WWTP will have a typical cost on the order of $12.00 per gallon of treatment capacity. This is a general factor and can be used to provide a

high-level budgetary estimate for capacity expansion. Upgrades to processes and technology are generally significantly lower. For example, process improvements currently underway at the White Cap WWTP are estimated to cost $4.90 per gallon of treatment capacity. Costs for process improvements can vary widely depending on the type of process involved and the extent of the improvements.

Costing for the current and planned CIP projects are listed as currently estimated by the city. Proposed CIP projects were costed using cost data from recently completed, current, and planned near term projects. Cost details for the WWTP CIP projects are provided in Appendix C.

6.2. Lift Stations and Force Mains

Lift station capacity can be increased by replacing existing pumps with larger pumps or by adding additional pumps. Pump costs were developed based on flow capacity and horsepower, where the horsepower required is a function of the elevation difference between the pump and force main outlet, the size and length of the force main and predicted flow velocity within the force main. A cost matrix was developed to allow selection of pump prices based on current or predicted development needs. Cost matrices were also developed for wet wells based on diameter and depth and for force mains based on diameter of the pipe and assuming a standard depth of burial. Additional costs were included to cover site work, electrical, and other ancillary items. Where a new lift station or replacement of a lift station are recommended a generalized cost of $1,800 per gallon per minute of capacity can be used. Costing was based on recently completed and planned projects of similar nature. In additional local contractors were contacted and requested to provide unit pricing for current market conditions.

Costs for force mains and wet wells have been developed based on current operational volume and volume required to accommodate growth. Generally, costs have been developed base increasing the size of the existing force main or the existing wet well. Other options such as installing a parallel force main or a second wet well to accommodate the volume needs are acceptable and may be more economical in some cases. It is beyond the scope of this planning effort to develop and evaluate design alternatives for individual projects. Costs presented are conservative and are intended to be budgetary in nature. As such, costs should be sufficient to cover alternatives selected during design for individual projects.

6.3. Gravity Collection System

Pricing for gravity collection portion of the system is a function of pipe size, length and depth of burial with consideration of the surface conditions at the location (pavement or unpaved areas). Unit prices included costs for removal of existing pipe (where applicable), materials, excavation, trench safety, backfill, traffic control, and bypass pumping. Pricing information was taken from recent projects and from information requested from local contractors.

Project pricing was developed by taking the mid-point of the segment to be upsized or installed and determining the depth range for the pipe. Unit costs for the selected depth were then applied to the length. Manhole costs were developed similarly, and a costs matrix was developed based on the diameter of the manhole and depth. Manhole spacing is based on the requirements in the current City of Corpus Christi Infrastructure Design Manual.

7. CAPITAL IMPROVEMENTS

The capital improvements have been divided into near term, 10-year and ultimate projects. “Near term” are projects that should be completed or and in the process of being completed prior to 2025. 10-Year are projects that aren’t immediately needed but should be completed for growth in the next ten years. Ultimate projects are projects defined for the ultimate buildout of the City. Appendix C includes individual costing sheets for each recommended project. Appendix D provides a map for each project.

Although the amount of development that will occur in the next ten years can be predicted, it is difficult to determine with reasonable accuracy where that growth will occur. Generally, costs were developed for the current project needs and for the ultimate flow conditions project needs. Ten-year costs were then developed by taking a percentage of the ultimate project costs based on predicted growth rates. Based on the breakdown generated using this approach a list of probable ten-year projects has been developed.

For convenience, Table 7-1 provides a summation of improvements that should occur between 2022 and 2024. Some of the improvements include costs that are attributable to growth. Those dual projects are shown in a separate column for convenience.

Table 7-1. Near Term Improvements

Project #	Project Name	Description	Total 2022 Cost- Non-Growth Related ($)	Total 2022 Cost- Partial Growth Related ($)
Allison				
1 of 238	Clarkwood North	Increase wet well diameter from 8' to 10' for an additional 600 gallons between 2022-2024, the wet well will need to be upsized again to 14' for an additional 850 gallons to meet ultimate flow conditions. Controls will also need to be adjusted.	$133,800	
2 of 238	Cynthia	Increase wet well diameter from 4' to 8' for an additional 132 gallons between 2022-2024, controls will also need to be adjusted. Force Main needs to be upsized from 2" to 4" between 2022-2024. Rehabilitate/repair wet well and force main to meet current flow conditions.	$113,400	
3 of 238	Highway 77	Force Main to be upsized from 2" to 4" between 2022-2024. For ultimate conditions, pumps must be upsized, wet well will need to be upsized from 8' to 16' for an additional 3,500 gallons and the Force Main will need to be further upsized from 4" to 12". Rehabilitate/repair force main to meet current flow	$240,700	

Project #	Project Name	Description	Total 2022 Cost- Non-Growth Related ($)	Total 2022 Cost- Partial Growth Related ($)
		conditions between 2022-2024. Upgrade pumps, wet well diameter, and force main to meet ultimate conditions.		
6 of 238	Sharpsburg LS (>5 MGD)	Lift station will need to be upgraded between 2022-2024 to hold an additional 6,000 gallons and upgraded in ultimate conditions for an additional 9, 400 gallons: Wet well, force main, and pumps to be upsized and replaced. Upgrade lift station to meet ultimate flow conditions.	$907,800	
21 of 238	Chispa Creek	Replace existing pipe with 1290 LF of 12 inch pipe, along Chispa Creek in Allison WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$787,700	
23 of 238	Nolford	Replace existing pipe with 510 LF of 12 inch pipe, along Nolford in Allison WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$317,900	
24 of 238	Palisade	Replace existing pipe with 700 LF of 10 inch pipe, 130 LF of 12 inch pipe, along Palisade in Allison WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$417,100	
25 of 238	Raintree	Replace existing pipe with 280 LF of 12 inch pipe, along Raintree in Allison WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$180,900	
31 of 238	Cynthia	Replace existing pipe with 1000 LF of 15 inch pipe, along Cynthia in Allison WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$568,500	
32 of 238	Sharpsburg Section 2	Replace existing pipe with 1200 LF of 15 inch pipe, along Sharpsburg Section 2 in Allison WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$761,300	
		Total	**4,429,100**	
Broadway				
46 of 238	Antelope	Replace existing pipe with 4820 LF of 30 inch pipe, along Antelope in Broadway WWTP Service Area. Upgrade gravity pipes to meet current flow conditions	$4,445,000	
47 of 238	Leigh	Replace existing pipe with 500 LF of 10 inch pipe, along Leigh in Broadway WWTP Service Area. Upgrade gravity pipes to meet current flow conditions	$303,800	
48 of 238	Leopard Section 3	Replace existing pipe with 710 LF of 10 inch pipe, 450 LF of 20 inch pipe, 520 LF of 24 inch pipe, along Leopard Section 3 in Broadway WWTP Service Area.	$1,077,300	

Project #	Project Name	Description	Total 2022 Cost- Non-Growth Related ($)	Total 2022 Cost- Partial Growth Related ($)
		Upgrade gravity pipes to meet current flow conditions		
49 of 238	Nueces Bay	Replace existing pipe with 460 LF of 18 inch pipe, 420 LF of 24 inch pipe, along Nueces Bay in Broadway WWTP Service Area. Upgrade gravity pipes to meet current flow conditions	$625,600	
50 of 238	Old Robstown	Replace existing pipe with 1380 LF of 16 inch pipe, along Old Robstown in Broadway WWTP Service Area. Upgrade gravity pipes to meet current flow conditions	$889,700	
51 of 238	Up River Section 1	Replace existing pipe with 190 LF of 15 inch pipe, 2220 LF of 20 inch pipe, along Up River Section 1 in Broadway WWTP Service Area. Upgrade gravity pipes to meet current capacity issues.	$110,600	
52 of 238	Villa	Replace existing pipe with 1240 LF of 15 inch pipe, along Villa in Broadway WWTP Service Area. Upgrade gravity pipes to meet current flow conditions	$669,100	
53 of 238	Westchester	Replace existing pipe with 320 LF of 10 inch pipe, along Westchester in Broadway WWTP Service Area. Upgrade gravity pipes to meet current flow conditions	$133,800	
		Total	**8,254,900**	
Greenwood				
7 of 238	Arcadia (> 5MGD)	Lift station renovation, force main diameter must be increased to 24", and pumps upsized between 2022-2024. Rehabilitate and repair lift station to meet current flow conditions.	$28,115,600	
10 of 238	Kostoryz (> 5MGD)	Wet well to be upsized from 21.85' to 34' diameter for an additional 17,610 gallons, force main to be upsized to 30", and the pumps are to be upsized between 2022-2024. Lift station rehabilitation needed in order to meet current flow conditions.	$41,181,800	
11 of 238	McBride (> 5MGD)	Lift Station wet well diameter to be increased to 24' for an additional 11, 400 gallons, force main diameter to be upsized to 24", and pumps need to be upsized. Lift station rehabilitation needed in order to meet current flow conditions.	$26,725,700	
12 of 238	Port/Pearse (> 5MGD)	Lift Station wet well diameter to be increased to 24' for an additional 22,000 gallons, force main	$57,081,500	

Project #	Project Name	Description	Total 2022 Cost- Non-Growth Related ($)	Total 2022 Cost- Partial Growth Related ($)
		diameter to be upsized to 30", and pumps need to be upsized between 2022-2024. Lift station rehabilitation needed in order to meet current flow conditions.		
13 of 238	Sacky (> 5MGD)	Force Main to be upsized from 16" to 20" for between 2022-2024. In ultimate flow conditions, the lift station wet well will require a diameter. of 20' for an additional 7,400 gallons and pumps will need to be upsized. Lift station improvements needed in order to meet current flow conditions.	$3,039,000	
54 of 238	Edwards	Replace existing pipe with 320 LF of 10 inch pipe, along Westchester in Broadway WWTP Service Area. Upgrade gravity pipes to meet current flow conditions	$640,000	
55 of 238	Kosar	Replace existing pipe with 300 LF of 18 inch pipe, 70 LF of 20 inch pipe, 170 LF of 24 inch pipe, along Kosar in Greenwood WWTP Service Area. Rehabilitate/repair gravity pipes to meet current flow conditions	$436,200	
56 of 238	Naples	Replace existing pipe with 3140 LF of 18 inch pipe, along Naples in Greenwood WWTP Service Area. Rehabilitate/repair gravity pipes to meet current flow conditions	$2,294,300	
57 of 238	Shely	Replace existing pipe with 860 LF of 12 inch pipe, along Shely in Greenwood WWTP Service Area. Rehabilitate/repair gravity pipes to meet current flow conditions	$379,600	
58 of 238	Staples Section 1	Replace existing pipe with 1340 LF of 20 inch pipe, along Staples Section 1 in Greenwood WWTP Service Area.	$964,400	
59 of 238	York	Replace existing pipe with 1040 LF of 24 inch pipe, along York in Greenwood WWTP Service Area. Rehabilitate/repair gravity pipes to meet current flow conditions	$713,700	
60 of 238	Ayers Section 1	Replace existing pipe with 970 LF of 16 inch pipe, along Ayers Section 1 in Greenwood WWTP Service Area. Rehabilitate/repair gravity pipes to meet current flow conditions	$256,100	
62 of 238	Leopard Section 4	Replace existing pipe with 130 LF of 12 inch pipe, 940 LF of 16 inch pipe, along Leopard Section 4 in Greenwood WWTP Service Area. Upgrade gravity pipes to meet current flow conditions	$620,500	

Project #	Project Name	Description	Total 2022 Cost- Non-Growth Related ($)	Total 2022 Cost- Partial Growth Related ($)
66 of 238	Benys	Replace existing pipe with 1260 LF of 16 inch pipe, along Benys in Greenwood WWTP Service Area. Upgrade gravity pipes to meet current flow conditions	$793,200	
67 of 238	Clifton	Replace existing pipe with 750 LF of 16 inch pipe, along Clifton in Greenwood WWTP Service Area. Upgrade gravity pipes to meet current flow conditions	$412,600	
68 of 238	Concho	Replace existing pipe with 990 LF of 20 inch pipe, along Concho in Greenwood WWTP Service Area. Upgrade gravity pipes to meet current flow conditions	$916,400	
69 of 238	Derry	Replace existing pipe with 410 LF of 16 inch pipe, along Derry in Greenwood WWTP Service Area. Upgrade gravity pipes to meet current flow conditions	$227,200	
70 of 238	Lantana	Replace existing pipe with 2290 LF of 20 inch pipe, along Lantana in Greenwood WWTP Service Area. Upgrade gravity pipes to meet current flow conditions	$2,206,000	
72 of 238	McBride Section 1	Replace existing pipe with 340 LF of 30 inch pipe, along McBride Section 1 in Greenwood WWTP Service Area. Upgrade gravity pipes to meet current flow conditions	$377,100	
73 of 238	Padre Island	Replace existing pipe with 730 LF of 16 inch pipe, 470 LF of 20 inch pipe, along Padre Island in Greenwood WWTP Service Area. Upgrade gravity pipes to meet current flow conditions	$757,900	
74 of 238	Skyline	Replace existing pipe with 310 LF of 16 inch pipe, along Skyline in Greenwood WWTP Service Area. Upgrade gravity pipes to meet current flow conditions	$220,400	
79 of 238	Ayers Section 2	Replace existing pipe with 440 LF of 16 inch pipe, 2240 LF of 20 inch pipe, along Ayers Section 2 in Greenwood WWTP Service Area. Rehabilitate/repair gravity pipes to meet current flow conditions	$1,874,600	$1,877,400
81 of 238	Hwy 286	Replace existing pipe with 360 LF of 16 inch pipe, 380 LF of 20 inch pipe, along Hwy 286 in Greenwood WWTP Service Area. Rehabilitate/repair gravity pipes to meet current flow conditions	$527,700	
		Total	**170,761,500**	**1,877,400**
Laguna Madre				
14 of 238	Laguna Shores (>5MGD)	Wet well to be upsized to have a diameter of 22' for an additional 6,000 gallons between 2022-2024.	$15,300,000	

Project #	Project Name	Description	Total 2022 Cost- Non-Growth Related ($)	Total 2022 Cost- Partial Growth Related ($)
		Lift station rehabilitation and repairs needed in order to meet current flow conditions.		
15 of 238	Military and Jester	Force Main to be upsized from 10" to 12" and wet well to be upsized from 10' to 20' for an additional 3,700 gallons between 2022-2024. Lift station and force main rehabilitation and repairs needed to meet current flow conditions.	$2,369,600	
88 of 238	Belmont	Replace existing pipe with 410 LF of 24 inch pipe, along Belmont in Laguna Madre WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$283,300	
89 of 238	Glenoak	Replace existing pipe with 1790 LF of 12 inch pipe, along Glenoak in Laguna Madre WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$832,700	
90 of 238	St Bernadine	Replace existing pipe with 500 LF of 12 inch pipe, along St Bernadine in Laguna Madre WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$220,900	
		Total	**19,006,500**	
Oso				
17 of 238	Perry Place WW	Upsize wet well from 6' to 12' for an additional 1,200 gallons and upsize force main from 10" to 16" between 2022-2024. Lift station rehabilitation and repairs needed in order to meet current flow conditions.	$14,793,400	
75 of 238	Williams	Replace existing pipe with 3160 LF of 21 inch pipe, along Williams in Oso WWTP Service Area. Upgrade gravity pipes to meet current flow conditions	$2,323,700	
95 of 238	Cherry Hills	Replace existing pipe with 1130 LF of 18 inch pipe, along Cherry Hills in Oso WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$1,137,100	
96 of 238	Everhart Section 1	Replace existing pipe with 830 LF of 24 inch pipe, along Everhart Section 1 in Oso WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$860,100	
97 of 238	Greenbriar	Replace existing pipe with 1060 LF of 18 inch pipe, along Greenbriar in Oso WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$1,064,000	
99 of 238	St Andrews	Replace existing pipe with 340 LF of 12 inch pipe, 950 LF of 16 inch pipe, along St Andrews in Oso WWTP Service Area.	$1,009,800	

Project #	Project Name	Description	Total 2022 Cost- Non-Growth Related ($)	Total 2022 Cost- Partial Growth Related ($)
		Rehabilitate/repair gravity pipes in order to meet current flow conditions.		
104 of 238	Country Club	Replace existing pipe with 260 LF of 24 inch pipe, 2000 LF of 30 inch pipe, along Country Club in Oso WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$2,934,100	
105 of 238	Gaines	Replace existing pipe with 4430 LF of 24 inch pipe, along Gaines in Oso WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$3,186,400	
106 of 238	Jarvis	Replace existing pipe with 1300 LF of 24 inch pipe, along Jarvis in Oso WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$895,900	
108 of 238	Robert	Replace existing pipe with 10 LF of 21 inch pipe, 730 LF of 24 inch pipe, along Robert in Oso WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$515,700	
110 of 238	Mcardle Section 1	Replace existing pipe with 4160 LF of 18 inch pipe, along Mcardle Section 1 in Oso WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$2,831,200	
112 of 238	Easter	Replace existing pipe with 1080 LF of 12 inch pipe, along Easter in Oso WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$555,300	
113 of 238	Mcardle Section 2	Replace existing pipe with 100 LF of 12 inch pipe, along Mcardle Section 2 in Oso WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$49,400	
114 of 238	Christie	Replace existing pipe with 20 LF of 16 inch pipe, 2340 LF of 20 inch pipe, along Christie in Oso WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$2,016,000	
115 of 238	Cuiper	Replace existing pipe with 150 LF of 20 inch pipe, along Cuiper in Oso WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$132,600	
116 of 238	Gollihar Section 2	Replace existing pipe with 660 LF of 30 inch pipe, along Gollihar Section 2 in Oso WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$948,500	
117 of 238	Santa Fe Section 1	Replace existing pipe with 1110 LF of 16 inch pipe, 1220 LF of 18 inch pipe, 9160 LF of 24 inch pipe, 640 LF of 30 inch pipe, along Santa Fe Section 1 in Oso WWTP Service Area.	$9,587,300	

Project #	Project Name	Description	Total 2022 Cost- Non-Growth Related ($)	Total 2022 Cost- Partial Growth Related ($)
		Rehabilitate/repair gravity pipes in order to meet current flow conditions.		
118 of 238	Everhart Section 2	Replace existing pipe with 4960 LF of 36 inch pipe, along Everhart Section 2 in Oso WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$5,201,300	
119 of 238	Santa Fe Section 2	Replace existing pipe with 170 LF of 12 inch pipe, along Santa Fe Section 2 in Oso WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$10,800	
120 of 238	Acushnet	Replace existing pipe with 2380 LF of 18 inch pipe, along Acushnet in Oso WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$1,936,200	
122 of 238	Braesvalley	Replace existing pipe with 970 LF of 16 inch pipe, along Braesvalley in Oso WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$540,100	
123 of 238	Everhart Section 3	Replace existing pipe with 2890 LF of 20 inch pipe, 440 LF of 21 inch pipe, 130 LF of 24 inch pipe, along Everhart Section 3 in Oso WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$2,702,000	
124 of 238	Middlecoff	Replace existing pipe with 1020 LF of 20 inch pipe, along Middlecoff in Oso WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$858,000	
125 of 238	Sanders	Replace existing pipe with 180 LF of 18 inch pipe, along Sanders in Oso WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$149,100	
126 of 238	Shadowbend	Replace existing pipe with 870 LF of 16 inch pipe, along Shadowbend in Oso WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$544,800	
128 of 238	Timbergate	Replace existing pipe with 1000 LF of 16 inch pipe, 640 LF of 20 inch pipe, along Timbergate in Oso WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$1,002,400	
129 of 238	Willowick	Replace existing pipe with 1260 LF of 16 inch pipe, along Willowick in Oso WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$791,700	
130 of 238	Del Starr	Replace existing pipe with 610 LF of 18 inch pipe, along Del Starr in Oso WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$386,000	

Project #	Project Name	Description	Total 2022 Cost- Non-Growth Related ($)	Total 2022 Cost- Partial Growth Related ($)
131 of 238	Everhart Section 4	Replace existing pipe with 1100 LF of 20 inch pipe, along Everhart Section 4 in Oso WWTP Service Area. Upgrade gravity pipes in order to meet ultimate flow conditions.		$1,535,800
132 of 238	Kerry	Replace existing pipe with 1590 LF of 18 inch pipe, along Kerry in Oso WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$1,084,000	
134 of 238	Limerick	Replace existing pipe with 550 LF of 20 inch pipe, along Limerick in Oso WWTP Service Area. Upgrade gravity pipes in order to meet ultimate flow conditions.		$601,000
135 of 238	O'Brian	Replace existing pipe with 860 LF of 18 inch pipe, along O'Brian in Oso WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$566,200	
136 of 238	Schanen	Replace existing pipe with 350 LF of 20 inch pipe, along Schanen in Oso WWTP Service Area. Upgrade gravity to meet current flow conditions	$443,000	
137 of 238	Shea	Replace existing pipe with 2280 LF of 20 inch pipe, along Shea in Oso WWTP Service Area. Upgrade gravity pipes to meet current flow conditions	$443,000	
138 of 238	Audn	Replace existing pipe with 260 LF of 16 inch pipe, along Audn in Oso WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$164,700	
139 of 238	Boardwalk	Replace existing pipe with 900 LF of 16 inch pipe, along Boardwalk in Oso WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$496,300	
140 of 238	Bollinger	Replace existing pipe with 420 LF of 16 inch pipe, along Bollinger in Oso WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$234,400	
141 of 238	Brockhampton	Replace existing pipe with 50 LF of 12 inch pipe, 610 LF of 16 inch pipe, along Brockhampton in Oso WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$397,300	
142 of 238	Cimarron	Replace existing pipe with 280 LF of 12 inch pipe, 2370 LF of 24 inch pipe, 4640 LF of 30 inch pipe, along Cimarron in Oso WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$5,957,600	
143 of 238	New Bedford	Replace existing pipe with 140 LF of 16 inch pipe, along New Bedford in Oso WWTP Service Area.	$77,600	

Project #	Project Name	Description	Total 2022 Cost- Non-Growth Related ($)	Total 2022 Cost- Partial Growth Related ($)
		Rehabilitate/repair gravity pipes in order to meet current flow conditions.		
144 of 238	Queen Bess	Replace existing pipe with 1130 LF of 20 inch pipe, along Queen Bess in Oso WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$779,400	
145 of 238	Stonehenge	Replace existing pipe with 730 LF of 12 inch pipe, 820 LF of 16 inch pipe, along Stonehenge in Oso WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$788,200	
146 of 238	Strateford	Replace existing pipe with 660 LF of 16 inch pipe, along Strateford in Oso WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$380,500	
147 of 238	Washam	Replace existing pipe with 1050 LF of 12 inch pipe, along Washam in Oso WWTP Service Area. Rehabilitate/repair gravity pipes in order to meet current flow conditions.	$529,200	
		Total	**71,304,300**	**2,136,800**
Whitecap				
18 of 238	Jackfish	Increase wet well diameter from 7.67' to 10' for an additional 500 gallons. Lift station rehabilitation and repairs needed in order to meet current flow conditions.	$133,800	
19 of 238	Pl Section 4	Upsize wet well from 4.2' to 20' for an additional 3,700 gallons before 2024. Wet well will need to be increased to 24' for an additional 2,800 gallons for ultimate conditions and force main diameter increased from 4" to 18". Lift station rehabilitation/repair needed in order to meet current flow conditions.	$975,600	
20 of 238	Seahorse	Upsize wet well diameter from 6' to 10' for an additional 400 gallons and force main diameter 4" to 6" between 2023-2024. Lift station to be rehabilitated in order to meet current flow conditions.	$218,000	
		Total	**1,327,400**	

Similarly, projects have been identified that will be required for the next 10 years of growth in each service area. These are included in Table 7-2. Some of these projects include near term improvements as well.

Table 7-2. 10-Year Projects

Project #	Project Name	Description	Total 2022 Cost ($)	Total 2031 Cost ($)
Allison				
4 of 238	Lakes Northwest	Wet well to be upsized from 8' to 16' for an additional 2,800 gallons and force main from 8" to 14" in ultimate time frame	$0	$4,778,700
1 of 238	Clarkwood North	Increase wet well diameter from 8' to 10' for an additional 600 gallons between 2022-2024, the wet well will need to be upsized again to 14' for an additional 850 gallons to meet ultimate flow conditions. Controls will also need to be adjusted.	$133,800	$2,747,200
3 of 238	Highway 77	Force Main to be upsized from 2" to 4" between 2022-2024. For ultimate conditions, pumps must be upsized, wet well will need to be upsized from 8' to 16' for an additional 3,500 gallons and the Force Main will need to be further upsized from 4" to 12".	$240,700	$4,921,300
6 of 238	Sharpsburg LS (>5 MGD)	Lift station will need to be upgraded between 2022-2024 to hold an additional 6,000 gallons and upgraded in ultimate conditions for an additional 9,400 gallons: Wet well, force main, and pumps to be upsized and replaced.	$907,800	$4,774,700
5 of 238	River Canyon	Pumps need to be upsized for ten year and ultimate flow conditions.	$0	$411,400
WWTP	Allison	UV Disinfection Improvements	$3,750,000	$3,750,000
		Total	**5,032,300**	**21,383,300**
Broadway				
WWTP	Broadway	Filtration Improvements	$2,500,000	$2,500,000
		Total	**2,500,000**	**2,500,000**
Greenwood				
8 of 238	Coastal Meadows	Replace force main with gravity pipe. Install 10,400 LF of 24” gravity pipe.	$0	$6,188,000
9 of 238	Highway Nine	Lift Station wet well upsized from 8' to 14' for an additional 775 gallons, controls to be adjusted between 2022-2024.	$0	$1,554,400
10 of 238	Kostoryz (> 5MGD)	Wet well to be upsized from 21.85' to 34' for an additional 17,610 gallons diameter, force main to be upsized to 30", and the pumps are to be upsized between 2022-2024.	$41,181,800	$3,780,300
11 of 238	McBride (> 5MGD)	Lift Station wet well diameter to be increased to 24' for an additional 11,400 gallons, force main diameter to be upsized to 24", and pumps need to be upsized.	$26,725,700	$8,179,700
13 of 238	Sacky (> 5MGD)	Force Main to be upsized from 16" to 20" for between 2022-2024. In ultimate flow conditions, the lift station wet well will require a diameter of 20' for an additional 7,400 gallons and pumps will need to be upsized.	$3,039,000	$3,003,700

Project #	Project Name	Description	Total 2022 Cost ($)	Total 2031 Cost ($)
192 of 238	New_London2	Install 1000 LF of new 15 inch gravity pipe in London Lift Station Shed in London Basin WWTP Service Area.	$0	$18,978,200
193 of 238	New_London3	Install 2000 LF of new 8 inch gravity pipe in London Lift Station Shed in London Basin WWTP Service Area.	$0	$2,908,200
196 of 238	New_London6	Install 2000 LF of new 10 inch gravity pipe in London Lift Station Shed in London Basin WWTP Service Area.	$0	$9,558,900
198 of 238	New_London8	Install 3400 LF of new 42 inch gravity pipe in London Lift Station Shed in London Basin WWTP Service Area.	$0	$12,176,100
200 of 238	New_London10	Install 4150 LF of new 24 inch gravity pipe in London Lift Station Shed in London Basin WWTP Service Area.	$0	$8,786,800
WWTP	Greenwood	WWTP Expansion		$65,000,000
		Total	**70,946,500**	**140,114,300**
Laguna Madre				
WWTP	Laguna Madre	UV Disinfection Improvements	$3,125,000	$3,125,000
		Total	**3,125,000**	**3,125,000**
Oso				
16 of 238	Everhart/Staples	Wet well upsizing from 13.12' to 24' for an additional 14,800 gallons in ultimate conditions. Force Main to be upsized to an equivalent diameter of 36".	$0	$41,843,100
WWTP	Oso	Operations Center	$3,580,000	$0
WWTP	Oso	UV Disinfection and Filtration Improvements	$14,500,000	$14,500,000
		Total	**18,080,000**	**56,343,100**
Whitecap				
19 of 238	PI Section 4	Upsize wet well from 4.2' to 20' for an additional 3,700 gallons before 2024. Wet well will need to be increased to 24' for an additional 2,800 gallons for ultimate conditions and force main diameter increased from 4" to 18".	$975,600	$3,226,300

Finally, there are improvements that will be needed for ultimate build-out of the system These are shown in Table 7-3. Some of these projects are also included in near-term and 10-year projects. These costs are included in this table for convenience.

Table 7-3. Ultimate Projects

Project #	Project Name	Description	Total 2022 Cost ($)	Total 2031 Cost ($)	Total Ultimate Cost ($)
Allison					
4 of 238	Lakes Northwest	Wet well to be upsized from 8' to 16' for an additional 2,800 gallons and force main from 8" to 14" in ultimate time frame	$0	$4,778,700	$10,388,200
5 of 238	River Canyon	Pumps need to be upsized for ten year and ultimate flow conditions.	$0	$411,400	$979,200
1 of 238	Clarkwood North	Increase wet well diameter from 8' to 10' for an additional 600 gallons between 2022-2024, the wet well will need to be upsized again to 14' for an additional 850 gallons to meet ultimate flow conditions. Controls will also need to be adjusted.	$133,800	$2,747,200	$9,302,400
3 of 238	Highway 77	Force Main to be upsized from 2" to 4" between 2022-2024. For ultimate conditions, pumps must be upsized, wet well will need to be upsized from 8' to 16' for an additional 3,500 gallons and the Force Main will need to be further upsized from 4" to 12".	$240,700	$4,921,300	$10,252,300
6 of 238	Sharpsburg LS (>5 MGD)	Lift station will need to be upgraded between 2022-2024 to hold an additional 6,000 gallons and upgraded in ultimate conditions to hold 9,400 gallons: Wet well, force main, and pumps to be upsized and replaced.	$907,800	$4,774,700	$15,536,300
22 of 238	La Branch	Replace existing pipe with 10 LF of 27 inch pipe, along La Branch in Allison WWTP Service Area. Upgrade gravity pipes in order to meet ultimate flow conditions.	$0	$0	$5,600
26 of 238	Sessions	Replace existing pipe with 950 LF of 12 inch pipe, along Sessions in Allison WWTP Service Area. Upgrade gravity pipes in order to meet ultimate flow conditions.	$0	$0	$1,032,400
27 of 238	Wandering Creek	Replace existing pipe with 830 LF of 18 inch pipe, along Wandering Creek in Allison WWTP Service Area. Upgrade gravity pipes in order to meet ultimate flow conditions.	$0	$0	$550,700
28 of 238	Clarkwood	Replace existing pipe with 1500 LF of 12 inch pipe, 4080 LF of 15 inch pipe, along Clarkwood in Allison WWTP Service Area.	$0	$0	$3,317,300
29 of 238	I-37	Replace existing pipe with 430 LF of 42 inch pipe, along I-37 in Allison WWTP Service Area.	$0	$0	$614,700
30 of 238	Sharpsburg Section 1	Replace existing pipe with 140 LF of 42 inch pipe, along Sharpsburg Section 1 in Allison WWTP Service Area.	$0	$0	$201,600
33 of 238	Zamora	Replace existing pipe with 540 LF of 12 inch pipe, 460 LF of 15 inch pipe, along Zamora in Allison WWTP Service Area.	$0	$0	$613,100

Project #	Project Name	Description	Total 2022 Cost ($)	Total 2031 Cost ($)	Total Ultimate Cost ($)
34 of 238	Hearn	Replace existing pipe with 1850 LF of 24 inch pipe, along Hearn in Allison WWTP Service Area.	$0	$0	$1,633,600
35 of 238	Loma Alta Section 1	Replace existing pipe with 940 LF of 24 inch pipe, along Loma Alta Section 1 in Allison WWTP Service Area.	$0	$0	$828,500
36 of 238	Country Estates	Replace existing pipe with 360 LF of 10 inch pipe, along Country Estates in Allison WWTP Service Area.	$0	$0	$154,100
37 of 238	Leopard Section 1	Replace existing pipe with 1010 LF of 30 inch pipe, along Leopard Section 1 in Allison WWTP Service Area.	$0	$0	$914,000
38 of 238	Loma Alta Section 2	Replace existing pipe with 740 LF of 30 inch pipe, along Loma Alta Section 2 in Allison WWTP Service Area.	$0	$0	$669,100
39 of 238	Northwest	Replace existing pipe with 940 LF of 15 inch pipe, along Northwest in Allison WWTP Service Area.	$0	$0	$497,100
40 of 238	Perry	Replace existing pipe with 1360 LF of 15 inch pipe, 780 LF of 18 inch pipe, along Perry in Allison WWTP Service Area.	$0	$0	$1,221,300
41 of 238	Leopard Section 2	Replace existing pipe with 220 LF of 16 inch pipe, along Leopard Section 2 in Allison WWTP Service Area.	$0	$0	$141,100
42 of 238	Main	Replace existing pipe with 2600 LF of 16 inch pipe, along Main in Allison WWTP Service Area.	$0	$0	$1,577,000
43 of 238	Stillwell	Replace existing pipe with 760 LF of 16 inch pipe, along Stillwell in Allison WWTP Service Area.	$0	$0	$487,200
44 of 238	Santa Gertrudis	Replace existing pipe with 110 LF of 10 inch pipe, along Santa Gertrudis in Allison WWTP Service Area.	$0	$0	$68,700
45 of 238	Beacon	Replace existing pipe with 1130 LF of 12 inch pipe, 1430 LF of 16 inch pipe, along Beacon in Allison WWTP Service Area.	$0	$0	$1,340,600
149 of 238	Grav to Clarkwood South 1	Install 7300 LF of new 15 inch gravity pipe in Clarkwood South Lift Station Shed in Allison Basin WWTP Service Area.	$0	$0	$3,721,800
150 of 238	Agnes St/Clarkwood	Install 2500 LF of new 8 inch gravity pipe in Clarkwood South Lift Station Shed in Allison Basin WWTP Service Area.	$0	$0	$1,063,900
151 of 238	Manning Rd	Install 6750 LF of new 12 inch gravity pipe in Stillwell Lift Station Shed in Allison Basin WWTP Service Area.	$0	$0	$3,249,300
152 of 238	Grav to Stillwell	Install 1880 LF of new 8 inch gravity pipe in Stillwell Lift Station Shed in Allison Basin WWTP Service Area.	$0	$0	$1,779,900
153 of 238	Grav to HWY 77 LS	Install 5290 LF of new 10 inch gravity pipe in Highway 77 Lift Station Shed in Allison Basin WWTP Service Area.	$0	$0	$2,158,400
154 of 238	Grav to Lakes NW 1	Install 1830 LF of new 12 inch gravity pipe in Lakes Northwest Lift Station Shed in Allison Basin WWTP Service Area.	$0	$0	$1,195,200

Project #	Project Name	Description	Total 2022 Cost ($)	Total 2031 Cost ($)	Total Ultimate Cost ($)
155 of 238	Grav to Lakes NW 2	Install 2510 LF of new 8 inch gravity pipe in Lakes Northwest Lift Station Shed in Allison Basin WWTP Service Area.	$0	$0	$1,154,400
156 of 238	Yellow Oak Ave Grav	Install 2120 LF of new 12 inch gravity pipe in Allison gravity Lift Station Shed in Allison Basin WWTP Service Area.	$0	$0	$1,331,000
157 of 238	Warrior Dr Grav	Install 1820 LF of new 8 inch gravity pipe in Allison gravity Lift Station Shed in Allison Basin WWTP Service Area.	$0	$0	$754,200
158 of 238	NW Crossing Grav 1	Install 3810 LF of new 15 inch gravity pipe in Northwest Crossing Lift Station Shed in Allison Basin WWTP Service Area.	$0	$0	$2,754,700
159 of 238	NW Crossing Grav 2	Install 3950 LF of new 12 inch gravity pipe in Northwest Crossing Lift Station Shed in Allison Basin WWTP Service Area.	$0	$0	$5,279,900
160 of 238	NW Crossing Grav 3	Install 3620 LF of new 10 inch gravity pipe in Northwest Crossing Lift Station Shed in Allison Basin WWTP Service Area.	$0	$0	$2,613,600
161 of 238	Nueces Acres Grav	Install 3820 LF of new 15 inch gravity pipe in Nueces Acres Lift Station Shed in Allison Basin WWTP Service Area.	$0	$0	$5,636,900
162 of 238	NW Crossing Grav 4	Install 3540 LF of new 10 inch gravity pipe in Northwest Crossing Lift Station Shed in Allison Basin WWTP Service Area.	$0	$0	$3,751,400
163 of 238	NW Crossing Grav 5	Install 1140 LF of new 15 inch gravity pipe in Northwest Crossing Lift Station Shed in Allison Basin WWTP Service Area.	$0	$0	$601,800
164 of 238	Bronco Rd	Install 1580 LF of new 8 inch gravity pipe in Stillwell Lift Station Shed in Allison Basin WWTP Service Area.	$0	$0	$671,600
165 of 238	Grav to Allison	Install 8960 LF of new 16 inch gravity pipe in Allison gravity Lift Station Shed in Allison Basin WWTP Service Area.	$0	$0	$6,245,200
166 of 238	Calallen Center Grav	Install 11900 LF of new 20 inch gravity pipe in Calallen Lift Station Shed in Allison Basin WWTP Service Area.	$0	$0	$9,305,300
167 of 238	Calallen East Grav	Install 8860 LF of new 10 inch gravity pipe in Calallen Lift Station Shed in Allison Basin WWTP Service Area.	$0	$0	$3,915,617
168 of 238	Grav to Lakes NW 3	Install 2190 LF of new 10 inch gravity pipe in Lakes Northwest Lift Station Shed in Allison Basin WWTP Service Area.	$0	$0	$1,155,000
169 of 238	NW Crossing Grav 5	Install 1140 LF of new 15 inch gravity pipe in Northwest Crossing Lift Station Shed in Allison Basin WWTP Service Area.	$0	$0	$5,279,900
170 of 238	Erne Street	Install 1790 LF of new 12 inch gravity pipe in Stillwell Lift Station Shed in Allison Basin WWTP Service Area.	$0	$0	$821,600
171 of 238	New Grav Northwest/Hearn	Install 90 LF of new 18 inch gravity pipe in Sharpsburg S Lift Station Shed in Allison Basin WWTP Service Area.	$0	$0	$3,121,200

Project #	Project Name	Description	Total 2022 Cost ($)	Total 2031 Cost ($)	Total Ultimate Cost ($)
172 of 238	Future Grav To Allison Grav	Install 9020 LF of new 18 inch gravity pipe in Allison gravity Lift Station Shed in Allison Basin WWTP Service Area.	$0	$0	$6,022,600
235 of 238	Lakes NW LS	Install new Lift Station and Force Main in Allison WWTP Service Area	$0	$0	$156,300
		Total	**1,282,300**	**17,633,300**	**136,066,817**
Greenwood					
8 of 238	Coastal Meadows	Force Main diameter to be upsized to 8".	$0	$133,800	$1,906,800
9 of 238	Highway Nine	Lift Station wet well upsized from 8' to 14' to hold an additional 775 gallons controls to be adjusted between 2022-2024.	$0	$1,554,400	$1,860,800
13 of 238	Sacky (> 5MGD)	Force Main to be upsized from 16" to 20" for between 2022-2024. In ultimate flow conditions, the lift station wet well will require a diameter of 20' for an additional 7,400 gallons and pumps will need to be upsized.	$3,039,000	$3,003,700	$9,180,000
61 of 238	IH-37 Access Road	Replace existing pipe with 440 LF of 10 inch pipe, 350 LF of 12 inch pipe, 430 LF of 16 inch pipe, along IH-37 Access Road in Greenwood WWTP Service Area.	$0	$0	$690,900
63 of 238	Carroll	Replace existing pipe with 320 LF of 16 inch pipe, 1370 LF of 20 inch pipe, 1260 LF of 24 inch pipe, along Carroll in Greenwood WWTP Service Area.	$0	$0	$2,211,000
64 of 238	Cresthill	Replace existing pipe with 200 LF of 12 inch pipe, 520 LF of 16 inch pipe, along Cresthill in Greenwood WWTP Service Area.	$0	$0	$494,100
65 of 238	Kostoryz	Replace existing pipe with 4310 LF of 16 inch pipe, 3630 LF of 20 inch pipe, 1130 LF of 24 inch pipe, 40 LF of 42 inch pipe, 120 LF of 48 inch pipe, along Kostoryz in Greenwood WWTP Service Area.	$0	$0	$6,987,800
71 of 238	Leopard Section 5	Replace existing pipe with 2150 LF of 16 inch pipe, along Leopard Section 5 in Greenwood WWTP Service Area.	$0	$0	$1,260,800
76 of 238	Up River Section 2	Replace existing pipe with 3970 LF of 20 inch pipe, along Up River Section 2 in Greenwood WWTP Service Area.	$0	$0	$4,845,800
77 of 238	Alaniz	Replace existing pipe with 700 LF of 12 inch pipe, along Alaniz in Greenwood WWTP Service Area.	$0	$0	$360,400
78 of 238	Sacky	Replace existing pipe with 390 LF of 18 inch pipe, 290 LF of 20 inch pipe, along Sacky in Greenwood WWTP Service Area.	$0	$0	$470,400
80 of 238	Camargo	Replace existing pipe with 440 LF of 16 inch pipe, 2240 LF of 20 inch pipe, along Ayers Section 2 in Greenwood WWTP Service Area.	$0	$0	$26,700
82 of 238	McBride Section 2	Replace existing pipe with 1490 LF of 30 inch pipe, along McBride Section 2 in Greenwood WWTP Service Area.	$0	$0	$1,239,400

Project #	Project Name	Description	Total 2022 Cost ($)	Total 2031 Cost ($)	Total Ultimate Cost ($)
83 of 238	Neptune	Replace existing pipe with 640 LF of 10 inch pipe, along Neptune in Greenwood WWTP Service Area.	$0	$0	$267,600
84 of 238	Old Brownsville	Replace existing pipe with 2200 LF of 36 inch pipe, along Old Brownsville in Greenwood WWTP Service Area.	$0	$0	$3,064,000
85 of 238	Omaha	Replace existing pipe with 620 LF of 10 inch pipe, 1500 LF of 12 inch pipe, 5720 LF of 30 inch pipe, along Omaha in Greenwood WWTP Service Area.	$0	$0	$7,015,400
86 of 238	Santa Elena	Replace existing pipe with 310 LF of 10 inch pipe, along Santa Elena in Greenwood WWTP Service Area.	$0	$0	$137,800
87 of 238	Saratoga	Replace existing pipe with 2570 LF of 36 inch pipe, 110 LF of 60 inch pipe, along Saratoga in Greenwood WWTP Service Area.	$0	$0	$3,066,300
173 of 238	Grav to LS1003 WWTP 2	Install 2830 LF of new 15 inch gravity pipe in WW-LS 1003 WWTP-2 Lift Station Shed in Greenwood Basin WWTP Service Area.	$0	$0	$1,755,200
174 of 238	Grav to LS1003 WWTP 2	Install 2830 LF of new 15 inch gravity pipe in WW-LS 1003 WWTP-2 Lift Station Shed in Greenwood Basin WWTP Service Area.	$0	$0	$1,444,700
175 of 238	Grav to LS1003 WWTP 4_1	Install 3930 LF of new 15 inch gravity pipe in WW-LS 1003 WWTP-4 Lift Station Shed in Greenwood Basin WWTP Service Area.	$0	$0	$2,004,800
176 of 238	Grav to LS1003 WWTP 4_2	Install 2720 LF of new 8 inch gravity pipe in WW-LS 1003 WWTP-4 Lift Station Shed in Greenwood Basin WWTP Service Area.	$0	$0	$1,154,300
177 of 238	Grav to Coastal Meadows 1	Install 16830 LF of new 18 inch gravity pipe in Coastal Meadows Lift Station Shed in Greenwood Basin WWTP Service Area.	$0	$0	$2,343,400
178 of 238	Grav to Coastal Meadows 2	Install 5300 LF of new 12 inch gravity pipe in WW-LS 1003 WWTP-2 Lift Station Shed in Greenwood Basin WWTP Service Area.	$0	$0	$10,869,600
179 of 238	Future Bates Rd	Install 5030 LF of new 8 inch gravity pipe in WW-LS 1003 WWTP-2 Lift Station Shed in Greenwood Basin WWTP Service Area.	$0	$0	$2,053,600
180 of 238	Grav to LS1003 WWTP 4_3	Install 2130 LF of new 12 inch gravity pipe in WW-LS 1003 WWTP-4 Lift Station Shed in Greenwood Basin WWTP Service Area.	$0	$0	$978,500
181 of 238	Grav to Highway Nine 1	Install 9370 LF of new 8 inch gravity pipe in Highway Nine New LS 2 Lift Station Shed in Greenwood Basin WWTP Service Area.	$0	$0	$3,823,400
182 of 238	Grav to Highway Nine 3	Install 3300 LF of new 10 inch gravity pipe in Highway Nine New LS 2 Lift Station Shed in Greenwood Basin WWTP Service Area.	$0	$0	$1,401,900
183 of 238	Grav to Highway Nine 2	Install 4560 LF of new 8 inch gravity pipe in Highway Nine New LS 1 Lift Station Shed in Greenwood Basin WWTP Service Area.	$0	$0	$2,015,200

Project #	Project Name	Description	Total 2022 Cost ($)	Total 2031 Cost ($)	Total Ultimate Cost ($)
184 of 238	Grav to LS 1003 WWTP 2 South	Install 4160 LF of new 8 inch gravity pipe in WW-LS 1003 WWTP-2 Lift Station Shed in Greenwood Basin WWTP Service Area.	$0	$0	$1,839,100
191 of 238	New_London1	Install 5300 LF of new 15 inch gravity pipe in London Lift Station Shed in London Basin WWTP Service Area.	$0	$0	$5,638,700
194 of 238	New_London4	Install 3000 LF of new 24 inch gravity pipe in London Lift Station Shed in London Basin WWTP Service Area.	$0	$0	$2,090,900
195 of 238	New_London5	Install 7900 LF of new 54 inch gravity pipe in London Lift Station Shed in London Basin WWTP Service Area.	$0	$0	$13,301,500
197 of 238	New_London7	Install 2500 LF of new 12 inch gravity pipe in London Lift Station Shed in London Basin WWTP Service Area.	$0	$0	$8,218,900
199 of 238	New_London9	Install 2650 LF of new 15 inch gravity pipe in London Lift Station Shed in London Basin WWTP Service Area.	$0	$0	$2,207,600
201 of 238	New_London11	Install 1500 LF of new 15 inch gravity pipe in London Lift Station Shed in London Basin WWTP Service Area.	$0	$0	$2,749,000
202 of 238	New_London12	Install 2370 LF of new 60 inch gravity pipe in London Lift Station Shed in London Basin WWTP Service Area.	$0	$0	$4,398,900
203 of 238	New_London13	Install 4840 LF of new 54 inch gravity pipe in London Lift Station Shed in London Basin WWTP Service Area.	$0	$0	$7,812,900
204 of 238	New_London14	Install 6450 LF of new 36 inch gravity pipe in London Lift Station Shed in London Basin WWTP Service Area.	$0	$0	$6,575,000
205 of 238	New_London15	Install 2450 LF of new 24 inch gravity pipe in London Lift Station Shed in London Basin WWTP Service Area.	$0	$0	$3,829,600
206 of 238	New_London16	Install 6810 LF of new 15 inch gravity pipe in London Lift Station Shed in London Basin WWTP Service Area.	$0	$0	$4,253,300
221 of 238	New LS to G1_1	Install new Lift Station and Force Main in Greenwood WWTP Service Area	$0	$0	$659,400
222 of 238	New LS to LS1003WWTP2	Install new Lift Station and Force Main in Greenwood WWTP Service Area	$0	$0	$728,700
223 of 238	New LS to LS1003WWTP2-South	Install new Lift Station and Force Main in Greenwood WWTP Service Area	$0	$0	$156,300
224 of 238	New LS to WW-LS1003 WWTP-4	Install new Lift Station and Force Main in Greenwood WWTP Service Area	$0	$0	$721,600
232 of 238	New LS to Highway Nine 1	Install new Lift Station and Force Main in Greenwood WWTP Service Area	$0	$0	$303,400
233 of 238	New LS to Highway Nine 2	Install new Lift Station and Force Main in Greenwood WWTP Service Area	$0	$0	$670,900
		Total	**3,039,000**	**4,691,900**	**141,086,300**

Project #	Project Name	Description	Total 2022 Cost ($)	Total 2031 Cost ($)	Total Ultimate Cost ($)
Laguna Madre					
185 of 238	Grav to Waldron 1A	Install 4890 LF of new 15 inch gravity pipe in New LS to Waldron 1A Lift Station Shed in Laguna Madre Basin WWTP Service Area.	$0	$0	$2,493,300
186 of 238	Lola Johnson Rd	Install 2380 LF of new 8 inch gravity pipe in Jamaica Lift Station Shed in Laguna Madre Basin WWTP Service Area.	$0	$0	$1,050,400
187 of 238	Yorktown Blvd	Install 3280 LF of new 8 inch gravity pipe in New LS to Waldron 1B Lift Station Shed in Laguna Madre Basin WWTP Service Area.	$0	$0	$1,890,200
188 of 238	Glenoak Dr	Install 5720 LF of new 15 inch gravity pipe in New LS to Waldron 1B Lift Station Shed in Laguna Madre Basin WWTP Service Area.	$0	$0	$2,917,000
189 of 238	Roscher Rd	Install 6510 LF of new 15 inch gravity pipe in New LS to Waldron 1B Lift Station Shed in Laguna Madre Basin WWTP Service Area.	$0	$0	$3,173,400
190 of 238	Grav to Waldron 1A-2	Install 2220 LF of new 12 inch gravity pipe in New LS to Waldron 1A Lift Station Shed in Laguna Madre Basin WWTP Service Area.	$0	$0	$1,132,200
218 of 238	New LS to Waldron 1A	Install new Lift Station and Force Main in Laguna Madre WWTP Service Area	$0	$0	$2,984,900
219 of 238	New LS to Waldron 1B	Install new Lift Station and Force Main in Laguna Madre WWTP Service Area	$0	$0	$455,100
220 of 238	New LS to Waldron 2	Install new Lift Station and Force Main in Laguna Madre WWTP Service Area	$0	$0	$309,200
236 of 238	Flour Bluff Rd	Install 5250 LF of new 12 inch gravity pipe in Flour Bluff Lift Station Shed in Laguna Madre Basin WWTP Service Area.	$0	$0	$2,410,500
237 of 238	Grav to Waldron 2	Install 2160 LF of new 8 inch gravity pipe in New LS to Waldron 2 Lift Station Shed in Laguna Madre Basin WWTP Service Area.	$0	$0	$927,100
238 of 238	Grav to Waldron	Install 8660 LF of new 12 inch gravity pipe in Grav to Waldron Lift Station Shed in Laguna Madre Basin WWTP Service Area.	$0	$0	$4,286,000
		Total	**0**	**0**	**24,029,300**
Oso					
16 of 238	Everhart/Staples	Wet well upsizing from 13.12' to 24' for an additional 14,800 gallons in ultimate conditions. Force Main to be upsized to an equivalent diameter of 36".	$0	$41,843,100	$79,560,000
111 of 238	Nile	Parallel a 24" pipe next to the existing 42". A 24" at this slope could take all flow from the Perry Place LS branch.	$0	$0	$276,100
91 of 238	Airline	Replace existing pipe with 620 LF of 20 inch pipe, 1400 LF of 30 inch pipe, 3490 LF of 36 inch pipe, along Airline in Oso WWTP Service Area.	$0	$0	$6,014,100

Project #	Project Name	Description	Total 2022 Cost ($)	Total 2031 Cost ($)	Total Ultimate Cost ($)
92 of 238	Rodd Field	Replace existing pipe with 790 LF of 24 inch pipe, 690 LF of 30 inch pipe, along Rodd Field in Oso WWTP Service Area.	$0	$0	$1,217,000
93 of 238	Slough	Replace existing pipe with 2300 LF of 20 inch pipe, along Slough in Oso WWTP Service Area.	$0	$0	$1,708,000
98 of 238	River Oaks	Replace existing pipe with 320 LF of 12 inch pipe, along River Oaks in Oso WWTP Service Area.	$0	$0	$198,800
100 of 238	Alameda	Replace existing pipe with 790 LF of 20 inch pipe, along Alameda in Oso WWTP Service Area.	$0	$0	$566,600
101 of 238	Casa Linda	Replace existing pipe with 1840 LF of 12 inch pipe, along Casa Linda in Oso WWTP Service Area.	$0	$0	$939,200
102 of 238	Sinclair	Replace existing pipe with 1620 LF of 20 inch pipe, along Sinclair in Oso WWTP Service Area.	$0	$0	$1,192,200
103 of 238	Staples Section 2	Replace existing pipe with 1170 LF of 30 inch pipe, along Staples Section 2 in Oso WWTP Service Area.	$0	$0	$1,428,800
107 of 238	Kentner	Replace existing pipe with 5430 LF of 24 inch pipe, 50 LF of 30 inch pipe, along Kentner in Oso WWTP Service Area.	$0	$0	$3,915,100
109 of 238	Gollihar Section 1	Replace existing pipe with 1290 LF of 20 inch pipe, along Gollihar Section 1 in Oso WWTP Service Area.	$0	$0	$687,900
121 of 238	Alley (Pvy)	Replace existing pipe with 350 LF of 20 inch pipe, 660 LF of 24 inch pipe, 700 LF of 30 inch pipe, along Alley (Pvy) in Oso WWTP Service Area.	$0	$0	$1,369,500
127 of 238	Staples Section 3	Replace existing pipe with 1170 LF of 24 inch pipe, 5140 LF of 30 inch pipe, along Staples Section 3 in Oso WWTP Service Area.	$0	$0	$5,553,300
133 of 238	Kingston	Replace existing pipe with 2790 LF of 30 inch pipe, along Kingston in Oso WWTP Service Area.	$0	$0	$3,313,000
148 of 238	Woolridge	Replace existing pipe with 1300 LF of 18 inch pipe, 600 LF of 20 inch pipe, along Woolridge in Oso WWTP Service Area.	$0	$0	$2,239,900
207 of 238	New_Oso1	Install 50 LF of new 6 inch gravity pipe in Everhardt and Staples Lift Station Shed in Oso Basin WWTP Service Area. Install new Gravity Pipes in order to meet demands generated from anticipated growth.	$0	$0	$27,800
		Total	**0**	**41,843,100**	**110,207,300**
Whitecap					
19 of 238	Pl Section 4	Upsize wet well from 4.2' to 20' for an additional 3,700 gallons before 2024. Wet well will need to be increased to 24' for an additional 2,800 gallons for ultimate conditions and force main diameter increased from 4" to 18".	$975,600	$3,226,300	$17,922,700
208 of 238	New_Whitecap1	Install 2830 LF of new 10 inch gravity pipe in Coquino Bay Lift Station Shed in Whitecap Basin WWTP Service Area.	$0	$0	$1,203,000

Project #	Project Name	Description	Total 2022 Cost ($)	Total 2031 Cost ($)	Total Ultimate Cost ($)
209 of 238	New_Whitecap2	Install 1600 LF of new 10 inch gravity pipe in Coquino Bay Lift Station Shed in Whitecap Basin WWTP Service Area.	$0	$0	$678,800
210 of 238	New_Whitecap3	Install 1310 LF of new 8 inch gravity pipe in Lake Padre South Lift Station Shed in Whitecap Basin WWTP Service Area.	$0	$0	$535,400
211 of 238	New_Whitecap4	Install 1710 LF of new 8 inch gravity pipe in Swordfish Lift Station Shed in Whitecap Basin WWTP Service Area.	$0	$0	$725,300
212 of 238	New_Whitecap5	Install 1410 LF of new 8 inch gravity pipe in Verdemar Lift Station Shed in Whitecap Basin WWTP Service Area.	$0	$0	$599,900
213 of 238	New_Whitecap6	Install 890 LF of new 6 inch gravity pipe in To ModelMH 124020240 Lift Station Shed in Whitecap Basin WWTP Service Area.	$0	$0	$395,400
214 of 238	New_Whitecap7	Install 560 LF of new 6 inch gravity pipe in To ModelMH 124020240 Lift Station Shed in Whitecap Basin WWTP Service Area.	$0	$0	$249,900
215 of 238	New_Whitecap8	Install 1180 LF of new 8 inch gravity pipe in To ModelMH 124020240 Lift Station Shed in Whitecap Basin WWTP Service Area.	$0	$0	$481,600
216 of 238	New_Whitecap9	Install 1500 LF of new 10 inch gravity pipe in To ModelMH 124040580 Lift Station Shed in Whitecap Basin WWTP Service Area.	$0	$0	$661,300
217 of 238	New_Whitecap10	Install 800 LF of new 4 inch gravity pipe in Zahn Lift Station Shed in Whitecap Basin WWTP Service Area.	$0	$0	$1,600
225 of 238	New LS to Coquina Bay 2	Install new Lift Station and Force Main in Whitecap WWTP Service Area	$0	$0	$353,000
226 of 238	New LS to Coquina Bay 1	Install new Lift Station and Force Main in Whitecap WWTP Service Area	$0	$0	$464,600
227 of 238	New LS to Zahn 1	Install new Lift Station and Force Main in Whitecap WWTP Service Area	$0	$0	$512,800
228 of 238	New LS to Verdemar	Install new Lift Station and Force Main in Whitecap WWTP Service Area	$0	$0	$220,300
229 of 238	New LS to MH 240 1	Install new Lift Station and Force Main in Whitecap WWTP Service Area	$0	$0	$308,400
230 of 238	New LS to MH 240 2	Install new Lift Station and Force Main in Whitecap WWTP Service Area	$0	$0	$245,600
231 of 238	New LS to MH 240 3	Install new Lift Station and Force Main in Whitecap WWTP Service Area	$0	$0	$354,800
234 of 238	New LS to MH 580	Install new Lift Station and Force Main in Whitecap WWTP Service Area	$0	$0	$482,100
		Total	**975,600**	**3,226,300**	**26,396,500**

Exhibit 1. Wastewater Service Area

PAPE-DAWSON ENGINEERS
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TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028800

Wastewater Service Areas
CORPUS CHRISTI

Cynthia
Sharpsburg
Calallen
Allison
Allison WWTP
Clarkwood
North
McBride
Broadway
Broadway WWTP
Greenwood
Arcadia
London Lift Station
Port/Pearse
Sacky
Greenwood WWTP
Kostoryz
Oso
Oso WWTP
London
Military/Jester
Laguna Madre WWTP
Laguna Madre
Laguna Shores
Jackfish
Whitecap
Whitecap WWTP

Nueces Bay
Spoil Banks
Ingleside on the Bay
Corpus Christi Bay
Corpus Christi Naval Air Station
Cayo del Oso
Tailings Pond
Cabaniss Field Nas
Corpus Christi Int'l Airport
Robstown
Agnes St
Up River Rd
Violet Rd
Clarkwood Rd
Weber Rd
Chapman Ranch Rd
Tierra Grande
Petronila
Chapman Ranch
Texas Tropical Trl
FM 1694
FM 43
FM 2826
1889
44
69
1694
61
30
892
665
43
2444
20
67
55
P22
64 ft
44 ft
43 ft
41 ft

Legend
- WWTP Service Area
- Lift Station
- Waste Water Treatment Plant
- Existing Force Main

Existing Gravity Pipes
- <=12"
- 15"-24"
- 27" - 36"
- >36"

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	AA
DRAWN	AA
CHECKED	AA
SHEET	1.0

Date: Aug 31, 2023 10:56 AM User: eposey
File: P:\123\83\00\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Wastewater Service Areas Map: Wastewater Service Areas

Exhibit 2. Wastewater Treatment Plant Service Areas

Wastewater Treatment Plant Service Areas
CORPUS CHRISTI

PAPE-DAWSON ENGINEERS
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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	AA
DRAWN	AA
CHECKED	AA
SHEET	1.0

Legend

- Lift Station Sewersheds
- Lift Station
- Waste Water Treatment Plant
- Existing Force Main

Existing Gravity Pipes

- <=12"
- 15"-24"
- 27" - 36"
- >36"

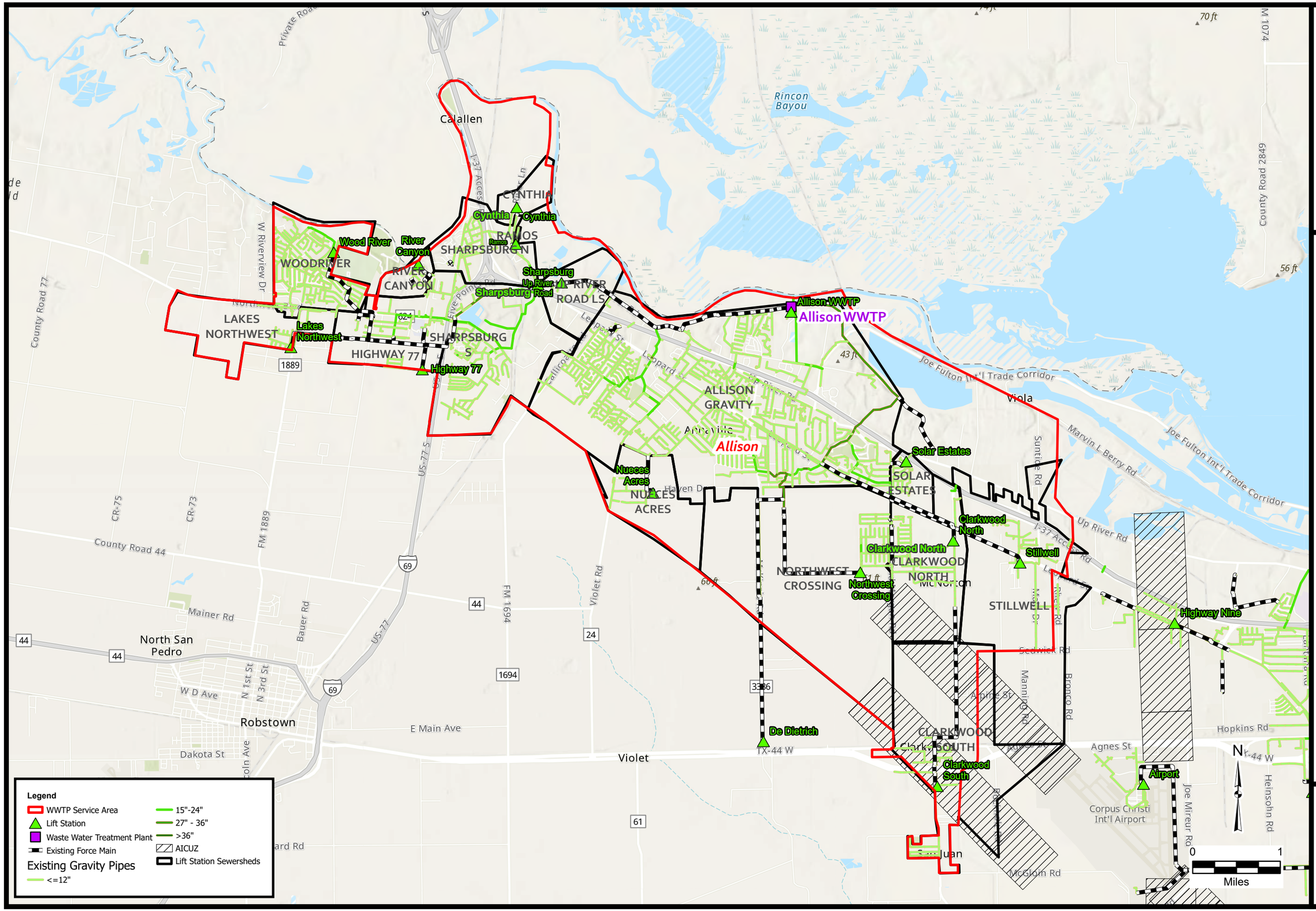
Allison WWTP
Broadway WWTP
Greenwood WWTP
Oso WWTP
Laguna Madre WWTP
Whitecap WWTP

RAMOS, WOODRIVER, RIVER CANYON, LAKES NORTHWEST, HIGHWAY 77, UP RIVER ROAD LS, ALLISON GRAVITY, NUECES ACRES, SOLAR ESTATES, NORTHWEST CROSSING, CLARKWOOD NORTH, STILLWELL, CLARKWOOD SOUTH, HIGHWAY NINE, MCBRIDE, AIRPORT, LEVI COUNTY JAIL, WW-LS 1003 WWTP-1, WW-LS 1003 WWTP-2, WW-LS 1003 WWTP-3, WW-LS 1003 WWTP-4, WW-LS 1003 WWTP, COASTAL MEADOWS, WW-LS1037, WW-LS1099, WW-LS1008, WW-LS1009, WW-LS1018, B1, B2, B3, BROWNLEE, COOPERS ALLEY L-HEAD, PRIVATE, MORGAN, OLEANDER WW, WW-LS1090, ARCADIA, O2, O3, O4, O5, O6, O7, O8, O9, O10, O11, O12, TROJAN, SACKY WW, OSO GRAVITY TO WWTP, TAMUCC M University WW, EVERHARDT AND STAPLES, SCHANEN WW, WILLIAMS WW, WEBERS GLEN WW, COUNTRY CLUB WW, PELICAN BAY WW, ANCHOR HARBOR WW, PERRY PLACE WW, STATION 5 WW, LAKES WW, WOOLDRIDGE WW, GREENFIELDS BY THE BAY, BUCKINGHAM WW, AIRLINE, CIMARRON WW, SLOUGH WW, KINGS CROSSING WW, STARRY WW, TURTLE COVE, WALMART, LAGUNA MADRE GRAVITY, NEW LS TO WALDRON 2, GATEWAY PARK, FLOUR BLUFF, JAMAICA, RHETTA PLACE, NEW LS TO WALDRON 1B, LAGUNA SHORES, NEW LS TO WALDRON 1A, RIVIERA, REX, P22, KENNEDY CAUSEWAY, JACKFISH, PARK ROAD 53, TO MODEL MH 124020240, TO MODEL MH 124040580, TESORO, LEEWARD, CUMANA, COQUINO BAY, SEA PINES, ZAHN

Nueces Bay, Viola, Ingleside on the Bay, Corpus Christi Bay, Corpus Christi Naval Air Station, Cayo del Oso, Tailings Pond, Robstown, Petronila, Tierra Grande, Chapman Ranch, Weber Rd, Up River Rd, Violet Rd, Clarkwood Rd, Chapman Ranch Rd, Texas Tropical Trl, FM 1694, FM 2826, FM 43, Agnes St, Airport, Waldron Field, Cabaniss Field Nas, Corpus Christi Intl Airport

1889, 69, 44, 1694, 892, 64 ft, 30, 665, 61, 2444, 20, 43, 44 ft, 43 ft, 41 ft, 55, 67

Exhibit 3. Allison Sewershed



Legend

- WWTP Service Area
- Lift Station
- Waste Water Treatment Plant
- Existing Force Main
- Existing Gravity Pipes
  - <=12"
  - 15"-24"
  - 27" - 36"
  - >36"
  - AICUZ
  - Lift Station Sewersheds

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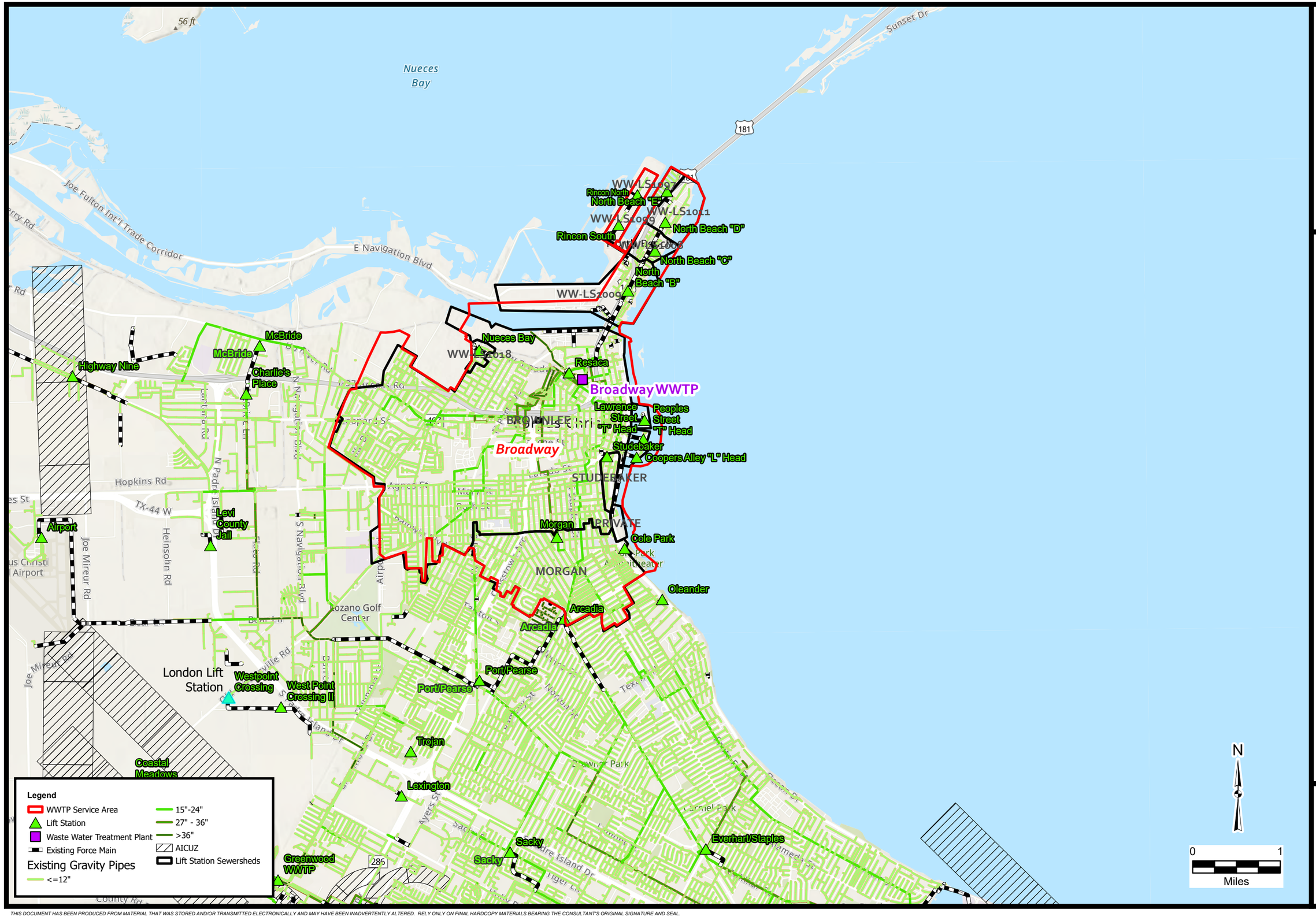
ALLISON SEWERSHED
CORPUS CHRISTI, TEXAS
EXISTING CONDITIONS

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	AA
DRAWN	AA
CHECKED	AA
SHEET	1.0

Date: Aug 31, 2023 2:23 PM User: eposey
File:

Exhibit 4. Broadway Sewershed



Legend

- WWTP Service Area
- Lift Station
- Waste Water Treatment Plant
- Existing Force Main

Existing Gravity Pipes

- <=12"
- 15"-24"
- 27" - 36"
- >36"
- AICUZ
- Lift Station Sewersheds

BROADWAY SEWERSHED
CORPUS CHRISTI, TEXAS
EXISTING CONDITIONS

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DATE	Aug 2023
DESIGNER	AA
DRAWN	AA
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SHEET	1.0

Date: Aug 31, 2023 2:47 PM User: eposey
File:

Exhibit 5. Greenwood Sewershed

GREENWOOD SEWERSHED
CORPUS CHRISTI, TEXAS
EXISTING CONDITIONS

PAPE-DAWSON ENGINEERS
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Legend

- WWTP Service Area
- Lift Station
- Waste Water Treatment Plant
- Existing Force Main

Existing Gravity Pipes

- <=12"
- 15"-24"
- 27" - 36"
- >36"
- AICUZ
- Lift Station Sewersheds

JOB NO.	0000-00
DATE	Sep 2023
DESIGNER	AA
DRAWN	AA
CHECKED	AA
SHEET	1.0

Date: Sep 13, 2023 1:25 PM User: valexander
File:

Exhibit 6. Laguna Madre Sewershed

PAPE-DAWSON ENGINEERS
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LAGUNA MADRE SEWERSHED
CORPUS CHRISTI, TEXAS
EXISTING CONDITIONS

Lexington
Sacky
Sacky
Everhart/Staples
Kostoryz
Kostoryz
Schanen
Country Club Estates
Webers Glen
Station #5
Wooldridge
The Lakes
London East
Greenfields By The Bay
Wooldridge II
Airline
Buckingham
Cimmaron
Slough
Kings Crossing
Bay Drive
Starry
TAMUCC
Oso WWTP #1
Oso WWTP #2
Pelican Bay
Williams
Sugar Tree
Anchor Habor
Perry Place
Military/Jester
Military/Jester
Travel Trailer
Laguna Madre WWTP
Laguna Madre WWTP
Waldron Road
Gateway Park
Flour Bluff
Rhetta Place
Purdue
Jamaica (Online at Ultimate)
Laguna Madre
Laguna Shores
Laguna Shores
Rivieria
Rex
Kennedy Causeway
Kennedy Causeway II
Packery Pointe
Seahorse
Seahorse Swordfish
Jackfish
Jackfish
Verdemar
Park Road 53
Zahn
Park Road 22
Tesoro
Aquarius
Leeward
Whitecap WWTP
Padre Island Section 4
Lake Par South
Cumana
Gypsy
Coquina Bay
Sea Pines

Oso Beach Municipal Golf Course
Texas A&M University-Corpus Christi
Gardendale
Naval Air Station Corpus Christi
Country Club
Gulf Winds Golf Course
TURTLE COVE
WALMART
NEW LS TO WALDRON 2
WALDRON
FLOUR BLUFF
RHETTA PLACE
PURDUE
JAMAICA
NEW LS TO WALDRON 1B
LAGUNA SHORES
Waldron Field
NEW LS TO WALDRON 1A
RIVIERA
REX
Tailings Pond
Oso Creek Park
Padre Island Park
Ocean Dr
D St
Holly Rd
Yorktown Blvd
S Staples St
Gilead Rd
Rodd Field Rd
Weber Rd
Ennis Joslin Rd
Graham Rd
Waldron Rd
Carroll Rd
P22
County Road 43
14 ft
25 ft
24 ft
20 ft
13 ft

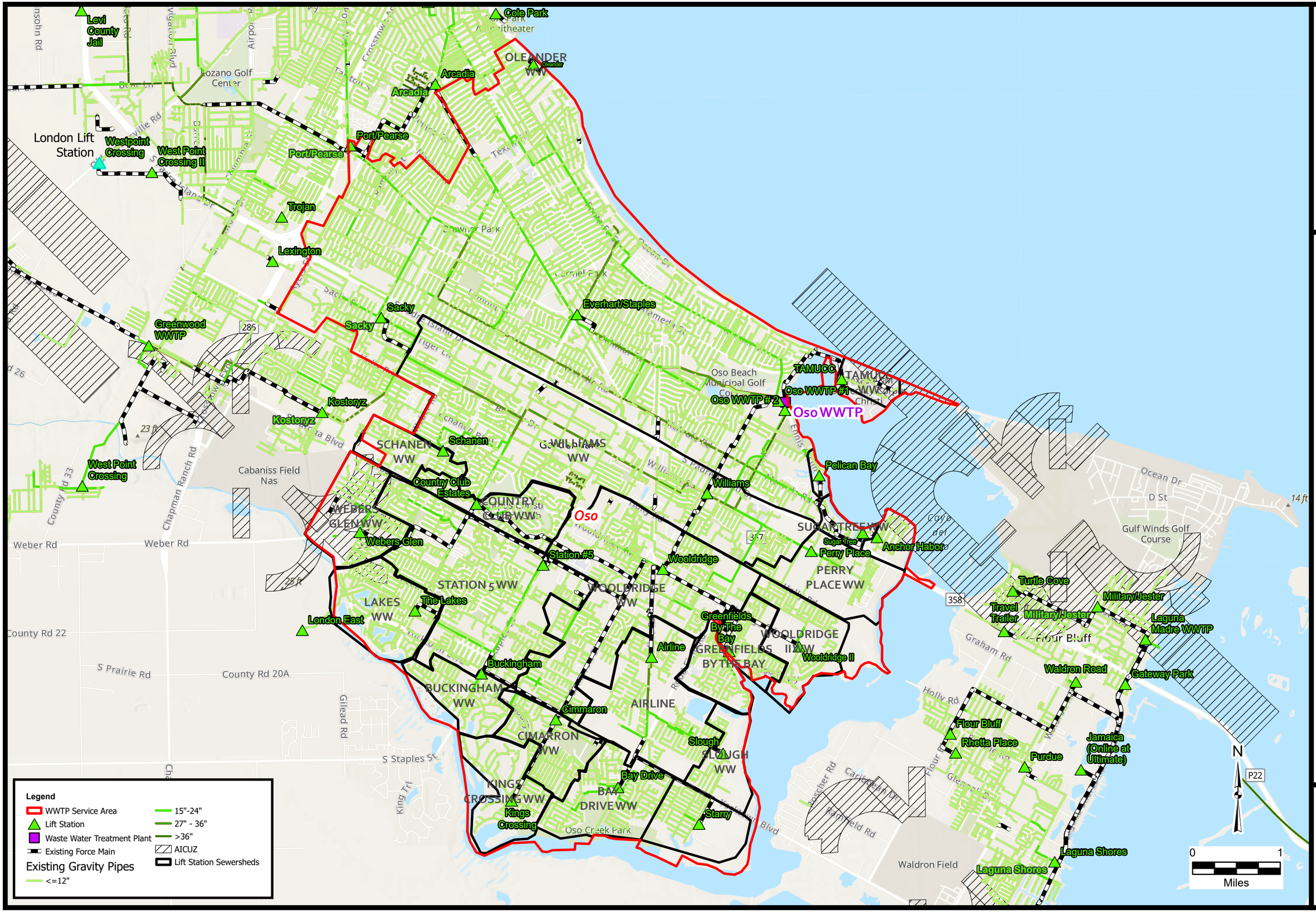
0 1 Miles

Legend
- WWTP Service Area
- Lift Station
- Waste Water Treatment Plant
- Existing Force Main
- Existing Gravity Pipes
  - <=12"
  - 15"-24"
  - 27" - 36"
  - >36"
  - AICUZ
  - Lift Station Sewersheds

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	AA
DRAWN	AA
CHECKED	AA
SHEET	1.0

Date: Aug 31, 2023 3:28 PM User: eposey
File:

Exhibit 7. Oso Sewershed



Legend

- WWTP Service Area
- Lift Station
- Waste Water Treatment Plant
- Existing Force Main

Existing Gravity Pipes

- <=12"
- 15"-24"
- 27" - 36"
- >36"
- AICUZ
- Lift Station Sewersheds

Date: Aug 31, 2023 3:35 PM User: eposey
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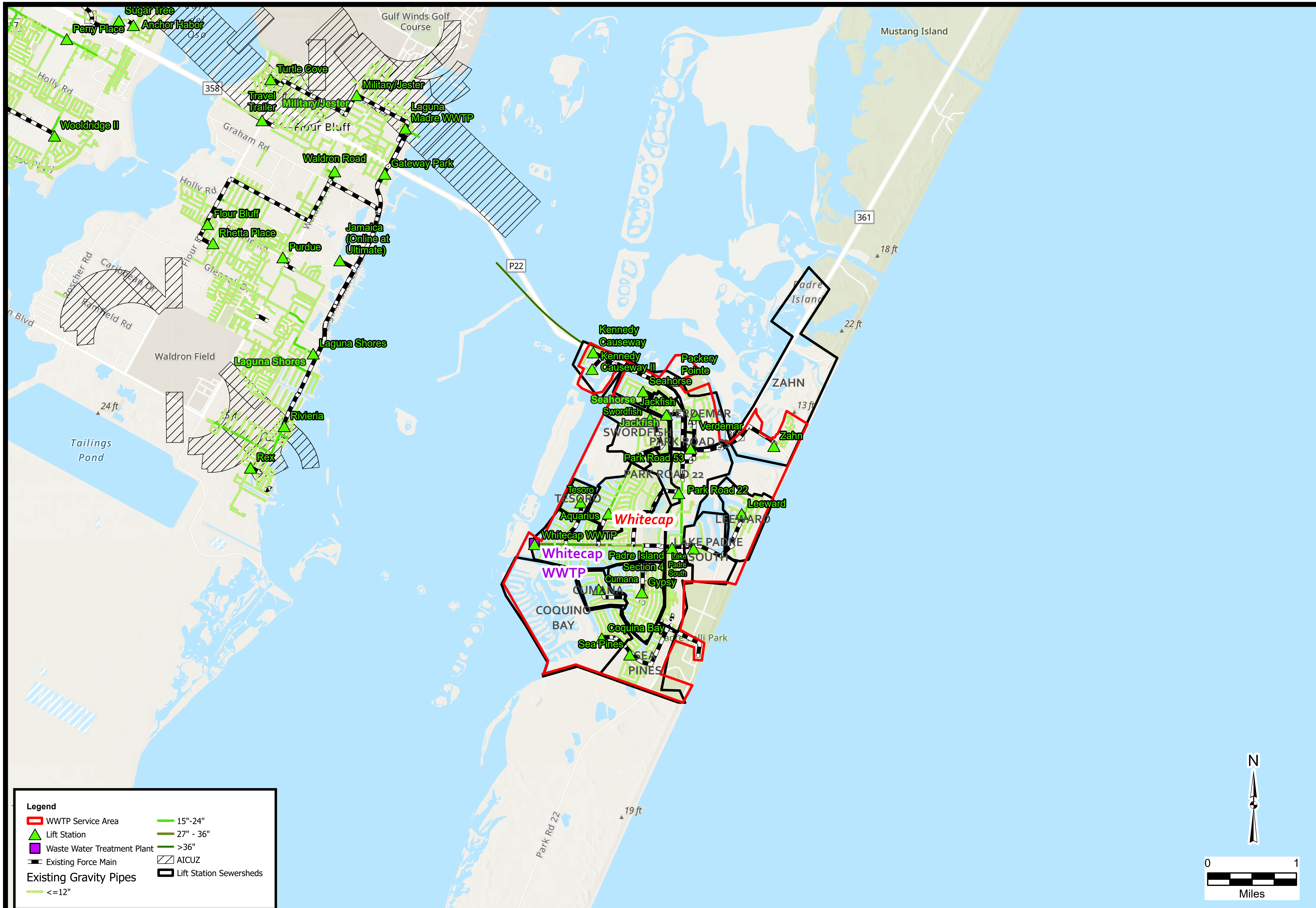
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028800

OSO SEWERSHED
CORPUS CHRISTI, TEXAS
EXISTING CONDITIONS

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	AA
DRAWN	AA
CHECKED	AA
SHEET	1.0

Exhibit 8. Whitecap Sewershed


Sugar Tree
Perry Place
Anchor Habor
Gulf Winds Golf Course
Mustang Island
Turtle Cove
Military/Jester
Travel Trailer
Military/Jester
Laguna Madre WWTP
Wooldridge II
Flour Bluff
Graham Rd
Holly Rd
Waldron Road
Gateway Park
358
361
Flour Bluff
Rhetta Place
Purdue
Jamaica (Online at Ultimate)
P22
18 ft
22 ft
Padre Island
Laguna Shores
Laguna Shores
Waldron Field
24 ft
Tailings Pond
Rivieria
Rex
Kennedy Causeway
Kennedy Causeway II
Packery Pointe
Seahorse
ZAHN
Seahorse
Jackfish
Swordfish
VERDEMAR
Verdemar
Jackfish
SWORDFISH
PARK ROAD 53
13 ft
Zahn
Park Road 53
PARK ROAD 22
Park Road 22
Tesoro
TESORO
Leeward
Aquarius
Whitecap
LEEWARD
Whitecap WWTP
Whitecap WWTP
LAKE PADRE SOUTH
Padre Island Section 4
Lake Padre South
Cumana
Gypsy
CUMANA
COQUINA BAY
Coquina Bay
Sea Pines
SEA PINES
Park Rd 22
19 ft
N
0
1
Miles
Legend
WWTP Service Area
Lift Station
Waste Water Treatment Plant
Existing Force Main
Existing Gravity Pipes
<=12"
15"-24"
27" - 36"
>36"
AICUZ
Lift Station Sewersheds

PAPE-DAWSON ENGINEERS

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WHITECAP SEWERSHED
CORPUS CHRISTI, TEXAS
EXISTING CONDITIONS

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	AA
DRAWN	AA
CHECKED	AA
SHEET	1.0

Date: Aug 31, 2023 3:44 PM User: eposey
File:

Exhibit 9. Area Development Plans

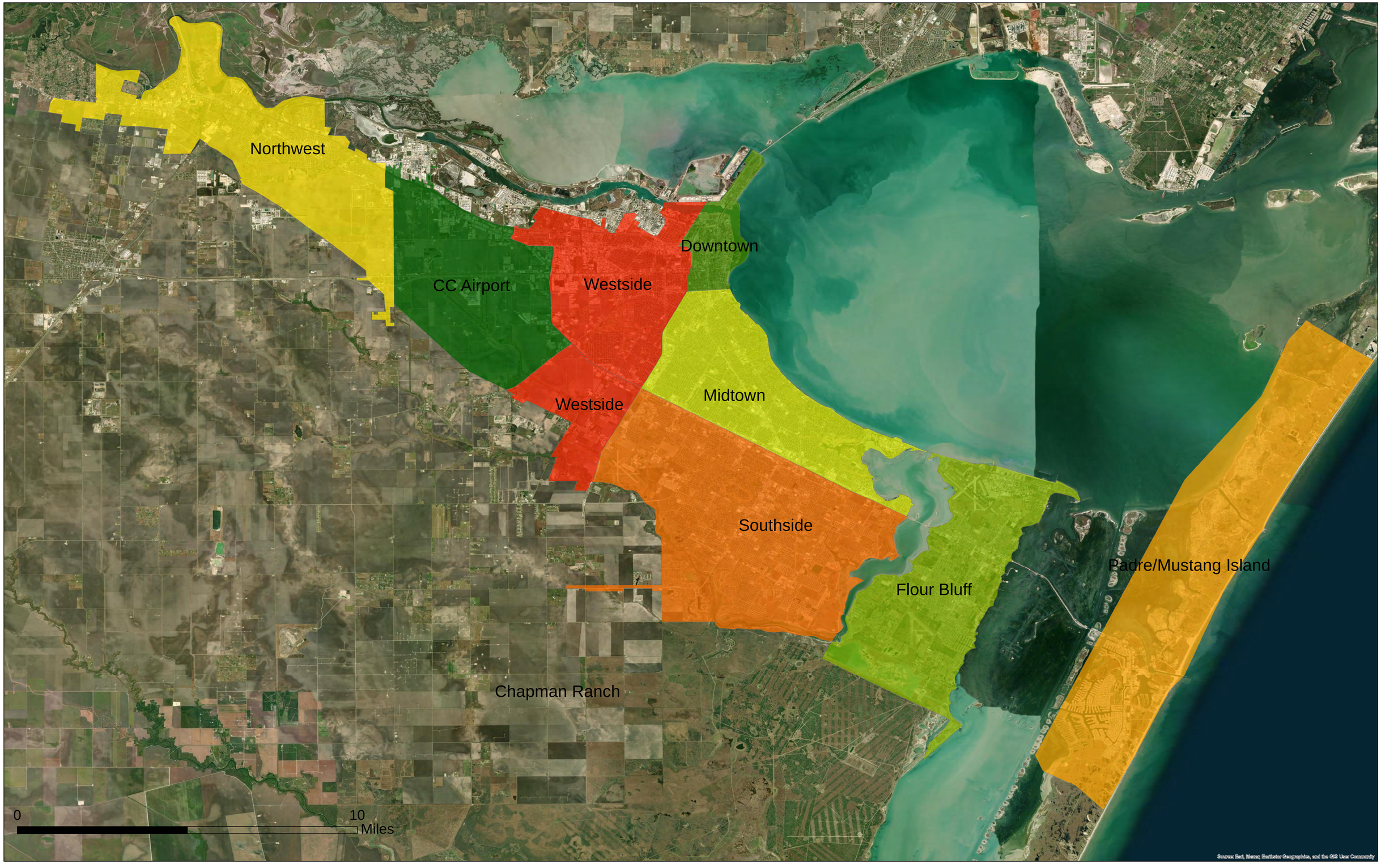
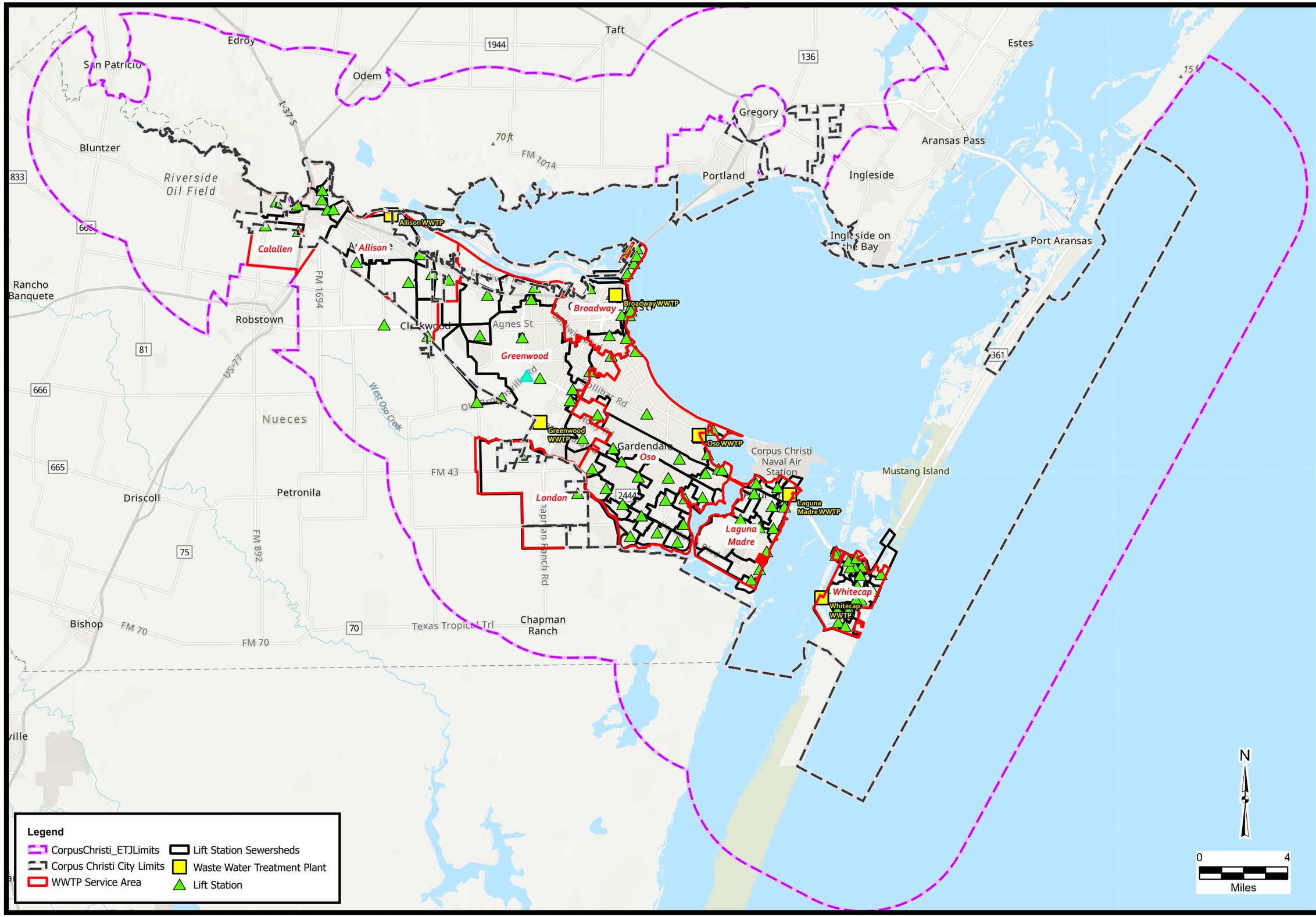

Northwest
CC Airport
Westside
Downtown
Westside
Midtown
Southside
Flour Bluff
Padre/Mustang Island
Chapman Ranch
0
10
Miles
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Exhibit 10. Extraterritorial Jurisdiction



Legend

- CorpusChristi_ETJLimits
- Corpus Christi City Limits
- WWTP Service Area
- Lift Station Sewersheds
- Waste Water Treatment Plant
- Lift Station

EXTRAERRITORIAL JURISDICTION
CORPUS CHRISTI, TEXAS
BOUNDARY EXHIBIT

PAPE-DAWSON ENGINEERS
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TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028800

JOB NO.	0000-00
DATE	Sep 2023
DESIGNER	AA
DRAWN	AA
CHECKED	AA
SHEET	1.0

Date: Sep 01, 2023 11:40 AM User: eposey
File:

Exhibit 11. Allison System Upgrades for Current Conditions.

Date: Mar 31, 2023 9:09 AM User: valexander

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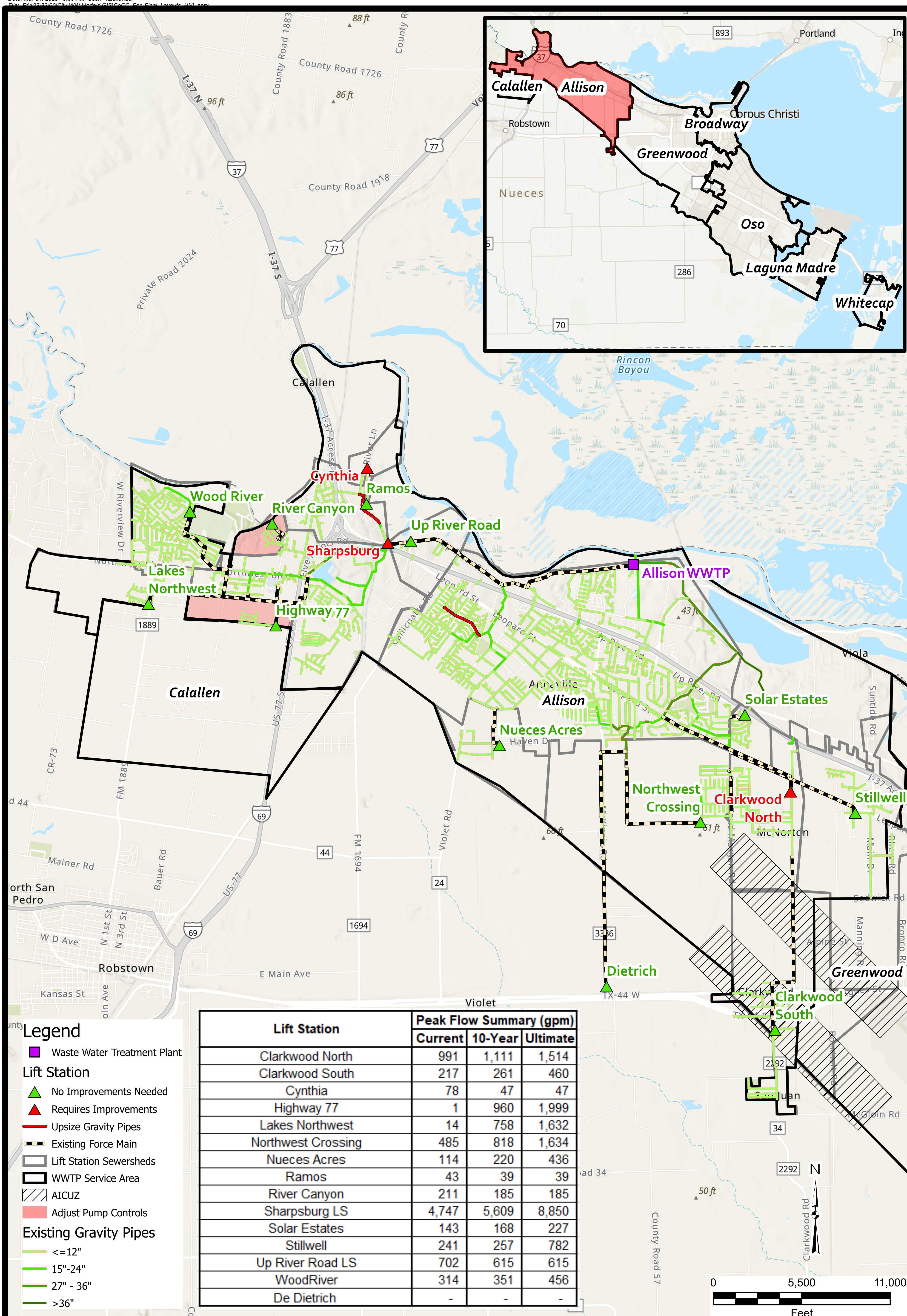

Legend

- Waste Water Treatment Plant

Lift Station

- No Improvements Needed
- Requires Improvements
- Upsize Gravity Pipes
- Existing Force Main
- Lift Station Sewersheds
- WWTP Service Area
- AICUZ
- Adjust Pump Controls

Existing Gravity Pipes

- <=12"
- 15"-24"
- 27" - 36"
- >36"

Lift Station	Peak Flow Summary (gpm)		
	Current	10-Year	Ultimate
Clarkwood North	991	1,111	1,514
Clarkwood South	217	261	460
Cynthia	78	47	47
Highway 77	1	960	1,999
Lakes Northwest	14	758	1,632
Northwest Crossing	485	818	1,634
Nueces Acres	114	220	436
Ramos	43	39	39
River Canyon	211	185	185
Sharpsburg LS	4,747	5,609	8,850
Solar Estates	143	168	227
Stillwell	241	257	782
Up River Road LS	702	615	615
WoodRiver	314	351	456
De Dietrich	-	-	-

JOB NO. 12383-00
DATE Mar 2023
DESIGNER RW
CHECKED RW DRAWN VRA
SHEET 1.0

Allison System Upgrades for Current Conditions

City of Corpus Christi

PAPE-DAWSON ENGINEERS

807 N UPPER BROADWAY, STE 103 | CORPUS CHRISTI, TX 78401 | 210.375.9000
TEXAS ENGINEERING FIRM #470

Exhibit 12. Broadway System Upgrades for Current Conditions

Legend

- Waste Water Treatment Plant

Lift Station

- No Improvements Needed
- Requires Improvements
- Existing Force Main
- Upsize Gravity Pipes
- WWTP Area
- Lift Station Sewersheds
- AICUZ
- Adjust Pump Controls

Existing Gravity Pipes

- <=12"
- 15"-24"
- 27" - 36"
- >36"

Lift Station	Peak Flow Summary (gpm)		
	Current	10-Year	Ultimate
Coopers Alley L-Head	4	4	4
Lawrence St. T-Head	11	11	11
Magee Beach	2	2	2
Morgan	659	954	1,068
Peoples St. T-Head	13	13	13
Studebaker	35	47	67
North Beach "C"	130	153	221
North Beach "D"	240	256	470
North Beach "B"	142	151	358
North Beach "E"	45	53	75
Nueces Bay	120	121	121
Rincon South	1	1	1
Rincon North	2	2	2
Cole Park	No Data Available		
Brownlee	No Data Available		
Resaca (WWTP)	No Data Available		

Calallen
Allison
Broadway
Greenwood
Oso
Laguna Madre
Whitecap
Rincon North
North Beach "E"
Rincon South
North Beach "D"
North Beach "C"
North Beach "B"
Nueces Bay
Resaca
Broadway WWTP
Brownlee
Peoples Street "T" Head
Lawrence Street "T" Head
Studebaker
Coopers Alley "L" Head
Magee Beach
Morgan
Cole Park
Greenwood
Oso

0 3,000 6,000
Feet

JOB NO.	12383-00
DATE	Mar 2023
DESIGNER	RW
CHECKED	RW
DRAWN	VRA
SHEET	1.0

Broadway System Upgrades for Current Conditions

City of Corpus Christi

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TEXAS ENGINEERING FIRM #470

Exhibit 13. Broadway System Upgrades for Ultimate Condition

Date: Mar 31, 2023 8:24 AM User: valexander
File: P:\123\83\00\City WW Models\GIS\CoCC_For_Final_Layouts_HNL.aprx

Legend

- Waste Water Treatment Plant

Lift Station

- No Improvements Needed
- Requires Improvements
- New Lift Station
- Future Force Main
- Existing Force Main
- Future Gravity Main
- Upsize Gravity Pipes
- Lift Station Sewersheds
- WWTP Area
- AICUZ

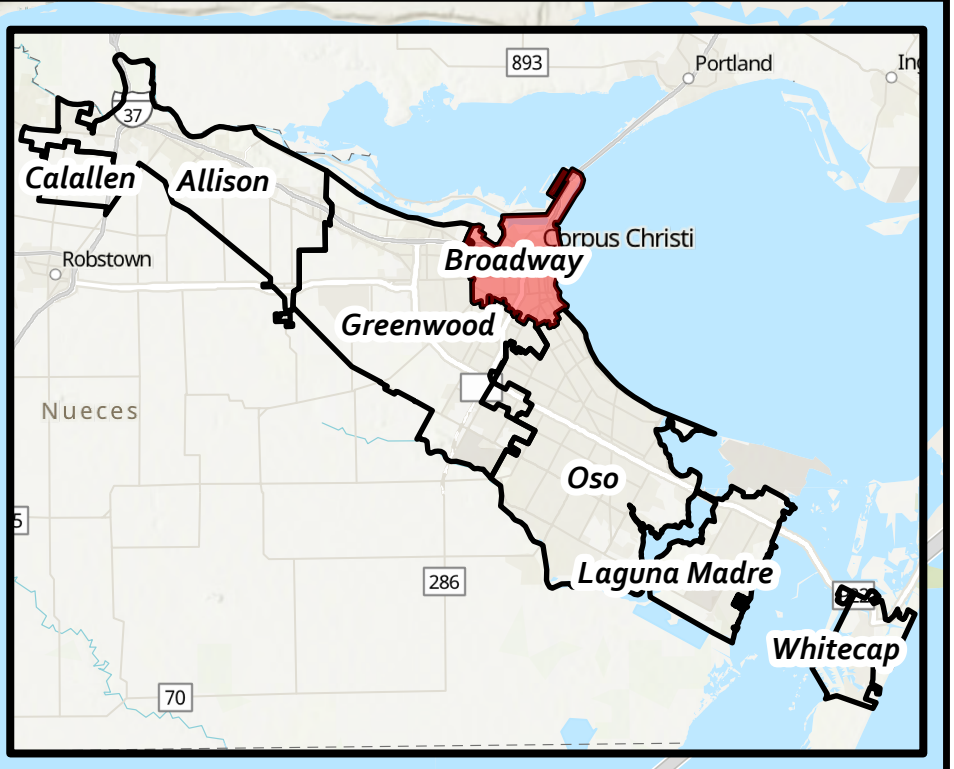
Existing Gravity Pipes

- <=12"
- 15"-24"
- 27" - 36"
- >36"

Future Land Use

- Employment
- Residential

Lift Station	Peak Flow Summary (gpm)		
	Current	10-Year	Ultimate
Coopers Alley L-Head	4	4	4
Lawrence St. T-Head	11	11	11
Magee Beach	2	2	2
Morgan	659	954	1,068
Peoples St. T-Head	13	13	13
Studebaker	35	47	67
North Beach "C"	130	153	221
North Beach "D"	240	256	470
North Beach "B"	142	151	358
North Beach "E"	45	53	75
Nueces Bay	120	121	121
Rincon South	1	1	1
Rincon North	2	2	2
Cole Park	No Data Available		
Brownlee	No Data Available		
Resaca (WWTP)	No Data Available		



Nueces Bay
Resaca
Broadway WWTP
Brownlee
Peoples Street "T" Head
Lawrence Street "T" Head
Studebaker
Coopers Alley "L" Head
Magee Beach
Rincon North
North Beach "E"
Rincon South
North Beach "D"
North Beach "C"
North Beach "B"
Morgan
Cole Park
Broadway
Greenwood
Oso
Nueces Bay
54 ft
69 ft
68 ft
Up River Rd
Agnes St
N Navigation Blvd
S Navigation Blvd
Baldwin Blvd
Tarlton St
Horne Rd
Blevins St
Crosstown Expy
Greenwood Dr
Cole Park Amphitheater
Louisiana Parkway
Harbor Bridge
Center

N

0 3,000 6,000
Feet

JOB NO.	12383-00
DATE	Mar 2023
DESIGNER	RW
CHECKED	RW
DRAWN	VRA
SHEET	1.0

Broadway System Upgrades for Ultimate Conditions

City of Corpus Christi

PAPE-DAWSON ENGINEERS
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TEXAS ENGINEERING FIRM #470

Exhibit 14. Greenwood System Upgrades for Current Conditions

Date: Mar 31, 2023 10:41 AM User: valexander
File: P:\123\83\00\City WW Models\GIS\CoCC_For_Final_Layouts_VRA.aprx

Legend

- Waste Water Treatment Plant

Lift Station

- No Improvements Required
- Improvements Required
- Upsize Gravity Pipes
- Existing Force Main
- AICUZ
- Lift Station Sewersheds
- WWTP Service Area
- Adjust Pump Controls

Existing Gravity Pipes

- <=12"
- 15"-24"
- 27" - 36"
- >36"

Manhole elevations need to be inspected by City to ensure slopes and inverts are correct

Calallen
Allison
Portland
Robstown
Corpus Christi
Broadway
Greenwood
Nueces
Oso
Laguna Madre
Whitecap
Joe Fulton Int'l Trade Corridor
Up River Rd
I-37 Access Rd
Allison
McNorton
Highway Nine
McBride
Charlie's Place
Sedwick Rd
Bronco Rd
Manning Rd
Alpine St
Clarkwood
Agnes St
Hopkins Rd
Levi County Jail
Airport
Corpus Christi Int'l Airport
Joe Mireur Rd
Helmsohn Rd
TX-44 E
San Juan
McGloin Rd
Greenwood
Westpoint Crossing
Port/Pearse
Arcadia
Trojan
Lexington
Coastal Meadows
Rose Acres
Old Brownsville Rd
Greenwood WWTP
Sacky
Oso
Kostoryz
Cabaniss Field Nas
Weber Rd
Chapman Ranch Rd
Leopard St
Mary St
Ruth St
Morgan Ave
Laredo St
Baldwin Blvd
Schanen Blvd
Everhart Rd
Saratoga Blvd
Brawner Park
Lamont St
Tiger Ln
Island Dr
Villa Dr
N Port Ave
W Broadway St
S Staples St
14th St
Ramsey Rd
Louisiana Ave
Cole Park Amphitheater
Corpus Christi Country Club
54 ft
56 ft
23 ft
25 ft
893
37
407
44
286
70
181
2292
34
N

Lift Station	Peak Flow Summary (gpm)		
	Current	10-Year	Ultimate
Airport	586	475	475
Arcadia (> 5MGD)	6,101	6,101	4,100
Coastal Meadows	197	236	745
Highway Nine	1,031	1,178	1,331
Kostoryz (> 5MGD)	11,532	10,530	10,530
Levi County Jail	-	20	20
McBride (> 5MGD)	7,787	6,900	6,900
Sacky (> 5MGD)	4,755	4,797	4,895
Trojan	72	60	60
Lexington	54	54	54
Port/Pearse (>5 MGD)	10,235	7,950	7,950
Charlie's Place	No Data Available		
Rose Acres	No Data Available		
Westpoint Crossing	No Data Available		

0 2,500 5,000 10,000 Feet

JOB NO. 12383-00
DATE Mar 2023
DESIGNER RW
CHECKED RW DRAWN VRA
SHEET 1.0

Greenwood System Upgrades for Current Conditions

City of Corpus Christi

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TEXAS ENGINEERING FIRM #470

Exhibit 15. Greenwood System Upgrades for Ultimate Conditions

Date: Mar 31, 2023 7:57 AM User: valexander
File: P:\123\83\00\City WW Models\GIS\CoCC_For_Final_Layouts_VRA.aprx

Legend

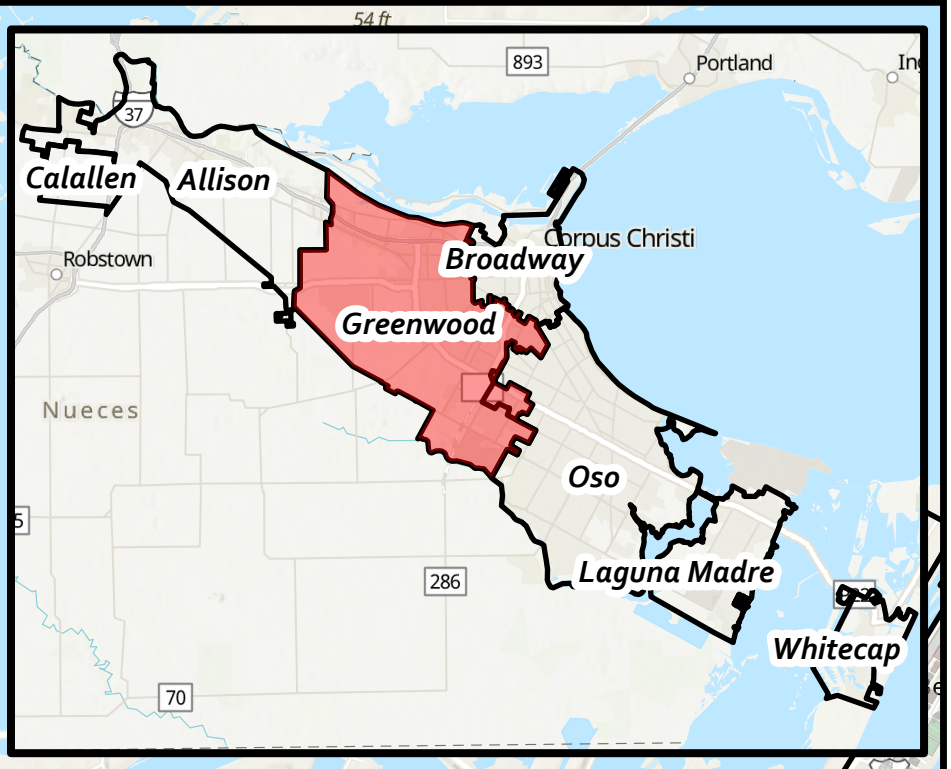
- Waste Water Treatment Plant

Lift Station
- No Improvements Required
- Improvements Required
- New Lift Station
- Future Force Main
- Existing Force Main
- Future Gravity Main
- Upsize Gravity Pipes
- Lift Station Sewersheds
- WWTP Service Area
- AICUZ
- Adjust Pump Controls

Existing Gravity Pipes
- <=12"
- 15"-24"
- 27" - 36"
- >36"

Future Land Use
- Employment
- Residential

New Lift Station	Ultimate Peak Flow (gpm)
New LS to G1_1	906
New LS to LS1003WWTP2	1,325
New LS to LS1003WWTP2- South	275
New LS to WW-LS1003 WWTP-4	2,259
New LS to Highway Nine 1	400
New LS to Highway Nine 2	1,219



Lift Station	Peak Flow Summary (gpm)		
	Current	10-Year	Ultimate
Airport	586	475	475
Arcadia (> 5MGD)	6,101	6,101	4,100
Coastal Meadows	197	236	745
Highway Nine	1,031	1,178	1,331
Kostoryz (> 5MGD)	11,532	10,530	10,530
Levi County Jail	-	20	20
McBride (> 5MGD)	7,787	6,900	6,900
Sacky (> 5MGD)	4,755	4,797	4,895
Trojan	72	60	60
Lexington	54	54	54
Port/Pearse (>5 MGD)	10,235	7,950	7,950
Charlie's Place	No Data Available		
Rose Acres	No Data Available		
Westpoint Crossing	No Data Available		

0 2,500 5,000 10,000 Feet

JOB NO.	12383-00
DATE	Mar 2023
DESIGNER	RW
CHECKED	RW
DRAWN	VRA
SHEET	1.0

Greenwood System Upgrades for Ultimate Conditions

City of Corpus Christi

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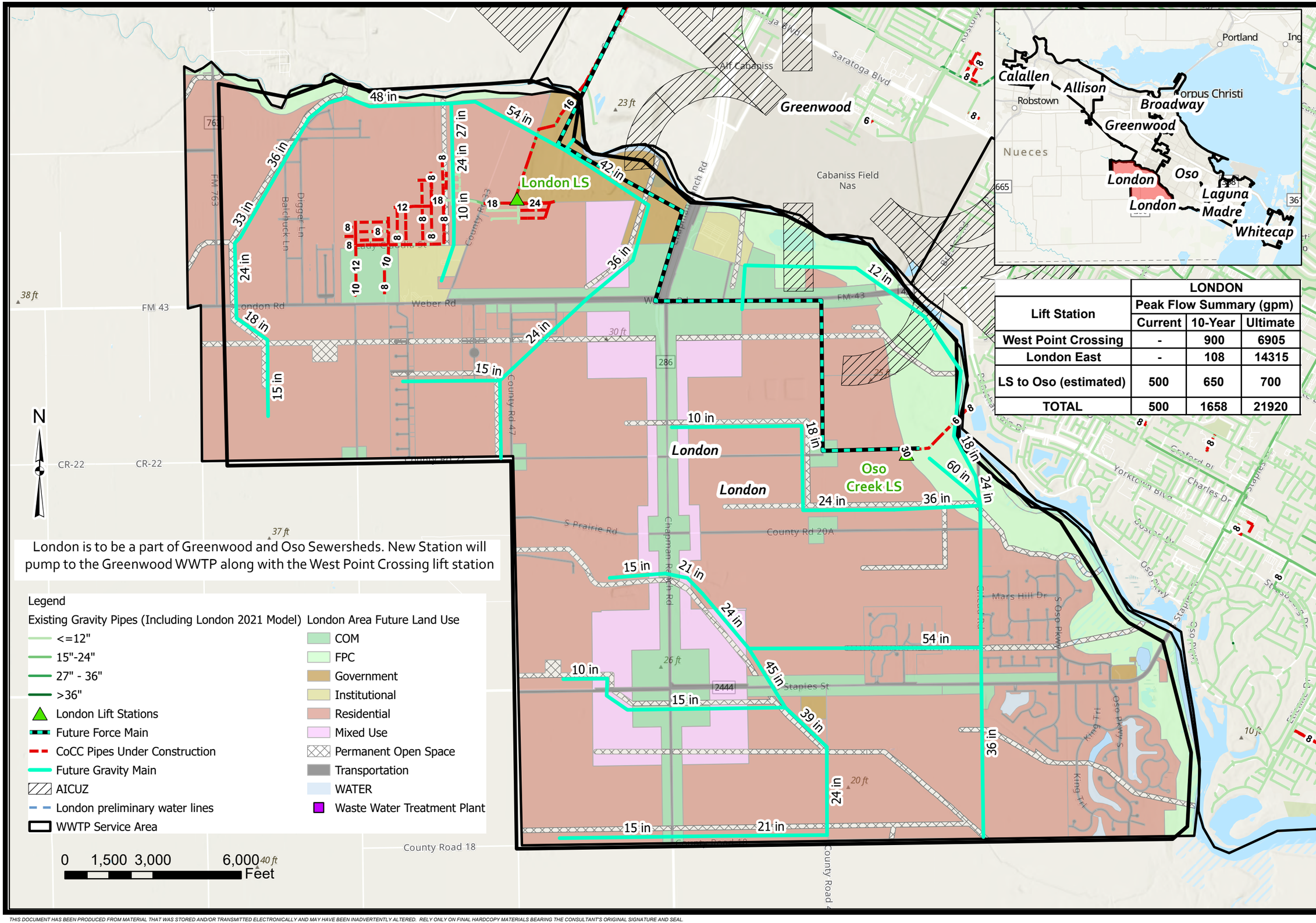
TEXAS ENGINEERING FIRM #470

Exhibit 16. London Area Wastewater Planning



London is to be a part of Greenwood and Oso Sewersheds. New Station will pump to the Greenwood WWTP along with the West Point Crossing lift station

Lift Station	LONDON Peak Flow Summary (gpm)		
	Current	10-Year	Ultimate
West Point Crossing	-	900	6905
London East	-	108	14315
LS to Oso (estimated)	500	650	700
TOTAL	500	1658	21920

Legend

Existing Gravity Pipes (Including London 2021 Model)
- <=12"
- 15"-24"
- 27" - 36"
- >36"
- London Lift Stations
- Future Force Main
- CoCC Pipes Under Construction
- Future Gravity Main
- AICUZ
- London preliminary water lines
- WWTP Service Area

London Area Future Land Use
- COM
- FPC
- Government
- Institutional
- Residential
- Mixed Use
- Permanent Open Space
- Transportation
- WATER
- Waste Water Treatment Plant

PAPE-DAWSON ENGINEERS
10350 RICHMOND AVE, STE 200 | HOUSTON, TX 77042 | 713.428.2400
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10193974

London Area Sanitary Sewer Planning

CITY OF CORPUS CHRISTI

JOB NO.	12383-00
DATE	Sep 2023
DESIGNER	AA
DRAWN	AA
CHECKED	AA
SHEET	1.0

Date: Sep 18, 2023 7:45 AM User: valexander
File: P:\12383\00\City WW Models\GIS\CoCC_For_Final_Layouts_London_VRA.aprx

Exhibit 17. Laguna Madre Upgrades for Current Conditions

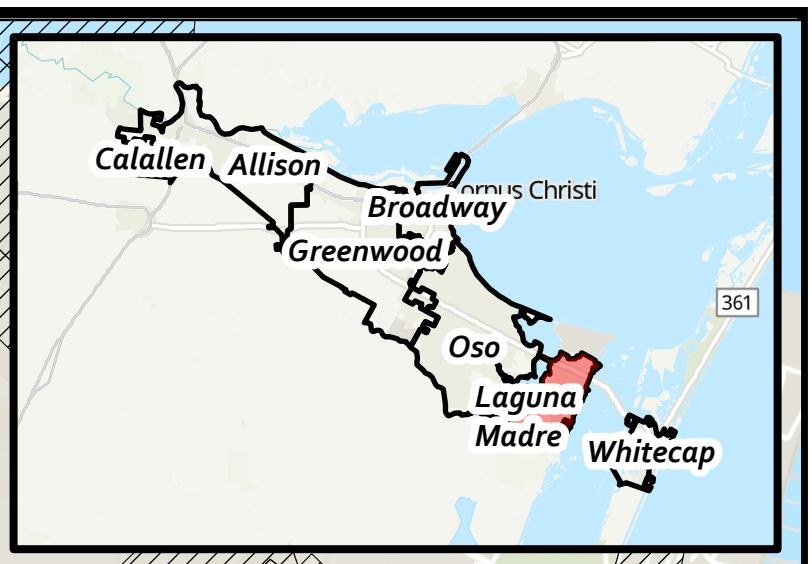
Date: Mar 31, 2023 7:41 AM User: valexander
File: P:\123\83\00\City WW Models\GIS\CoCC_For_Final_Layouts_VRA.aprx

Legend

- Waste Water Treatment Plant

Lift Station
- No Improvements Required
- Improvements Required
- Existing Force Main
- Upsize Gravity Pipes
- Lift Station Sewersheds
- WWTP Service Area
- AICUZ
- Adjust Pump Controls

Existing Gravity Pipes
- <=12"
- 15"-24"
- 27" - 36"
- >36"



Turtle Cove
Military/Jester
Walmart
Laguna Madre WWTP
Waldron Road
Gateway Park
Flour Bluff
Rhetta Place
Purdue
Jamaica
Laguna Madre
Laguna Shores
Rivieria
Rex

Lift Station	Peak Flow Summary (gpm)		
	Current	10-Year	Ultimate
Flour Bluff	647	668	734
Gateway Park	51	48	39
Jamaica	52	61	177
Laguna Shores (>5MGD)	3,946	3,347	3,347
Military and Jester	1,999	1,410	1,410
Purdue	211	197	197
Rhetta Place	109	120	125
Rex	509	422	422
Riviera	1,618	1,383	1,383
Turtle Cove	709	540	540
Waldron	1,615	1,732	1,820
Walmart	10	11	28
Laguna Madre WWTP	No Data Available		

N

0 1,500 3,000 6,000 Feet

JOB NO. 12383-00
DATE Mar 2023
DESIGNER RW
CHECKED RW DRAWN VRA
SHEET 1.0

Laguna Madre System Upgrades for Current Conditions

City of Corpus Christi

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TEXAS ENGINEERING FIRM #470

Exhibit 18. Laguna Madre System Upgrades for Ultimate Flow Conditions

Date: Mar 31, 2023 7:42 AM User: valexander
File: P:\123\83\00\City WW Models\GIS\CoCC_For_Final_Layouts_VRA.aprx

Legend

- Waste Water Treatment Plant

Lift Station
- No Improvements Required
- Improvements Required
- New Lift Station

- Existing Force Main
- Future Force Main
- Future Gravity Main
- Upsize Gravity Pipes
- Lift Station Sewersheds
- WWTP Service Area
- AICUZ
- Adjust Pump Controls

Existing Gravity Pipes
- <=12"
- 15"-24"
- 27" - 36"
- >36"

Future Land Use
- Employment
- Residential

Calallen
Allison
Broadway
Greenwood
Oso
Laguna Madre
Whitecap
Corpus Christi
361

Oso
Turtle Cove
Military/Jester
Walmart
Laguna Madre WWTP
Flour Bluff
New LS to Waldron 2
Waldron Road
Gateway Park
Rhetta Place
New LS to Waldron 1B
Purdue
Jamaica
Laguna Madre
Laguna Shores
Waldron Field
New LS to Waldron 1A
Rivieria
Tailings Pond
Rex
Expand wet well at Rex Lift Station
Atwood Park
Cayo del Oso
Tour Bluff
Spanish Grant Bermuda Beach
358

Lift Station	Peak Flow Summary (gpm)		
	Current	10-Year	Ultimate
Flour Bluff	647	668	734
Gateway Park	51	48	39
Jamaica	52	61	177
Laguna Shores (>5MGD)	3,946	3,347	3,347
Military and Jester	1,999	1,410	1,410
Purdue	211	197	197
Rhetta Place	109	120	125
Rex	509	422	422
Riviera	1,618	1,383	1,383
Turtle Cove	709	540	540
Waldron	1,615	1,732	1,820
Walmart	10	11	28
Laguna Madre WWTP	No Data Available		

New Lift Station	Ultimate Peak Flow (gpm)
New LS to Waldron 1A	1,541
New LS to Waldron 2	290
New LS to Waldron 1B	700

N

0 1,500 3,000 6,000 Feet

JOB NO. 12383-00
DATE Mar 2023
DESIGNER RW
CHECKED RW DRAWN VRA
SHEET 1.0

Laguna Madre System Upgrades
Ultimate System
City of Corpus Christi

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Exhibit 19. Oso System Upgrades for Existing Conditions

Date: Mar 31, 2023 8:01 AM User: valexander
File: P:\123\83\00\City WW Models\GIS\CoCC_For_Final_Layouts_HNL.aprx

Lift Station	Peak Flow Summary (gpm)		
	Current	10-Year	Ultimate
Airline WW	553	997	1,375
Anchor Harbor WW	75	248	350
Bay Drive WW	189	514	550
Buckingham WW	328	1,409	1,750
Cimarron WW	397	464	690
Country Club WW	924	5,500	5,500
Everhart/Staples	1,802	5,263	8,725
Greenfields by the Bay	1,125	1,191	1,325
Kings Crossing WW	350	371	400
Lakes WW 1	460	847	910
Oleander WW	2	10	11
Pelican Bay WW	125	121	117
Perry Place WW	1,000	1,073	1,125
Schanen WW	795	797	800
Slough WW	0	223	223
Starry WW	-	782	782
Station 5 WW	3,300	3,185	3,125
Sugar Tree WW	550	583	625
TAMUCC WW	160	168	168
Webers Glen WW	875	785	785
Williams WW	15,000	14,520	14,520
Wooldridge II WW	310	471	525
Wooldridge WW	14,280	14,848	15,080

Calallen
Allison
Portland
Robstown
Corpus Christi
Broadway
Greenwood
Nueces
Oso
Laguna Madre
Whitecap
Cole Park Amphitheater
Oleander
Lozano Golf Center
Greenwood
Oso Beach Municipal Golf Course
TAMUCC
Oso WWTP
Schanen
Gardendale
Pelican Bay
Country Club Estates
Williams
Webers Glen
Oso
Station #5
Wooldridge
Sugar Tree
Perry Place
Anchor Habor
The Lakes
Greenfields By The Bay
Wooldridge II
Airline
Buckingham
Cimarron
Slough
Kings Crossing
Bay Drive
Starry
Oso Creek Park
Cabaniss Field Nas
Waldron Fiel
Tailings

New force main from Perry Place to intersection with 42" line. Rebuild Perry Place LS to give additional head.

Legend

- Waste Water Treatment Plant

Lift Stations

- No Improvements Needed
- Requires Improvements
- Existing Force Main
- Upsize Gravity Pipes
- AICUZ
- Lift Station Sewersheds
- WWTP Service Area
- Adjust Pump Controls

Existing Gravity Pipes

- <=12"
- 15"-24"
- 27" - 36"
- >36"

N

0 5,000 10,000
Feet

JOB NO.	12383-00
DATE	Mar 2023
DESIGNER	RW
CHECKED	RW
DRAWN	VRA
SHEET	1.0

Oso System Upgrades for Current Conditions

City of Corpus Christi

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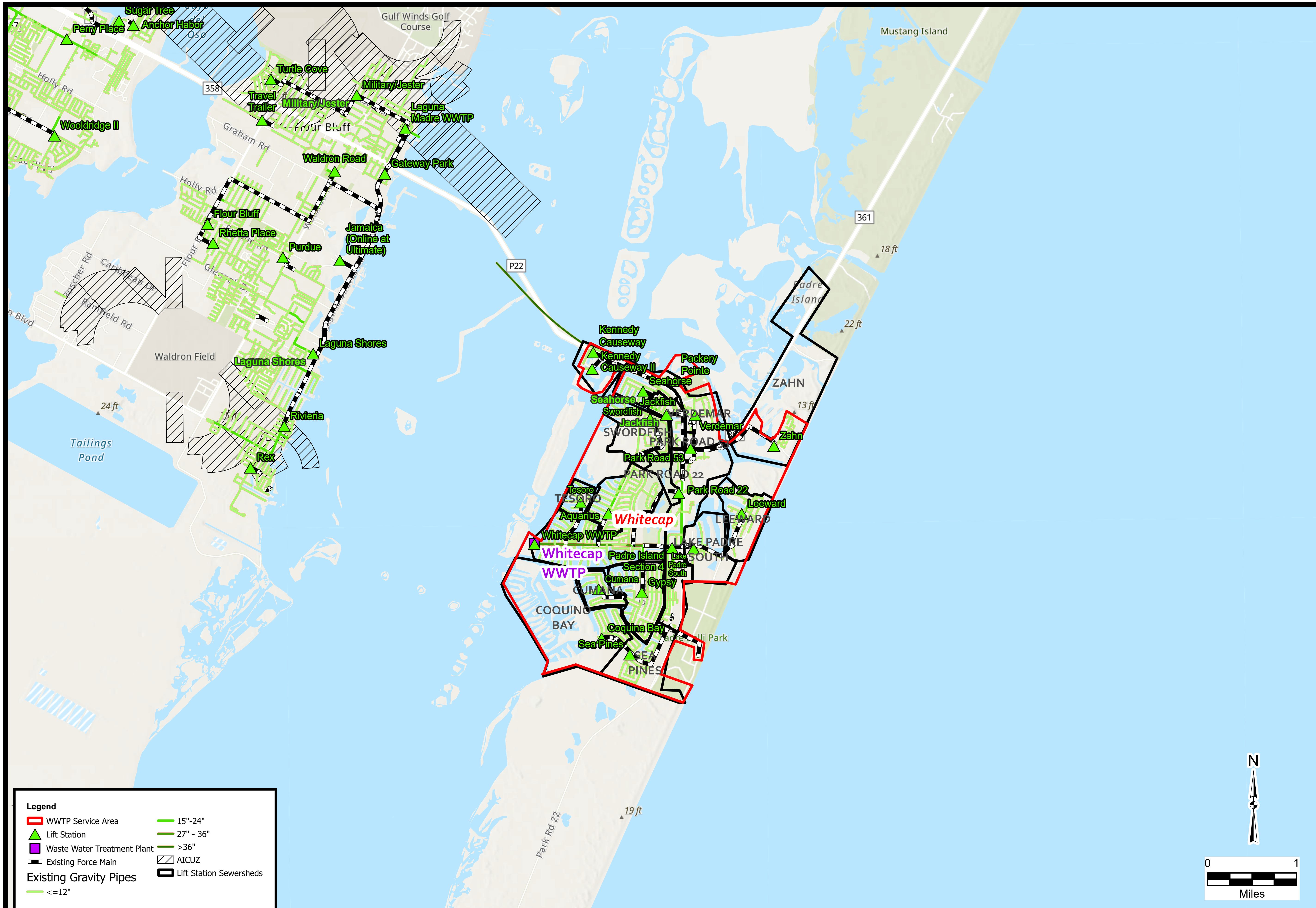
Exhibit 20. White Cap Upgrades


Sugar Tree
Anchor Habor
Perry Place
Gulf Winds Golf Course
Mustang Island
Turtle Cove
Military/Jester
Travel Trailer
Military/Jester
Laguna Madre WWTP
Wooldridge II
358
Holly Rd
Graham Rd
Flour Bluff
Waldron Road
Gateway Park
Holly Rd
361
Flour Bluff
Rhetta Place
Purdue
Jamaica (Online at Ultimate)
18 ft
P22
Caribbean Dr
Waldron Field
Laguna Shores
Laguna Shores
Padre Island
22 ft
Kennedy Causeway
Kennedy Causeway II
Packery Pointe
Seahorse
ZAHN
Seahorse
Jackfish
13 ft
24 ft
Rivieria
Swordfish
VERDEMAR
Jackfish
Verdemar
Zahn
SWORDFISH
Tailings Pond
PARK ROAD 53
Rex
Park Road 53
PARK ROAD 22
Tesoro
Park Road 22
TESORO
Leeward
Aquarius
Whitecap
LEEWARD
Whitecap WWTP
LAKE PADRE
Whitecap WWTP
Padre Island Section 4
Lake Padre South
SOUTH
Cumana
Gypsy
CUMANA
COQUINA BAY
Coquina Bay
Sea Pines
SEA PINES
19 ft
Park Rd 22
N
0
1
Miles
Legend
WWTP Service Area
Lift Station
Waste Water Treatment Plant
Existing Force Main
Existing Gravity Pipes
<=12"
15"-24"
27" - 36"
>36"
AICUZ
Lift Station Sewersheds

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Date: Aug 31, 2023 3:44 PM User: eposey
File:

PAPE-DAWSON ENGINEERS

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2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028800

WHITECAP SEWERSHED

CORPUS CHRISTI, TEXAS

EXISTING CONDITIONS

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	AA
DRAWN	AA
CHECKED	AA
SHEET	1.0

Appendix A. Wastewater Treatment Plant Asset Evaluation

SUBJECT: City of Corpus Christi Master Planning and Impact Fee Study
PD Project # 12383-00
Wastewater Treatment Plant Asset Evaluation (LAN Project 130-10987-000)

DATE: August 2023

TO: Kim Keefer, P.E.
Pape-Dawson Engineers, Inc.
2000 NW Loop 410, San Antonio, TX 78213

FROM: Scott Harris, P.E., ENV SP

Scope of Services

In support of the City of Corpus Christi's Impact Fee Study, Pape-Dawson Engineers are updating / developing master plans for the City's water, wastewater, stormwater, and roadway infrastructure. LAN supported Pape-Dawson by completing this asset evaluation of the existing wastewater treatment plant facilities. This asset evaluation included a condition / capacity assessment of six (6) wastewater treatment plants: Allison, Broadway, Greenwood, Laguna Madre, Oso, and Whitecap.

Specific tasks included:

- Reviewed previous reports, master plans, permits and other third-party evaluations, implementations of any recommendations from the previous evaluations, remaining recommendations for the previous evaluations, and the ability for the existing facilities to treat current, 5-year and 10-year planned flows and recommended improvements.
- Coordinated with City staff to review the Treatment Plant Process & Capacity Assessments. This effort included review of the City of Corpus Christi Wastewater Management Plan, November 2016. This plan provided estimated flows through 2045. The flows within this report were compared to those being used for the collection system model to determine discrepancies or adjustments to either set of flows.
- LAN completed site visits to each plant to meet one-on-one with plant operators to review capacity and condition issues in the existing plants.

Overview of Evaluations

All the plants have adequate capacity for the 10-year period of this study, although projected flows exceed the 75% threshold at Allison, Greenwood, Laguna Madre, and Oso during the study period. Texas Commission on Environmental Quality (TCEQ) regulation TAC 305.126(a) requires expansion planning when average daily flow exceeds 75% of the plant capacity.

Investment in Infrastructure

Since the completion of the Wastewater Management Plan in 2016 and the decision by City Council to continue improving the six existing plants, rather than consolidating and constructing a regional plant, the city has invested a considerable amount of capital into each of the six plants.

Operations and Maintenance (O&M) costs associated with operating the six plants is roughly $23.3 million (City of Corpus Christi Fiscal Year 2023 Budget), an increase of 28.6% since 2016. These O&M costs include staffing salaries, power cost, hauling and disposal cost, consumable products like chemicals, plant repairs and other miscellaneous daily expenses. Note that O&M costs are not eligible for coverage by impact fees. Increasing O&M costs need to be considered as part of the overall funding plan but would have little influence on impact fee structure.

In addition to the O&M budget, the FY 23 Capital Improvement Plan (CIP) includes $39 million in capital projects for the six wastewater treatment plants, including major expansions at Greenwood and Oso.

O&M costs are currently funded through utility rate payers while 91% of the capital improvements are funded through revenue bonds. Specific improvements are detailed in later sections of this memorandum.

Long Range Requirements

The scope of this evaluation includes looking at the ability for the existing facilities to treat current, 5-year and 10-year planned flows, however based on future land use and development projections LAN includes several long-range considerations for the city as part of this memorandum.

Longer range projections (more than 10 years from now) are more speculative in nature and tied to future growth and regulatory changes. Potential changes in technology may allow for cost savings utilizing optimization coupled with strategic facility expansion (addition of new concrete tanks, etc..). Optimization provides the greatest opportunity to meet future demands at lower cost.

Projecting future flow involved evaluation of land-use and future residential and commercial development in the area. Regulatory changes tend to move towards more restrictive measures such as controlling the discharge of nutrients specifically, nitrogen and phosphorous, that can cause excessive growth of aquatic vegetation and other harmful effects on the environment. Additional regulatory restrictions that could become more prominent in the future include perfluoroalkyl and polyfluoroalkyl substances (PFAS) and microplastics, although PFAS and microplastics are discussed more prevalently in drinking water forums.

Existing Capacity / Conditions Assessments

In 2016, the City of Corpus Christi conducted an extensive long-range evaluation (City of Corpus Christi Wastewater Management Plan, November 2016) of future CIP and O&M of their existing six wastewater treatment plants (Allison, Broadway, Greenwood, Laguna Madre, Oso, and Whitecap). The alternatives included several combinations of decommissioning existing plants and constructing a large central treatment facility as well as an alternative of addressing existing plant deficiencies and continuing to

operate the six existing treatment plants. Ultimately the decision to addressing existing plant deficiencies was determined to be the most cost effective and practical decision.

All the plants are approaching 50 to 70 years of operation and in that time have undergone evolutionary repairs and expansions starting in the 1970s to the early 2000s. Since 2016, capital improvements have been or are in the construction stages at all six plants. Most of the CIP scope included repairs and replacement to aging equipment and structures that has exceeded the useful life expectancy or failed in disrepair as result of the harsh costal corrosive environment.

Most of the construction has occurred in the last four-or-five years except for the Broadway plant which involved the decommissioning of the Old Broadway plant and the construction of a new Broadway plant between 2015 and 2018.

All six plants are currently in compliance with the TCEQ permits. Wastewater loadings (biochemical oxygen demand [BOD5] and total suspended solids [TSS]) were assumed to remain at current concentrations throughout the planning period.

Tabulated summaries for each of the plants' major facilities are located in Attachment 1.

The figure below shows the locations of the six existing Corpus Christi WWTPs and the appurtenant collection sanitary sewer system boundaries. Two areas are noted for future expansion. The area in red around the London area is planned to be added to the Greenwood WWTP. The area in green south the of the Calallen area is being planned to be added to the Allison WWTP.

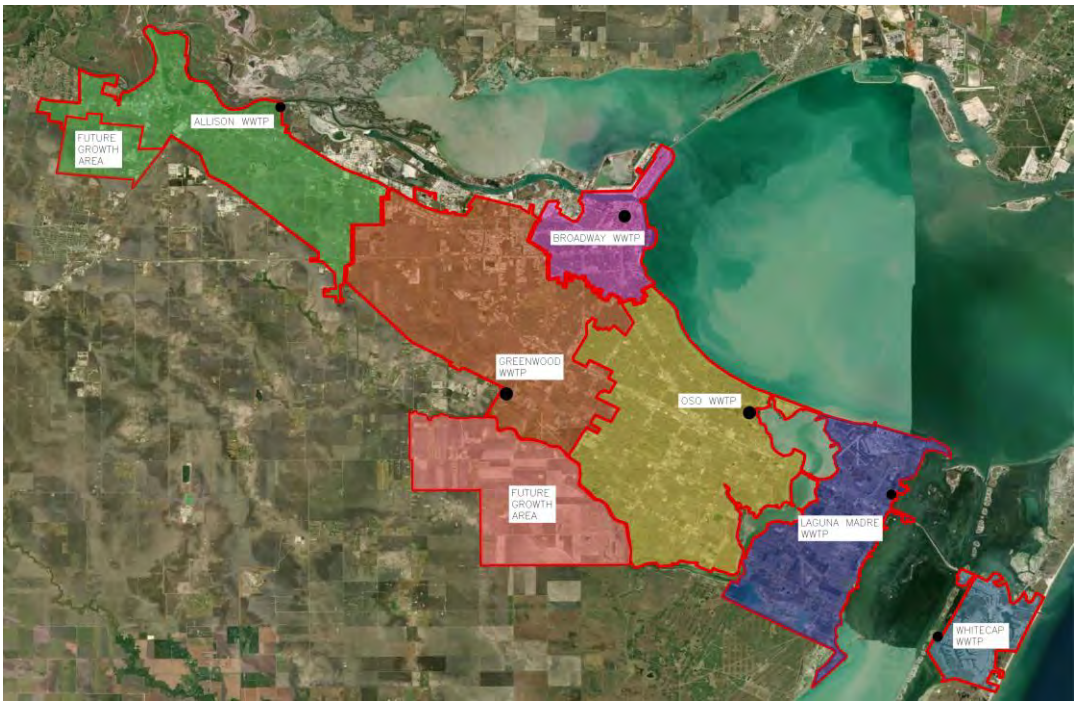

Figure 1: City of Corpus Christi Wastewater Service Areas and Treatment Plant Locations

Allison Wastewater Treatment Plant

The Allison WWTP facility currently has a capacity of 5 MGD with a 15 MGD 2-hour peak flow. The plant is able to discharge to two locations: the Nueces River or Nueces Bay. The plant was originally constructed in 1966 with a major expansion in 1984 to the current capacity. It operates as a conventional activated sludge process with lift station, screening, grit removal, aeration basins, final clarifiers, tertiary cloth filter, chlorine disinfection, solids pump station, aerobic digester, and belt filter press.

The Allison plant has an ammonia-nitrogen permit average daily limit of 4 or 12 mg/L depending on discharge point bay or river, respectively. The Allison WWTP also receives high strength discharges from a meat packing industry in its service area. The high BOD and ammonia-nitrogen loadings from this industry have caused influent loadings to the facility to exceed its original design parameters.

The figure below shows the locations of the major facilities / process components at the Allison WWTP:

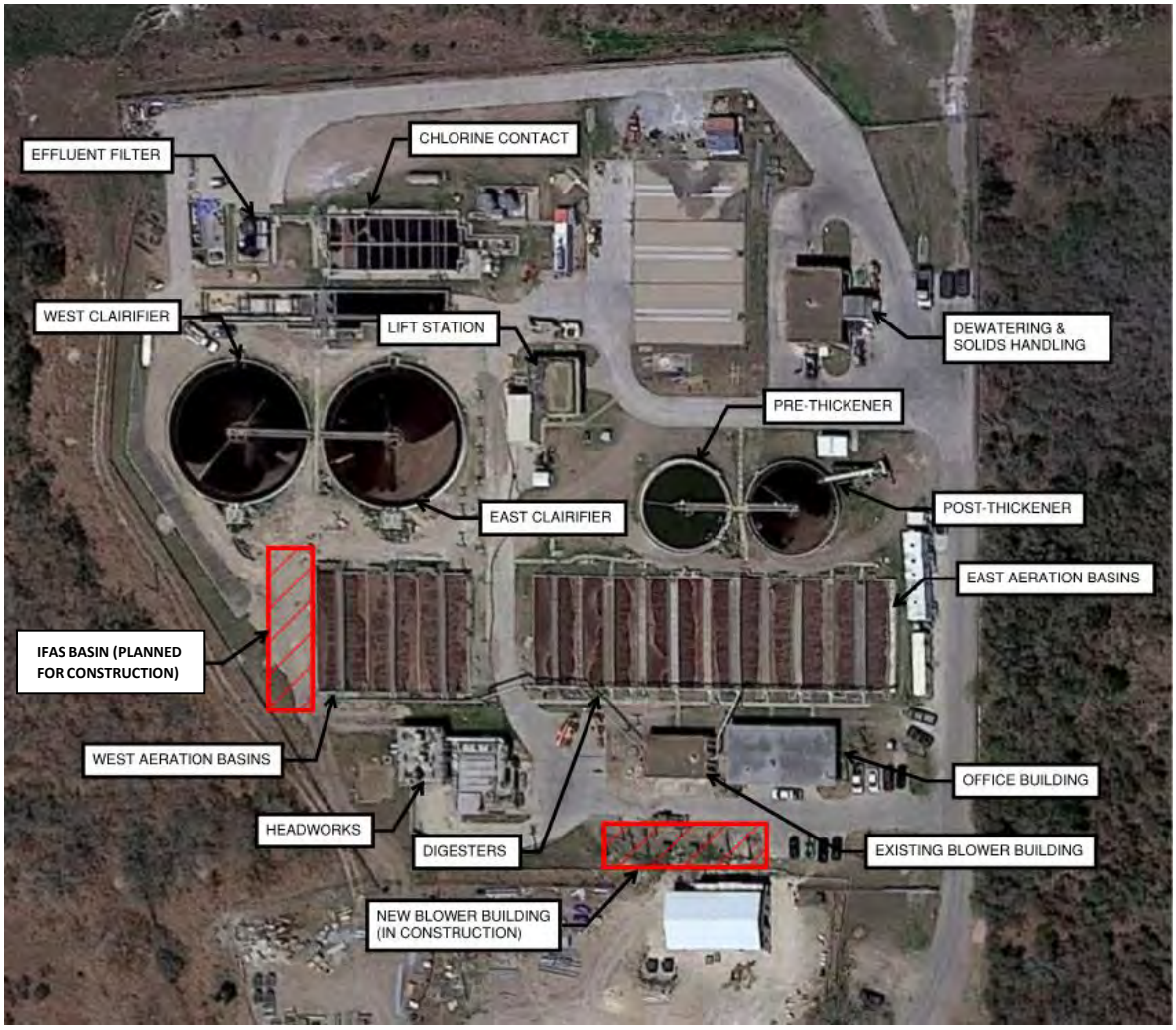

Figure 2: Allison Wastewater Treatment Plant

Based on the Wastewater Management Plan, November 2016, the facility was rated as "Poor". The impact of age, the wastewater and local environment, combined with the lack of capital improvements, had taken its toll on the facility. Capital improvements tied to improving condition and capacity at the plant started in 2017 and are currently continuing into 2023. These improvements involve modifications and improvements to all existing facilities including lift station pumps and piping replacement, anoxic chamber prior to aeration, new electrical control room, new emergency generator, disinfection equipment replacement, tertiary cloth filter, chlorine contact chamber, disinfection system, effluent reuse transfer pump station, and aerobic digester.

The most current plant upgrades include replacing clarifier equipment, new aeration basin to increase of aeration capacity with new blowers and fine bubble diffusers and automatic controls on air supply along with a new blower building, addition of an integrated fixed film activated sludge (IFAS) process, and a new volute press for continuous sludge dewatering service. The IFAS process is intended to increase both BOD and nitrification removal capacity.

Broadway Wastewater Treatment Plant

The Broadway WWTP currently has a capacity of 8 MGD with a 20 MGD 2-hour peak flow. It discharges to the Corpus Christi inner harbor. The plant constructed from 2013 to 2016 replaced the original plant built in 1938. The plant operates as a conventional activated sludge process and includes influent pumping, screening, grit removal, four aeration basins, two secondary clarifiers, and UV disinfection.

The figure below shows the locations of the major facilities / process components at the Broadway WWTP:

Figure 3: Broadway Wastewater Treatment Plant

In 2016, the facility was rated as "Very Good" except for the old original effluent filter which has since been decommissioned and no longer in use. Most of the capital improvements at Broadway since 2016 were to correct construction deficiencies that have plagued the plant since construction was completed. Some of the problems reported included leaking joints in the aeration basins and inefficiencies with the new UV system.

To address future demands in the service area and possible diversions from other services areas, there are plans to add a third secondary clarifier adjacent to existing clarifiers beginning in FY 2023. Broadway is also the only plant with centrifuge solids dewatering.

Greenwood Wastewater Treatment Plant

The Greenwood WWTP currently has a capacity of 8 MGD with a 24 MGD 2-hour peak flow. The plant discharges to La Volla Creek just upstream of Oso Creek. The plant was originally constructed in 1957 as a trickling filter plant with anaerobic digestion. Two major expansions in the 1980s increased to today's capacity and converted to a conventional activated sludge process with lift station, screening, grit removal, aeration basins, final clarifiers, solids pump station, tertiary filter, UV disinfection, anaerobic digester, dissolved air floatation (DAF) thickener and belt filter press.

Similar to the Allison plant, the facility was rated as "Poor" in 2016. The impact of age, the wastewater and local environment, combined with the lack of capital improvements, had taken its toll on the facility. Since 2018 the headworks of the plant has been rehabilitated with new screens and grit removal system. Additionally, a new tertiary cloth filter and UV disinfection facility were recently completed.

Greenwood plant has an ammonia-nitrogen permit average daily limit of 3 mg/L. To address future development in the service area, significant capital improvements at Greenwood are planned over the next several years including expanding the plant capacity from 8 to 12 MGD. Currently this project is in planning. These projects would include additional aeration basins, an additional final clarifier, new turbo blowers with fine bubble diffusers and automatic controls on air supply and new RAS and WAS pump stations.

In addition, plans are to decommission the existing DAF and two of the existing anaerobic digesters will be converted to aerated sludge holding tanks and a dewatering feed pump facility will be constructed to pump dewatered solids to the existing belt filter presses.

In addition to the capital projects to address growth, the Greenwood WWTP should consider addressing flooding from La Volla and Oso Creeks by implementing CIP Project 18070. Recent flooding caused significant damage to the plant. Future improvements should include raising containment walls or berms around key components and on-site drainage improvements.

The figure below shows the locations of the major facilities / process components at the Greenwood WWTP:

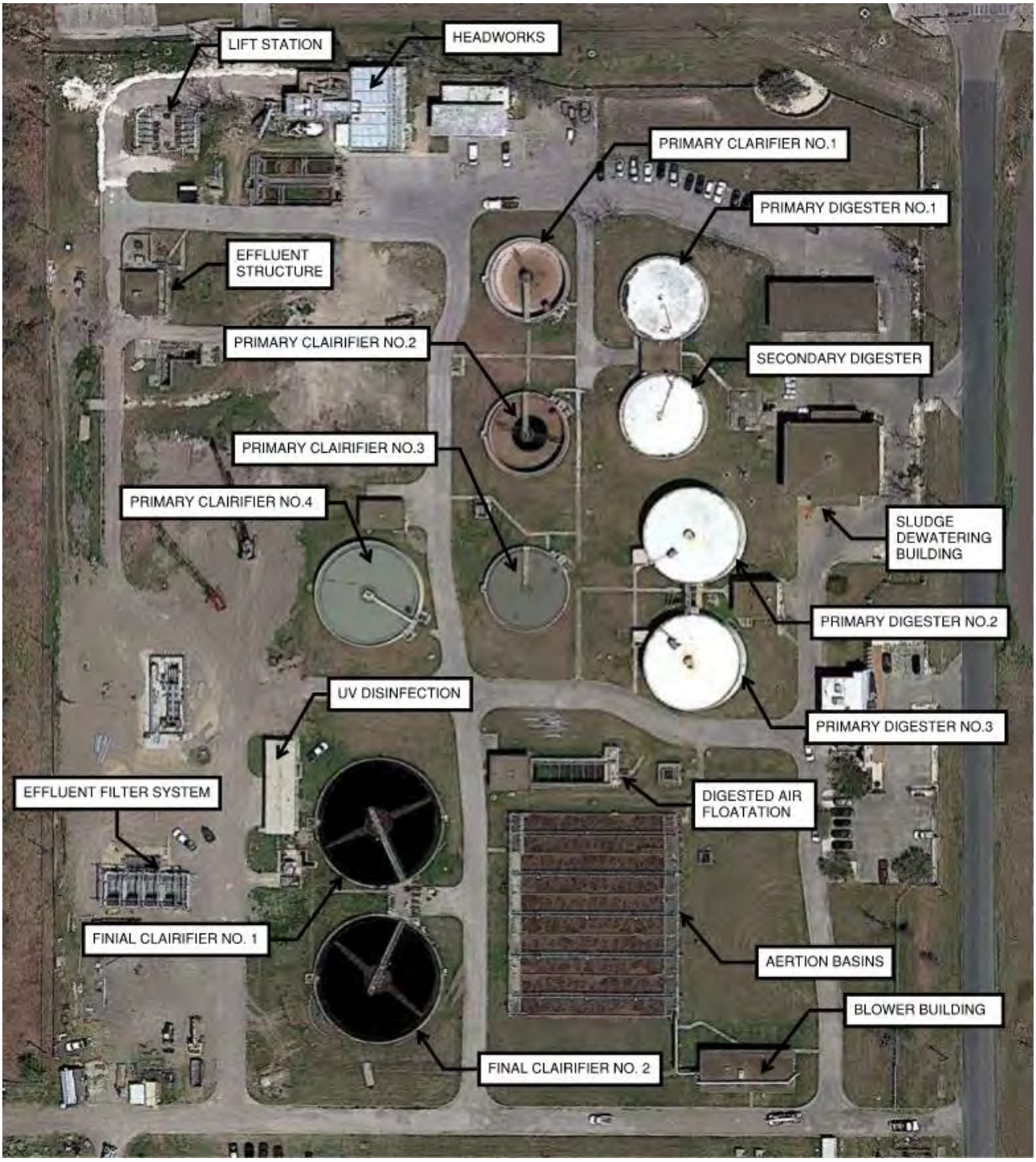

Figure 4: Greenwood Wastewater Treatment Plant

Laguna Madre Wastewater Treatment Plant

The Laguna Madre WWTP currently has a capacity of 3 MGD with a 9 MGD 2-hour peak flow. The plant discharges to the Laguna Madre (Bay). The plant was originally constructed in 1971 with major expansion in 1986 to its current capacity. It operates as a conventional activated sludge process with lift station, screening, grit removal, aeration basins, final clarifiers, solids pump station, chlorine disinfection, aerobic digester, and belt filter press.

The figure below shows the locations of the major facilities / process components at the Laguna Madre WWTP:

Figure 5: Laguna Madre Wastewater Treatment Plant

The facility was rated as “Fair” in 2016. In 2017 improvements included upgrades to the influent pumps station pumps, piping, and controls. In addition, headworks upgrades included grit removal and bar screen and upgrades to the aerobic digester.

Additionally, construction started in 2022 to add a new volute press for continuous sludge dewatering service, replacement of coarse bubble aeration system with fine bubble diffusers and automatic controls on air supply, replacement of clarifier equipment, upgrades to the aerobic digester basins and other miscellaneous plant improvements.

Oso Water Reclamation Plant

The Oso Water Reclamation Plant (WRP) currently has a capacity of 16.2 MGD with a 98 MGD 2-hour peak flow. The plant was originally constructed in 1941 with major expansion in 1982, to the current capacity. It operates using a conventional activated sludge process with lift station, screening, grit removal, aeration basins, final clarifiers, solids pump station, chlorine disinfection, aerobic digester, and belt filter press. Breakpoint chlorination is used to meet the ammonia nitrogen permit limit. According to Corpus Christi Water (CCW), the city is in discussions with TCEQ to expand Oso Wastewater Treatment Plant rating from 16.2 to 18 MGD and to implement CIP project 20084A.

The figure below shows the locations of the major facilities / process components at the Oso WRP:

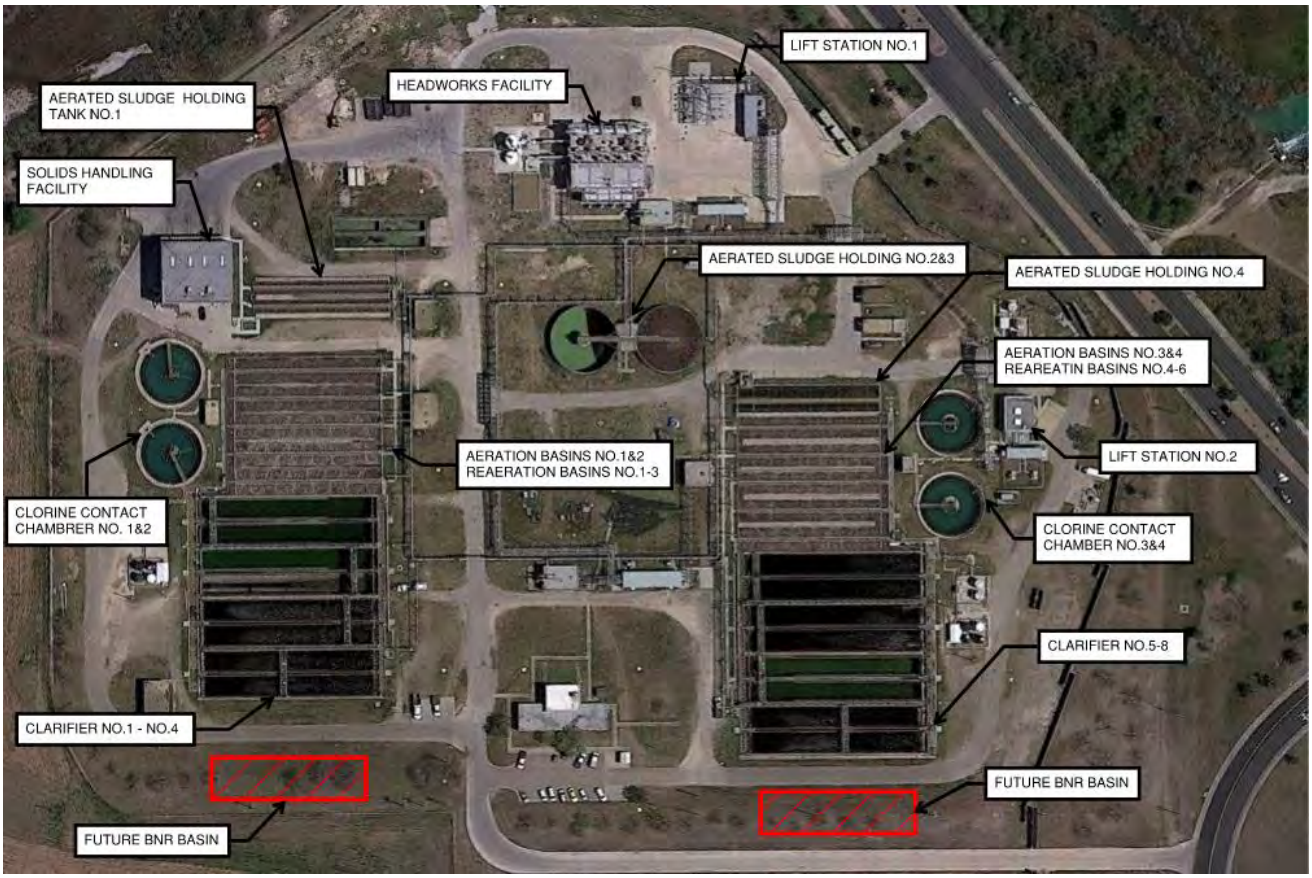

Figure 6: Oso Water Reclamation Plant

The facility was rated as "Poor" in 2016. Since 2018 the headworks were rehabilitated with a new lift station, screening, and grit removal system. In addition, odor control and new electrical control room were constructed.

To address future development in the service area, significant capital improvements at Oso are planned over the next several years including expanding the plant capacity from 16.2 to 18 MGD and replacement

of the breakpoint chlorination with new biological nitrifying/denitrifying process including additional aeration basins with fine bubble diffusers and automatic controls, air supply with step feed and new centrifugal blowers, improvements to the traveling bridge scum system, improvements to the RAS/WAS pumping system, and modifications to the chemical disinfection to comply with Enterococci regulations.

Whitecap Wastewater Treatment Plant

The Whitecap WWTP currently has a capacity of 2.5 MGD with a 7.5 MGD 2-hour peak flow. The plant was originally constructed in 1974 with major expansion in 1991, to the current capacity, It operates using a conventional activated sludge process with a lift station, screening, aeration basins, final clarifiers, solids pump station, UV disinfection, aerobic digester, and belt filter press.

The figure below shows the locations of the major facilities / process components at the Whitecap WWTP:

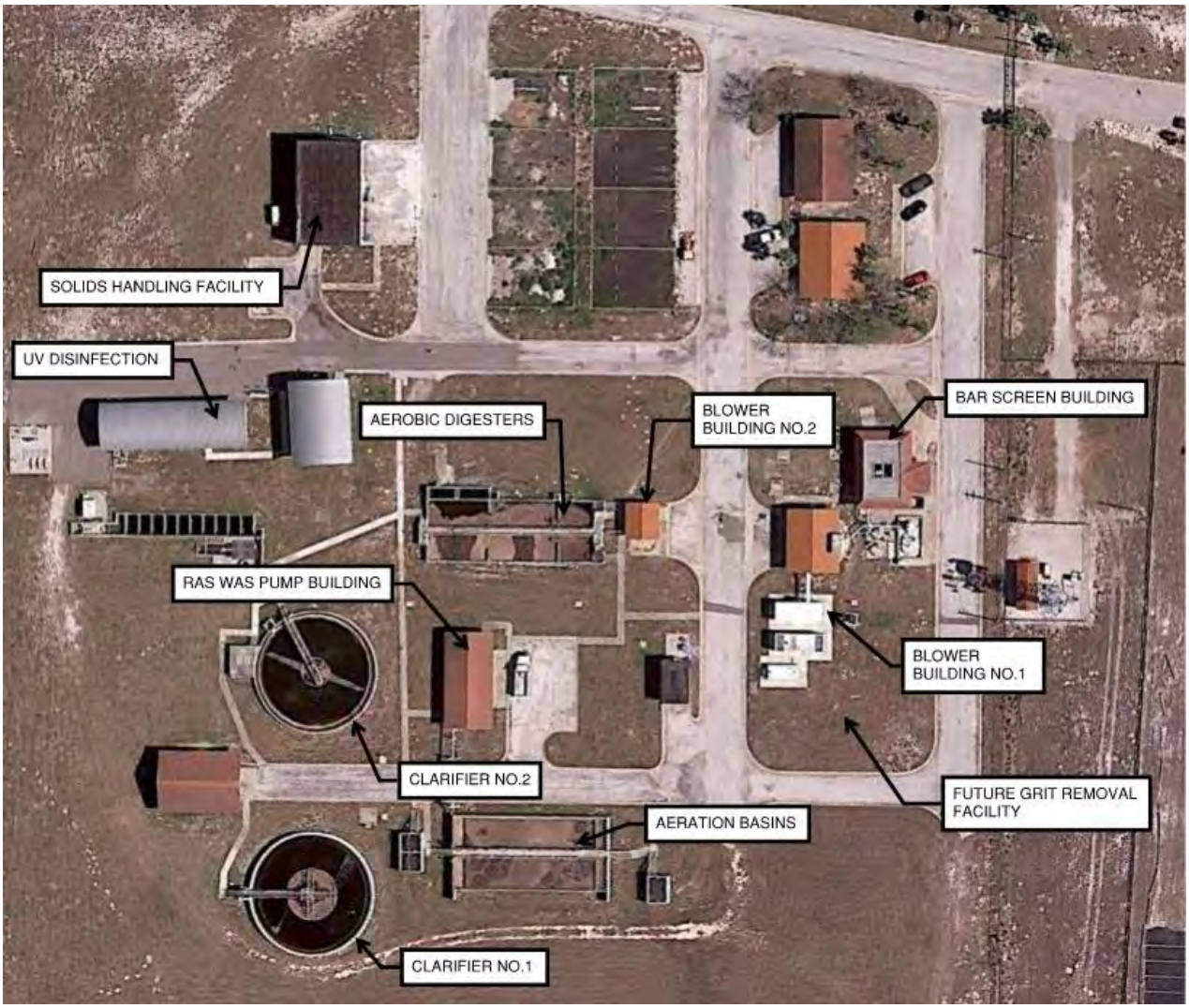

Figure 7: Whitecap Wastewater Treatment Plant

The facility was rated as "Poor" in 2016. From 2016 to 2018 improvements included adding new tertiary cloth filter and replacement of the chlorine disinfection with UV disinfection facility. Recently (2022) construction began on process improvements including upgrades to the bar screens, lift station, new grit removal system, aeration blowers and fine bubble diffusers and automatic controls on air supply, replacement of clarifier equipment, RAS/WAS pumps, modifications to aerobic digester, and addition of new volute screw press for continuous sludge dewatering service.

Regulatory Requirements

The table below includes the current Texas Pollution Discharge Elimination System (TPDES) Permit Daily Average Discharge Limitations for the six treatment plants as required by the Texas Commission on Environmental Quality (TCEQ). The TCEQ and TPDES permits are renewed on a five-year cycle.

		TPDES Permit Daily Average Discharge Limitations				
	Existing Plant	BOD_5	TSS*	Nitrogen**	Enterococci	Total Coper
Plant	Capacity (MGD)	mg/L (lbs/day)	mg/L (lbs/day)	mg/L (lbs/day)	CFU or MPN/100	mg/L (lbs/day)
Allison	5	20 (834)	20 (834)	12 (500)	35	
Broadway	8	20 (1,334)	20 (1,334)	N/A	35	
Greenwood	8	10 (667)	15 (1,001)	3 (200)	33	3 (200)
Laguna Madre	3	20 (500)	20 (500)	Report***	35	
Oso	16.2	20 (2,702)	20 (2,702)	4 (540)	35	
Whitecap	2.5	20 (417)	20 (417)	N/A	35	

* Suspended Solids
**Ammonia Nitrogen
*** Discharge levels are reported but not regulated at this time

Table 1: TPDES Permit Limitations

Plant-Specific Considerations

- Biological nutrient removal is currently being added to the Allison, Greenwood, and Oso plants but is not a TCEQ requirement at the other plants. In discussions with Corpus Christi Water (CCW) staff, this requirement may change in the future to where TCEQ may require BNR for more facilities.
- Tertiary cloth filters and UV disinfection have been installed at Whitecap and Greenwood. Broadway has UV disinfection and Allison has a tertiary cloth filter but uses chlorine for disinfection. The other plants are using chlorine for disinfection and do not have tertiary filters.
- Biosolids management at the five of the six city wastewater facilities consist of aerobic digestion, biosolids dewatering with belt filter press or volute press, and trucking to landfill

disposal. Greenwood is the only plant that presently has anaerobic digesters with DAF thickeners and belt filter press dewatering before hauling to the landfill for disposal.

- Nutrient limits for ammonia nitrogen are presently in place at Allison, Greenwood, and Oso.

Future Capacity Assessment

As part of the wastewater master plan, Pape Dawson Engineers (PD) provided existing, and future (10-year) modeled flows to LAN for consideration for each wastewater treatment plant.

Background and Flow Development

Efforts to comply with the Consent Decree regarding its wastewater collection system and sanitary sewer overflows (SSO's) are ongoing and have not been completed. This initial work included a hydraulic model with appropriate wastewater generators applied to the collection system. This modeling data, coupled with the water usage data was used to confirm wastewater flow factors. These flow factors were then compared to treatment plant flows and adjusted as required for existing land use to confirm consistent assumptions across all components of the wastewater system. For the purposes of this master plan, it will be assumed that the flow factors include an infiltration and inflow component.

The table below includes 2021 modeled flows with projected 2031 flows:

	2021 Modeled Flow		2031 Projected Flow		Increase in Flows		% Increase
	GPM	MGD	GPM	MGD	GPM	MGD	
Allison	2,275	3.28	2,753	3.96	478	0.32	21%
Broadway	2,832	4.08	2,982	4.29	150	0.21	5.3%
Greenwood*	4,058	5.84	4,814	6.93	756	1.09	19%
Laguna Madre	1,556	2.24	1,886	2.72	330	0.48	21%
Oso	9,204	13.25	10,498	15.12	1,294	1.87	14%
Whitecap	983	1.42	1,177	1.69	194	0.27	20%

Table 2: Modeled and Projected (2031) wastewater flows

** Includes London Area existing / projected flows*

TCEQ regulation TAC 305.126(a) requires expansion planning when average daily flow exceeds 75% of the plant capacity. The table below considers 2031 flows to determine if plants need to be expanded to meet TCEQ requirements in the next ten years.

	Existing Plant Capacity (MGD)	75% Capacity	2031 Projected Flow (MGD)	Expansion Planning Needed?
Allison	5.0	3.75	3.96	Yes
Broadway	8.0	6.0	4.29	No
Greenwood	8.0 (12.0)*	6.0 (9.0)*	6.93	Yes (No)*
Laguna Madre	3.0	2.25	2.72	Yes
Oso	16.2 (18.0)*	12.15 (13.5)*	15.12	Yes (Yes)*
Whitecap	2.5	1.88	1.69	No

Table 3: Expansion Planning Needed for 2031 Flows

** Future Expansions Considered*

By comparing 2021 and 2031 plant flows the table below shows the year when plant flows reach 75% and 100% current capacity.

Plant / Capacity (MGD)	Years to 75% (Year)	Years to 100% (Year)
Allison / 5.0	7.8 (2029)	20.9 (2042)
Broadway / 8.0	26.6(2048)	46.0 (2067)
Greenwood / 8.0	1.4 (2023)	19.9 (2041)
Greenwood / 12.0	29.2 (2050)	56.9 (2078)
Laguna Madre / 3.0	4.4 (2025)	13.3 (2034)
Oso / 16.2	2.1 (2023)	12.9 (2034)
Oso / 18.0	5.7 (2027)	17.7 (2039)
Whitecap / 2.5	17.6 (2039)	42.4 (2063)

Table 4: Timeframe for WWTP's to reach 75% and 100% Capacity

** Greenwood and Oso WWTP's are shown twice in the Table above to illustrate timeframe for necessary expansion if existing capacities were increase from 8 to 12 MGD or 16.2 to 18 MGD, respectively.*

Key takeaways:

- The projected 2031 flows exceed the 75% threshold at Allison, Laguna Madre, Oso, and Greenwood (if the rated capacity is not expanded to 12.0 MGD).
- Oso, Greenwood, and Laguna Madre will require planning activities within the next few years. Note that Greenwood is currently being planned for expansion.
- Flows to Greenwood, Laguna Madre, and Oso are projected to increase the most over the next ten years.
- Except for the Oso WRP, all the plants have adequate space for future expansion to accommodate projected future flows.
- The Oso WRP is surrounded by development and therefore capacity expansion is limited even though growth in the Oso watershed has potential to be significant.

Considerations to Address Growth / Expansion

As previously mentioned, the City has made significant investments over the past 6-8 years to address the historic issues of aging and underfunded infrastructure at each of the six wastewater treatment facilities. They have kept up with regulatory driven changes requiring capital investments to meet new discharge requirements as well. Development driven growth has not been an issue over the last thirty years, but projected flows are now starting to impact these facilities.

There are two primary ways to address expansion of wastewater treatment plants due to development-driven growth: 1. Build new process trains within the plants or 2. Optimize the plant processes to improve efficiency and capacity.

New Construction

Adding new structures and unit processes is the more traditional way to increase capacity. Typically, this involves adding process trains. For example, if have two bar screens add a third, if have two aeration basins add a third or fourth and so on.

Construction costs for building a new WWTP, excluding property acquisition, is approximately $12/gallon. So, to construct a new 1 MGD WWTP, it would cost around $12,000,000.

The cost associated with completing process improvements at WWTP's can vary widely depending on the extent and nature of the improvements. Cost to replace old equipment is usually less than constructing new structures.

Whitecap WWTP Example – Improvements at the Whitecap Wastewater Treatment Plant (2.5 MGD) are currently under construction. They included replacing process equipment, piping, pumps, electrical and miscellaneous structural improvements. The only new construction (structure and equipment) was a new grit removal structure with a stacked tray hydraulically induced vortex grit removal unit, grit pumps, piping, and a grit classifier. Every existing plant process was touched in this construction project at a

cost of around $12,250,000. Therefore, the cost $12,250,000 for a 2.5 MGD plant improvement project is roughly $4.9/gallon, significantly less than $12 / gallon for new construction.

Below is a table representing potential costs of new construction based on projected FY 2031 flow increases (from Table 2, above) using $12/gallon for cost projecting:

Plant / Capacity (MGD)	Increase in Flow over next 10-years	Potential Cost for New Facility Construction
Allison / 5.0	0.32	$3,840,000
Broadway / 8.0	0.21	$2,520,000
Greenwood / 8.0	1.09	$13,080,000
Laguna Madre / 3.0	0.48	$5,760,000
Oso / 16.2	1.87	$22,440,000
Whitecap / 2.5	0.27	$3,240,000

Table 5: Potential Costs of New Construction to Address FY 2031 Flows

** Note that these potential costs are ONLY to address the increase in flows over the next ten years.*

Optimization of Wastewater Treatment Plants

Increases in efficiency and modifications to existing facilities are ways to increase capacity of the treatment plants without adding new facilities. Optimization is potentially less expensive compared to adding additional structures and treatment processes. Several optimization strategies are listed below but are certainly not limited to:

Headworks

The headworks of the plant includes the lift station, screening, odor control, and grit removal and typically brings the highest amount of "wear-and-tear" of all treatment equipment because of the constituents of the raw sewage entering the plant. Optimization can include:

- Install submersible pumps with VFD and no-clog impellers at lift stations
- Update screening technology to minimize maintenance and control odor
- Install or improve grit removal systems at each plant. For example – the city is already moving toward HeadCell multi-tray grit removal at Allison, Greenwood, Oso, Laguna Madre, and Whitecap.

Aeration

There are methods and new technologies to optimize aeration process with the potential of significantly reduced energy costs including:

- Provide step aeration or deliver the maximum oxygen where maximum organic source is available (usually upstream area of aeration basin)
- Step feed the return activated sludge (RAS) by changing the RAS flow to the tail-end of aeration basins during times of increased flow because inflow / infiltration helps prevent the wash-out of the biological process.
- Configure existing plug flow aeration basins for biological nutrient removal by adding baffle walls and internal recirculation
- Add moving-bed bioreactor treatment (IFAS/MBBR) and increase contact surface for biological reaction

Clarifiers

The city can improve solids capture in the clarifiers by:

- Installing spiral rakes to help the capture of settled solids
- Install Stafford baffles to prevent short circuiting

Solids Handling

The city can improve solids handling by:

- Implementing anaerobic digestion and renewable energy recovery
- Improving dewatering technology through the installation of volute presses, centrifuge, and other continuous automatic operation equipment
- Use biosolids for fertilizer or soil amendment

Impacts of Future Regulatory Changes

Although not necessarily tied to growth, future TCEQ regulatory changes would most likely involve removing nutrients, specifically nitrogen and phosphorous.

From the City's Wastewater Management Plan (2016):

> "The most significant aspect of the treatment requirements evaluation is that all or most of the WWTPs will likely be subject to nutrient limits in the foreseeable future. We are anticipating that moderate nutrient limits would be implemented initially with limits becoming increasingly stringent with time. We would anticipate initial total nitrogen (TN) and total phosphorus (TP) limits of 8 mg/L and 1 mg/L respectively with limits eventually being lowered to limit of technology levels (TN < 3 mg/L and TP <0.3 mg/L). We are anticipating the most sensitive receivers, and the associated treatment facilities, will receive nutrient limits first including Oso Creek, Nueces Bay and estuary, and Oso Bay. This is expected to be followed by the Laguna Madre and Ship Channel over time.
>
> The overarching direction of the wastewater industry is towards increased levels of treatment and resource recovery. Newer plants are typically designed to maximize resource recovery

> through biogas production and installation of a combined heat and power (CHP) system. We are anticipating the pressure to maximize effluent reuse will continue and anticipate industrial reuse will eventually be implemented. Current EPA regulatory initiatives such as the implementation of effluent viral limits will require increased disinfection limits. The land area requirements for all new plant sites should therefore be sufficient to accommodate these future anticipated initiatives."

Nearly a decade after this report was written regulating nutrient discharge limits in Texas has still been slow to gain traction especially in costal environments like Corpus Christi.

Opportunities for Effluent Reuse

The City of Corpus Christi (City) has used wastewater effluent for non-potable reuse since the 1960's. The Greenwood WWTP and Oso WWTP have pump stations and piping used to convey wastewater effluent to holding ponds at the near-by golf courses but that is really the extent of current use. The city presently reuses approximately 3% of the total wastewater effluent and would like to increase not only the quantity of effluent reused but also find better uses for the effluent through increased potable and non-potable distributions.

A study completed in 2019 by LAN, "Wastewater Effluent Feasibility Assessment" intended to further evaluate the feasibility to increase wastewater reuse from the Broadway, Greenwood, and Oso Wastewater Treatment Plants. The feasibility assessment intent was to building upon previous reports and recommend a staged approach to increase the use of effluent wastewater.

In looking at the feasibility of reusing effluent, emphasis was placed on using existing facilities as much as possible. Including the existing piping and pumping facilities at the Greenwood and Oso WWTP's as well as using existing City-owned property. Each plant has unique advantages and disadvantages regarding effluent reuse.

Alternatives for improving the reuse program from the Broadway, Oso, and Greenwood WWTP's were developed considering the following:

- Potential reuse market – industrial, irrigation, commercial, domestic
- Storage alternatives - existing or new
- Distance from the Aquifer Storage and Recovery Project
- Distance from the Water Treatment Plant
- Effluent flow available for reuse
- Effluent characteristics: BOD, TSS, TDS, nitrogen, pathogens

Eight primary alternatives (below) for reusing effluent were presented in this report. Benefits and disadvantages for each alternative were also presented to aid in determining their viability. Seven additional alternatives were analyzed; however, LAN found that these alternatives were non-viable and not considered any further.

- Alternative B1 – Further Treat Effluent at Broadway and Pump it to a Central Tank
- Alternative B2 – Further Treat Effluent at Broadway and Pump it to a Future Desalinization Plant
- Alternative G1 – Store Existing Effluent at Greenwood and Pump it to a Future ASR Project
- Alternative G2 – Pump Existing Effluent from Greenwood to a Central Tank
- Alternative G3 – Store Existing Effluent at the Greenwood WWTP for Distribution
- Alternative O1 – Store Existing Effluent adjacent to Oso for distribution to TAMUCC
- Alternative O2 – Store Existing Effluent adjacent to Oso and pump to Nearby Development(s)
- Alternative O3 – Expand the existing system for use at Bill Witt Park and Del Mar South Campus

Recommendations

LAN recommended the City of Corpus Christi implement the alternatives above in a phased, programmatic approach.

Near term improvements could include:

- Completing a revised, comprehensive Wastewater Effluent Master Plan and Improving Effluent Reuse Planning & Policies
- Improving Inflow & Infiltration (I&I) issues in each basin but most importantly the Broadway Basin
- Implement Project O2 with the intent of expanding the system in the long-term to implement projects O1 and O3
- Implement Project G3 with the anticipation of expanding the system (Project G1) in the long-term to provide effluent to the Aquifer Storage and Recovery (ASR) project

Conceptual Level Opinions of Cost (2019) for Near Term projects were:

- Project O2 - $3,719,040
- Project G3 - $1,850,000

Long-term recommendations include:

- Following implementation of Project O2, the system can be expanded easily to provide effluent to TAMUCC (O1) and to the southside, Bill Witt Park and Del Mar College South Campus (O3).
- After implementing Project G3, expanding the system to provide effluent to the Aquifer Storage and Recovery (ASR) project, the part of the long-term development of that project.
- After investigating and addressing I&I issues in the Broadway basin, consider Project B1 or B2, depending on how much progress is made with other City alternative water delivery methods, such as desalinization.

Summary of Conclusions from 2019 Effluent Reuse Assessment

It is evident through this feasibility study that the City of Corpus Christi has policies in place ensuring they have a fresh and safe water supply, well into the future. Water costs may not be excessive for commercial or industrial users at this time, but future demand will only increase as industry develops, and costs must flex to more demand. The Regional Water Plan includes diverse strategies to meet future demands, including additional effluent reuse. Along with policy revisions and implementations, several near-term and long-term investments are feasible to increase not only the quantity of effluent reused but also find better uses for the effluent through increase potable and non-potable distributions.

Proposed Capital Improvements

Based on the existing conditions and existing/future capacity assessments presented in this memorandum, the following are active and proposed capital improvements for the six wastewater treatment plants. A detailed summary of all projects, opinions of probable costs, and expenditure schedules are included in Attachment 2.

A summary table of CIP projects, active and proposed for the ten-year CIP which shows which projects are maintenance related, capacity related, combined, proposed time frame, total cost, and cost related specifically to capacity expansion is included in Attachment 3.

Active Projects

The following are active projects currently underway but not yet completed. These projects address long-term maintenance issues and improve capacity either through the process optimization techniques or new construction:

- Allison WWTP Process Improvements & Lift Station Upgrades
- Broadway WWTP Plant Rehabilitation
- Broadway WWTP Third Clarifier
- Greenwood WWTP Electrical Improvements to UV System
- Greenwood WWTP Flood Mitigation
- Greenwood WWTP Process Upgrade (DAF and Odor Control)
- Laguna Madre WWTP Rehabilitation
- Oso WRP Aeration Coarse Bubble Process Improvements
- Oso WRP Process Upgrades & BPC Facility Decommissioning
- Whitecap WWTP Improvements

The total cost of active projects in the WWTP CIP (prior + planned) = $269,996,184

The total cost of active projects over the next ten years (through FY31) = $217,355,657

The portion of these projects that address long-term maintenance improvements = $98,105,211, or 45%

The portion that addresses plant capacity improvements or expansions = $119,250,446, or 55%

Proposed Projects

The following are proposed projects to be implemented over the next ten years. These projects are not included in the city's current CIP but based on our review of the existing facilities and interviews with CCW staff. Similar to the active projects, each project addresses long-term maintenance issues and improves capacity either through process optimization techniques or new construction:

that would improve capacity for each plant and better facilitate growth in the service areas:

- Allison WWTP UV Disinfection Improvements
- Broadway WWTP Filtration Improvements

- Greenwood WWTP Plant Expansion
- Laguna Madre WWTP UV Disinfection Improvements
- Oso WRP UV and Filtration Improvements

The total cost of proposed projects over the next ten years, to be included in the WWTP CIP = $87,330,000

The portion of these projects that address long-term maintenance improvements = $12,955,000, or 15%

The portion that addresses plant capacity improvements or expansions = $74,375,000, or 85%

A summary table of CIP projects, active and proposed for the ten-year CIP which shows which projects are maintenance related, capacity related, combined, proposed time frame, total cost, and cost related specifically to capacity expansion is included in Attachment 3.

Diversions to Address Capacity Constraints

The above projects will improve capacity at each of the plants however it must be noted that the Oso Water Reclamation Plant is constrained from growth. Presently the Oso WRP is the largest plant on the system and projects focused on process improvements could improve capacity, but the plant is surrounded by development and any future expansion to the property is limited.

Greenwood is the second largest plant and has significant land for expansion. In discussions with Corpus Christi Water, the long-range plan is to expand Oso up to the site limitations and divert extraneous flow to Greenwood. Greenwood could be expanded to meet any future WWTP demands. The city has the flexibility and infrastructure in place using the Arcadia Lift Station to divert flows from Broadway or Oso to the Greenwood WWTP.

Long-Range Projects to Address Ultimate Growth

The above active and proposed projects address growth over the next ten years, however, below are three expansion projects that the City could begin planning for to address ultimate growth within the service areas.

Plant	Begin Planning for Expansion (Year)	Expand Plant for Ultimate Growth in Service Area (Year)
Laguna Madre	2025	2034
Whitecap	2039	2063
Allison	2029	2042

Table 6: Long-Range Expansions

Summary and Conclusions

- All the plants have adequate capacity for the 10-year period of this study, although projected flows exceed the 75% threshold at Allison, Greenwood, Laguna Madre, and Oso during the study period.

- TCEQ regulation TAC 305.126(a) requires expansion planning when average daily flow exceeds 75% of the plant capacity.

- Since the completion of the Wastewater Management Plan in 2016 and the decision by City Council to continue improving the six existing plants, rather than consolidating and constructing a regional plant, the city has invested a considerable amount of capital into each of the six plants.
- Development driven growth has not been an issue over the last thirty years, but projected flows are now starting to impact these facilities.

- Adding new structures and unit processes is the more traditional way to increase capacity however optimization of the plant processes is less expensive compared to adding additional structures and treatment processes.

- The Regional Water Plan includes strategies to meet future demands, including additional effluent reuse. The city has opportunities to increase not only the quantity of effluent reused but also find better uses for the effluent through increase potable and non-potable distributions.

- **The city has $119,250,446 worth of active projects (already started) and $74,375,000 in proposed projects to be completed in the next ten years to address plant capacity improvements or expansions.**

Technical Memorandum Attachments:

1. Wastewater Treatment Plant Summaries
2. Wastewater Treatment Plant Proposed Capital Improvements

Allison WWTP Summary	
Item	Value
Preliminary Treatment	
Bar Screens	
Number of Units	3
Width, ft	3’
Manufacturer	Vulcan Industries
Grit Removal	
Grit Pumps	2
Hydro International HeadCell	1
Hydro International Teacups	1
Hydro International Classifiers	1
Lift Station	
Number of Pumps	3
Types	Submersible Pumps
Secondary Treatment	
Existing Blower Building	
Number of Pumps	4
Pump Use	Two (2) to Digesters Two (2) to Aeration Basins
New Blower Building (In Construction)	
Number of Pumps	7
Pump Use	Two (2) to Digesters Five (5) to Aeration Basins
Aeration Basins	
Number of Units	9
Dimensions, ft	West Basins: 77’ L x 33’ W East Basins: 72’ L x 15’ W
Sidewall Depth, ft	West Basins: 15’ East Basins: 13’
Secondary Clarifiers	
Number of Units	2
Diameter, ft	92’ to Wall 40’-10” to Scum Baffle

Side Water Depth, ft	10’-6”
Secondary Sludge and Scum Pumps	
Numbers of Units	4 Two (2) Per Clarifier
Pre-Thickener	
Number of Units	1
Diameter, ft	55’ to Wall
Side Water Depth, ft	9’-6”
Post-Thickener	
Number of Units	1
Diameter, ft	55’ to Wall
Side Water Depth, ft	9.5’
Digesters	
Numbers of Units	5
Dimensions, ft (each)	70’ L x 30’ W
Side Water Depth, ft	13.25’
Tertiary Treatment	
Effluent Filters	
Number of Units	2
Type	Cloth Filter System
Dewatering & Solids Handling	
Dewatering	
Number of Units	2
Existing Type	Ashbrook Belt Filters
Future Type	Volute Screw Press
Disinfection	
Type	Chlorination
Chemicals Used	Sodium Hypochlorite Sodium Bisulfite

Broadway WWTP Summary	
Preliminary Treatment	
Bar Screens	
Number of Units	3
Width, ft	3’
Grit Removal	
Grit Pumps	2
Hydro International HeadCell	2
Hydro International Teacups	2
Hydro International Classifiers	1
Lift Station	
Number of Pumps	3
Types	Submersible Pumps
Secondary Treatment	
Blower Building	
Number of Pumps	2
Aeration Basins	
Number of Units	4
Dimensions, ft	190’ L x 25’ W
Secondary Clarifiers	
Number of Units	2
Diameter, ft	100’
Secondary Sludge and Scum Pumps	
Numbers of Units	4 Two (2) Per Clarifier
Digesters	
Numbers of Units	2
Dimensions, ft (each)	135’ L x 21’ W
Dewatering & Solids Handling	
Number of Units	3
Existing Type	Centrifuge Dewatering
Disinfection	
Type	UV Disinfection

Greenwood WWTP Summary	
Item	Value
Preliminary Treatment	
Bar Screens	
Number of Units	3
Width, ft	3’
Manufacturer	Vulcan Industries
Grit Removal	
Grit Pumps	4
Hydro International HeadCell	2
Hydro International Teacups	2
Hydro International Classifiers	2
Lift Station	
Number of Pumps	10
Types	Submersible Pumps
Secondary Treatment	
Primary Clarifiers	
Number of Units	4
Diameter, ft	36’
Primary Digesters	
Number of Units	3
Diameter, ft	41’
Existing Blower Building	
Number of Pumps	4
Aeration Basins	
Number of Units	5
Dimensions, ft	70’ L x 17’ W
Secondary Clarifiers	
Number of Units	2
Diameter, ft	55’
Digested Air Flotation Thickener	
Numbers of Units	1

Dimensions, ft (each)	52’ L x 12’ W
Tertiary Treatment	
Effluent Filters	
Number of Units	1
Type	Cloth Filter System
Dewatering & Solids Handling	
Number of Units	2
Existing Type	Ashbrook Belt Filter Press
Future Type	Volute Screw Press
Disinfection	
Type	UV Disinfection

Laguna Madre WWTP Summary	
Item	Value
Preliminary Treatment	
Bar Screens	
Number of Units	1
Width, ft	3’
Manufacturer	Lakeside Equipment
Grit Removal	
Grit Pumps	1
Hydro International HeadCell	1
Hydro International Teacups	1
Hydro International Classifiers	1
Lift Station	
Types	Submersible Pump
Secondary Treatment	
Aeration Basins	
Number of Units	3
Dimensions, ft	100’ L x 25’ W
Sidewall Depth, ft	14.5’
Secondary Clarifiers	
Number of Units	2
Diameter, ft	85’ To Wall
Side Water Depth, ft	13.5’
Secondary Sludge and Scum Pumps	
Numbers of Units	4 Two (2) Per Clarifier
Pre-Thickener	
Number of Units	1
Diameter, ft	33.5’
Side Water Depth, ft	12.5’
Aerobic Digesters	
Numbers of Units	5
Dimensions, ft (each)	Digester 1: 99’ L x 14’ W

	Digester 2&5: 22’ L x 19’ W Digester 3&4: 42’ L x 19’ W
Side Water Depth, ft	14.5’
Dewatering & Solids Handling	
Number of Units	1
Future Type	Volute Screw Press
Disinfection	
Type	Chlorination
Chemicals Used	Sodium Hypochlorite Sodium Bisulfite

OSO WWTP Summary	
Item	Value
Preliminary Treatment	
Bar Screens	
Number of Units	4
Width, ft	3’
Manufacturer	Vulcan Industries
Grit Removal	
Grit Pumps	4
Hydro International HeadCell	4
Hydro International Teacups	4
Hydro International Classifiers	2
Lift Station	
Number of Pumps	6
Types	Submersible Pumps
Secondary Treatment	
Blower Building	
Number of Pumps	12
Aeration Basins	
Number of Units	4
Dimensions, ft	177’ L x 30’ W
Side Water Depth, ft	14’
Reaeration Basins	
Number of Units	6
Dimensions, ft	177’ L x 30’ W
Side Water Depth, ft	14’
Secondary Clarifiers	
Number of Units	8
Diameter, ft	200’L x 52’W
Side Water Depth, ft	14’
Secondary Sludge and Scum Pumps	
Numbers of Units	16 Two (2) per Clarifier

Aerated Sludge Holding Tanks	
Numbers of Units	3
Diameter, ft (each) Dimensions, ft	Two (2) 76’ One (1) 155’ L x 46’ W
Dewatering & Solids Handling	
Number of Units	4
Existing Type	Ashbrook Belt Filter Press
Disinfection	
Type	Breakpoint Chlorination
Chemicals Used	Sodium Hypochlorite Sodium Bisulfite

Whitecap WWTP Summary	
Item	Value
Preliminary Treatment	
Bar Screens	
Number of Units	2
Width, ft	3’
Manufacturer	Lakeside Equipment
Grit Removal	
Grit Pumps	2
Hydro International HeadCell	1
Hydro International Teacups	1
Hydro International Classifiers	1
Lift Station	
Number of Pumps	3
Types	Submersible Pumps
Secondary Treatment	
Existing Blower Building	
Existing Number of Pumps	3
Future Addition	1
Aeration Basins	
Number of Units	2
Dimensions, ft	76’ L x 19’ W
Sidewall Depth, ft	17’-6”
Secondary Clarifiers	
Number of Units	2
Diameter, ft	70’
Side Water Depth, ft	11’
RAS WAS Sludge Pumps	
Numbers of Units	4
Aerobic Digesters	
Numbers of Units	2
Dimensions, ft (each)	97’ L x 35’ W

Side Water Depth, ft	14’
Dewatering & Solids Handling	
Dewatering	
Number of Units	2
Existing Type	Andritz Belt Filter
Future Addition Type	Volute Screw Press
Disinfection	
Type	UV Disinfection

Wastewater Treatment Plant Capital Improvements

Project Name: Allison WWTP Process Improvements & Lift Station upgrade
City Project: E10043 (Short-Term)
Treatment Plant: Allison WWTP
Status: Active

Note:
This project is currently active and is planning to be completed by 2023. Description and Cost below are based on Corpus Christi's Capital Improvement Budgets for the last four (4) years.

Description

The scope includes replacing plant lift station, installing IFAS system in the west aeration basin, and repairing east and west aeration basins, two final clarifiers, automatic backwash filter, chlorine contact chamber, disinfection system, effluent reuse transfer pump station, aerobic digester, belt press building, blower building and other miscellaneous items. The implementation of this project will significantly improve the treatment effectiveness and reduce permit violations.

Justification

This project provides upgrades and replacement of worn-out equipment and replaces breakpoint chlorination for nitrification with a biological process.

Current Year

Expenditures	Prior Years	2021	2022	2023	2024	2025	Total
Construction/Rehab	$800,000	$6,100,000	$7,158,066	$4,000,000			$18,058,066
Testing			$50,000				$50,000
Inspection		$80,000	$120,000	$150,000			$350,000
Design	$1,450,000		$50,000				$1,500,000
Contingency	$481,000	$600,000	$319,000	$100,000			$1,500,000
Engineering Svc & Admin. Reimbursement		$106,000	$144,000	$100,000			$350,000
Total	$2,731,000	$6,886,000	$7,841,066	$4,350,000			$21,808,066

Impact/Other

The implementation of this project will ensure normal operations of Allison WWTP and potentially reduce operational costs.

Wastewater Treatment Plant Capital Improvements

Project Name: Broadway WWTP Plant Rehabilitation
City Project: 18084 (Short-Term)
Treatment Plant: Broadway WWTP
Status: Active

Note:
This project is currently active and is planning to be completed by 2024. Description and Cost below are based on Corpus Christi's Capital Improvement Budgets for the last four (4) years.

Description

The project addresses construction deficiencies that have plagued the plant since construction was completed in 2016 including abnormal displacement of aeration basin wall, aeration blowers, clarifier equipment corrosion, SCADA system, and others.

Justification

Execution of this project will extend the life of the treatment plant and improve operation efficiency to meet operational and regulatory requirements.

Current Year

Expenditures	Prior Years	2021	2022	2023	2024	2025	Total
Construction/Rehab				$4,800,000	$750,000		$5,550,000
Testing				$50,000			$50,000
Inspection				$100,000	$50,000		$150,000
Design		$934,316	$65,684	$50,000			$1,050,000
Contingency			$50,000	$480,000	$30,000		$560,000
Engineering Svc & Admin. Reimbursement			$55,138	$30,000	$30,000		$115,138
Total	$0	$934,316	$170,822	$5,510,000	$860,000		$7,475,138

Impact/Other

Upon completion of this project additional maintenance costs will be budget to maintain these improvements.

Wastewater Treatment Plant Capital Improvements

Project Name: Broadway WWTP Third Clarifier
City Project: 21001 (Short-Term)
Treatment Plant: Broadway WWTP
Status: Active

Note:
This project is currently active and is planning to be completed by 2025. Description and Cost below are based on Corpus Christi's Capital Improvement Budgets for the last four (4) years.

Description

One more clarifier is needed to provide operational flexibility and redundancy for routine inspection and maintenance. The plant presently has two existing clarifiers. In addition the old blower building will be demolished.

Justification

The addition of a third clarifier increases plants capacity and process flexibilit.

Current Year

Expenditures	Prior Years	2021	2022	2023	2024	2025	Total
Construction/Rehab					$4,800,000	$2,400,000	$7,200,000
Testing			$30,000				$30,000
Inspection					$120,000	$80,000	$200,000
Design			$150,000	$750,000	$40,000		$940,000
Contingency			$20,000	$75,000	$480,000	$240,000	$815,000
Engineering Svc & Admin. Reimbursement			$50,000	$50,000	$30,000	$30,000	$160,000
Total	$0	$0	$250,000	$875,000	$5,470,000	$2,750,000	$9,345,000

Impact/Other

Upon completion of this project additional maintenance costs will be budget to maintain these improvements.

Wastewater Treatment Plant Capital Improvements

Project Name: Greenwood WWTP Electrical Improvements to UV system
City Project: E10180
Treatment Plant: Greenwood WWTP
Status: Active

Note:
This project is currently active and is planning to be completed by 2023. Description and Cost below are based on Corpus Christi's Capital Improvement Budgets for the last four (4) years.

Description

This project provides new Ultraviolet (UV) disinfection system at the Greenwood Wastewater Treatment Plant (WWTP) to meet or exceed the existing effluent limits for Enterococci bacteria which is set at 35 CFU/100 ml. Additionally, the project includes a new tertiary filter basin upstream of the proposed UV system.

Justification

This project is needed to meet operational and regulatory requirements, and replaces worn-out equipment.

Current Year

Expenditures	Prior Years	2021	2022	2023	2024	2025	Total
Construction/Rehab	$450,000	$5,540,000					$5,990,000
Testing			$20,000				$20,000
Inspection			$80,000				$80,000
Design			$596,675				$596,675
Contingency			$528,277				$528,277
Engineering Svc & Admin. Reimbursement			$95,299				$95,299
Total	$450,000	$5,540,000	$1,320,251	$0	$0	$0	$7,310,251

Impact/Other

Operational impact on the electrical usage will increase with additional higher intensity bulbs but the effect should be nominal. Failure to complete project could result in TCEQ administrative sanctions.

Wastewater Treatment Plant Capital Improvements

Project Name: Greenwood WWTP Flood Mitigation
City Project: 18070
Treatment Plant: Greenwood WWTP
Status: Active

Note:
This project is currently active and is planning to be completed by 2023. Description and Cost below are based on Corpus Christi's Capital Improvement Budgets for the last four (4) years.

Description

The Greenwood Wastewater Treatment Plant (GWWTP) was originally constructed in 1957 and is located adjacent to La Volla Creek. It has a maximum rated capacity of 8 million gallons per day (mgd). In the past decade, the GWWTP has experienced at least two (2) major flooding events that have caused damage to equipment, endangered personnel, inhibited the plant's ability to disinfect and meter the wastewater and caused wastewater overflows to La Volla Creek. The objectives of this project are to construct cost-efficient flood proofing improvements and install plant backup generator to keep the normal operations and safety when the GWWTP are subject to heavy rainstorms and power outage

Justification

This project is to protect process and electrial equipment form flooding hazard.

Current Year

Expenditures	Prior Years	2021	2022	2023	2024	2025	Total
Construction/Rehab					$3,700,000	$1,100,000	$4,800,000
Testing							$0
Inspection							$0
Design		$401,697	$21,626	$680,000	$230,000		$1,333,323
Contingency					$350,000		$350,000
Engineering Svc & Admin. Reimbursement		$40,000		$30,000	$300,000	$100,000	$470,000
Total	$0	$441,697	$21,626	$710,000	$4,580,000	$1,200,000	$6,953,323

Impact/Other

Work will reduce potential flooding in the plant and minimize enforcement actions by Texas Commission on Environmental Quality.

Wastewater Treatment Plant Capital Improvements

Project Name: Greenwood WWTP Process upgrade (DAF and Odor Control)
City Project: 18069
Treatment Plant: Greenwood WWTP
Status: Active

Note:
This project is currently active and is planning to be completed by 2023. Description and Cost below are based on Corpus Christi's Capital Improvement Budgets for the last four (4) years.

Description

This project is to provide process upgrades, replacement and rehabilitation of the existing Greenwood Wastewater Treatment Plant treatment units. The City staff has been working on an overall conceptual design of wastewater treatment process upgrades. The whole project scope may include demolishing the existing primary clarifiers, adding aeration basin volume, replacing the existing coarse bubble aeration with fine bubble aeration, installing one new final clarifier, and installing new flow distribution channel to the three final clarifiers, converting Primary Digester Nos. 2 and 3 from anaerobic digesters to aerated sludge holding tanks, replacing the Dissolved Air Flotation Thickener (DAFT) with three rotary drum thickeners, and replacing the belt filter presses with screw / volute presses. Considering budget availability, the whole project will be divided into two phases and completed within approximately 8 years.

Justification

This project is needed to meet operational and regulatory requirements.

Current Year

Expenditures	Prior Years	2021	2022	2023	2024	2025	Total
Construction/Rehab				$3,145,930	$18,210,000	$17,350,000	$38,705,930
Testing							$0
Inspection					$500,000	$500,000	$1,000,000
Design		$667,675	$3,222,051				$3,889,726
Contingency				$200,000	$200,000	$1,100,000	$1,500,000
Engineering Svc & Admin. Reimbursement		$56,551	$349,800	$200,000	$300,000	$260,000	$1,166,351
Total	$0	$724,226	$3,571,851	$3,545,930	$19,210,000	$19,210,000	$46,262,007

Impact/Other

This project will extend the life of treatment plant, improve efficiency of operation and lower overall costs.

Wastewater Treatment Plant Capital Improvements

Project Name: Laguna Madre WWTP Rehabilitation
City Project: 18086
Treatment Plant: Laguna Madre WWTP
Status: Active

Note:
This project is currently active and is planning to be completed by 2023. Description and Cost below are based on Corpus Christi's Capital Improvement Budgets for the last four (4) years.

Description

This project included renovation of the existing main office building, replacing the existing portable office building by a new office building, improvements on the existing electrical and mechanical equipment at various structures including upgrades from diffused air system to fine bubbles at aeration basins, rehabilitation of thickener equipment, clarifiers, chlorine contact chamber, sludge holding tank and polymer system, etc.

Justification

This project is required to meet operational and regulatory requirements, and replaces the temporary trailor office with a permanent facilty.

Current Year

Expenditures	Prior Years	2021	2022	2023	2024	2025	Total
Construction/Rehab		$2,384,000	$2,200,000	$880,000			$5,464,000
Testing							$0
Inspection							$0
Design		$124,902	$412,421				$537,323
Contingency							$0
Engineering Svc & Admin. Reimbursement		$29,576	$317,424	$25,000			$372,000
Total	$0	$2,538,478	$2,929,845	$905,000			$6,373,323

Impact/Other

Upon completion of this project additional maintenance costs will be budget to maintain these improvements.

Wastewater Treatment Plant Capital Improvements

Project Name: OSO WRP Aeration Coarse Bubble Process

City Project: 20084B
Treatment Plant: OSO WWTP
Status: Active

Note:
This project is currently active and is planning to be completed by 2023. Cost below are based on Corpus Christi's Capital Improvement Budgets for the last four (4) years.

Description

The proposed improvements are to replace the 40 year old diffusers in the MLSS, RAS/WAS, and Clarifier 1-8 Effluent channels which are worn out, broken and no longer capable of delivering air as originally designed. These improvements have been expedited as a separate stand-alone construction package to address the most urgent upfront issues and ease the construction of Oso WRP Phase II.

Justification

This project is needed to meet operational and regulatory requirements.

Current Year

Expenditures	Prior Years	2021	2022	2023	2024	2025	Total
Construction/Rehab			$2,874,900	$1,232,100			$4,107,000
Testing			$20,000				$20,000
Inspection			$50,000	$35,000			$85,000
Design			$250,000				$250,000
Contingency			$287,490	$123,210			$410,700
Engineering Svc & Admin. Reimbursement			$50,000	$20,000			$70,000
Total			$3,532,390	$1,410,310			$4,942,700

Impact/Other

This project will enable the Oso WRP to run in a more economical and efficient manner. Operational impact is adversely affected when plant is not working at optimal levels.

Wastewater Treatment Plant Capital Improvements

Project Name: OSO WRP Process Upgrade & BPC Facility Decommissioning
City Project: 20084A
Treatment Plant: OSO WWTP
Status: Active

Note:
This project is currently active and is planning to be completed by 2025. Cost below are based on Corpus Christi's Capital Improvement Budgets for the last four (4) years.

Description

Construction of new headworks and lift station at Oso Water Reclamation Plant (WRP) started in FY18. The next phase of work involves secondary treatment improvements and a process conversion to Biological Nutrient Removal (BNR). This will allow the City to decommission current breakpoint chlorination (BPC) system which is currently achieving ammonia removal by chemical addition and will allow plant to maintain permit compliance by removing ammonia more efficiently and safely through biological processes. In addition, equipment associated
with secondary treatment units have exceeded original design life and have become maintenance intensive and a hindrance to operations. Scope of improvements include retrofitting existing aeration basins with fine bubble aeration equipment, raising aeration basin walls for increased depth, construction of new blower building, replacement or rehabilitation of existing scum and sludge removal components on secondary clarifiers,
improvements to chlorine contact chambers to address short circuiting, demolition/decommissioning of breakpoint chlorination system and other miscellaneous enhancements associated with administrative building, digesters and access roads. These improvements will increase the plants capacity from 16MGD to 18 MGD

Justification

Consistency with the Comprehensive Plan: Policy Statements pg. 48: 1,3 & 6; pp. 55-58; Wastewater Master Plan.

Current Year

Expenditures	Prior Years	2021	2022	2023	2024	2025	Total
Construction/Rehab				$10,000,000	$24,000,000	$24,000,000	$58,000,000
Testing				$50,000			$50,000
Inspection				$150,000	$280,000	$280,000	$710,000
Design			$5,500,000	$150,000	$100,000	$100,000	$5,850,000
Contingency				$800,000	$1,920,000	$1,920,000	$4,640,000
Engineering Svc & Admin. Reimbursement			$277,500	$100,000	$100,000	$50,000	$527,500
Total			$5,777,500	$11,250,000	$26,400,000	$26,350,000	$69,777,500

Impact/Other

This project will enable the Oso WRP to run in a more economical and efficient manner. Operational impact is adversely affected when plant is not working at optimal levels.

Wastewater Treatment Plant Capital Improvements

Project Name: Whitecap WWTP Improvements
City Project: 23037
Treatment Plant: OSO WWTP
Status: Active

Note:
This project is currently active and is planning to be completed by 2025. Cost below are based on Corpus Christi's Capital Improvement Budgets for the last four (4) years.

Description

Construction includes upgrades to the bar screens, lift station, new grit removal system, aeration blowers and fine bubble diffusers and automatic controls on air supply, replacement of clarifier equipment, RAS/WAS pumps, modifications to aerobic digester, and addition of new volute press for continuous sludge dewatering service.

Justification

This project is needed to meet operational and regulatory requirements.

Current Year

Expenditures	Prior Years	2021	2022	2023	2024	2025	Total
Construction/Rehab			$1,500,000	$5,000,000	$5,000,000	$1,116,727	$12,616,727
Testing							$0
Inspection						$163,600	$163,600
Design		$1,000,000	$1,050,000				$2,050,000
Contingency							$0
Engineering Svc & Admin. Reimbursement		$62,091	$144,710	$163,600	$163,600	$78,073	$612,074
Total	$0	$1,062,091	$2,694,710	$5,163,600	$5,163,600	$1,358,400	$15,442,401

Impact/Other

There is no projected operational impact with this project at this time. Upon completion of this project additional maintenance costs will be budget to maintain these improvements.

Wastewater Treatment Plant Capital Improvements

Project Name: Allison WWTP UV Disinfection Improvements
Treatment Plant: Allison WWTP
Status: Proposed

Note:
This project is a future recommendation for the City of Corpus Christi by Lockwood, Andrews & Newnam.

Description

The scope includes adding a UV disinfection unit to the plant process to replace the existing chlorination disinfection system.

Justification

A life cycle cost comparison between chemical disinfection and UV disinfection should be evaluated. Potential project cost estimate is presented below.

Expenditures	2026	2027	2028	2029	2030	2031	Total
Construction/Rehab					$1,350,000	$1,350,000	$2,700,000
Design (10-15%)				$650,000			$650,000
Contingency (15%)					$300,000	$300,000	$600,000
Engineering Svc & Admin. Reimbursement				$350,000	$350,000	$350,000	$1,050,000
Total	$0	$0	$0	$1,000,000	$2,000,000	$2,000,000	$5,000,000

- Project would be apart of the continuation of short range projects E10043

Wastewater Treatment Plant Capital Improvements

Project Name: Broadway WWTP Filtration Improvements

Treatment Plant: Broadway WWTP

Status: Proposed

Note:
This project is a future recommendation for the City of Corpus Christi by Lockwood, Andrews & Newnam.

Description

The scope includes adding a tertiary cloth filter unit to reduce the total susepended solids dicharging from the plants process.

Justification

The implementation of this project will reduce toatal suspended solids in plant effluent and reduce cost for disinfection.

Expenditures	2026	2027	2028	2029	2030	2031	Total
Construction/Rehab					$1,350,000	$1,350,000	$2,700,000
Design (10-15%)				$650,000			$650,000
Contingency (15%)					$300,000	$300,000	$600,000
Engineering Svc & Admin. Reimbursement				$350,000	$350,000	$350,000	$1,050,000
Total	$0	$0	$0	$1,000,000	$2,000,000	$2,000,000	$5,000,000

• Project can be a continuation of short range project 18084 & 21001

Wastewater Treatment Plant Capital Improvements

Project Name: Greenwood WWTP Plant Expansion
Treatment Plant: Greenwood WWTP
Status: Proposed

Note:
This project is currently underway and is expected to last for 8 years. For more information refer to short range project 18069.

Description

This project is to provide process upgrades, replacement and rehabilitation of the existing Greenwood Wastewater Treatment Plant treatment units. This project is the continuation of the short range project 18069 which is currently in a design phase.

Justification

Expenditures	2026	2027	2028	2029	2030	2031	Total
Construction/Rehab	$6,550,000	$2,300,000	$10,375,000	$16,750,000	$16,750,000		$52,725,000
Design							$0
Contingency (15%)	$1,200,000	$450,000	$1,875,000	$3,000,000	$3,000,000		$9,525,000
Engineering Svc & Admin. Reimbursement	$250,000	$250,000	$250,000	$250,000	$250,000		$1,250,000
Total	$8,000,000	$3,000,000	$12,500,000	$20,000,000	$20,000,000		$63,500,000

Wastewater Treatment Plant Capital Improvements

Project Name: Laguna Madre WWTP UV Improvements
Treatment Plant: Laguna Madre WWTP
Status: Proposed

Note:
This project is a future recommendation for the City of Corpus Christi by Lockwood, Andrews & Newnam.

Description

The scope includes adding a UV disinfection unit to the plant process to replace the existing chlorination disinfection system.

Justification

A life cycle cost comparison between chemical disinfection and UV disinfection should be evaluated. Potential project cost estimate is presented below.

Expenditures	2026	2027	2028	2029	2030	2031	Total
Construction/Rehab					$1,350,000	$1,350,000	$2,700,000
Design (10-15%)				$650,000			$650,000
Contingency (15%)					$300,000	$300,000	$600,000
Engineering Svc & Admin. Reimbursement				$350,000	$350,000	$350,000	$1,050,000
Total	$0	$0	$0	$1,000,000	$2,000,000	$2,000,000	$5,000,000

- Project would be apart of the continuation of short range projects 20086

Wastewater Treatment Plant Capital Improvements

Project Name: Oso WRP UV andFiltration Improvements

Treatment Plant: OSO WWTP

Status: Proposed

Note:
This project is a future recommendation for the City of Corpus Christi by Lockwood, Andrews & Newnam.

Description

The scope includes adding a UV disinfection unit to the plant process to replace the existing chlorination disinfection system.and adding a tertiary cloth filter unit to reduce the total susepended solids dicharging from the plants process.

Justification

Continuation of short range projects 20084A & 20084B. In addition to the planned Biological Nutrient Removal (BNR) and decommissioning of the current breakpoint chlorination (BPC) system, the implementation of a tertiary cloth filter and UV disinfection will further reduce total suspended solids and potentially save costs in the plants process for disinfection.

Expenditures	2026	2027	2028	2029	2030	2031	Total
Construction/Rehab	$17,550,000				$3,650,000	$3,650,000	$24,850,000
Design (10-15%)	$100,000			$1,100,000			$1,200,000
Contingency (15%)	$270,000				$700,000	$700,000	$1,670,000
Engineering Svc & Admin. Reimbursement	$80,000			$400,000	$400,000	$400,000	$1,280,000
Total	$18,000,000	$0	$0	$1,500,000	$4,750,000	$4,750,000	$29,000,000

• Project would be apart of the continuation of short range projects 20084A.

Wastewater Treatment Plant Capital Improvements

Project Name: WWTP SCADA Improvements
Treatment Plant: All Six Plants
Status: Proposed

Note:
This project is a future recommendation for the City of Corpus Christi by Lockwood, Andrews & Newnam.

Description

The scope includes upgrading all six wastewater treatment plants SCADA systems.

Justification

Quality SCADA system provides real time monitoring and remote process control.

Expenditures	2026	2027	2028	2029	2030	2031	Total
Construction/Rehab	$300,000	$300,000	$300,000				$900,000
Design (10%)							$0
Captial Equipment	$1,100,000	$1,100,000	$1,100,000				$3,300,000
Engineering Svc & Admin. Reimbursement	$100,000	$100,000	$100,000				$300,000
Total	$1,500,000	$1,500,000	$1,500,000	$0	$0	$0	$4,500,000

- Project would be apart of the continuation of short range projects 18082

Lockwood, Andrews & Newnam, Inc.
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Attachment 3
Summary of WWTP CIP

Summary of Wastewater Treatment Plant Capital Improvements (Active Projects)

Project			WWTP CIP Project Costs			CIP Total	Yr Complete	10- yr WWTP CIP Costs			
Project #	Plant	Project Name	Prior Yr Spent	Current	FY25 - FY31			% Maint	% Capacity	10-yr Cost (Maint)	10-yr Cost (Capacity)
E10043	Allison	Lift Station Upgrades & Process Imps	$ 16,608,066	$ 4,956,818	$ -	$ 21,564,884	FY24	50%	50%	$ 2,478,409	$ 2,478,409
21001	Broadway	Plant Rehabilitation	$ 1,059,200	$ 8,330,000	$ 7,630,000	$ 17,019,200	FY25	95%	5%	$ 15,162,000	$ 798,000
25016	Broadway	Third Clarifier	$ 550,000	$ 6,330,000	$ 9,190,000	$ 16,070,000	FY25	0%	100%	$ -	$ 15,520,000
18087	Greenwood	Flood Mitigation and Back-up Gen	$ 517,166	$ 904,410	$ 14,208,329	$ 15,629,905	FY27	95%	5%	$ 14,357,102	$ 755,637
18089	Greenwood	WWTP Process Upgrade	$ 4,177,882	$ 15,000,000	$ 57,000,000	$ 76,177,882	FY26	50%	50%	$ 36,000,000	$ 36,000,000
18086	Laguna Madre	WWTP Rehabilitation	$ 5,468,323	$ 150,000	$ 5,000,000	$ 10,618,323	FY31	75%	25%	$ 3,862,500	$ 1,287,500
20084A	Oso	Process Upgrade & BPC Facility Decom	$ 5,777,500	$ 15,450,000	$ 66,960,000	$ 88,187,500	FY27	25%	75%	$ 20,602,500	$ 61,807,500
20084B	Oso	Aeration Coarse Bubble Upgrade	$ 4,732,390	$ 212,100	$ -	$ 4,944,490	FY24	100%	0%	$ 212,100	$ -
18087	Whitecap	WWTP Improvements	$ 13,750,000	$ 1,034,000	$ 5,000,000	$ 19,784,000	FY31	90%	10%	$ 5,430,600	$ 603,400
			$ 52,640,527	$ 52,367,328	$ 164,988,329	$ 269,996,184				$ 98,105,211	$ 119,250,446

Summary of Wastewater Treatment Plant Capital Improvements (Proposed Projects)

Project			WWTP CIP Project Costs			CIP Total	Yr Complete	10- yr WWTP CIP Costs			
Project #	Plant	Project Name	Prior Yr Spent	Current	FY25 - FY31			% Maint	% Capacity	10-yr Cost (Maint)	10-yr Cost (Capacity)
25016	Greenwood	WWTP Expansion	$ -	$ -	$ 65,000,000	$ 65,000,000	FY31	0%	100%	$ -	$ 65,000,000
23037	Oso	Operations Center	$ -	$ 500,000	$ 3,080,000	$ 3,580,000	FY25	100%	0%	$ 3,580,000	$ -
New	Allison	UV Disinfection Improvements	$ -	$ -	$ 7,500,000	$ 7,500,000	FY31	50%	50%	$ 3,750,000	$ 3,750,000
New	Broadway	Filtration Improvements	$ -	$ -	$ 5,000,000	$ 5,000,000	FY31	50%	50%	$ 2,500,000	$ 2,500,000
New	Laguna Madre	UV Disinfection Improvements	$ -	$ -	$ 6,250,000	$ 6,250,000	FY31	50%	50%	$ 3,125,000	$ 3,125,000
New	Oso	UV Disinfection & Filtrations Imps	$ -	$ -	$ 29,000,000	$ 29,000,000	FY31	50%	50%	$ 14,500,000	$ 14,500,000
			$ -	$ 500,000	$ 86,830,000	$ 87,330,000				$ 12,955,000	$ 74,375,000

Total Active and Proposed WWTP 10-yr CIP	
Total 10-yr WWTP CIP (Maintenance Projects)	$ 111,060,211
Total 10-yr CIP (Capacity / Expansion Projects)	$ 193,625,446
Total 10-yr WWTP CIP (Current to FY31)	$ 304,685,657

Appendix B. Lift Station and Force Main Data

Recommendations for Pump Operations

Basin	Lift Station	Setting elevations (ft)				Operating Range Per Pump (ft) 1	2	3	WW base elevation vs. pump off setting (ft)	
Allison	Clarkwood N	WW base level	29.05						5	Current
	Given settings	OFF	34.05	34.05		2	5	0	3	Proposed
		ON	36.05	39.05						
	Changed settings	OFF	32.05	32.05		3	5	0		
		ON	35.05	37.05						
Allison	Clarkwood S	WW base level	13.99						3.5	Current
	Given settings	OFF	17.49	17.49		6	9	0	2.51	Proposed
		ON	23.49	26.49						
	Changed settings	OFF	16.5	16.5		6	9	0		
		ON	22.5	25.5						
Allison	Cynthia	WW base level	-1.43						2.33	Current
	Given settings	OFF	0.9	0.9		0.33	0.67	0	2.5	Proposed
		ON	1.23	1.57						
	Changed settings	OFF	1.07	1.07		0.67	1	0		
		ON	1.74	2.07						
Allison	Highway 77	WW base level	59.28						2	Current
	Given settings	OFF	61.28	61.28		2	4	0	2	Proposed
		ON	63.28	65.28						
	Changed settings	OFF	61.28	61.28		3	5	0		
		ON	64.28	66.28						
Allison	Nueces Acres	WW base level	43.63						5	Current
	Given settings	OFF	48.63	48.63		1	3	0	2.52	Proposed
		ON	49.63	51.63						
	Changed settings	OFF	46.15	46.15		1	3	0		
		ON	47.15	49.15						
Broadway	Coopers Alley L-Head	WW base level	-5.09						1.5	Current
	Given settings	OFF	-3.59	-3.59		2.5	1	0	2.5	Proposed
		ON	-1.09	-2.59						
	Changed settings	OFF	-2.59	-2.59		2.5	1	0		
		ON	-0.09	-1.59						
Broadway	Lawrence St. T-Head	WW base level	-5.12						2.33	Current
	Given settings	OFF	-2.79	-2.79		1.17	2.17	0	2.5	Proposed
		ON	-1.62	-0.62						
	Changed settings	OFF	-2.62	-2.62		1.17	2.17	0		
		ON	-1.45	-0.45						
Broadway	Magee Beach	WW base level	0.68						2.42	Current
	Given settings	OFF	3.1	3.1		0.58	0.25	0	2	Proposed
		ON	3.68	3.35						
	Changed settings	OFF	2.68	2.68		1	0.67	0		
		ON	3.68	3.35						
Broadway	Morgan	WW base level	9.81						3.5	Current
	Given settings	OFF	13.31	13.31	13.31	2	4	5	2.5	Proposed
		ON	15.31	17.31	18.31					
	Changed settings	OFF	12.31	12.31	12.31	2	4	5		
		ON	14.31	16.31	17.31					
Broadway	Studebaker	WW base level	-7.79						4.5	Current
	Given settings	OFF	-3.29	-3.29		3	2	0	2.5	Proposed
		ON	-0.29	-1.29						
	Changed settings	OFF	-5.29	-5.29		3	2	0		
		ON	-2.29	-3.29						

Basin	Lift Station	Setting elevations (ft)				Operating Range Per Pump (ft) 1	2	3	WW base elevation vs. pump off setting (ft)	
Laguna Madre	Laguna Shores	WW base level	-8.25						3	Current
	Given settings	OFF	-5.25	-5.25	-5.25	2.5	3	3.5	2.5	Proposed
		ON	-2.75	-2.25	-1.75					
	Changed settings	OFF	-5.75	-5.75	-5.75	3	3.5	4		
		ON	-2.75	-2.25	-1.75					
Laguna Madre	Military and Jester	WW base level	-4.7						3.5	Current
	Given settings	OFF	-1.2	-1.2		2.5	2.5	0	2.5	Proposed
		ON	1.3	1.3						
	Changed settings	OFF	-2.2	-2.2		3.5	3.5	0		
		ON	1.3	1.3						
Laguna Madre	Rex	WW base level	-8.5						1.2	Current
	Given settings	OFF	-7.3	-7.3		2	4	0	2.5	Proposed
		ON	-5.3	-3.3						
	Changed settings	OFF	-6	-6		2	4	0		
		ON	-4	-2						
Laguna Madre	Riviera	WW base level	-12.25						3.5	Current
	Given settings	OFF	-8.75	-8.75	-8.75	1	2	3	2.5	Proposed
		ON	-7.75	-6.75	-5.75					
	Changed settings	OFF	-9.75	-9.75	-9.75	2	3	4		
		ON	-7.75	-6.75	-5.75					
Laguna Madre	Turtle Cove	WW base level	-5						3	Current
	Given settings	OFF	-2	-2		3	5	0	2.5	Proposed
		ON	1	3						
	Changed settings	OFF	-2.5	-2.5		3.5	5.5	0		
		ON	1	3						
Laguna Madre	Waldron	WW base level	-23						4.5	Current
	Given settings	OFF	-18.5	-18.5	-18.5	3	6	9	2.5	Proposed
		ON	-15.5	-12.5	-9.5					
	Changed settings	OFF	-20.5	-20.5	-20.5	5	8	11		
		ON	-15.5	-12.5	-9.5					
Oso	Country Club	WW base level	-11.45						6	Current
	Given settings	OFF	-5.45	-5.45	-5.45	3	4	5	4	Proposed
		ON	-2.45	-1.45	-0.45					
	Changed settings	OFF	-7.45	-7.45	-7.45	4	5	6		
		ON	-3.45	-2.45	-1.45					
Oso	Perry Place	WW base level	-9.75						3.5	Current
	Given settings	OFF	-6.25	-6.25		11.12	8.12	0	2.5	Proposed
		ON	4.87	1.87						
	Changed settings	OFF	-7.25	-7.25		12.12	9.12	0		
		ON	4.87	1.87						
Oso	Everhardt and Staples	WW base level	-7.14						5	Current
	Given settings	OFF	-2.14	-2.14	-2.14	7.01	4.01	2	3	Proposed
		ON	4.87	1.87	-0.14					
	Changed settings	OFF	-4.14	-4.14	-4.14	6.28	5.28	4.28		
		ON	2.14	1.14	0.14					
Oso	Station 5	WW base level	-10.33						4	Current
	Given settings	OFF	-6.33	-6.33	-6.33	3	4	5	3	Proposed
		ON	-3.33	-2.33	-1.33					
	Changed settings	OFF	-7.33	-7.33	-7.33	4	5	6		
		ON	-3.33	-2.33	-1.33					

Allison Service Area Lift Stations

Current Flow

Lift Station	CIP projects between 2023 and 2025	Peaking Factor	Average Flow (gpm)	Peak Flow (gpm)	Peak Flow (cfs)	Current Flow: Pump Information: # of Pumps	Pump 1 Rated Flow	Pump 2 Rated Flow	Pump 3 Rated Flow	Pump 4 Rated Flow	Sum of Rated Flow	Upsize Pump?	Pump On Elevation (ft)	Pumps Off Elevation (ft)	Pump ON-Pump OFF (ft)	Force Main Information: Force Main Diameter (in)	FM Velocity (ft/s)	Upsize Force Main?	Wet Well Upsizing Determination: Wet Well Diameter (ft)	Current Wet Well Volume (ft^3)	Current Wet Well Volume (gal)	Minimum wet well volume based on peak flow (gallons)	Minimum wet well Volume (ft^3)	Available Working Volume (gal)	Available Working Volume (ft^3)	Need to be upsized?	WW Diameter Needed (ft)
Clarkwood North	2023	1.63	609.0	991	2.21	2	1520	1520			3040	NO	39.05	34.05	5	12.00	2.81	NO	8	251	1,880	2,477.50	331.19	-597	-79.87	YES	9
Clarkwood South	2024	4.14	52.4	217	0.48	2	402	402			804	NO	26.49	17.49	9	4.00	5.54	NO	8	452	3,384	542.50	72.52	2,842	379.87	NO	3
Cynthia	2025	10.40	7.5	78	0.17	2	47	47			94	NO	1.57	0.90	1	2.00	7.97	YES	4	8	63	195.00	26.07	-132	-17.65	YES	7
Highway 77	2025	10.00	0.1	1	0.00	2	20	20			40	NO	65.28	61.28	4	2.00	0.10	NO	8	201	1,504	2.50	0.33	1,502	200.73	NO	0
Lakes Northwest		9.03	1.6	14	0.03	2	625	625			1250	NO	66.45	62.95	4	8.00	0.09	NO	8	176	1,316	35.00	4.68	1,281	171.25	NO	1
Northwest Crossing		5.54	87.5	485	1.08	3	1250	1250	1250		3750	NO	45.11	40.61	4	12.00	1.38	NO	12	396	2,961	1,212.50	162.09	1,749	233.75	NO	8
Nueces Acres	2025	4.15	27.5	114	0.25	2	410	410			820	NO	51.63	48.63	3	6.00	1.29	NO	8	151	1,128	285.00	38.10	843	112.70	NO	4
Ramos		8.60	5.0	43	0.10	2	70	0			70	NO	0.48	-2.18	3	6.00	0.49	NO	4	33	250	107.50	14.37	143	19.06	NO	3
River Canyon		9.59	22.0	211	0.47	2	160	160			320	NO	7.98	4.57	3	8.00	1.35	NO	6	96	721	527.50	70.52	194	25.90	NO	5
Sharpsburg LS		7.10	669.0	4,747	10.58	3	1750	1750	1750		5250	NO	-7.37	-11.87	5	24.00	3.37	NO	15	795	5,949	11,867.50	1,586.46	-5,919	-791.24	YES	21
Solar Estates	2025	2.04	70.0	143	0.32	2	425	425			850	NO	47.64	44.64	3	6.00	1.62	NO	6	85	635	357.50	47.79	277	37.03	NO	5
Stillwell		2.62	92.0	241	0.54	2	875	875			1750	NO	27.92	23.42	5	10.00	0.98	NO	10	353	2,644	602.50	80.54	2,041	272.89	NO	5
Up River Road LS		9.12	77.0	702	1.56	2	430	430			860	NO	-3.41	-5.41	2	8.00	4.48	NO	19	567	4,242	1,755.00	234.61	2,487	332.45	NO	12
WoodRiver		5.19	60.5	314	0.70	3	1600	1600			3200	NO	7.38	2.38	5	16.00	0.50	NO	12	565	4,230	785.00	104.94	3,445	460.55	NO	5
De Dietrich				-		2	460	460			920	NO	45.42	42.42	3	8.00	-	NO	6	85	635	-	-	635	84.82	NO	-
Allison gravity (end at WWTP)	2023	4.02	3422.5	13,758	30.65	3		3200	3200		9600	YES	3.40	-5.80	9	24		NO	(15)	1,626	12,161.64	34,395.00	4,597.96	-22,233	-2,972.18	YES	25

Ultimate Flow

Lift Station	CIP projects between 2023 and 2025	Peaking Factor	Average Flow (gpm)	Peak Flow (gpm)	Peak Flow (cfs)	Ultimate Flow: Pump Information: # of Pumps	Pump 1 Rated Flow	Pump 2 Rated Flow	Pump 3 Rated Flow	Pump 4 Rated Flow	Sum of Rated Flow	Upsize Pump?	Pump On Elevation (ft)	Pumps Off Elevation (ft)	Pump ON-Pump OFF (ft)	Force Main Information: Force Main Diameter	FM Velocity	Upsize Force Main?	Wet Well Upsizing Determination: Wet Well Diameter	Current Wet Well Volume (ft^3)	Current Wet Well Volume (gal)	Minimum wet well volume based on peak flow (gallons)	Minimum Wet Well Volume (ft^3)	Available Working Volume (gal)	Available Working Volume (ft^3)	Need to be upsized?	WW Diameter Needed (ft)
Clarkwood North	2023		1114.7	1,514	3.37	2	1520	1520			3040	NO	39.05	34.05	5	12.00	4.29	NO	8	251	1,880	3,784.73	505.95	-1,905	-254.62	YES	11
Clarkwood South	2024		317.5	460	1.02	2	402	402			804	NO	26.49	17.49	9	10.00	1.88	NO	8	452	3,384	1,150.00	153.73	2,234	298.66	NO	5
Cynthia	2025		7.9	47	0.11	2	47	47			94	NO	1.57	0.90	1	2.00	4.84	NO	4	8	63	118.38	15.83	-55	-7.41	YES	5
Highway 77	2025		87.3	1,999	4.45	2	20	20			40	YES	65.28	61.28	4	4.00	51.04	YES	8	201	1,504	4,997.50	668.07	-3,493	-467.01	YES	15
Lakes Northwest			4.9	1,632	3.64	2	625	625			1250	YES	66.45	62.95	4	8.00	10.42	YES	8	176	1,316	4,080.00	545.42	-2,764	-369.49	YES	14
Northwest Crossing			316.8	1,634	3.64	3	1250	1250	1250		3750	NO	45.11	40.61	5	14.00	3.41	NO	12	509	3,807	4,085.00	546.09	-278	-37.15	YES	12
Nueces Acres	2025		97.9	436	0.97	2	410	410			820	NO	51.63	48.63	3	6.00	4.95	NO	8	151	1,128	1,090.00	145.71	38	5.08	NO	8
Ramos			5.1	39	0.09	2	70	0			70	NO	0.48	-2.18	3	6.00	0.44	NO	4	33	250	97.50	13.03	153	20.39	NO	2
River Canyon			23.1	185	0.41	2	160	160			320	NO	7.98	4.57	3	8.00	1.18	NO	6	96	721	462.50	61.83	259	34.59	NO	5
Sharpsburg LS			1059.7	8,850	19.72	3	1750	1750	1750		5250	YES	-7.37	-11.87	5	24.00	6.28	YES	15	795	5,949	22,125.00	2,957.69	-16,176	-2,162.47	YES	29
Solar Estates	2025		111.1	227	0.51	2	425	425			850	NO	47.64	44.64	3	6.00	2.58	NO	6	85	635	567.61	75.88	67	8.94	NO	6
Stillwell			298.4	782	1.74	2	875	875			1750	NO	27.92	23.42	5	10.00	3.19	NO	10	353	2,644	1,954.50	261.28	689	92.15	NO	9
Up River Road LS			93.6	615	1.37	2	430	430			860	NO	-3.41	-5.41	2	8.00	3.93	NO	19	567	4,242	1,537.50	205.53	2,704	361.52	NO	11
WoodRiver			113.9	456	1.02	3	1600	1600			3200	NO	7.38	2.38	5	16.00	0.73	NO	12	565	4,230	1,139.10	152.28	3,091	413.21	NO	6
De Dietrich			0.0	-	-	2	460	460			920	NO	45.42	42.42	3	8.00	-		6	85	635	-	-	635	84.82	NO	-
Allison gravity (end at WWTP)	2023		5188.8	20,755	46.24	3		3200	3200		9600		3.40	-5.80	9	-			-	-	-	51,888.19	6,936.46	-51,888	-6,936.46		

Broadway Service Area Lift Stations

Current Flow

Lift Station	CIP projects between 2023 and 2025	Peaking Factor	Average Flow (gpm)	Peak Flow (gpm)	Peak Flow (cfs)	Current Flow: Pump Information: # of Pumps	Pump 1 Rated Flow	Pump 2 Rated Flow	Pump 3 Rated Flow	Pump 4 Rated Flow	Sum of Rated Flow	Upsize Pump?	Pump On Elevation (ft)	Pumps Off Elevation (ft)	Pump ON-Pump OFF (ft)	Force Main Information: Force Main Diameter (in)	FM Velocity (ft/s)	Upsize Force Main?	Wet Well Upsizing Determination: Wet Well Diameter (ft)	Current Wet Well Volume (ft^3)	Current Wet Well Volume (gal)	Minimum wet well volume based on peak flow (gallons)	Minimum wet well Volume (ft^3)	Available Working Volume (gal)	Available Working Volume (ft^3)	Need to be upsized?	WW Diameter Needed (ft)
Coopers Alley L-Head		6.73	0.60	4.04	0.01	2	10	10			20	NO	-1.09	-3.59	3	6	0.05	NO	9	159	1190	10	1.35	1180	158	NO	1
Lawrence St. T-Head	2024	2.21	5.10	11.00	0.02	2	20	20			40	NO	-0.62	-2.79	2	6	0.12	NO	7	84	625	28	3.68	597	80	NO	2
Magee Beach		10.00	0.15	2.00	0.00	2	130	130			260	NO	3.68	3.1	1	4	0.05	NO	6	16	123	5	0.67	118	16	NO	1
Morgan	2023	1.28	516.25	659.00	1.47	3	990	990	990		2970	NO	18.31	13.31	5	12	1.87	NO	17	1135	8490	1648	220.24	6842	915	NO	8
Peoples St. T-Head	2024	10.00	1.30	13.00	0.03	2	20	20			40	NO	-0.13	-3.13	3	6	0.15	NO	7	115	864	33	4.34	831	111	NO	1
Studebaker		0.57	60.95	35.00	0.08	2	50	50			100	NO	-0.29	-3.29	3	8	0.22	NO	12	339	2538	88	11.70	2451	328	NO	2
WW-LS1008		3.97	32.80	130.00	0.29	3	200	200	200		600	NO	-5.95	-11.95	6	8	0.83	NO	12	679	5076	325	43.45	4751	635	NO	3
WW-LS1009		2.04	117.90	240.00	0.53	2	360	360			720	NO	-9.68	-13.68	4	12	0.68	NO	12	452	3384	600	80.21	2784	372	NO	5
WW-LS1011		5.80	24.50	142.00	0.32	3	210	210	210		630	NO	-10.6	-13.1	3	8	0.91	NO	12	283	2115	355	47.46	1760	235	NO	5
WW-LS1012		7.09	6.30	45.00	0.10	2	70	70			140	NO	-4.09	-7.09	3	4	1.15	NO	6	85	635	113	15.04	522	70	NO	3
WW-LS1018		0.87	137.10	120.00	0.27	2	180	180			360	NO	2.37	0.03	2	6	1.36	NO	7	90	674	300	40.10	374	50	NO	5
WW-LS1097		4.00	0.20	1.00	0.00	2	100	100			200	NO	-4.12	-6.12	2	4	0.03	NO	6	57	423	3	0.33	421	56	NO	1
WW-LS1099		4.00	0.40	2.00	0.00	2	100	100			200	NO	-3.26	-5.26	2	4	0.05	NO	6	57	423	5	0.67	418	56	NO	1

Ultimate Flow

Lift Station	CIP projects between 2023 and 2025	Peaking Factor	Average Flow (gpm)	Peak Flow (gpm)	Peak Flow (cfs)	Ultimate Flow: Pump Information: # of Pumps	Pump 1 Rated Flow	Pump 2 Rated Flow	Pump 3 Rated Flow	Pump 4 Rated Flow	Sum of Rated Flow	Upsize Pump?	Pump On Elevation (ft)	Pumps Off Elevation (ft)	Pump ON-Pump OFF (ft)	Force Main Information: Force Main Diameter	FM Velocity	Upsize Force Main?	Wet Well Upsizing Determination: Wet Well Diameter	Current Wet Well Volume (ft^3)	Current Wet Well Volume (gal)	Minimum wet well volume based on peak flow (gallons)	Minimum Wet Well Volume (ft^3)	Available Working Volume (gal)	Available Working Volume (ft^3)	Need to be upsized?	WW Diameter Needed (ft)
Coopers Alley L-Head			0.6	4	0.01	2	10	10			20	NO	-1.09	-3.59	3	6.00	0.02	NO	9	159	1,190	10.00	1.34	1,180	157.71	NO	1
Lawrence St. T-Head	2024		5.1	11	0.02	2	20	20			40	NO	-0.62	-2.79	2	6.00	0.06	NO	7	84	625	27.50	3.68	597	79.84	NO	2
Magee Beach			0.2	2	0.00	2	130	130			260	NO	3.68	3.10	1	4.00	0.02	NO	6	16	123	5.00	0.67	118	15.73	NO	1
Morgan	2023		534.2	1,068	2.38	3	990	990	990		2970	NO	18.31	13.31	5	12.00	3.03	NO	17	1,135	8,490	2,670.00	356.93	5,820	777.98	NO	10
Peoples St. T-Head	2024		1.3	13	0.03	2	20	20			40	NO	-0.13	-3.13	3	6.00	0.07	NO	7	115	864	32.50	4.34	831	111.11	NO	1
Studebaker			67.5	67	0.15	2	50	50			100	NO	-0.29	-3.29	3	8.00	0.29	NO	12	339	2,538	167.50	22.39	2,371	316.90	NO	3
WW-LS1008			55.7	221	0.49	3	200	200	200		600	NO	-5.95	-11.95	6	8.00	0.94	NO	12	679	5,076	552.50	73.86	4,524	604.73	NO	4
WW-LS1009			231.0	470	1.05	2	360	360			720	NO	-9.68	-13.68	4	12.00	1.33	NO	12	452	3,384	1,175.00	157.08	2,209	295.32	NO	7
WW-LS1011			89.5	358	0.80	3	210	210	210		630	NO	-10.60	-13.10	3	8.00	1.52	NO	12	283	2,115	895.00	119.64	1,220	163.10	NO	8
WW-LS1012			18.6	75	0.17	2	70	70			140	NO	-4.09	-7.09	3	4.00	0.64	NO	6	85	635	187.50	25.07	447	59.76	NO	3
WW-LS1018			138.6	121	0.27	2	180	180			360	NO	2.37	0.03	2	6.00	0.69	NO	7	90	674	302.50	40.44	371	49.62	NO	5
WW-LS1097			0.2	1	0.00	2	100	100			200	NO	-4.12	-6.12	2	4.00	0.01	NO	6	57	423	2.50	0.33	421	56.21	NO	1
WW-LS1099			0.4	2	0.00	2	100	100			200	NO	-3.26	-5.26	2	4.00	0.02	NO	6	57	423	5.00	0.67	418	55.88	NO	1

Greenwood Service Area Lift Stations

Current Flow

Lift Station	CIP projects between 2023 and 2025	Peaking Factor	Average Flow (gpm)	Peak Flow (gpm)	Peak Flow (cfs)	Current Flow: Pump Information: # of Pumps	Pump 1 Rated Flow	Pump 2 Rated Flow	Pump 3 Rated Flow	Pump 4 Rated Flow	Sum of Rated Flow	Upsize Pump?	Pump On Elevation (ft)	Pumps Off Elevation (ft)	Pump ON-Pump OFF (ft)	Force Main Information: Force Main Diameter (in)	FM Velocity (ft/s)	Upsize Force Main?	Wet Well Upsizing Determination: Wet Well Diameter (ft)	Current Wet Well Volume (ft^3)	Current Wet Well Volume (gal)	Minimum wet well volume based on peak flow (gallons)	Minimum wet well Volume (ft^3)	Available Working Volume (gal)	Available Working Volume (ft^3)	Need to be upsized?	WW Diameter Needed (ft)
Airport		8.99	20.56	586	1.31	2	865	865			1730	NO	22.61	19.61	3	10	2.39	NO	9	191	1,428	1,465.01	195.84	-37	-4.99	YES	9.12
Arcadia (> 5MGD)		5.34	418.41	6,101	13.59	5	500	500	500	500	2000	YES	21.03	13.93	7	16	9.73	YES	22.75	2,886	21,590	15,251.41	2,038.82	6,338	847.28	NO	19.12
Coastal Meadows		5.71	15.48	197	0.44	2	185	185			370	NO	20.69	18.69	2	6	2.24	NO	6.5	66	496	493.35	65.95	3	0.41	NO	6.48
Highway Nine	2024	10.70	18.71	1,031	2.30	2	304	304			608	YES	11.8	7	5	8	6.58	YES	8	241	1,805	2,576.64	344.45	-772	-103.17	YES	9.56
Kostoryz (> 5MGD)		6.36	407.06	11,532	25.69	3	2000	3000	3000		8000	YES	-0.3	-4.3	4	2 at 16", 1 at 12"		YES	21.85	1,500	11,220	28,829.82	3,854.00	-17,610	-2,354.13	YES	35.03
Levi County Jail		4.00	0.01	0	0.00	2	750	750			1500	NO	30.62	27.62	3	6	0.00	NO	11.1	290	2,172	0.03	0.00	2,172	290.30	NO	0.04
McBride (> 5MGD)		5.12	736.15	7,787	17.35	3	2900	1050	1050		5000	YES	-3.78	-8.78	5	20	7.95	YES	16.6	1,082	8,095	19,467.09	2,602.38	-11,372	-1,520.26	YES	25.74
Sacky (> 5MGD)	2025	7.28	139.82	4,755	10.59	3	1000	1000	1000		3000	YES	10.65	4.9	6	20	4.86	NO	12	650	4,865	11,888.14	1,589.22	-7,023	-938.91	YES	18.76
Trojan		6.28	4.93	72	0.16	2	600	600			1200	NO	26.27	23.77	3	6	0.82	NO	9.85	191	1,425	180.29	24.10	1,245	166.40	NO	3.50
WW-LS1037 Lear Street		9.60	0.54	54	0.12	2	700	700			1400	NO	22.05	19.05	3	6	0.61	NO	14.15	472	3,529	134.35	17.96	3,395	453.81	NO	2.76
WW-LS1090 Pearse Dr (> 5MGD)		4.19	749.4	10,235	22.80	6	3500	3500	3500	3500	21000	NO	16.25	13.75	3	24	7.26	YES	15.6	478	3,574	25,586.29	3,420.40	-22,012	-2,942.56	YES	41.74

Ultimate Flow

Lift Station	CIP projects between 2023 and 2025	Peaking Factor	Average Flow (gpm)	Peak Flow (gpm)	Peak Flow (cfs)	Ultimate Flow: Pump Information: # of Pumps	Pump 1 Rated Flow	Pump 2 Rated Flow	Pump 3 Rated Flow	Pump 4 Rated Flow	Sum of Rated Flow	Upsize Pump?	Pump On Elevation (ft)	Pumps Off Elevation (ft)	Pump ON-Pump OFF (ft)	Force Main Information: Force Main Diameter	FM Velocity	Upsize Force Main?	Wet Well Upsizing Determination: Wet Well Diameter	Current Wet Well Volume (ft^3)	Current Wet Well Volume (gal)	Minimum wet well volume based on peak flow (gallons)	Minimum Wet Well Volume (ft^3)	Available Working Volume (gal)	Available Working Volume (ft^3)	Need to be upsized?	WW Diameter Needed (ft)
Airport			24.72	475	1.06	2	865	865			1730	NO	22.61	19.61	3	10	1.62	NO	9	191	1,428	1,187.50	158.75	240	32.11	NO	8.21
Arcadia (> 5MGD)			422.7047917	4,100	9.13	5	500	500	500	500	2000	YES	21.03	13.93	7	16	8.72	YES	22.75	2,886	21,590	10,250.00	1,370.23	11,340	1,515.88	NO	15.68
Coastal Meadows			530	745	1.66	2	185	185			370	YES	20.69	18.69	2	6	4.23	NO	6.5	66	496	1,862.50	248.98	-1,366	-182.61	YES	12.59
Highway Nine	2024		850	1,331	2.97	2	304	304			608	YES	11.8	14.75	3	8	5.66	NO	8	151	1,128	3,327.50	444.82	-2,199	-294.03	YES	13.74
Kostoryz (> 5MGD)			569.6034028	10,530	23.46	3	2000	3000	3000		8000	YES	-0.3	-4.3	4	2 at 16", 1 at 12"		NO	21.85	1,500	11,220	26,325.00	3,519.15	-15,105	-2,019.28	YES	33.47
Levi County Jail			10	20	-	2	750	750			1500	NO	30.62	27.62	3	6	-	NO	11.1	290	2,172	-	-	0	0.00	-	-
McBride (> 5MGD)			946.5559028	6,900	15.37	3	2900	1050	1050		5000	YES	-3.78	-8.78	5	20	11.74	YES	16.6	1,082	8,095	17,250.00	2,306.00	-9,155	-1,223.87	YES	24.23
Sacky (> 5MGD)	2025		174.9463889	4,895	10.91	3	1000	1000	1000		3000	YES	10.65	4.9	6	20	8.33	YES	12	650	4,865	12,237.50	1,635.92	-7,373	-985.61	YES	19.03
Trojan			6.939097222	60	0.13	2	600	600			1200	NO	26.27	23.77	3	6	0.34	NO	9.85	191	1,425	150.00	20.05	1,275	170.45	NO	3.20
WW-LS1037 Lear Street			16.17090278	54	0.12	2	700	700			1400	NO	22.05	19.05	3	6	0.31	NO	14.15	472	3,529	135.00	18.05	3,394	453.72	NO	2.77
WW-LS1090 Pearse Dr (> 5MGD)			781.3574306	7,950	17.71	6	3500	3500	3500	3500	21000	NO	16.25	13.75	3	20	13.53	YES	15.6	478	3,574	19,875.00	2,656.91	-16,301	-2,179.07	YES	36.79

Laguna Madre Area Lift Stations

Current Flow

						Current Flow																				
						Pump Information										Force Main Information			Wet Well Upsizing Determination							
Lift Station	CIP projects between 2023 and 2025	Peaking Factor	Average Flow (gpm)	Peak Flow (gpm)	Peak Flow (cfs)	# of Pumps	Pump 1 Rated Flow	Pump 2 Rated Flow	Pump 3 Rated Flow	Pump 4 Rated Flow	Sum of Rated Flow	Upsize Pump?	Pump On Elevation (ft)	Pumps Off Elevation (ft)	Pump ON-Pump OFF (ft)	Force Main Diameter (in)	FM Velocity (ft/s)	Upsize Force Main?	Wet Well Diameter (ft)	Current Wet Well Volume (ft^3)	Current Wet Well Volume (gal)	Minimum wet well volume based on peak flow (gallons)	Minimum wet well Volume (ft^3)	Available Working Volume (gal)	Available Working Volume (ft^3)	Need to be upsized?	WW Diameter Needed (ft)
Flour Bluff		4.0	161.67	647	1.4	3	380	530	990		1,900	NO	6	-1.5	8	14	1.35	NO	10	589	4,406	1,616.70	216.12	2,790	372.93	NO	6
Gateway Park	2022	9.4	4.64	51	0.11	2	125	125			250	NO	-6	-7	1	4	1.31	NO	10	73	549	127.94	17.10	421	56.34	NO	5
Jamaica		9.8	25.33	52	0.12	2	1000	1000	-		2,000	NO	-22	-23	1	8	0.33	NO	12	113	846	129.71	17.34	716	95.76	NO	5
Laguna Shores (>5MGD)	2024	3.9	887.28	3,946	8.79	4	580	580	580		1,740	YES	-1.75	-5.25	4	16	6.30	YES	14	523	3,916	9,864.98	1,318.76	-5,949	-795.26	YES	22
Military and Jester	2024	7.8	151.38	1,999	4.45	1	900				900	YES	1.3	-1.2	3	10	8.16	YES	10	185	1,382	4,996.28	667.91	-3,614	-483.16	YES	19
Purdue	2024	3.9	70.11	211	0.47	2	200	200			400	NO	1.7	-2.8	5	6	2.40	NO	8	226	1,692	527.90	70.57	1,164	155.62	NO	5
Rhetta Place		3.6	62.96	109	0.24	2	125	125			250	NO	4.5	3	2	6	1.24	NO	6	42	317	273.74	36.59	44	5.82	NO	6
Rex		3.8	59.24	509	1.13	2	400	400			800	NO	-5.3	-7.3	2	8	3.25	NO	8	92	691	1,272.92	170.16	-582	-77.84	YES	11
Riviera	2025	4.1	272.72	1,618	3.60	3	750	750	-		1,500	YES	-5.75	-8.75	3	12	4.59	NO	20	961	7,192	4,044.67	540.70	3,147	420.73	NO	15
Turtle Cove		6.0	75.70	709	1.58	2	375	375			750	NO	3	-2	5	8	4.53	NO	10	393	2,938	1,772.66	236.97	1,165	155.73	NO	8
Waldron	2024	5.0	201.83	1,615	3.60	3	700	700	700		2,100	NO	-9.5	-18.5	9	12	4.58	NO	15	1,687	12,622	4,037.19	539.70	8,585	1,147.60	NO	9
Walmart		1.4	10.94	10	0.02	2	480	480			960	NO	-5.91	-8.41	3	8	0.06	NO	6	71	528.77	24.05	3.22	505	67.47	NO	1

Ultimate Flow

						Ultimate Flow																				
						Pump Information										Force Main Information			Wet Well Upsizing Determination							
Lift Station	CIP projects between 2023 and 2025	Peaking Factor	Average Flow (gpm)	Peak Flow (gpm)	Peak Flow (cfs)	# of Pumps	Pump 1 Rated Flow	Pump 2 Rated Flow	Pump 3 Rated Flow	Pump 4 Rated Flow	Sum of Rated Flow	Upsize Pump?	Pump On Elevation (ft)	Pumps Off Elevation (ft)	Pump ON-Pump OFF (ft)	Force Main Diameter	FM Velocity	Upsize Force Main?	Wet Well Diameter	Current Wet Well Volume (ft^3)	Current Wet Well Volume (gal)	Minimum wet well volume based on peak flow (gallons)	Minimum Wet Well Volume (ft^3)	Available Working Volume (gal)	Available Working Volume (ft^3)	Need to be upsized?	WW Diameter Needed (ft)
Flour Bluff			235.97	734	1.6	3	380	530	990		1,900	NO	6	-1.5	8	14	1.53	NO	10	589	4,406	1,835.00	245.30	2,571	343.75	NO	7
Gateway Park	2022		6.75	39	0.09	2	125	125			250	NO	-6	-7	1	4	1.00	NO	10	73	549	97.50	13.03	452	60.41	NO	4
Jamaica			127.70	177	0.39	2	1000	1000	-		2,000	NO	-22	-23	1	8	1.13	NO	12	113	846	442.50	59.15	404	53.94	NO	9
Laguna Shores (>5MGD)	2024		1030.26	3,347	7.46	3	580	580	580		1,740	YES	-1.75	-5.25	4	16	5.34	NO	14	523	3,916	8,367.50	1,118.58	-4,451	-595.07	YES	20
Military and Jester	2024		168.25	1,410	3.14	2	900	830			1,730	NO	1.3	-1.2	3	10	5.76	NO	10	185	1,382	3,525.00	471.23	-2,143	-286.48	YES	16
Purdue	2024		81.81	197	0.44	2	200	200			400	NO	1.7	-2.8	5	6	2.24	NO	8	226	1,692	492.50	65.84	1,200	160.36	NO	4
Rhetta Place			74.67	125	0.28	2	125	125			250	NO	4.5	3	2	6	1.42	NO	6	42	317	312.50	41.78	5	0.64	NO	6
Rex			74.09	422	0.94	2	400	400			800	NO	-5.3	-7.3	2	8	2.69	NO	8	92	691	1,055.00	141.03	-364	-48.71	YES	10
Riviera	2025		353.00	1,383	3.08	3	750	750	-		1,500	NO	-5.75	-8.75	3	12	3.92	NO	20	961	7,192	3,457.50	462.20	3,734	499.22	NO	14
Turtle Cove			77.27	540	1.20	2	375	375			750	NO	3	-2	5	8	3.45	NO	8	245	1,833	1,350.00	180.47	483	64.61	NO	7
Waldron	2024		671.12	1,820	4.05	3	700	700	700		2,100	NO	-9.5	-18.5	9	12	5.16	NO	15	1,687	12,622	4,550.00	608.25	8,072	1,079.05	NO	9
Walmart			24.33	28	0.06	2	480	480			960	NO	-5.91	-8.41	3	8	0.18	NO	6	71	529	70.00	9.36	459	61.33	NO	2

Oso Service Area Lift Stations

Current Flow

Lift Station	CIP projects between 2023 and 2025	Peaking Factor	Average Flow (gpm)	Peak Flow (gpm)	Peak Flow (cfs)	# of Pumps	Pump 1 Rated Flow	Pump 2 Rated Flow	Pump 3 Rated Flow	Pump 4 Rated Flow	Pump 5 Rated Flow	Sum of Rated Flow	Upsize Pump?	Pump On Elevation (ft)	Pumps Off Elevation (ft)	Pump ON-Pump OFF (ft)	Force Main Diameter (in)	FM Velocity (ft/s)	Upsize Force Main?	Wet Well Diameter (ft)	Current Wet Well Volume (ft^3)	Current Wet Well Volume (gal)	Minimum wet well volume based on peak flow (gallons)	Minimum wet well Volume (ft^3)	Available Working Volume (gal)	Available Working Volume (ft^3)	Need to be upsized?	WW Diameter Needed (ft)
						Current Flow: Pump Information											Force Main Information			Wet Well Upsizing Determination									
Airline WW		1.61	343.32	553	1.23	2	580	580				1,160	NO	-4.03	-6.03	2	12	1.57	NO	22	760	5,687	830	110.93	4,857	649.34	NO	8
Anchor Harbor WW		1.80	41.79	75	0.17	2	250	250				400	NO	0.25	-2.72	3	8	0.48	NO	6	84	628	113	15.05	516	68.92	NO	3
Bay Drive WW		4.48	42.18	189	0.42	3	400	400	400			1,200	NO	-7.25	-10.25	3	10	0.77	NO	12	339	2,538	283	37.89	2,255	301.40	NO	4
Buckingham WW	2025	1.74	216.62	328	0.73	3	1,250	1,250	1,250			3,750	NO	-6.29	-8.79	3	10	1.34	NO	16	478	3,574	492	65.77	3,082	412.07	NO	6
Cimarron WW	2025	1.12	354.38	397	0.88	2	1,000	300				1,300	NO	-0.44	-2.94	3	14	0.83	NO	8	116	864	596	79.62	268	35.89	NO	6
Country Club WW	2024	2.65	348.26	924	2.06	2	3,000	2,500				5,500	NO	-1.45	-5.45	4	24	0.66	NO	12	452	3,384	1,386	185.34	1,998	267.05	NO	8
Everhart/Staples	2024	3.44	523.67	1,802	4.01	3	10,000	10,000	6,000			26,000	NO	4.87	-2.14	7	24	1.28	NO	13	948	7,089	4,504	602.10	2,585	345.61	NO	10
Greenfields by the Bay		1.00	220.00	1,125	2.51	3	600	550	500			1,650	NO	-3.38	-7.88	5	12	3.19	NO	12	509	3,807	1,688	225.59	2,120	283.35	NO	8
Kings Crossing WW		1.44	144.64	350	0.78	2	400	400				800	NO	-3.88	-7.88	4	12	0.99	NO	6	113	846	525	70.18	321	42.92	NO	5
Lakes WW 1		1.00	271.00	460	1.02	3	750	750	750			2,250	NO	3.98	-3.52	8	10	1.88	NO	6	212	1,586	690	92.24	896	119.82	NO	4
Oleander WW		1.43	1.25	2	0.00	1	200					200	NO	13.66	12.16	2	4	0.05	NO	4	19	141	3	0.36	138	18.49	NO	1
Pelican Bay WW		2.10	31.01	125	0.28	2	275	275				550	NO	-1.77	-4.27	3	4	3.19	NO	6	71	529	188	25.07	341	45.62	NO	4
Perry Place WW	2024	1.00	161.70	1,000	2.23	2	650	650				1,300	NO	-4.75	-6.25	2	10	4.08	NO	6	42	317	1,500	200.52	-1,183	-158.11	YES	13
Schanen WW		1.37	232.74	795	1.77	2	400	400				800	NO	4.4	2.9	2	8	5.07	NO	9	95	714	1,193	159.41	-479	-63.99	YES	12
Slough WW		10.00	0.01	0	0.00	2	400	400				800	NO	-9.94	-11.94	2	10		NO	12	226	1,692.05	0	0.02	1,692	226.18	NO	0
Starry WW		10.00	0.00	0	0.00	2	600	600				1,200	NO	-12.67	-16.67	4	12	-	NO	12	452	3,384	0	-	3,384	452.39	NO	-
Station 5 WW		1.00	1420.84	3,300	7.35	3	1,400	1,400	1,400			4,200	NO	-1.33	-6.33	5	24	2.34	NO	12	600	4,488	4,950	661.72	-462	-61.79	YES	13
Sugar Tree WW	2024	2.13	103.68	550	1.23	2	625	625				1,250	NO	-4.8	-7.14	2	12	1.56	NO	6	66	495	825	110.29	-330	-44.12	YES	8
TAMUCC WW		1.70	94.09	160	0.36	2	500	500				1,000	NO	-4.53	-7.03	3	8	1.02	NO	6	71	529	240	32.13	288	38.56	NO	4
Webers Glen WW		1.00	159.92	875	1.95	2	400	400				900	NO	4.26	0.76	4	12	2.48	NO	12	364	2,719	1,313	175.46	1,407	188.09	NO	8
Williams WW	2023	1.00	5637.17	15,000	33.42	4	4,000	3,000	6,250	6,250		19,500	NO	3.45	-4.55	8	36	4.73	NO	32	6,434	48,130	37,500	5,013.04	10,630	1,420.97	NO	28
Wooldridge II WW		1.00	116.34	310	0.69	2	450	450				900	NO	-11.33	-13.33	2	16	0.49	NO	12	226	1,692	465	62.16	1,227	164.03	NO	6
Wooldridge WW	2023	1.37	3405.93	14,280	31.82	3	5,150	5,150	5,150			17,450	NO	-0.35	-8.35	8	30	6.48	YES	26	4,247	31,773	35,700	4,772.41	-3,927	-524.96	YES	28

Ultimate Flow

Lift Station	CIP projects between 2023 and 2025	Peaking Factor	Average Flow (gpm)	Peak Flow (gpm)	Peak Flow (cfs)	# of Pumps	Pump 1 Rated Flow	Pump 2 Rated Flow	Pump 3 Rated Flow	Pump 4 Rated Flow		Sum of Rated Flow	Upsize Pump?	Pump On Elevation (ft)	Pumps Off Elevation (ft)	Pump ON-Pump OFF (ft)	Force Main Diameter	FM Velocity	Upsize Force Main?	Wet Well Diameter	Current Wet Well Volume (ft^3)	Current Wet Well Volume (gal)	Minimum wet well volume based on peak flow (gallons)	Minimum Wet Well Volume (ft^3)	Available Working Volume (gal)	Available Working Volume (ft^3)	Need to be upsized?	WW Diameter Needed (ft)
						Ultimate Flow: Pump Information											Force Main Information			Wet Well Upsizing Determination									
Airline WW			1131.79	1,375	3.06	2	580	580	580	580	580	2,900	NO	-4.03	-6.03	2	12	3.90	NO	22	760	5,687	2,063	275.72	3,625	484.55	NO	13
Anchor Harbor WW			68.46	350	0.78	2	250	250				500	NO	0.25	-2.72	3	8	1.49	NO	6	84	628	525	70.18	103	13.79	NO	5
Bay Drive WW			250.98	550	1.23	2	400	400	400			1,200	NO	-7.25	-10.25	3	10	1.87	NO	12	339	2,538	825	110.29	1,713	229.01	NO	7
Buckingham WW			222.12	1,750	3.90	2	1,250	1,250	1,250			3,750	NO	-6.29	-8.79	3	10	5.96	NO	16	478	3,574	2,625	350.91	949	126.93	NO	13
Cimarron WW			416.79	690	1.54	2	1,000	300				1,300	NO	-0.44	-2.94	3	14	1.68	NO	8	116	864	1,035	138.36	-171	-22.85	YES	8
Country Club WW			406.49	5,500	12.25		3,000	2,500				5,500	NO	-1.45	-5.45	4	24	7.80	YES	12	452	3,384	8,250	1,102.87	-4,866	-650.48	YES	19
Everhart/Staples			546.01	8,725	19.44		10,000	10,000	6,000			26,000	NO	4.87	-2.14	7	36	8.25	YES	13	948	7,089	21,813	2,915.92	-14,723	-1,968.20	YES	23
Greenfields by the Bay			279.28	1,325	2.95		600	550	500			1,650	NO	-3.38	-7.88	5	12	3.76	NO	12	509	3,807	1,988	265.69	1,820	243.25	NO	9
Kings Crossing WW			197.09	400	0.89		400	400				800	NO	-3.88	-7.88	4	12	1.13	NO	6	113	846	600	80.21	246	32.89	NO	5
Lakes WW 1			277.95	910	2.03		750	750	750			2,250	NO	3.98	-3.52	8	10	3.10	NO	6	212	1,586	1,365	182.47	221	29.58	NO	6
Oleander WW			1.28	11	0.02		200					200	NO	13.66	12.16	2	4	0.09	NO	4	19	141	17	2.21	125	16.64	NO	1
Pelican Bay WW			34.21	117	0.26		275	275				550	NO	-1.77	-4.27	3	4	1.00	NO	6	71	529	176	23.46	353	47.23	NO	3
Perry Place WW			315.95	1,125	2.51	3	650					650	YES	-4.75	-6.25	2	10	3.83	NO	6	42	317	1,688	225.59	-1,370	-183.18	YES	14
Schanen WW			256.56	800	1.78	2	400	400				800	NO	4.4	2.9	2	8	3.40	NO	9	95	714	1,200	160.42	-486	-64.99	YES	12
Slough WW			111.62	0	0.00	2	400	400				800	NO	-9.94	-11.94	2	10	-	NO	12	226	1,692.05	0	-	1,692	226.20	NO	-
Starry WW			264.00	782	1.74	2	600	600				1,200	NO	-12.67	-16.67	4	12	2.22	NO	12	452	3,384	1,173	156.81	2,211	295.58	NO	7
Station 5 WW			1503.63	3,125	6.96	3	1,400	1,400	1,400			4,200	NO	-1.33	-6.33	5	24	4.43	NO	12	600	4,488	4,688	626.63	-200	-26.70	YES	13
Sugar Tree WW			130.93	625	1.39	2	625	625				1,250	NO	-4.8	-7.14	2	12	1.77	NO	6	66	495	938	125.33	-443	-59.16	YES	8
TAMUCC WW			94.19	168	0.37	2	500	500				1,000	NO	-4.53	-7.03	3	8	0.71	NO	6	71	529	252	33.69	277	37.00	NO	4
Webers Glen WW			218.00	785	1.75	2	400	400				800	NO	4.26	0.76	4	12	2.23	NO	12	364	2,719	1,178	157.41	1,542	206.13	NO	8
Williams WW			7099.52	14,520	32.35	3	4,000	3,000	6,250	6,250		19,500	NO	3.45	-4.55	8	36	4.58	NO	32	6,434	48,130	36,300	4,852.62	11,830	1,581.38	NO	28
Wooldridge II WW			233.11	525	1.17	2	450	450				900	NO	-11.33	-13.33	2	16	1.12	NO	12	226	1,692	788	105.27	905	120.92	NO	8
Wooldridge WW			4696.68	15,080	33.60	3	5,150	5,150	5,150			15,450	NO	-0.35	-8.35	8	30	17.11	YES	26	4,247	31,773	37,700	5,039.77	-5,927	-792.33	YES	28

White Cap Service Area Lift Stations

Current Flow

Lift Station	CIP projects between 2023 and 2025	Peaking Factor	Average Flow (gpm)	Peak Flow (gpm)	Peak Flow (cfs)	# of Pumps	Pump 1 Rated Flow	Pump 2 Rated Flow	Pump 3 Rated Flow	Pump 4 Rated Flow	Sum of Rated Flow	Upsize Pump?	Pump On Elevation (ft)	Pumps Off Elevation (ft)	Pump ON-Pump OFF (ft)	Force Main Diameter (in)	FM Velocity (ft/s)	Upsize Force Main?	Wet Well Diameter (ft)	Current Wet Well Volume (ft^3)	Current Wet Well Volume (gal)	Minimum wet well volume based on peak flow (gallons)	Minimum wet well Volume (ft^3)	Available Working Volume (gal)	Available Working Volume (ft^3)	Need to be upsized?	WW Diameter Needed (ft)
						Current Flow: Pump Information										Current Flow: Force Main Information			Current Flow: Wet Well Upsizing Determination								
Aquarius	2024	3.41	166.44	568	1.26	2	2,130	2,130			4,260	NO	-8.8	-11.8	3	12	1.61	NO	10	235.61945	1763	1419	189.72	343	46	NO	9.0
Coquino Bay		1.20	15.65	19	0.04	2	340	340			680	NO	-4.5	-9	5	6	0.21	NO	11.5	467.41008	3496	47	6.29	3449	461	NO	1.3
Cumana		2.61	26.88	70	0.16	2	300	300			600	NO	-3.5	-7.5	4	6	0.80	NO	6	113.09734	846	175	23.43	671	90	NO	2.7
Gypsy		2.96	90.27	267	0.60	2	500	500			1,000	NO	-8.83	-13.83	5	8	1.71	NO	7.92	246.326	1843	668	89.31	1175	157	NO	4.8
Jackfish		3.59	144.47	518	1.15	2	1,090	1,090			2,180	NO	-4.87	-7.37	3	10	2.12	NO	7.67	115.51028	864	1296	173.20	-432	-58	YES	9.4
Kennedy Causeway		2.97	17.63	52	0.12	2	100	100			200	NO	-6.5	-9	3	4	1.34	NO	6	70.685835	529	131	17.50	398	53	NO	3.0
Lake Padre South		1.66	20.66	34	0.08	2	1,125	1,125			2,250	NO	-2	-5.5	4	8	0.22	NO	7.67	161.71439	1210	86	11.44	1124	150	NO	2.0
Leeward		1.13	436.95	494	1.10	2	995	995			1,990	NO	-5.15	-7.65	3	10	2.02	NO	11.5	259.67227	1942	1236	165.20	707	94	NO	9.2
Park Road 22		2.00	-	-				-			-	YES	-20	-23.5	4	16	-	NO	16	660.42168	4940			4940	660	NO	0.0
Park Road 53		2.91	10.83	32	0.07	2	705	705			1,410	NO	3	0.5	3	6	0.36	NO	6	70.685835	529	79	10.55	450	60	NO	2.3
PI Section 4		1.80	867.49	1,563	3.48	2	1,460	1,375			2,835	NO	-9	-11	2	14	3.26	NO	4.2	27.708847	207	3908	522.40	-3701	-495	YES	18.2
Sea Pines		1.81	37.98	69	0.15	2	260	420			680	NO	-8.16	-12.66	5	6	0.78	NO	8	226.19467	1692	171	22.92	1521	203	NO	2.5
Seahorse		3.66	73.30	85	0.19	2	240	150			390	NO	-5.72	-7.2	1	4	2.17	NO	6	41.846014	313	213	28.41	101	13	NO	4.9
Swordfish		1.16	40.12	47	0.10	2	310	310			620	NO	-5.5	-8.5	3	6	0.53	NO	6	84.823002	635	116	15.56	518	69	NO	2.6
Tesoro		5.80	25.33	147	0.33	2	285	285			570	NO	-2.96	-5.46	3	6	1.67	NO	6	70.685835	529	367	49.06	162	22	NO	5.0
Verdemar		4.92	38.27	188	0.42	2	390	390			780	NO	-7.5	-10	3	8		NO	10	196.34954	1469	471	62.97	998	133	NO	5.7
Zahn		3.00	0.00	-	-	2		-								8			6	0	0	0	0.00	0	0		

Ultimate Flow

Lift Station	CIP projects between 2023 and 2025	Peaking Factor	Average Flow (gpm)	Peak Flow (gpm)	Peak Flow (cfs)	# of Pumps	Pump 1 Rated Flow	Pump 2 Rated Flow	Pump 3 Rated Flow	Pump 4 Rated Flow	Sum of Rated Flow	Upsize Pump?	Pump On Elevation (ft)	Pumps Off Elevation (ft)	Pump ON-Pump OFF (ft)	Force Main Diameter	FM Velocity	Upsize Force Main?	Wet Well Diameter	Current Wet Well Volume (ft^3)	Current Wet Well Volume (gal)	Minimum wet well volume based on peak flow (gallons)	Minimum Wet Well Volume (ft^3)	Available Working Volume (gal)	Available Working Volume (ft^3)	Need to be upsized?	WW Diameter Needed (ft)
						Ultimate Flow: Pump Information										Ultimate Flow: Force Main Information			Ultimate Flow: Wet Well Upsizing Determination								
Aquarius	2024		315.15	1,075	2.39	2	2,130	2,130			2,130	NO	-8.8	-11.8	3	12	3.05	NO	10	235.61945	1763	2687	359.23	-925	-124	YES	12.3
Coquino Bay			280.65	338	0.75	2	340	340			340	NO	-4.5	-9	5	6	1.92	NO	11.5	467.41008	3496	844	112.85	2652	355	NO	5.7
Cumana			29.70	77	0.17	2	300	300			300	NO	-3.5	-7.5	4	6	0.44	NO	6	113.09734	846	194	25.90	652	87	NO	2.9
Gypsy			108.61	322	0.72	2	500	500			500	NO	-8.83	-13.83	5	8	1.37	NO	7.92	246.326	1843	804	107.46	1039	139	NO	5.2
Jackfish			149.26	535	1.19	2	1,090	1,090			1,090	NO	-4.87	-7.37	3	10	1.82	NO	7.67	115.51028	864	1338	178.93	-474	-63	YES	9.5
Kennedy Causeway			18.30	54	0.12	2	100	100			100	NO	-6.5	-9	3	4	0.46	NO	6	70.685835	529	136	18.17	393	53	NO	3.0
Lake Padre South			175.38	291	0.65	2	1,125	1,125			1,125	NO	-2	-5.5	4	8	1.24	NO	7.67	161.71439	1210	727	97.17	483	65	NO	5.9
Leeward			518.62	587	1.31	2	995	995			995	NO	-5.15	-7.65	3	10	2.00	NO	11.5	259.67227	1942	1467	196.07	476	64	NO	10.0
Park Road 22			650.00	1,950	4.34			-				YES	-20	-23.5	4	16	4.15	NO	16	703.71675	5264	4875	651.69	389	52	NO	15.4
Park Road 53			55.93	163	0.36	2	705	705			705	NO	3	0.5	3	6	0.92	NO	6	70.685835	529	408	54.48	121	16	NO	5.3
PI Section 4			1652.23	2,977	6.63	2	1,460	1,375			2,835	YES	-9	-11	2	14	7.24	YES	4.2	27.708847	207	7443	994.92	-7235	-967	YES	25.2
Sea Pines			329.22	595	1.32	2	260	420			680	NO	-8.16	-12.66	5	6	3.37	NO	8	226.19467	1692	1486	198.70	206	28	NO	7.5
Seahorse			75.93	278	0.62	2	240	150			390	NO	-5.72	-7.2	1	4	2.37	NO	6	41.846014	313	695	92.94	-382	-51	YES	8.9
Swordfish			76.50	89	0.20	2	310	310			310	NO	-5.5	-8.5	3	6	0.50	NO	6	84.823002	635	222	29.66	413	55	NO	3.5
Tesoro			26.25	105	0.23	2	285	285			285	NO	-2.96	-5.46	3	6	0.60	NO	6	70.685835	529	262	35.09	266	36	NO	4.2
Verdemar			38.27	188	0.42	2	390	390			390	NO	-7.5	-10	3	8		NO	10	196.34954	1469	471	62.97	998	133	NO	5.7

Appendix C. Project Cost Sheets

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 1 of 238

Project: Clarkwood North

WWTP Service Area: Allison

Lift Station Sewershed: Clarkwood North

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 609

Current Peak Flow (gpm): 991

10-Year Peak Flow (gpm): 1,111

Ultimate Peak Flow (gpm): 1,514

Type: Rehabilitate/Repair & Upgrade

Useful Life: 20 years

Category: Lift Station

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair wet well between 2022-2024 to meet current flow conditions, and upgrade wet well to meet ultimate flow conditions. Increase wet well diameter from 8' to 10' between 2022-2024, an additional volume of 600 gallons. The wet well will need to be upsized again to 14' to meet ultimate flow conditions, an additional volume of 850 gallons. Pump controls will also need to be adjusted.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 78,600	$ 1,616,000	$ 5,472,000	$ 7,166,600
Contingency (30%)	$ 23,600	$ 484,800	$ 1,641,600	$ 2,150,000
Mobilization (10%)	$ 7,900	$ 161,600	$ 547,200	$ 716,700
Bond (5%)	$ 4,000	$ 80,800	$ 273,600	$ 358,400
OH&P (10%)	$ 7,900	$ 161,600	$ 547,200	$ 716,700
Design & Inspection (15%)	$ 11,800	$ 242,400	$ 820,800	$ 1,075,000
Total	**$ 133,800**	**$ 2,747,200**	**$ 9,302,400**	**$ 12,183,400**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 2 of 238

Project: Cynthia

WWTP Service Area: Allison

Lift Station Sewershed: Cynthia

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 8

Current Peak Flow (gpm): 78

10-Year Peak Flow (gpm): 47

Ultimate Peak Flow (gpm): 47

Type: Rehabilitate/Repair

Useful Life: 20 years

Category: Lift Station and Force Main

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair wet well and force main to meet current flow conditions. Increase wet well diameter from 4' to 8' between 2022-2024, an additional volume of 132 gallons. Controls will also need to be adjusted. Force Main needs to be upsized from 2" to 4" between 2022-2024.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 66,400	$ 0	$ 0	$ 66,400
Contingency (30%)	$ 20,100	$ 0	$ 0	$ 20,100
Mobilization (10%)	$ 6,700	$ 0	$ 0	$ 6,700
Bond (5%)	$ 3,400	$ 0	$ 0	$ 3,400
OH&P (10%)	$ 6,700	$ 0	$ 0	$ 6,700
Design & Inspection (15%)	$ 10,100	$ 0	$ 0	$ 10,100
Total	**$ 113,400**	**$ 0**	**$ 0**	**$ 113,400**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 3 of 238

Project: Highway 77

WWTP Service Area: Allison

Lift Station Sewershed: Highway 77

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 0

Current Peak Flow (gpm): 1

10-Year Peak Flow (gpm): 960

Ultimate Peak Flow (gpm): 1,999

Type: Rehabilitate/Repair & Upgrade

Useful Life: 10 years

Category: Lift Station, Pumps, and Force Main

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair force main to meet current flow conditions between 2022-2024. Upgrade pumps, wet well diameter, and force main to meet ultimate conditions. Force Main to be upsized from 2" to 4" between 2022-2024. For ultimate conditions pumps must be upsized, wet well will need to be upsized from 8' to 16' for an additional volume of 3,500 gallons and the Force Main will need to be further upsized from 4" to 12".

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 141,400	$ 2,894,700	$ 6,030,600	$ 9,066,700
Contingency (30%)	$ 42,500	$ 868,500	$ 1,809,200	$ 2,720,200
Mobilization (10%)	$ 14,200	$ 289,500	$ 603,100	$ 906,800
Bond (5%)	$ 7,100	$ 144,800	$ 301,600	$ 453,500
OH&P (10%)	$ 14,200	$ 289,500	$ 603,100	$ 906,800
Design & Inspection (15%)	$ 21,300	$ 434,300	$ 904,700	$ 1,360,300
Total	**$ 240,700**	**$ 4,921,300**	**$ 10,252,300**	**$ 15,414,300**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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Capital Improvement Plan

City of Corpus Christi, Texas

Project # 4 of 238

Project: Lakes Northwest

WWTP Service Area: Allison

Lift Station Sewershed: Lakes Northwest

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 2

Current Peak Flow (gpm): 14

10-Year Peak Flow (gpm): 758

Ultimate Peak Flow (gpm): 1,632

Type: Upgrade

Useful Life: 20 years

Category: Lift Station and Force Main

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: 10-year

Justification & Description

Upgrade wet well and force main diameter to meet ultimate flow conditions. Wet well to be upsized from 8' to 16' for an additional 2,800 gallons and force main to be upsized from 8" to 14" in ultimate time frame

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 2,810,900	$ 6,110,600	$ 8,921,500
Contingency (30%)	$ 0	$ 843,300	$ 1,833,200	$ 2,676,500
Mobilization (10%)	$ 0	$ 281,100	$ 611,100	$ 892,200
Bond (5%)	$ 0	$ 140,600	$ 305,600	$ 446,200
OH&P (10%)	$ 0	$ 281,100	$ 611,100	$ 892,200
Design & Inspection (15%)	$ 0	$ 421,700	$ 916,600	$ 1,338,300
Total	**$ 0**	**$ 4,778,700**	**$ 10,388,200**	**$ 15,166,900**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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Capital Improvement Plan

City of Corpus Christi, Texas

Project # 5 of 238

Project: River Canyon

WWTP Service Area: Allison

Lift Station Sewershed: River Canyon

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 22

Current Peak Flow (gpm): 211

10-Year Peak Flow (gpm): 185

Ultimate Peak Flow (gpm): 185

Type: Upgrade

Useful Life: 10 years

Category: Pumps

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: 10-year

Justification & Description

Upgrade pumps to meet ultimate flow conditions. Pumps need to be upsized for ten year and ultimate flow conditions.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 242,000	$ 576,000	$ 818,000
Contingency (30%)	$ 0	$ 72,600	$ 172,800	$ 245,400
Mobilization (10%)	$ 0	$ 24,200	$ 57,600	$ 81,800
Bond (5%)	$ 0	$ 12,100	$ 28,800	$ 40,900
OH&P (10%)	$ 0	$ 24,200	$ 57,600	$ 81,800
Design & Inspection (15%)	$ 0	$ 36,300	$ 86,400	$ 122,700
Total	**$ 0**	**$ 411,400**	**$ 979,200**	**$ 1,390,600**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 6 of 238

Project: Sharpsburg LS (>5 MGD)

WWTP Service Area: Allison

Lift Station Sewershed: Sharpsburg

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 669

Current Peak Flow (gpm): 4,747

10-Year Peak Flow (gpm): 5,609

Ultimate Peak Flow (gpm): 8,850

Type: Rehabilitate/Repair & Upgrade

Useful Life: 10 years

Category: Lift Station, Pumps, and Force Main

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Upgrade lift station to meet ultimate flow conditions. Lift station will need to be upgraded between 2022-2024 to hold an additional 6,000 gallons and upgraded in ultimate conditions for an additional 9,400 gallons. Wet well, force main, and pumps to be upsized and replaced.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 534,000	$ 2,808,500	$ 9,138,900	$ 12,481,400
Contingency (30%)	$ 160,200	$ 842,600	$ 2,741,700	$ 3,744,500
Mobilization (10%)	$ 53,400	$ 280,900	$ 913,900	$ 1,248,200
Bond (5%)	$ 26,700	$ 140,500	$ 457,000	$ 624,200
OH&P (10%)	$ 53,400	$ 280,900	$ 913,900	$ 1,248,200
Design & Inspection (15%)	$ 80,100	$ 421,300	$ 1,370,900	$ 1,872,300
Total	**$ 907,800**	**$ 4,774,700**	**$ 15,536,300**	**$ 21,218,800**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 7 of 238

Project: Arcadia (> 5MGD)

WWTP Service Area: Greenwood

Lift Station Sewershed: Arcadia

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 418

Current Peak Flow (gpm): 6,101

10-Year Peak Flow (gpm): 6,101

Ultimate Peak Flow (gpm): 4,100

Type: Rehabilitate/Repair

Useful Life: 10 years

Category: Lift Station, Pumps, and Force Main

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate and repair lift station to meet current flow conditions. Lift station renovation, force main diameter must be increased to 24", and pumps upsized between 2022-2024 for an additional 4,200 gallons.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 16,538,400	$ 0	$ 0	$ 16,538,400
Contingency (30%)	$ 4,961,600	$ 0	$ 0	$ 4,961,600
Mobilization (10%)	$ 1,653,900	$ 0	$ 0	$ 1,653,900
Bond (5%)	$ 827,000	$ 0	$ 0	$ 827,000
OH&P (10%)	$ 1,653,900	$ 0	$ 0	$ 1,653,900
Design & Inspection (15%)	$ 2,480,800	$ 0	$ 0	$ 2,480,800
Total	**$ 28,115,600**	**$ 0**	**$ 0**	**$ 28,115,600**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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Capital Improvement Plan

City of Corpus Christi, Texas

Project # 8 of 238

Project: Coastal Meadows

WWTP Service Area: Greenwood

Lift Station Sewershed: Coastal Meadows

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 15

Current Peak Flow (gpm): 197

10-Year Peak Flow (gpm): 236

Ultimate Peak Flow (gpm): 745

Type: Future Project

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: 10-year

Justification & Description

Replace force main with gravity pipe. Install 10,400 LF of 24" gravity pipe.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 3,640,000	$ 0	$ 3,640,000
Contingency (30%)	$ 0	$ 1,092,000	$ 0	$ 1,092,000
Mobilization (10%)	$ 0	$ 364,000	$ 0	$ 364,000
Bond (5%)	$ 0	$ 182,000	$ 0	$ 182,000
OH&P (10%)	$ 0	$ 364,000	$ 0	$ 364,000
Design & Inspection (15%)	$ 0	$ 546,000	$ 0	$ 546,000
Total	**$ 0**	**$ 6,188,000**	**$ 0**	**$ 6,188,000**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 9 of 238

Project: Highway Nine

WWTP Service Area: Greenwood

Lift Station Sewershed: Highway Nine

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 19

Current Peak Flow (gpm): 1,031

10-Year Peak Flow (gpm): 1,178

Ultimate Peak Flow (gpm): 1,331

Type: Upgrade

Useful Life: 20 years

Category: Lift Station

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: 10-year

Justification & Description

Upgrade lift station to meet ultimate flow conditions. Lift Station wet well upsized from 8' to 14' for an additional 775 gallons and controls to be adjusted between 2022-2024.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 914,100	$ 1,094,400	$ 2,008,500
Contingency (30%)	$ 0	$ 274,300	$ 328,400	$ 602,700
Mobilization (10%)	$ 0	$ 91,500	$ 109,500	$ 201,000
Bond (5%)	$ 0	$ 45,800	$ 54,800	$ 100,600
OH&P (10%)	$ 0	$ 91,500	$ 109,500	$ 201,000
Design & Inspection (15%)	$ 0	$ 137,200	$ 164,200	$ 301,400
Total	**$ 0**	**$ 1,554,400**	**$ 1,860,800**	**$ 3,415,200**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 10 of 238

Project: Kostoryz (> 5MGD)

WWTP Service Area: Greenwood

Lift Station Sewershed: Kostoryz

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 407

Current Peak Flow (gpm): 11,532

10-Year Peak Flow (gpm): 10,530

Ultimate Peak Flow (gpm): 10,530

Type: Rehabilitate/Repair

Useful Life: 10 years

Category: Lift Station, Pumps, and Force Main

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Lift station rehabilitation needed in order to meet current flow conditions. Wet well to be upsized from 21.85' to 34' diameter for an additional 17,610 gallons, force main to be upsized to 30", and the pumps are to be upsized between 2022-2024.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 24,224,400	$ 2,223,600	$ 0	$ 26,448,000
Contingency (30%)	$ 7,267,400	$ 667,100	$ 0	$ 7,934,500
Mobilization (10%)	$ 2,422,500	$ 222,400	$ 0	$ 2,644,900
Bond (5%)	$ 1,211,300	$ 111,200	$ 0	$ 1,322,500
OH&P (10%)	$ 2,422,500	$ 222,400	$ 0	$ 2,644,900
Design & Inspection (15%)	$ 3,633,700	$ 333,600	$ 0	$ 3,967,300
Total	**$ 41,181,800**	**$ 3,780,300**	**$ 0**	**$ 44,962,100**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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Capital Improvement Plan

City of Corpus Christi, Texas

Project # 11 of 238

Project: McBride (> 5MGD)

WWTP Service Area: Greenwood

Lift Station Sewershed: McBride

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 736

Current Peak Flow (gpm): 7,787

10-Year Peak Flow (gpm): 6,900

Ultimate Peak Flow (gpm): 6,900

Type: Rehabilitate/Repair

Useful Life: 10 years

Category: Lift Station, Pumps, and Force Main

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Lift station rehabilitation needed in order to meet current flow conditions. Lift Station wet well diameter to be increased to 24' for an additional 11,400 gallons, force main diameter to be upsized to 24", and pumps need to be upsized.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 15,720,900	$ 4,811,400	$ 0	$ 20,532,300
Contingency (30%)	$ 4,716,300	$ 1,443,500	$ 0	$ 6,159,800
Mobilization (10%)	$ 1,572,100	$ 481,200	$ 0	$ 2,053,300
Bond (5%)	$ 786,100	$ 240,600	$ 0	$ 1,026,700
OH&P (10%)	$ 1,572,100	$ 481,200	$ 0	$ 2,053,300
Design & Inspection (15%)	$ 2,358,200	$ 721,800	$ 0	$ 3,080,000
Total	**$ 26,725,700**	**$ 8,179,700**	**$ 0**	**$ 34,905,400**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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Capital Improvement Plan

City of Corpus Christi, Texas

Project # 12 of 238

Project: Port/Pearse (> 5MGD)

WWTP Service Area: Greenwood

Lift Station Sewershed: Port/Pearse

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 749

Current Peak Flow (gpm): 10,235

10-Year Peak Flow (gpm): 7,950

Ultimate Peak Flow (gpm): 7,950

Type: Rehabilitate/Repair

Useful Life: 10 years

Category: Lift Station, Pumps, and Force Main

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Lift station rehabilitation needed in order to meet current flow conditions. Lift Station wet well diameter to be increased to 24' for an additional 22,000 gallons, force main diameter to be upsized to 30", and pumps need to be upsized between 2022-2024.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 33,577,200	$ 0	$ 0	$ 33,577,200
Contingency (30%)	$ 10,073,200	$ 0	$ 0	$ 10,073,200
Mobilization (10%)	$ 3,357,800	$ 0	$ 0	$ 3,357,800
Bond (5%)	$ 1,678,900	$ 0	$ 0	$ 1,678,900
OH&P (10%)	$ 3,357,800	$ 0	$ 0	$ 3,357,800
Design & Inspection (15%)	$ 5,036,600	$ 0	$ 0	$ 5,036,600
Total	**$ 57,081,500**	**$ 0**	**$ 0**	**$ 57,081,500**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 13 of 238

Project: Sacky (> 5MGD)

WWTP Service Area: Greenwood

Lift Station Sewershed: Sacky

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 140

Current Peak Flow (gpm): 4,755

10-Year Peak Flow (gpm): 4,797

Ultimate Peak Flow (gpm): 4,895

Type: Rehabilitate/Repair & Upgrade

Useful Life: 10 years

Category: Lift Station, Pumps, and Force Main

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Lift station improvements needed in order to meet current and ultimate flow conditions. Force Main to be upsized from 16" to 20" between 2022-2024. In ultimate flow conditions, the lift station wet well will require a diameter of 20' and pumps will need to be upsized for an additional 7,400 gallons.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 1,787,500	$ 1,766,700	$ 5,400,000	$ 8,954,200
Contingency (30%)	$ 536,300	$ 530,100	$ 1,620,000	$ 2,686,400
Mobilization (10%)	$ 178,800	$ 176,700	$ 540,000	$ 895,500
Bond (5%)	$ 89,400	$ 88,400	$ 270,000	$ 447,800
OH&P (10%)	$ 178,800	$ 176,700	$ 540,000	$ 895,500
Design & Inspection (15%)	$ 268,200	$ 265,100	$ 810,000	$ 1,343,300
Total	**$ 3,039,000**	**$ 3,003,700**	**$ 9,180,000**	**$ 15,222,700**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 14 of 238

Project: Laguna Shores (>5MGD)

WWTP Service Area: Laguna Madre

Lift Station Sewershed: Laguna Shores

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 887

Current Peak Flow (gpm): 3,946

10-Year Peak Flow (gpm): 3,347

Ultimate Peak Flow (gpm): 3,347

Type: Rehabilitate/Repair

Useful Life: 20 years

Category: Lift Station

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Lift station rehabilitation and repairs needed in order to meet current flow conditions. Wet well to be upsized to have a diameter of 22' between 2022-2024 for an additional 6,000 gallons.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 9,000,000	$ 0	$ 0	$ 9,000,000
Contingency (30%)	$ 2,700,000	$ 0	$ 0	$ 2,700,000
Mobilization (10%)	$ 900,000	$ 0	$ 0	$ 900,000
Bond (5%)	$ 450,000	$ 0	$ 0	$ 450,000
OH&P (10%)	$ 900,000	$ 0	$ 0	$ 900,000
Design & Inspection (15%)	$ 1,350,000	$ 0	$ 0	$ 1,350,000
Total	**$ 15,300,000**	**$ 0**	**$ 0**	**$ 15,300,000**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 15 of 238

Project: Military and Jester

WWTP Service Area: Laguna Madre

Lift Station Sewershed: Military and Jester

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 151

Current Peak Flow (gpm): 1,999

10-Year Peak Flow (gpm): 1,410

Ultimate Peak Flow (gpm): 1,410

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Force Main

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Lift station and force main rehabilitation and repairs needed to meet current flow conditions. Force Main to be upsized from 10" to 12" and wet well to be upsized from 10' to 20' between 2022-2024 for an additional 3,700 gallons.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 1,393,600	$ 0	$ 0	$ 1,393,600
Contingency (30%)	$ 418,200	$ 0	$ 0	$ 418,200
Mobilization (10%)	$ 139,400	$ 0	$ 0	$ 139,400
Bond (5%)	$ 69,800	$ 0	$ 0	$ 69,800
OH&P (10%)	$ 139,400	$ 0	$ 0	$ 139,400
Design & Inspection (15%)	$ 209,200	$ 0	$ 0	$ 209,200
Total	**$ 2,369,600**	**$ 0**	**$ 0**	**$ 2,369,600**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 16 of 238

Project: Everhart/Staples

WWTP Service Area: Oso

Lift Station Sewershed: Everhart/Staples

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 524

Current Peak Flow (gpm): 1,802

10-Year Peak Flow (gpm): 5,263

Ultimate Peak Flow (gpm): 8,725

Type: Upgrade

Useful Life: 20 years

Category: Lift Station and Force Main

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: 10-year

Justification & Description

Lift station upgrades needed in order to meet ulitmate flow conditions. Wet well upsizing from 13.12' to 24' in ultimate conditions for an additional 14,800 gallons. Force Main to be upsized to an equivalent diameter of 36".

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 24,613,400	$ 46,800,000	$ 71,413,400
Contingency (30%)	$ 0	$ 7,384,100	$ 14,040,000	$ 21,424,100
Mobilization (10%)	$ 0	$ 2,461,400	$ 4,680,000	$ 7,141,400
Bond (5%)	$ 0	$ 1,230,700	$ 2,340,000	$ 3,570,700
OH&P (10%)	$ 0	$ 2,461,400	$ 4,680,000	$ 7,141,400
Design & Inspection (15%)	$ 0	$ 3,692,100	$ 7,020,000	$ 10,712,100
Total	**$ 0**	**$ 41,843,100**	**$ 79,560,000**	**$121,403,100**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 17 of 238

Project: Perry Place WW

WWTP Service Area: Oso

Lift Station Sewershed: Perry Place

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 162

Current Peak Flow (gpm): 1,000

10-Year Peak Flow (gpm): 1,073

Ultimate Peak Flow (gpm): 1,125

Type: Rehabilitate/Repair

Useful Life: 20 years

Category: Lift Station and Force Main

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Lift station rehabilitation and repairs needed in order to meet current flow conditions. Upsize wet well from 6' to 12' and upsize force main from 10" to 16" between 2022-2024 for an additional 1,200 gallons.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 8,702,000	$ 0	$ 0	$ 8,702,000
Contingency (30%)	$ 2,610,600	$ 0	$ 0	$ 2,610,600
Mobilization (10%)	$ 870,200	$ 0	$ 0	$ 870,200
Bond (5%)	$ 435,100	$ 0	$ 0	$ 435,100
OH&P (10%)	$ 870,200	$ 0	$ 0	$ 870,200
Design & Inspection (15%)	$ 1,305,300	$ 0	$ 0	$ 1,305,300
Total	**$ 14,793,400**	**$ 0**	**$ 0**	**$ 14,793,400**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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Capital Improvement Plan

City of Corpus Christi, Texas

Project # 18 of 238

Project: Jackfish

WWTP Service Area: Whitecap

Lift Station Sewershed: Jackfish

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 144

Current Peak Flow (gpm): 518

10-Year Peak Flow (gpm): 535

Ultimate Peak Flow (gpm): 535

Type: Rehabilitate/Repair

Useful Life: 20 years

Category: Lift Station

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Lift station rehabilitation and repairs needed in order to meet current flow conditions. Increase wet well diameter from 7.67' to 10' for an additional 500 gallons between 2022-2023.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 78,600	$ 0	$ 0	$ 78,600
Contingency (30%)	$ 23,600	$ 0	$ 0	$ 23,600
Mobilization (10%)	$ 7,900	$ 0	$ 0	$ 7,900
Bond (5%)	$ 4,000	$ 0	$ 0	$ 4,000
OH&P (10%)	$ 7,900	$ 0	$ 0	$ 7,900
Design & Inspection (15%)	$ 11,800	$ 0	$ 0	$ 11,800
Total	**$ 133,800**	**$ 0**	**$ 0**	**$ 133,800**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 19 of 238

Project: PI Section 4

WWTP Service Area: Whitecap

Lift Station Sewershed: PI Section 4

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 867

Current Peak Flow (gpm): 1,563

10-Year Peak Flow (gpm): 1,888

Ultimate Peak Flow (gpm): 2,977

Type: Rehabilitate/Repair & Upgrade

Useful Life: 20 years

Category: Lift Station and Force Main

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Lift station rehabilitation/repair needed in order to meet current flow conditions. Upsize wet well from 4.2' to 20' before 2024 for an additional 3,700 gallons. Wet well will need to be increased to 24' for ultimate conditions and force main diameter increased from 4" to 18" for an additional 2,800 gallons.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 573,800	$ 1,897,700	$ 10,542,600	$ 13,014,100
Contingency (30%)	$ 172,200	$ 569,400	$ 3,162,800	$ 3,904,400
Mobilization (10%)	$ 57,400	$ 189,800	$ 1,054,300	$ 1,301,500
Bond (5%)	$ 28,700	$ 94,900	$ 527,200	$ 650,800
OH&P (10%)	$ 57,400	$ 189,800	$ 1,054,300	$ 1,301,500
Design & Inspection (15%)	$ 86,100	$ 284,700	$ 1,581,500	$ 1,952,300
Total	**$ 975,600**	**$ 3,226,300**	**$ 17,922,700**	**$ 22,124,600**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 20 of 238

Project: Seahorse

WWTP Service Area: Whitecap

Lift Station Sewershed: Seahorse

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 73

Current Peak Flow (gpm): 85

10-Year Peak Flow (gpm): 116

Ultimate Peak Flow (gpm): 278

Type: Rehabilitate/Repair

Useful Life: 20 years

Category: Lift Station and Force Main

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Lift station to be rehabilitated in order to meet current flow conditions. Upsize wet well diameter from 6' to 10' and force main diameter 4" to 6" between 2023-2024 for an additional 400 gallons.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 127,900	$ 0	$ 0	$ 127,900
Contingency (30%)	$ 38,500	$ 0	$ 0	$ 38,500
Mobilization (10%)	$ 12,900	$ 0	$ 0	$ 12,900
Bond (5%)	$ 6,500	$ 0	$ 0	$ 6,500
OH&P (10%)	$ 12,900	$ 0	$ 0	$ 12,900
Design & Inspection (15%)	$ 19,300	$ 0	$ 0	$ 19,300
Total	**$ 218,000**	**$ 0**	**$ 0**	**$ 218,000**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 21 of 238

Project: Chispa Creek

WWTP Service Area: Allison

Lift Station Sewershed: Allison Gravity

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 3,423

Current Peak Flow (gpm): 13,758

10-Year Peak Flow (gpm): 13,908

Ultimate Peak Flow (gpm): 14,227

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 1290 LF of 12 inch pipe, along Chispa Creek in Allison WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 463,200	$ 0	$ 0	$ 463,200
Contingency (30%)	$ 139,000	$ 0	$ 0	$ 139,000
Mobilization (10%)	$ 46,400	$ 0	$ 0	$ 46,400
Bond (5%)	$ 23,200	$ 0	$ 0	$ 23,200
OH&P (10%)	$ 46,400	$ 0	$ 0	$ 46,400
Design & Inspection (15%)	$ 69,500	$ 0	$ 0	$ 69,500
Total	**$ 787,700**	**$ 0**	**$ 0**	**$ 787,700**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 22 of 238

Project: La Branch

WWTP Service Area: Allison

Lift Station Sewershed: Allison Gravity

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 3,423

Current Peak Flow (gpm): 13,758

10-Year Peak Flow (gpm): 13,908

Ultimate Peak Flow (gpm): 14,227

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 10 LF of 27 inch pipe, along La Branch in Allison WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 3,100	$ 3,100
Contingency (30%)	$ 0	$ 0	$ 1,000	$ 1,000
Mobilization (10%)	$ 0	$ 0	$ 400	$ 400
Bond (5%)	$ 0	$ 0	$ 200	$ 200
OH&P (10%)	$ 0	$ 0	$ 400	$ 400
Design & Inspection (15%)	$ 0	$ 0	$ 500	$ 500
Total	**$ 0**	**$ 0**	**$ 5,600**	**$ 5,600**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 23 of 238

Project: Nolford

WWTP Service Area: Allison

Lift Station Sewershed: Allison Gravity

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 3,423

Current Peak Flow (gpm): 13,758

10-Year Peak Flow (gpm): 13,908

Ultimate Peak Flow (gpm): 14,227

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 510 LF of 12 inch pipe, along Nolford in Allison WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 186,900	$ 0	$ 0	$ 186,900
Contingency (30%)	$ 56,100	$ 0	$ 0	$ 56,100
Mobilization (10%)	$ 18,700	$ 0	$ 0	$ 18,700
Bond (5%)	$ 9,400	$ 0	$ 0	$ 9,400
OH&P (10%)	$ 18,700	$ 0	$ 0	$ 18,700
Design & Inspection (15%)	$ 28,100	$ 0	$ 0	$ 28,100
Total	**$ 317,900**	**$ 0**	**$ 0**	**$ 317,900**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 24 of 238

Project: Palisade

WWTP Service Area: Allison

Lift Station Sewershed: Allison Gravity

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 3,423

Current Peak Flow (gpm): 13,758

10-Year Peak Flow (gpm): 13,908

Ultimate Peak Flow (gpm): 14,227

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 700 LF of 10 inch pipe, 130 LF of 12 inch pipe, along Palisade in Allison WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 245,200	$ 0	$ 0	$ 245,200
Contingency (30%)	$ 73,600	$ 0	$ 0	$ 73,600
Mobilization (10%)	$ 24,600	$ 0	$ 0	$ 24,600
Bond (5%)	$ 12,300	$ 0	$ 0	$ 12,300
OH&P (10%)	$ 24,600	$ 0	$ 0	$ 24,600
Design & Inspection (15%)	$ 36,800	$ 0	$ 0	$ 36,800
Total	**$ 417,100**	**$ 0**	**$ 0**	**$ 417,100**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 25 of 238

Project: Raintree

WWTP Service Area: Allison

Lift Station Sewershed: Allison Gravity

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 3,423

Current Peak Flow (gpm): 13,758

10-Year Peak Flow (gpm): 13,908

Ultimate Peak Flow (gpm): 14,227

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 280 LF of 12 inch pipe, along Raintree in Allison WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 106,200	$ 0	$ 0	$ 106,200
Contingency (30%)	$ 31,900	$ 0	$ 0	$ 31,900
Mobilization (10%)	$ 10,700	$ 0	$ 0	$ 10,700
Bond (5%)	$ 5,400	$ 0	$ 0	$ 5,400
OH&P (10%)	$ 10,700	$ 0	$ 0	$ 10,700
Design & Inspection (15%)	$ 16,000	$ 0	$ 0	$ 16,000
Total	**$ 180,900**	**$ 0**	**$ 0**	**$ 180,900**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 26 of 238

Project: Sessions

WWTP Service Area: Allison

Lift Station Sewershed: Allison Gravity

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 3,423

Current Peak Flow (gpm): 13,758

10-Year Peak Flow (gpm): 13,908

Ultimate Peak Flow (gpm): 14,227

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 950 LF of 12 inch pipe, along Sessions in Allison WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 607,100	$ 607,100
Contingency (30%)	$ 0	$ 0	$ 182,200	$ 182,200
Mobilization (10%)	$ 0	$ 0	$ 60,800	$ 60,800
Bond (5%)	$ 0	$ 0	$ 30,400	$ 30,400
OH&P (10%)	$ 0	$ 0	$ 60,800	$ 60,800
Design & Inspection (15%)	$ 0	$ 0	$ 91,100	$ 91,100
Total	**$ 0**	**$ 0**	**$ 1,032,400**	**$ 1,032,400**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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Capital Improvement Plan

City of Corpus Christi, Texas

Project # 27 of 238

Project: Wandering Creek

WWTP Service Area: Allison

Lift Station Sewershed: Allison Gravity

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 3,423

Current Peak Flow (gpm): 13,758

10-Year Peak Flow (gpm): 13,908

Ultimate Peak Flow (gpm): 14,227

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 830 LF of 18 inch pipe, along Wandering Creek in Allison WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 323,900	$ 323,900
Contingency (30%)	$ 0	$ 0	$ 97,200	$ 97,200
Mobilization (10%)	$ 0	$ 0	$ 32,400	$ 32,400
Bond (5%)	$ 0	$ 0	$ 16,200	$ 16,200
OH&P (10%)	$ 0	$ 0	$ 32,400	$ 32,400
Design & Inspection (15%)	$ 0	$ 0	$ 48,600	$ 48,600
Total	**$ 0**	**$ 0**	**$ 550,700**	**$ 550,700**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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Capital Improvement Plan

City of Corpus Christi, Texas

Project # 28 of 238

Project: Clarkwood

WWTP Service Area: Allison

Lift Station Sewershed: Clarkwood South

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 52

Current Peak Flow (gpm): 217

10-Year Peak Flow (gpm): 261

Ultimate Peak Flow (gpm): 460

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 1500 LF of 12 inch pipe, 4080 LF of 15 inch pipe, along Clarkwood in Allison WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 1,951,200	$ 1,951,200
Contingency (30%)	$ 0	$ 0	$ 585,400	$ 585,400
Mobilization (10%)	$ 0	$ 0	$ 195,200	$ 195,200
Bond (5%)	$ 0	$ 0	$ 97,600	$ 97,600
OH&P (10%)	$ 0	$ 0	$ 195,200	$ 195,200
Design & Inspection (15%)	$ 0	$ 0	$ 292,700	$ 292,700
Total	**$ 0**	**$ 0**	**$ 3,317,300**	**$ 3,317,300**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 29 of 238

Project: I-37

WWTP Service Area: Allison

Lift Station Sewershed: Sharpsburg

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 669

Current Peak Flow (gpm): 4,747

10-Year Peak Flow (gpm): 5,609

Ultimate Peak Flow (gpm): 8,850

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 430 LF of 42 inch pipe, along I-37 in Allison WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 361,400	$ 361,400
Contingency (30%)	$ 0	$ 0	$ 108,500	$ 108,500
Mobilization (10%)	$ 0	$ 0	$ 36,200	$ 36,200
Bond (5%)	$ 0	$ 0	$ 18,100	$ 18,100
OH&P (10%)	$ 0	$ 0	$ 36,200	$ 36,200
Design & Inspection (15%)	$ 0	$ 0	$ 54,300	$ 54,300
Total	**$ 0**	**$ 0**	**$ 614,700**	**$ 614,700**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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Capital Improvement Plan

City of Corpus Christi, Texas

Project # 30 of 238

Project: Sharpsburg Section 1

WWTP Service Area: Allison

Lift Station Sewershed: Sharpsburg

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 669

Current Peak Flow (gpm): 4,747

10-Year Peak Flow (gpm): 5,609

Ultimate Peak Flow (gpm): 8,850

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 140 LF of 42 inch pipe, along Sharpsburg Section 1 in Allison WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 118,400	$ 118,400
Contingency (30%)	$ 0	$ 0	$ 35,600	$ 35,600
Mobilization (10%)	$ 0	$ 0	$ 11,900	$ 11,900
Bond (5%)	$ 0	$ 0	$ 6,000	$ 6,000
OH&P (10%)	$ 0	$ 0	$ 11,900	$ 11,900
Design & Inspection (15%)	$ 0	$ 0	$ 17,800	$ 17,800
Total	**$ 0**	**$ 0**	**$ 201,600**	**$ 201,600**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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Capital Improvement Plan

City of Corpus Christi, Texas

Project # 31 of 238

Project: Cynthia

WWTP Service Area: Allison

Lift Station Sewershed: Sharpsburg

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 669

Current Peak Flow (gpm): 4,747

10-Year Peak Flow (gpm): 5,609

Ultimate Peak Flow (gpm): 8,850

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 1000 LF of 15 inch pipe, along Cynthia in Allison WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 334,200	$ 0	$ 0	$ 334,200
Contingency (30%)	$ 100,300	$ 0	$ 0	$ 100,300
Mobilization (10%)	$ 33,500	$ 0	$ 0	$ 33,500
Bond (5%)	$ 16,800	$ 0	$ 0	$ 16,800
OH&P (10%)	$ 33,500	$ 0	$ 0	$ 33,500
Design & Inspection (15%)	$ 50,200	$ 0	$ 0	$ 50,200
Total	**$ 568,500**	**$ 0**	**$ 0**	**$ 568,500**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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Capital Improvement Plan

City of Corpus Christi, Texas

Project # 32 of 238

Project: Sharpsburg Section 2

WWTP Service Area: Allison

Lift Station Sewershed: Sharpsburg

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 669

Current Peak Flow (gpm): 4,747

10-Year Peak Flow (gpm): 5,609

Ultimate Peak Flow (gpm): 8,850

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 1200 LF of 15 inch pipe, along Sharpsburg Section 2 in Allison WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 454,700	$ 0	$ 0	$ 454,700
Contingency (30%)	$ 136,500	$ 0	$ 0	$ 136,500
Mobilization (10%)	$ 45,500	$ 0	$ 0	$ 45,500
Bond (5%)	$ 22,800	$ 0	$ 0	$ 22,800
OH&P (10%)	$ 33,500	$ 0	$ 0	$ 33,500
Design & Inspection (15%)	$ 68,300	$ 0	$ 0	$ 68,300
Total	**$ 761,300**	**$ 0**	**$ 0**	**$ 761,300**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 33 of 238

Project: Zamora

WWTP Service Area: Allison

Lift Station Sewershed: Sharpsburg

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 669

Current Peak Flow (gpm): 4,747

10-Year Peak Flow (gpm): 5,609

Ultimate Peak Flow (gpm): 8,850

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 540 LF of 12 inch pipe, 460 LF of 15 inch pipe, along Zamora in Allison WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 360,500	$ 360,500
Contingency (30%)	$ 0	$ 0	$ 108,200	$ 108,200
Mobilization (10%)	$ 0	$ 0	$ 36,100	$ 36,100
Bond (5%)	$ 0	$ 0	$ 18,100	$ 18,100
OH&P (10%)	$ 0	$ 0	$ 36,100	$ 36,100
Design & Inspection (15%)	$ 0	$ 0	$ 54,100	$ 54,100
Total	**$ 0**	**$ 0**	**$ 613,100**	**$ 613,100**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 34 of 238

Project: Hearn

WWTP Service Area: Allison

Lift Station Sewershed: Sharpsburg

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 669

Current Peak Flow (gpm): 4,747

10-Year Peak Flow (gpm): 5,609

Ultimate Peak Flow (gpm): 8,850

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 1850 LF of 24 inch pipe, along Hearn in Allison WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 960,800	$ 960,800
Contingency (30%)	$ 0	$ 0	$ 288,300	$ 288,300
Mobilization (10%)	$ 0	$ 0	$ 96,100	$ 96,100
Bond (5%)	$ 0	$ 0	$ 48,100	$ 48,100
OH&P (10%)	$ 0	$ 0	$ 96,100	$ 96,100
Design & Inspection (15%)	$ 0	$ 0	$ 144,200	$ 144,200
Total	**$ 0**	**$ 0**	**$ 1,633,600**	**$ 1,633,600**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 35 of 238

Project: Loma Alta Section 1

WWTP Service Area: Allison

Lift Station Sewershed: Sharpsburg

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 669

Current Peak Flow (gpm): 4,747

10-Year Peak Flow (gpm): 5,609

Ultimate Peak Flow (gpm): 8,850

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 940 LF of 24 inch pipe, along Loma Alta Section 1 in Allison WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 487,200	$ 487,200
Contingency (30%)	$ 0	$ 0	$ 146,200	$ 146,200
Mobilization (10%)	$ 0	$ 0	$ 48,800	$ 48,800
Bond (5%)	$ 0	$ 0	$ 24,400	$ 24,400
OH&P (10%)	$ 0	$ 0	$ 48,800	$ 48,800
Design & Inspection (15%)	$ 0	$ 0	$ 73,100	$ 73,100
Total	**$ 0**	**$ 0**	**$ 828,500**	**$ 828,500**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 36 of 238

Project: Country Estates

WWTP Service Area: Allison

Lift Station Sewershed: Sharpsburg

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 669

Current Peak Flow (gpm): 4,747

10-Year Peak Flow (gpm): 5,609

Ultimate Peak Flow (gpm): 8,850

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 360 LF of 10 inch pipe, along Country Estates in Allison WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 90,500	$ 90,500
Contingency (30%)	$ 0	$ 0	$ 27,200	$ 27,200
Mobilization (10%)	$ 0	$ 0	$ 9,100	$ 9,100
Bond (5%)	$ 0	$ 0	$ 4,600	$ 4,600
OH&P (10%)	$ 0	$ 0	$ 9,100	$ 9,100
Design & Inspection (15%)	$ 0	$ 0	$ 13,600	$ 13,600
Total	**$ 0**	**$ 0**	**$ 154,100**	**$ 154,100**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 37 of 238

Project: Leopard Section 1

WWTP Service Area: Allison

Lift Station Sewershed: Sharpsburg

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 669

Current Peak Flow (gpm): 4,747

10-Year Peak Flow (gpm): 5,609

Ultimate Peak Flow (gpm): 8,850

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 1010 LF of 30 inch pipe, along Leopard Section 1 in Allison WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 537,500	$ 537,500
Contingency (30%)	$ 0	$ 0	$ 161,300	$ 161,300
Mobilization (10%)	$ 0	$ 0	$ 53,800	$ 53,800
Bond (5%)	$ 0	$ 0	$ 26,900	$ 26,900
OH&P (10%)	$ 0	$ 0	$ 53,800	$ 53,800
Design & Inspection (15%)	$ 0	$ 0	$ 80,700	$ 80,700
Total	**$ 0**	**$ 0**	**$ 914,000**	**$ 914,000**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 38 of 238

Project: Loma Alta Section 2

WWTP Service Area: Allison

Lift Station Sewershed: Sharpsburg

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 669

Current Peak Flow (gpm): 4,747

10-Year Peak Flow (gpm): 5,609

Ultimate Peak Flow (gpm): 8,850

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 740 LF of 30 inch pipe, along Loma Alta Section 2 in Allison WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 393,400	$ 393,400
Contingency (30%)	$ 0	$ 0	$ 118,100	$ 118,100
Mobilization (10%)	$ 0	$ 0	$ 39,400	$ 39,400
Bond (5%)	$ 0	$ 0	$ 19,700	$ 19,700
OH&P (10%)	$ 0	$ 0	$ 39,400	$ 39,400
Design & Inspection (15%)	$ 0	$ 0	$ 59,100	$ 59,100
Total	**$ 0**	**$ 0**	**$ 669,100**	**$ 669,100**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 39 of 238

Project: Northwest

WWTP Service Area: Allison

Lift Station Sewershed: Sharpsburg

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 669

Current Peak Flow (gpm): 4,747

10-Year Peak Flow (gpm): 5,609

Ultimate Peak Flow (gpm): 8,850

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 940 LF of 15 inch pipe, along Northwest in Allison WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 292,200	$ 292,200
Contingency (30%)	$ 0	$ 0	$ 87,700	$ 87,700
Mobilization (10%)	$ 0	$ 0	$ 29,300	$ 29,300
Bond (5%)	$ 0	$ 0	$ 14,700	$ 14,700
OH&P (10%)	$ 0	$ 0	$ 29,300	$ 29,300
Design & Inspection (15%)	$ 0	$ 0	$ 43,900	$ 43,900
Total	**$ 0**	**$ 0**	**$ 497,100**	**$ 497,100**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 40 of 238

Project: Perry

WWTP Service Area: Allison

Lift Station Sewershed: Sharpsburg

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 669

Current Peak Flow (gpm): 4,747

10-Year Peak Flow (gpm): 5,609

Ultimate Peak Flow (gpm): 8,850

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 1360 LF of 15 inch pipe, 780 LF of 18 inch pipe, along Perry in Allison WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 718,200	$ 718,200
Contingency (30%)	$ 0	$ 0	$ 215,500	$ 215,500
Mobilization (10%)	$ 0	$ 0	$ 71,900	$ 71,900
Bond (5%)	$ 0	$ 0	$ 36,000	$ 36,000
OH&P (10%)	$ 0	$ 0	$ 71,900	$ 71,900
Design & Inspection (15%)	$ 0	$ 0	$ 107,800	$ 107,800
Total	**$ 0**	**$ 0**	**$ 1,221,300**	**$ 1,221,300**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 41 of 238

Project: Leopard Section 2

WWTP Service Area: Allison

Lift Station Sewershed: Stillwell

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 92

Current Peak Flow (gpm): 241

10-Year Peak Flow (gpm): 257

Ultimate Peak Flow (gpm): 782

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 220 LF of 16 inch pipe, along Leopard Section 2 in Allison WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 82,900	$ 82,900
Contingency (30%)	$ 0	$ 0	$ 24,900	$ 24,900
Mobilization (10%)	$ 0	$ 0	$ 8,300	$ 8,300
Bond (5%)	$ 0	$ 0	$ 4,200	$ 4,200
OH&P (10%)	$ 0	$ 0	$ 8,300	$ 8,300
Design & Inspection (15%)	$ 0	$ 0	$ 12,500	$ 12,500
Total	**$ 0**	**$ 0**	**$ 141,100**	**$ 141,100**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 42 of 238

Project: Main

WWTP Service Area: Allison

Lift Station Sewershed: Stillwell

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 92

Current Peak Flow (gpm): 241

10-Year Peak Flow (gpm): 257

Ultimate Peak Flow (gpm): 782

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 2600 LF of 16 inch pipe, along Main in Allison WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 927,500	$ 927,500
Contingency (30%)	$ 0	$ 0	$ 278,300	$ 278,300
Mobilization (10%)	$ 0	$ 0	$ 92,800	$ 92,800
Bond (5%)	$ 0	$ 0	$ 46,400	$ 46,400
OH&P (10%)	$ 0	$ 0	$ 92,800	$ 92,800
Design & Inspection (15%)	$ 0	$ 0	$ 139,200	$ 139,200
Total	**$ 0**	**$ 0**	**$ 1,577,000**	**$ 1,577,000**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 43 of 238

Project: Stillwell

WWTP Service Area: Allison

Lift Station Sewershed: Stillwell

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 92

Current Peak Flow (gpm): 241

10-Year Peak Flow (gpm): 257

Ultimate Peak Flow (gpm): 782

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 760 LF of 16 inch pipe, along Stillwell in Allison WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 286,400	$ 286,400
Contingency (30%)	$ 0	$ 0	$ 86,000	$ 86,000
Mobilization (10%)	$ 0	$ 0	$ 28,700	$ 28,700
Bond (5%)	$ 0	$ 0	$ 14,400	$ 14,400
OH&P (10%)	$ 0	$ 0	$ 28,700	$ 28,700
Design & Inspection (15%)	$ 0	$ 0	$ 43,000	$ 43,000
Total	**$ 0**	**$ 0**	**$ 487,200**	**$ 487,200**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 44 of 238

Project: Santa Gertrudis

WWTP Service Area: Allison

Lift Station Sewershed: WoodRiver

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 61

Current Peak Flow (gpm): 314

10-Year Peak Flow (gpm): 351

Ultimate Peak Flow (gpm): 456

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 110 LF of 10 inch pipe, along Santa Gertrudis in Allison WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 40,200	$ 40,200
Contingency (30%)	$ 0	$ 0	$ 12,100	$ 12,100
Mobilization (10%)	$ 0	$ 0	$ 4,100	$ 4,100
Bond (5%)	$ 0	$ 0	$ 2,100	$ 2,100
OH&P (10%)	$ 0	$ 0	$ 4,100	$ 4,100
Design & Inspection (15%)	$ 0	$ 0	$ 6,100	$ 6,100
Total	**$ 0**	**$ 0**	**$ 68,700**	**$ 68,700**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 45 of 238

Project: Beacon

WWTP Service Area: Allison

Lift Station Sewershed: Allison Gravity

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 3,423

Current Peak Flow (gpm): 13,758

10-Year Peak Flow (gpm): 13,908

Ultimate Peak Flow (gpm): 14,227

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 1130 LF of 12 inch pipe, 1430 LF of 16 inch pipe, along Beacon in Allison WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 788,400	$ 788,400
Contingency (30%)	$ 0	$ 0	$ 236,600	$ 236,600
Mobilization (10%)	$ 0	$ 0	$ 78,900	$ 78,900
Bond (5%)	$ 0	$ 0	$ 39,500	$ 39,500
OH&P (10%)	$ 0	$ 0	$ 78,900	$ 78,900
Design & Inspection (15%)	$ 0	$ 0	$ 118,300	$ 118,300
Total	**$ 0**	**$ 0**	**$ 1,340,600**	**$ 1,340,600**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 46 of 238

Project: Antelope

WWTP Service Area: Broadway

Lift Station Sewershed: Resaca

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 2,830

Current Peak Flow (gpm): 5,016

10-Year Peak Flow (gpm): 5,175

Ultimate Peak Flow (gpm): 5,513

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Upgrade gravity pipes in order to meet current flow conditions. Replace existing pipe with: 4820 LF of 30 inch pipe, along Antelope in Broadway WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 2,614,600	$ 0	$ 0	$ 2,614,600
Contingency (30%)	$ 784,400	$ 0	$ 0	$ 784,400
Mobilization (10%)	$ 261,500	$ 0	$ 0	$ 261,500
Bond (5%)	$ 130,800	$ 0	$ 0	$ 130,800
OH&P (10%)	$ 261,500	$ 0	$ 0	$ 261,500
Design & Inspection (15%)	$ 392,200	$ 0	$ 0	$ 392,200
Total	**$ 4,445,000**	**$ 0**	**$ 0**	**$ 4,445,000**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 47 of 238

Project: Leigh

WWTP Service Area: Broadway

Lift Station Sewershed: Resaca

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 2,830

Current Peak Flow (gpm): 5,016

10-Year Peak Flow (gpm): 5,175

Ultimate Peak Flow (gpm): 5,513

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Upgrade gravity pipes in order to meet current flow conditions. Replace existing pipe with: 500 LF of 10 inch pipe, along Leigh in Broadway WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 178,600	$ 0	$ 0	$ 178,600
Contingency (30%)	$ 53,600	$ 0	$ 0	$ 53,600
Mobilization (10%)	$ 17,900	$ 0	$ 0	$ 17,900
Bond (5%)	$ 9,000	$ 0	$ 0	$ 9,000
OH&P (10%)	$ 17,900	$ 0	$ 0	$ 17,900
Design & Inspection (15%)	$ 26,800	$ 0	$ 0	$ 26,800
Total	**$ 303,800**	**$ 0**	**$ 0**	**$ 303,800**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 48 of 238

Project: Leopard Section 3

WWTP Service Area: Broadway

Lift Station Sewershed: Resaca

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 2,830

Current Peak Flow (gpm): 5,016

10-Year Peak Flow (gpm): 5,175

Ultimate Peak Flow (gpm): 5,513

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Upgrade gravity pipes in order to meet current flow conditions. Replace existing pipe with: 710 LF of 10 inch pipe, 450 LF of 20 inch pipe, 520 LF of 24 inch pipe, along Leopard Section 3 in Broadway WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 633,600	$ 0	$ 0	$ 633,600
Contingency (30%)	$ 190,100	$ 0	$ 0	$ 190,100
Mobilization (10%)	$ 63,400	$ 0	$ 0	$ 63,400
Bond (5%)	$ 31,700	$ 0	$ 0	$ 31,700
OH&P (10%)	$ 63,400	$ 0	$ 0	$ 63,400
Design & Inspection (15%)	$ 95,100	$ 0	$ 0	$ 95,100
Total	**$ 1,077,300**	**$ 0**	**$ 0**	**$ 1,077,300**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 49 of 238

Project: Nueces Bay

WWTP Service Area: Broadway

Lift Station Sewershed: Resaca

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 2,830

Current Peak Flow (gpm): 5,016

10-Year Peak Flow (gpm): 5,175

Ultimate Peak Flow (gpm): 5,513

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Upgrade gravity pipes in order to meet current flow conditions. Replace existing pipe with: 460 LF of 18 inch pipe, 420 LF of 24 inch pipe, along Nueces Bay in Broadway WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 368,000	$ 0	$ 0	$ 368,000
Contingency (30%)	$ 110,400	$ 0	$ 0	$ 110,400
Mobilization (10%)	$ 36,800	$ 0	$ 0	$ 36,800
Bond (5%)	$ 18,400	$ 0	$ 0	$ 18,400
OH&P (10%)	$ 36,800	$ 0	$ 0	$ 36,800
Design & Inspection (15%)	$ 55,200	$ 0	$ 0	$ 55,200
Total	**$ 625,600**	**$ 0**	**$ 0**	**$ 625,600**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 50 of 238

Project: Old Robstown

WWTP Service Area: Broadway

Lift Station Sewershed: Resaca

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 2,830

Current Peak Flow (gpm): 5,016

10-Year Peak Flow (gpm): 5,175

Ultimate Peak Flow (gpm): 5,513

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Upgrade gravity pipes in order to meet current flow conditions. Replace existing pipe with: 1380 LF of 16 inch pipe, along Old Robstown in Broadway WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 523,200	$ 0	$ 0	$ 523,200
Contingency (30%)	$ 157,000	$ 0	$ 0	$ 157,000
Mobilization (10%)	$ 52,400	$ 0	$ 0	$ 52,400
Bond (5%)	$ 26,200	$ 0	$ 0	$ 26,200
OH&P (10%)	$ 52,400	$ 0	$ 0	$ 52,400
Design & Inspection (15%)	$ 78,500	$ 0	$ 0	$ 78,500
Total	**$ 889,700**	**$ 0**	**$ 0**	**$ 889,700**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 51 of 238

Project: Up River Section 1

WWTP Service Area: Broadway

Lift Station Sewershed: Resaca

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 2,830

Current Peak Flow (gpm): 5,016

10-Year Peak Flow (gpm): 5,175

Ultimate Peak Flow (gpm): 5,513

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Upgrade gravity pipes in order to meet current flow conditions. Replace existing pipe with: 190 LF of 15 inch pipe, 2220 LF of 20 inch pipe, along Up River Section 1 in Broadway WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 65,000	$ 0	$ 0	$ 65,000
Contingency (30%)	$ 19,500	$ 0	$ 0	$ 19,500
Mobilization (10%)	$ 6,500	$ 0	$ 0	$ 6,500
Bond (5%)	$ 3,300	$ 0	$ 0	$ 3,300
OH&P (10%)	$ 6,500	$ 0	$ 0	$ 6,500
Design & Inspection (15%)	$ 9,800	$ 0	$ 0	$ 9,800
Total	**$ 110,600**	**$ 0**	**$ 0**	**$ 110,600**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 52 of 238

Project: Villa

WWTP Service Area: Broadway

Lift Station Sewershed: Resaca

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 2,830

Current Peak Flow (gpm): 5,016

10-Year Peak Flow (gpm): 5,175

Ultimate Peak Flow (gpm): 5,513

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Upgrade gravity pipes in order to meet current flow conditions. Replace existing pipe with: 1240 LF of 15 inch pipe, along Villa in Broadway WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 393,400	$ 0	$ 0	$ 393,400
Contingency (30%)	$ 118,100	$ 0	$ 0	$ 118,100
Mobilization (10%)	$ 39,400	$ 0	$ 0	$ 39,400
Bond (5%)	$ 19,700	$ 0	$ 0	$ 19,700
OH&P (10%)	$ 39,400	$ 0	$ 0	$ 39,400
Design & Inspection (15%)	$ 59,100	$ 0	$ 0	$ 59,100
Total	**$ 669,100**	**$ 0**	**$ 0**	**$ 669,100**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 53 of 238

Project: Westchester

WWTP Service Area: Broadway

Lift Station Sewershed: Resaca

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 2,830

Current Peak Flow (gpm): 5,016

10-Year Peak Flow (gpm): 5,175

Ultimate Peak Flow (gpm): 5,513

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 320 LF of 10 inch pipe, along Westchester in Broadway WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 78,600	$ 0	$ 0	$ 78,600
Contingency (30%)	$ 23,600	$ 0	$ 0	$ 23,600
Mobilization (10%)	$ 7,900	$ 0	$ 0	$ 7,900
Bond (5%)	$ 4,000	$ 0	$ 0	$ 4,000
OH&P (10%)	$ 7,900	$ 0	$ 0	$ 7,900
Design & Inspection (15%)	$ 11,800	$ 0	$ 0	$ 11,800
Total	**$ 133,800**	**$ 0**	**$ 0**	**$ 133,800**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 54 of 238

Project: Edwards

WWTP Service Area: Greenwood

Lift Station Sewershed: Arcadia

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 418

Current Peak Flow (gpm): 6,101

10-Year Peak Flow (gpm): 6,101

Ultimate Peak Flow (gpm): 4,100

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 1370 LF of 10 inch pipe, along Edwards in Greenwood WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 376,300	$ 0	$ 0	$ 376,300
Contingency (30%)	$ 112,900	$ 0	$ 0	$ 112,900
Mobilization (10%)	$ 37,700	$ 0	$ 0	$ 37,700
Bond (5%)	$ 18,900	$ 0	$ 0	$ 18,900
OH&P (10%)	$ 37,700	$ 0	$ 0	$ 37,700
Design & Inspection (15%)	$ 56,500	$ 0	$ 0	$ 56,500
Total	**$ 640,000**	**$ 0**	**$ 0**	**$ 640,000**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 55 of 238

Project: Kosar

WWTP Service Area: Greenwood

Lift Station Sewershed: Arcadia

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 418

Current Peak Flow (gpm): 6,101

10-Year Peak Flow (gpm): 6,101

Ultimate Peak Flow (gpm): 4,100

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 300 LF of 18 inch pipe, 70 LF of 20 inch pipe, 170 LF of 24 inch pipe, along Kosar in Greenwood WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 256,400	$ 0	$ 0	$ 256,400
Contingency (30%)	$ 77,000	$ 0	$ 0	$ 77,000
Mobilization (10%)	$ 25,700	$ 0	$ 0	$ 25,700
Bond (5%)	$ 12,900	$ 0	$ 0	$ 12,900
OH&P (10%)	$ 25,700	$ 0	$ 0	$ 25,700
Design & Inspection (15%)	$ 38,500	$ 0	$ 0	$ 38,500
Total	**$ 436,200**	**$ 0**	**$ 0**	**$ 436,200**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 56 of 238

Project: Naples

WWTP Service Area: Greenwood

Lift Station Sewershed: Arcadia

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 418

Current Peak Flow (gpm): 6,101

10-Year Peak Flow (gpm): 6,101

Ultimate Peak Flow (gpm): 4,100

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 3140 LF of 18 inch pipe, along Naples in Greenwood WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 1,349,400	$ 0	$ 0	$ 1,349,400
Contingency (30%)	$ 404,900	$ 0	$ 0	$ 404,900
Mobilization (10%)	$ 135,000	$ 0	$ 0	$ 135,000
Bond (5%)	$ 67,500	$ 0	$ 0	$ 67,500
OH&P (10%)	$ 135,000	$ 0	$ 0	$ 135,000
Design & Inspection (15%)	$ 202,500	$ 0	$ 0	$ 202,500
Total	**$ 2,294,300**	**$ 0**	**$ 0**	**$ 2,294,300**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 57 of 238

Project: Shely

WWTP Service Area: Greenwood

Lift Station Sewershed: Arcadia

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 418

Current Peak Flow (gpm): 6,101

10-Year Peak Flow (gpm): 6,101

Ultimate Peak Flow (gpm): 4,100

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 860 LF of 12 inch pipe, along Shely in Greenwood WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 223,100	$ 0	$ 0	$ 223,100
Contingency (30%)	$ 67,000	$ 0	$ 0	$ 67,000
Mobilization (10%)	$ 22,400	$ 0	$ 0	$ 22,400
Bond (5%)	$ 11,200	$ 0	$ 0	$ 11,200
OH&P (10%)	$ 22,400	$ 0	$ 0	$ 22,400
Design & Inspection (15%)	$ 33,500	$ 0	$ 0	$ 33,500
Total	**$ 379,600**	**$ 0**	**$ 0**	**$ 379,600**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 58 of 238

Project: Staples Section 1

WWTP Service Area: Greenwood

Lift Station Sewershed: Arcadia

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 418

Current Peak Flow (gpm): 6,101

10-Year Peak Flow (gpm): 6,101

Ultimate Peak Flow (gpm): 4,100

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 1340 LF of 20 inch pipe, along Staples Section 1 in Greenwood WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 567,100	$ 0	$ 0	$ 567,100
Contingency (30%)	$ 170,200	$ 0	$ 0	$ 170,200
Mobilization (10%)	$ 56,800	$ 0	$ 0	$ 56,800
Bond (5%)	$ 28,400	$ 0	$ 0	$ 28,400
OH&P (10%)	$ 56,800	$ 0	$ 0	$ 56,800
Design & Inspection (15%)	$ 85,100	$ 0	$ 0	$ 85,100
Total	**$ 964,400**	**$ 0**	**$ 0**	**$ 964,400**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 59 of 238

Project: York

WWTP Service Area: Greenwood

Lift Station Sewershed: Arcadia

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 418

Current Peak Flow (gpm): 6,101

10-Year Peak Flow (gpm): 6,101

Ultimate Peak Flow (gpm): 4,100

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 1040 LF of 24 inch pipe, along York in Greenwood WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 419,700	$ 0	$ 0	$ 419,700
Contingency (30%)	$ 126,000	$ 0	$ 0	$ 126,000
Mobilization (10%)	$ 42,000	$ 0	$ 0	$ 42,000
Bond (5%)	$ 21,000	$ 0	$ 0	$ 21,000
OH&P (10%)	$ 42,000	$ 0	$ 0	$ 42,000
Design & Inspection (15%)	$ 63,000	$ 0	$ 0	$ 63,000
Total	**$ 713,700**	**$ 0**	**$ 0**	**$ 713,700**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 60 of 238

Project: Ayers Section 1

WWTP Service Area: Greenwood

Lift Station Sewershed: Greenwood WWTP

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 2,664

Current Peak Flow (gpm): 31,041

10-Year Peak Flow (gpm): 31,717

Ultimate Peak Flow (gpm): 34,599

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 970 LF of 16 inch pipe, along Ayers Section 1 in Greenwood WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 150,500	$ 0	$ 0	$ 150,500
Contingency (30%)	$ 45,200	$ 0	$ 0	$ 45,200
Mobilization (10%)	$ 15,100	$ 0	$ 0	$ 15,100
Bond (5%)	$ 7,600	$ 0	$ 0	$ 7,600
OH&P (10%)	$ 15,100	$ 0	$ 0	$ 15,100
Design & Inspection (15%)	$ 22,600	$ 0	$ 0	$ 22,600
Total	**$ 256,100**	**$ 0**	**$ 0**	**$ 256,100**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 61 of 238

Project: IH-37 Access Road

WWTP Service Area: Greenwood

Lift Station Sewershed: Highway Nine

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 19

Current Peak Flow (gpm): 1,031

10-Year Peak Flow (gpm): 1,178

Ultimate Peak Flow (gpm): 1,331

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 440 LF of 10 inch pipe, 350 LF of 12 inch pipe, 430 LF of 16 inch pipe, along IH-37 Access Road in Greenwood WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 406,200	$ 406,200
Contingency (30%)	$ 0	$ 0	$ 121,900	$ 121,900
Mobilization (10%)	$ 0	$ 0	$ 40,700	$ 40,700
Bond (5%)	$ 0	$ 0	$ 20,400	$ 20,400
OH&P (10%)	$ 0	$ 0	$ 40,700	$ 40,700
Design & Inspection (15%)	$ 0	$ 0	$ 61,000	$ 61,000
Total	**$ 0**	**$ 0**	**$ 690,900**	**$ 690,900**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 62 of 238

Project: Leopard Section 4

WWTP Service Area: Greenwood

Lift Station Sewershed: Highway Nine

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 19

Current Peak Flow (gpm): 1,031

10-Year Peak Flow (gpm): 1,178

Ultimate Peak Flow (gpm): 1,331

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Upgrade gravity pipes in order to meet current flow conditions Replace existing pipe with: 130 LF of 12 inch pipe, 940 LF of 16 inch pipe, along Leopard Section 4 in Greenwood WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 364,900	$ 0	$ 0	$ 364,900
Contingency (30%)	$ 109,500	$ 0	$ 0	$ 109,500
Mobilization (10%)	$ 36,500	$ 0	$ 0	$ 36,500
Bond (5%)	$ 18,300	$ 0	$ 0	$ 18,300
OH&P (10%)	$ 36,500	$ 0	$ 0	$ 36,500
Design & Inspection (15%)	$ 54,800	$ 0	$ 0	$ 54,800
Total	**$ 620,500**	**$ 0**	**$ 0**	**$ 620,500**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 63 of 238

Project: Carroll

WWTP Service Area: Greenwood

Lift Station Sewershed: Kostoryz

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 407

Current Peak Flow (gpm): 11,532

10-Year Peak Flow (gpm): 10,530

Ultimate Peak Flow (gpm): 10,530

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 320 LF of 16 inch pipe, 1370 LF of 20 inch pipe, 1260 LF of 24 inch pipe, along Carroll in Greenwood WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 1,300,400	$ 1,300,400
Contingency (30%)	$ 0	$ 0	$ 390,200	$ 390,200
Mobilization (10%)	$ 0	$ 0	$ 130,100	$ 130,100
Bond (5%)	$ 0	$ 0	$ 65,100	$ 65,100
OH&P (10%)	$ 0	$ 0	$ 130,100	$ 130,100
Design & Inspection (15%)	$ 0	$ 0	$ 195,100	$ 195,100
Total	**$ 0**	**$ 0**	**$ 2,211,000**	**$ 2,211,000**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 64 of 238

Project: Cresthill

WWTP Service Area: Greenwood

Lift Station Sewershed: Kostoryz

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 407

Current Peak Flow (gpm): 11,532

10-Year Peak Flow (gpm): 10,530

Ultimate Peak Flow (gpm): 10,530

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 200 LF of 12 inch pipe, 520 LF of 16 inch pipe, along Cresthill in Greenwood WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 290,500	$ 290,500
Contingency (30%)	$ 0	$ 0	$ 87,200	$ 87,200
Mobilization (10%)	$ 0	$ 0	$ 29,100	$ 29,100
Bond (5%)	$ 0	$ 0	$ 14,600	$ 14,600
OH&P (10%)	$ 0	$ 0	$ 29,100	$ 29,100
Design & Inspection (15%)	$ 0	$ 0	$ 43,600	$ 43,600
Total	**$ 0**	**$ 0**	**$ 494,100**	**$ 494,100**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 65 of 238

Project: Kostoryz

WWTP Service Area: Greenwood

Lift Station Sewershed: Kostoryz

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 407

Current Peak Flow (gpm): 11,532

10-Year Peak Flow (gpm): 10,530

Ultimate Peak Flow (gpm): 10,530

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 4310 LF of 16 inch pipe, 3630 LF of 20 inch pipe, 1130 LF of 24 inch pipe, 40 LF of 42 inch pipe, 120 LF of 48 inch pipe, along Kostoryz in Greenwood WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 4,110,300	$ 4,110,300
Contingency (30%)	$ 0	$ 0	$ 1,233,100	$ 1,233,100
Mobilization (10%)	$ 0	$ 0	$ 411,100	$ 411,100
Bond (5%)	$ 0	$ 0	$ 205,600	$ 205,600
OH&P (10%)	$ 0	$ 0	$ 411,100	$ 411,100
Design & Inspection (15%)	$ 0	$ 0	$ 616,600	$ 616,600
Total	**$ 0**	**$ 0**	**$ 6,987,800**	**$ 6,987,800**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 66 of 238

Project: Benys

WWTP Service Area: Greenwood

Lift Station Sewershed: McBride

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 736

Current Peak Flow (gpm): 7,787

10-Year Peak Flow (gpm): 6,900

Ultimate Peak Flow (gpm): 6,900

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Upgrade gravity pipes in order to meet current flow conditions Replace existing pipe with: 1260 LF of 16 inch pipe, along Benys in Greenwood WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 466,400	$ 0	$ 0	$ 466,400
Contingency (30%)	$ 140,000	$ 0	$ 0	$ 140,000
Mobilization (10%)	$ 46,700	$ 0	$ 0	$ 46,700
Bond (5%)	$ 23,400	$ 0	$ 0	$ 23,400
OH&P (10%)	$ 46,700	$ 0	$ 0	$ 46,700
Design & Inspection (15%)	$ 70,000	$ 0	$ 0	$ 70,000
Total	**$ 793,200**	**$ 0**	**$ 0**	**$ 793,200**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 67 of 238

Project: Clifton

WWTP Service Area: Greenwood

Lift Station Sewershed: McBride

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 736

Current Peak Flow (gpm): 7,787

10-Year Peak Flow (gpm): 6,900

Ultimate Peak Flow (gpm): 6,900

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Upgrade gravity pipes in order to meet current flow conditions Replace existing pipe with: 750 LF of 16 inch pipe, along Clifton in Greenwood WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 242,600	$ 0	$ 0	$ 242,600
Contingency (30%)	$ 72,800	$ 0	$ 0	$ 72,800
Mobilization (10%)	$ 24,300	$ 0	$ 0	$ 24,300
Bond (5%)	$ 12,200	$ 0	$ 0	$ 12,200
OH&P (10%)	$ 24,300	$ 0	$ 0	$ 24,300
Design & Inspection (15%)	$ 36,400	$ 0	$ 0	$ 36,400
Total	**$ 412,600**	**$ 0**	**$ 0**	**$ 412,600**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 68 of 238

Project: Concho

WWTP Service Area: Greenwood

Lift Station Sewershed: McBride

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 736

Current Peak Flow (gpm): 7,787

10-Year Peak Flow (gpm): 6,900

Ultimate Peak Flow (gpm): 6,900

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Upgrade gravity pipes in order to meet current flow conditions Replace existing pipe with: 990 LF of 20 inch pipe, along Concho in Greenwood WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 539,000	$ 0	$ 0	$ 539,000
Contingency (30%)	$ 161,700	$ 0	$ 0	$ 161,700
Mobilization (10%)	$ 53,900	$ 0	$ 0	$ 53,900
Bond (5%)	$ 27,000	$ 0	$ 0	$ 27,000
OH&P (10%)	$ 53,900	$ 0	$ 0	$ 53,900
Design & Inspection (15%)	$ 80,900	$ 0	$ 0	$ 80,900
Total	**$ 916,400**	**$ 0**	**$ 0**	**$ 916,400**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 69 of 238

Project: Derry

WWTP Service Area: Greenwood

Lift Station Sewershed: McBride

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 736

Current Peak Flow (gpm): 7,787

10-Year Peak Flow (gpm): 6,900

Ultimate Peak Flow (gpm): 6,900

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Upgrade gravity pipes in order to meet current flow conditions Replace existing pipe with: 410 LF of 16 inch pipe, along Derry in Greenwood WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 133,500	$ 0	$ 0	$ 133,500
Contingency (30%)	$ 40,100	$ 0	$ 0	$ 40,100
Mobilization (10%)	$ 13,400	$ 0	$ 0	$ 13,400
Bond (5%)	$ 6,700	$ 0	$ 0	$ 6,700
OH&P (10%)	$ 13,400	$ 0	$ 0	$ 13,400
Design & Inspection (15%)	$ 20,100	$ 0	$ 0	$ 20,100
Total	**$ 227,200**	**$ 0**	**$ 0**	**$ 227,200**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 70 of 238

Project: Lantana

WWTP Service Area: Greenwood

Lift Station Sewershed: McBride

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 736

Current Peak Flow (gpm): 7,787

10-Year Peak Flow (gpm): 6,900

Ultimate Peak Flow (gpm): 6,900

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Upgrade gravity pipes in order to meet current flow conditions Replace existing pipe with: 2290 LF of 20 inch pipe, along Lantana in Greenwood WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 1,297,500	$ 0	$ 0	$ 1,297,500
Contingency (30%)	$ 389,300	$ 0	$ 0	$ 389,300
Mobilization (10%)	$ 129,800	$ 0	$ 0	$ 129,800
Bond (5%)	$ 64,900	$ 0	$ 0	$ 64,900
OH&P (10%)	$ 129,800	$ 0	$ 0	$ 129,800
Design & Inspection (15%)	$ 194,700	$ 0	$ 0	$ 194,700
Total	**$ 2,206,000**	**$ 0**	**$ 0**	**$ 2,206,000**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 71 of 238

Project: Leopard Section 5

WWTP Service Area: Greenwood

Lift Station Sewershed: McBride

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 736

Current Peak Flow (gpm): 7,787

10-Year Peak Flow (gpm): 6,900

Ultimate Peak Flow (gpm): 6,900

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 2150 LF of 16 inch pipe, along Leopard Section 5 in Greenwood WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 741,500	$ 741,500
Contingency (30%)	$ 0	$ 0	$ 222,500	$ 222,500
Mobilization (10%)	$ 0	$ 0	$ 74,200	$ 74,200
Bond (5%)	$ 0	$ 0	$ 37,100	$ 37,100
OH&P (10%)	$ 0	$ 0	$ 74,200	$ 74,200
Design & Inspection (15%)	$ 0	$ 0	$ 111,300	$ 111,300
Total	**$ 0**	**$ 0**	**$ 1,260,800**	**$ 1,260,800**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 72 of 238

Project: McBride Section 1

WWTP Service Area: Greenwood

Lift Station Sewershed: McBride

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 736

Current Peak Flow (gpm): 7,787

10-Year Peak Flow (gpm): 6,900

Ultimate Peak Flow (gpm): 6,900

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Upgrade gravity pipes in order to meet current flow conditions Replace existing pipe with: 340 LF of 30 inch pipe, along McBride Section 1 in Greenwood WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 221,700	$ 0	$ 0	$ 221,700
Contingency (30%)	$ 66,600	$ 0	$ 0	$ 66,600
Mobilization (10%)	$ 22,200	$ 0	$ 0	$ 22,200
Bond (5%)	$ 11,100	$ 0	$ 0	$ 11,100
OH&P (10%)	$ 22,200	$ 0	$ 0	$ 22,200
Design & Inspection (15%)	$ 33,300	$ 0	$ 0	$ 33,300
Total	**$ 377,100**	**$ 0**	**$ 0**	**$ 377,100**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 73 of 238

Project: Padre Island

WWTP Service Area: Greenwood

Lift Station Sewershed: McBride

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 736

Current Peak Flow (gpm): 7,787

10-Year Peak Flow (gpm): 6,900

Ultimate Peak Flow (gpm): 6,900

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Upgrade gravity pipes in order to meet current flow conditions Replace existing pipe with: 730 LF of 16 inch pipe, 470 LF of 20 inch pipe, along Padre Island in Greenwood WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 445,700	$ 0	$ 0	$ 445,700
Contingency (30%)	$ 133,800	$ 0	$ 0	$ 133,800
Mobilization (10%)	$ 44,600	$ 0	$ 0	$ 44,600
Bond (5%)	$ 22,300	$ 0	$ 1	$ 22,301
OH&P (10%)	$ 44,600	$ 0	$ 1	$ 44,601
Design & Inspection (15%)	$ 66,900	$ 0	$ 1	$ 66,901
Total	**$ 757,900**	**$ 0**	**$ 3**	**$ 757,903**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 74 of 238

Project: Skyline

WWTP Service Area: Greenwood

Lift Station Sewershed: McBride

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 736

Current Peak Flow (gpm): 7,787

10-Year Peak Flow (gpm): 6,900

Ultimate Peak Flow (gpm): 6,900

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Upgrade gravity pipes in order to meet current flow conditions Replace existing pipe with: 310 LF of 16 inch pipe, along Skyline in Greenwood WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 129,500	$ 0	$ 0	$ 129,500
Contingency (30%)	$ 38,900	$ 0	$ 0	$ 38,900
Mobilization (10%)	$ 13,000	$ 0	$ 0	$ 13,000
Bond (5%)	$ 6,500	$ 0	$ 2	$ 6,502
OH&P (10%)	$ 13,000	$ 0	$ 2	$ 13,002
Design & Inspection (15%)	$ 19,500	$ 0	$ 2	$ 19,502
Total	**$ 220,400**	**$ 0**	**$ 6**	**$ 220,406**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 75 of 238

Project: Williams

WWTP Service Area: Oso

Lift Station Sewershed: Oso WWTP

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 8,915

Current Peak Flow (gpm): 49,420

10-Year Peak Flow (gpm): 50,807

Ultimate Peak Flow (gpm): 53,623

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Upgrade gravity pipes in order to meet current flow conditions. Replace existing pipe with: 3160 LF of 21 inch pipe, along Williams in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 1,366,700	$ 0	$ 0	$ 1,366,700
Contingency (30%)	$ 410,100	$ 0	$ 0	$ 410,100
Mobilization (10%)	$ 136,700	$ 0	$ 0	$ 136,700
Bond (5%)	$ 68,400	$ 0	$ 3	$ 68,403
OH&P (10%)	$ 136,700	$ 0	$ 3	$ 136,703
Design & Inspection (15%)	$ 205,100	$ 0	$ 3	$ 205,103
Total	**$ 2,323,700**	**$ 0**	**$ 9**	**$ 2,323,709**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 76 of 238

Project: Up River Section 2

WWTP Service Area: Greenwood

Lift Station Sewershed: McBride

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 736

Current Peak Flow (gpm): 7,787

10-Year Peak Flow (gpm): 6,900

Ultimate Peak Flow (gpm): 6,900

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 3970 LF of 20 inch pipe, along Up River Section 2 in Greenwood WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 2,850,300	$ 2,850,300
Contingency (30%)	$ 0	$ 0	$ 855,100	$ 855,100
Mobilization (10%)	$ 0	$ 0	$ 285,100	$ 285,100
Bond (5%)	$ 0	$ 0	$ 142,600	$ 142,600
OH&P (10%)	$ 0	$ 0	$ 285,100	$ 285,100
Design & Inspection (15%)	$ 0	$ 0	$ 427,600	$ 427,600
Total	**$ 0**	**$ 0**	**$ 4,845,800**	**$ 4,845,800**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 77 of 238

Project: Alaniz

WWTP Service Area: Greenwood

Lift Station Sewershed: Sacky WW

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 140

Current Peak Flow (gpm): 4,755

10-Year Peak Flow (gpm): 4,794

Ultimate Peak Flow (gpm): 4,895

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 700 LF of 12 inch pipe, along Alaniz in Greenwood WWTP Service Area.

Expenditures	**2022-2024**	**2025-2031**	**Ultimate**	**Total**
Direct Construction Cost	$ 0	$ 0	$ 212,000	$ 212,000
Contingency (30%)	$ 0	$ 0	$ 63,600	$ 63,600
Mobilization (10%)	$ 0	$ 0	$ 21,200	$ 21,200
Bond (5%)	$ 0	$ 0	$ 10,600	$ 10,600
OH&P (10%)	$ 0	$ 0	$ 21,200	$ 21,200
Design & Inspection (15%)	$ 0	$ 0	$ 31,800	$ 31,800
Total	**$ 0**	**$ 0**	**$ 360,400**	**$ 360,400**

Funding Sources	**2022-2024**	**2025-2026**	**Ultimate**	**Total**
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 78 of 238

Project: Sacky

WWTP Service Area: Greenwood

Lift Station Sewershed: Sacky WW

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 140

Current Peak Flow (gpm): 4,755

10-Year Peak Flow (gpm): 4,794

Ultimate Peak Flow (gpm): 4,895

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet current flow conditions. Replace existing pipe with: 390 LF of 18 inch pipe, 290 LF of 20 inch pipe, along Sacky in Greenwood WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 276,600	$ 276,600
Contingency (30%)	$ 0	$ 0	$ 83,000	$ 83,000
Mobilization (10%)	$ 0	$ 0	$ 27,700	$ 27,700
Bond (5%)	$ 0	$ 0	$ 13,900	$ 13,900
OH&P (10%)	$ 0	$ 0	$ 27,700	$ 27,700
Design & Inspection (15%)	$ 0	$ 0	$ 41,500	$ 41,500
Total	**$ 0**	**$ 0**	**$ 470,400**	**$ 470,400**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 79 of 238

Project: Ayers Section 2

WWTP Service Area: Greenwood

Lift Station Sewershed: Greenwood WWTP

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 2,664

Current Peak Flow (gpm): 31,041

10-Year Peak Flow (gpm): 31,717

Ultimate Peak Flow (gpm): 34,599

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current and ultimate flow conditions. Replace existing pipe with: 440 LF of 16 inch pipe, 2240 LF of 20 inch pipe, along Ayers Section 2 in Greenwood WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 1,102,600	$ 0	$ 1,104,100	$ 2,206,700
Contingency (30%)	$ 330,800	$ 0	$ 331,300	$ 662,100
Mobilization (10%)	$ 110,300	$ 0	$ 110,500	$ 220,800
Bond (5%)	$ 55,200	$ 0	$ 55,300	$ 110,500
OH&P (10%)	$ 110,300	$ 0	$ 110,500	$ 220,800
Design & Inspection (15%)	$ 165,400	$ 0	$ 165,700	$ 331,100
Total	**$ 1,874,600**	**$ 0**	**$ 1,877,400**	**$ 3,752,000**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 80 of 238

Project: Camargo

WWTP Service Area: Greenwood

Lift Station Sewershed: Greenwood WWTP

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 2,664

Current Peak Flow (gpm): 31,041

10-Year Peak Flow (gpm): 31,717

Ultimate Peak Flow (gpm): 34,599

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 30 LF of 36 inch pipe, along Camargo in Greenwood WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 15,600	$ 15,600
Contingency (30%)	$ 0	$ 0	$ 4,700	$ 4,700
Mobilization (10%)	$ 0	$ 0	$ 1,600	$ 1,600
Bond (5%)	$ 0	$ 0	$ 800	$ 800
OH&P (10%)	$ 0	$ 0	$ 1,600	$ 1,600
Design & Inspection (15%)	$ 0	$ 0	$ 2,400	$ 2,400
Total	**$ 0**	**$ 0**	**$ 26,700**	**$ 26,700**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 81 of 238

Project: Hwy 286

WWTP Service Area: Greenwood

Lift Station Sewershed: Greenwood WWTP

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 2,664

Current Peak Flow (gpm): 31,041

10-Year Peak Flow (gpm): 31,717

Ultimate Peak Flow (gpm): 34,599

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 360 LF of 16 inch pipe, 380 LF of 20 inch pipe, along Hwy 286 in Greenwood WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 310,200	$ 0	$ 0	$ 310,200
Contingency (30%)	$ 93,100	$ 0	$ 0	$ 93,100
Mobilization (10%)	$ 31,100	$ 0	$ 0	$ 31,100
Bond (5%)	$ 15,600	$ 0	$ 0	$ 15,600
OH&P (10%)	$ 31,100	$ 0	$ 0	$ 31,100
Design & Inspection (15%)	$ 46,600	$ 0	$ 0	$ 46,600
Total	**$ 527,700**	**$ 0**	**$ 0**	**$ 527,700**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 82 of 238

Project: McBride Section 2

WWTP Service Area: Greenwood

Lift Station Sewershed: Greenwood WWTP

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 2,664

Current Peak Flow (gpm): 31,041

10-Year Peak Flow (gpm): 31,717

Ultimate Peak Flow (gpm): 34,599

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 1490 LF of 30 inch pipe, along McBride Section 2 in Greenwood WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 729,000	$ 729,000
Contingency (30%)	$ 0	$ 0	$ 218,700	$ 218,700
Mobilization (10%)	$ 0	$ 0	$ 72,900	$ 72,900
Bond (5%)	$ 0	$ 0	$ 36,500	$ 36,500
OH&P (10%)	$ 0	$ 0	$ 72,900	$ 72,900
Design & Inspection (15%)	$ 0	$ 0	$ 109,400	$ 109,400
Total	**$ 0**	**$ 0**	**$ 1,239,400**	**$ 1,239,400**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 83 of 238

Project: Neptune

WWTP Service Area: Greenwood

Lift Station Sewershed: Greenwood WWTP

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 2,664

Current Peak Flow (gpm): 31,041

10-Year Peak Flow (gpm): 31,717

Ultimate Peak Flow (gpm): 34,599

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 640 LF of 10 inch pipe, along Neptune in Greenwood WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 157,300	$ 157,300
Contingency (30%)	$ 0	$ 0	$ 47,200	$ 47,200
Mobilization (10%)	$ 0	$ 0	$ 15,800	$ 15,800
Bond (5%)	$ 0	$ 0	$ 7,900	$ 7,900
OH&P (10%)	$ 0	$ 0	$ 15,800	$ 15,800
Design & Inspection (15%)	$ 0	$ 0	$ 23,600	$ 23,600
Total	**$ 0**	**$ 0**	**$ 267,600**	**$ 267,600**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 84 of 238

Project: Old Brownsville

WWTP Service Area: Greenwood

Lift Station Sewershed: Greenwood WWTP

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 2,664

Current Peak Flow (gpm): 31,041

10-Year Peak Flow (gpm): 31,717

Ultimate Peak Flow (gpm): 34,599

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 2200 LF of 36 inch pipe, along Old Brownsville in Greenwood WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 1,802,100	$ 1,802,100
Contingency (30%)	$ 0	$ 0	$ 540,700	$ 540,700
Mobilization (10%)	$ 0	$ 0	$ 180,300	$ 180,300
Bond (5%)	$ 0	$ 0	$ 90,200	$ 90,200
OH&P (10%)	$ 0	$ 0	$ 180,300	$ 180,300
Design & Inspection (15%)	$ 0	$ 0	$ 270,400	$ 270,400
Total	**$ 0**	**$ 0**	**$ 3,064,000**	**$ 3,064,000**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 85 of 238

Project: Omaha

WWTP Service Area: Greenwood

Lift Station Sewershed: Greenwood WWTP

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 2,664

Current Peak Flow (gpm): 31,041

10-Year Peak Flow (gpm): 31,717

Ultimate Peak Flow (gpm): 34,599

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 620 LF of 10 inch pipe, 1500 LF of 12 inch pipe, 5720 LF of 30 inch pipe, along Omaha in Greenwood WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 4,126,600	$ 4,126,600
Contingency (30%)	$ 0	$ 0	$ 1,238,000	$ 1,238,000
Mobilization (10%)	$ 0	$ 0	$ 412,700	$ 412,700
Bond (5%)	$ 0	$ 0	$ 206,400	$ 206,400
OH&P (10%)	$ 0	$ 0	$ 412,700	$ 412,700
Design & Inspection (15%)	$ 0	$ 0	$ 619,000	$ 619,000
Total	**$ 0**	**$ 0**	**$ 7,015,400**	**$ 7,015,400**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 86 of 238

Project: Santa Elena

WWTP Service Area: Greenwood

Lift Station Sewershed: Greenwood WWTP

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 2,664

Current Peak Flow (gpm): 31,041

10-Year Peak Flow (gpm): 31,717

Ultimate Peak Flow (gpm): 34,599

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 310 LF of 10 inch pipe, along Santa Elena in Greenwood WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 81,000	$ 81,000
Contingency (30%)	$ 0	$ 0	$ 24,300	$ 24,300
Mobilization (10%)	$ 0	$ 0	$ 8,100	$ 8,100
Bond (5%)	$ 0	$ 0	$ 4,100	$ 4,100
OH&P (10%)	$ 0	$ 0	$ 8,100	$ 8,100
Design & Inspection (15%)	$ 0	$ 0	$ 12,200	$ 12,200
Total	**$ 0**	**$ 0**	**$ 137,800**	**$ 137,800**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 87 of 238

Project: Saratoga

WWTP Service Area: Greenwood

Lift Station Sewershed: Greenwood WWTP

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 2,664

Current Peak Flow (gpm): 31,041

10-Year Peak Flow (gpm): 31,717

Ultimate Peak Flow (gpm): 34,599

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 2570 LF of 36 inch pipe, 110 LF of 60 inch pipe, along Saratoga in Greenwood WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 1,803,600	$ 1,803,600
Contingency (30%)	$ 0	$ 0	$ 541,100	$ 541,100
Mobilization (10%)	$ 0	$ 0	$ 180,400	$ 180,400
Bond (5%)	$ 0	$ 0	$ 90,200	$ 90,200
OH&P (10%)	$ 0	$ 0	$ 180,400	$ 180,400
Design & Inspection (15%)	$ 0	$ 0	$ 270,600	$ 270,600
Total	**$ 0**	**$ 0**	**$ 3,066,300**	**$ 3,066,300**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 88 of 238

Project: Belmont

WWTP Service Area: Laguna Madre

Lift Station Sewershed: Laguna Shores

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 887

Current Peak Flow (gpm): 3,946

10-Year Peak Flow (gpm): 3,347

Ultimate Peak Flow (gpm): 3,347

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 410 LF of 24 inch pipe, along Belmont in Laguna Madre WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 166,500	$ 0	$ 0	$ 166,500
Contingency (30%)	$ 50,000	$ 0	$ 0	$ 50,000
Mobilization (10%)	$ 16,700	$ 0	$ 0	$ 16,700
Bond (5%)	$ 8,400	$ 0	$ 0	$ 8,400
OH&P (10%)	$ 16,700	$ 0	$ 0	$ 16,700
Design & Inspection (15%)	$ 25,000	$ 0	$ 0	$ 25,000
Total	**$ 283,300**	**$ 0**	**$ 0**	**$ 283,300**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 89 of 238

Project: Glenoak

WWTP Service Area: Laguna Madre

Lift Station Sewershed: Laguna Shores

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 887

Current Peak Flow (gpm): 3,946

10-Year Peak Flow (gpm): 3,347

Ultimate Peak Flow (gpm): 3,347

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 1790 LF of 12 inch pipe, along Glenoak in Laguna Madre WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 489,700	$ 0	$ 0	$ 489,700
Contingency (30%)	$ 147,000	$ 0	$ 0	$ 147,000
Mobilization (10%)	$ 49,000	$ 0	$ 0	$ 49,000
Bond (5%)	$ 24,500	$ 0	$ 0	$ 24,500
OH&P (10%)	$ 49,000	$ 0	$ 0	$ 49,000
Design & Inspection (15%)	$ 73,500	$ 0	$ 0	$ 73,500
Total	**$ 832,700**	**$ 0**	**$ 0**	**$ 832,700**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 90 of 238

Project: St Bernadine

WWTP Service Area: Laguna Madre

Lift Station Sewershed: Laguna Shores

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 887

Current Peak Flow (gpm): 3,946

10-Year Peak Flow (gpm): 3,347

Ultimate Peak Flow (gpm): 3,347

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 500 LF of 12 inch pipe, along St Bernadine in Laguna Madre WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 129,900	$ 0	$ 0	$ 129,900
Contingency (30%)	$ 39,000	$ 0	$ 0	$ 39,000
Mobilization (10%)	$ 13,000	$ 0	$ 0	$ 13,000
Bond (5%)	$ 6,500	$ 0	$ 0	$ 6,500
OH&P (10%)	$ 13,000	$ 0	$ 0	$ 13,000
Design & Inspection (15%)	$ 19,500	$ 0	$ 0	$ 19,500
Total	**$ 220,900**	**$ 0**	**$ 0**	**$ 220,900**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 91 of 238

Project: Airline

WWTP Service Area: Oso

Lift Station Sewershed: Airline

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 343

Current Peak Flow (gpm): 553

10-Year Peak Flow (gpm): 997

Ultimate Peak Flow (gpm): 1,375

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 620 LF of 20 inch pipe, 1400 LF of 30 inch pipe, 3490 LF of 36 inch pipe, along Airline in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 3,537,600	$ 3,537,600
Contingency (30%)	$ 0	$ 0	$ 1,061,300	$ 1,061,300
Mobilization (10%)	$ 0	$ 0	$ 353,800	$ 353,800
Bond (5%)	$ 0	$ 0	$ 176,900	$ 176,900
OH&P (10%)	$ 0	$ 0	$ 353,800	$ 353,800
Design & Inspection (15%)	$ 0	$ 0	$ 530,700	$ 530,700
Total	**$ 0**	**$ 0**	**$ 6,014,100**	**$ 6,014,100**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 92 of 238

Project: Rodd Field

WWTP Service Area: Oso

Lift Station Sewershed: Airline

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 343

Current Peak Flow (gpm): 553

10-Year Peak Flow (gpm): 997

Ultimate Peak Flow (gpm): 1,375

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 790 LF of 24 inch pipe, 690 LF of 30 inch pipe, along Rodd Field in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 715,800	$ 715,800
Contingency (30%)	$ 0	$ 0	$ 214,800	$ 214,800
Mobilization (10%)	$ 0	$ 0	$ 71,600	$ 71,600
Bond (5%)	$ 0	$ 0	$ 35,800	$ 35,800
OH&P (10%)	$ 0	$ 0	$ 71,600	$ 71,600
Design & Inspection (15%)	$ 0	$ 0	$ 107,400	$ 107,400
Total	**$ 0**	**$ 0**	**$ 1,217,000**	**$ 1,217,000**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 93 of 238

Project: Slough

WWTP Service Area: Oso

Lift Station Sewershed: Airline

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 343

Current Peak Flow (gpm): 553

10-Year Peak Flow (gpm): 997

Ultimate Peak Flow (gpm): 1,375

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 2300 LF of 20 inch pipe, along Slough in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 1,004,600	$ 1,004,600
Contingency (30%)	$ 0	$ 0	$ 301,400	$ 301,400
Mobilization (10%)	$ 0	$ 0	$ 100,500	$ 100,500
Bond (5%)	$ 0	$ 0	$ 50,300	$ 50,300
OH&P (10%)	$ 0	$ 0	$ 100,500	$ 100,500
Design & Inspection (15%)	$ 0	$ 0	$ 150,700	$ 150,700
Total	**$ 0**	**$ 0**	**$ 1,708,000**	**$ 1,708,000**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 94 of 238

Project: Future Rodd Field

WWTP Service Area: Oso

Lift Station Sewershed: Bay Drive WW

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 42

Current Peak Flow (gpm): 189

10-Year Peak Flow (gpm): 514

Ultimate Peak Flow (gpm): 550

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 140 LF of 20 inch pipe, along Future Rodd Field in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 0	$ 0
Contingency (30%)	$ 0	$ 0	$ 0	$ 0
Mobilization (10%)	$ 0	$ 0	$ 0	$ 0
Bond (5%)	$ 0	$ 0	$ 0	$ 0
OH&P (10%)	$ 0	$ 0	$ 0	$ 0
Design & Inspection (15%)	$ 0	$ 0	$ 0	$ 0
Total	**$ 0**	**$ 0**	**$ 0**	**$ 0**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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Capital Improvement Plan

City of Corpus Christi, Texas

Project # 95 of 238

Project: Cherry Hills

WWTP Service Area: Oso

Lift Station Sewershed: Country Club WW

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 348

Current Peak Flow (gpm): 924

10-Year Peak Flow (gpm): 5,500

Ultimate Peak Flow (gpm): 5,500

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 1130 LF of 18 inch pipe, along Cherry Hills in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 668,700	$ 0	$ 0	$ 668,700
Contingency (30%)	$ 200,700	$ 0	$ 0	$ 200,700
Mobilization (10%)	$ 66,900	$ 0	$ 0	$ 66,900
Bond (5%)	$ 33,500	$ 0	$ 0	$ 33,500
OH&P (10%)	$ 66,900	$ 0	$ 0	$ 66,900
Design & Inspection (15%)	$ 100,400	$ 0	$ 0	$ 100,400
Total	**$ 1,137,100**	**$ 0**	**$ 0**	**$ 1,137,100**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 96 of 238

Project: Everhart Section 1

WWTP Service Area: Oso

Lift Station Sewershed: Country Club WW

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 348

Current Peak Flow (gpm): 924

10-Year Peak Flow (gpm): 5,500

Ultimate Peak Flow (gpm): 5,500

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 830 LF of 24 inch pipe, along Everhart Section 1 in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 505,900	$ 0	$ 0	$ 505,900
Contingency (30%)	$ 151,800	$ 0	$ 0	$ 151,800
Mobilization (10%)	$ 50,600	$ 0	$ 0	$ 50,600
Bond (5%)	$ 25,300	$ 0	$ 0	$ 25,300
OH&P (10%)	$ 50,600	$ 0	$ 0	$ 50,600
Design & Inspection (15%)	$ 75,900	$ 0	$ 0	$ 75,900
Total	**$ 860,100**	**$ 0**	**$ 0**	**$ 860,100**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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Capital Improvement Plan

City of Corpus Christi, Texas

Project # 97 of 238

Project: Greenbriar

WWTP Service Area: Oso

Lift Station Sewershed: Country Club WW

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 348

Current Peak Flow (gpm): 924

10-Year Peak Flow (gpm): 5,500

Ultimate Peak Flow (gpm): 5,500

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 1060 LF of 18 inch pipe, along Greenbriar in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 625,800	$ 0	$ 0	$ 625,800
Contingency (30%)	$ 187,800	$ 0	$ 0	$ 187,800
Mobilization (10%)	$ 62,600	$ 0	$ 0	$ 62,600
Bond (5%)	$ 31,300	$ 0	$ 0	$ 31,300
OH&P (10%)	$ 62,600	$ 0	$ 0	$ 62,600
Design & Inspection (15%)	$ 93,900	$ 0	$ 0	$ 93,900
Total	**$ 1,064,000**	**$ 0**	**$ 0**	**$ 1,064,000**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 98 of 238

Project: River Oaks

WWTP Service Area: Oso

Lift Station Sewershed: Country Club WW

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 348

Current Peak Flow (gpm): 924

10-Year Peak Flow (gpm): 5,500

Ultimate Peak Flow (gpm): 5,500

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 320 LF of 12 inch pipe, along River Oaks in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 116,800	$ 116,800
Contingency (30%)	$ 0	$ 0	$ 35,100	$ 35,100
Mobilization (10%)	$ 0	$ 0	$ 11,700	$ 11,700
Bond (5%)	$ 0	$ 0	$ 5,900	$ 5,900
OH&P (10%)	$ 0	$ 0	$ 11,700	$ 11,700
Design & Inspection (15%)	$ 0	$ 0	$ 17,600	$ 17,600
Total	**$ 0**	**$ 0**	**$ 198,800**	**$ 198,800**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 99 of 238

Project: St Andrews

WWTP Service Area: Oso

Lift Station Sewershed: Country Club WW

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 348

Current Peak Flow (gpm): 924

10-Year Peak Flow (gpm): 5,500

Ultimate Peak Flow (gpm): 5,500

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 340 LF of 12 inch pipe, 950 LF of 16 inch pipe, along St Andrews in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 594,000	$ 0	$ 0	$ 594,000
Contingency (30%)	$ 178,200	$ 0	$ 0	$ 178,200
Mobilization (10%)	$ 59,400	$ 0	$ 0	$ 59,400
Bond (5%)	$ 29,700	$ 0	$ 0	$ 29,700
OH&P (10%)	$ 59,400	$ 0	$ 0	$ 59,400
Design & Inspection (15%)	$ 89,100	$ 0	$ 0	$ 89,100
Total	**$ 1,009,800**	**$ 0**	**$ 0**	**$ 1,009,800**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 100 of 238

Project: Alameda

WWTP Service Area: Oso

Lift Station Sewershed: Everhardt and Staples

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 524

Current Peak Flow (gpm): 1,802

10-Year Peak Flow (gpm): 5,263

Ultimate Peak Flow (gpm): 8,725

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 790 LF of 20 inch pipe, along Alameda in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 333,100	$ 333,100
Contingency (30%)	$ 0	$ 0	$ 100,000	$ 100,000
Mobilization (10%)	$ 0	$ 0	$ 33,400	$ 33,400
Bond (5%)	$ 0	$ 0	$ 16,700	$ 16,700
OH&P (10%)	$ 0	$ 0	$ 33,400	$ 33,400
Design & Inspection (15%)	$ 0	$ 0	$ 50,000	$ 50,000
Total	**$ 0**	**$ 0**	**$ 566,600**	**$ 566,600**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 101 of 238

Project: Casa Linda

WWTP Service Area: Oso

Lift Station Sewershed: Everhardt and Staples

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 524

Current Peak Flow (gpm): 1,802

10-Year Peak Flow (gpm): 5,263

Ultimate Peak Flow (gpm): 8,725

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 1840 LF of 12 inch pipe, along Casa Linda in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 552,300	$ 552,300
Contingency (30%)	$ 0	$ 0	$ 165,700	$ 165,700
Mobilization (10%)	$ 0	$ 0	$ 55,300	$ 55,300
Bond (5%)	$ 0	$ 0	$ 27,700	$ 27,700
OH&P (10%)	$ 0	$ 0	$ 55,300	$ 55,300
Design & Inspection (15%)	$ 0	$ 0	$ 82,900	$ 82,900
Total	**$ 0**	**$ 0**	**$ 939,200**	**$ 939,200**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 102 of 238

Project: Sinclair

WWTP Service Area: Oso

Lift Station Sewershed: Everhardt and Staples

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 524

Current Peak Flow (gpm): 1,802

10-Year Peak Flow (gpm): 5,263

Ultimate Peak Flow (gpm): 8,725

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 1620 LF of 20 inch pipe, along Sinclair in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 701,100	$ 701,100
Contingency (30%)	$ 0	$ 0	$ 210,400	$ 210,400
Mobilization (10%)	$ 0	$ 0	$ 70,200	$ 70,200
Bond (5%)	$ 0	$ 0	$ 35,100	$ 35,100
OH&P (10%)	$ 0	$ 0	$ 70,200	$ 70,200
Design & Inspection (15%)	$ 0	$ 0	$ 105,200	$ 105,200
Total	**$ 0**	**$ 0**	**$ 1,192,200**	**$ 1,192,200**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 103 of 238

Project: Staples Section 2

WWTP Service Area: Oso

Lift Station Sewershed: Everhardt and Staples

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 524

Current Peak Flow (gpm): 1,802

10-Year Peak Flow (gpm): 5,263

Ultimate Peak Flow (gpm): 8,725

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 1170 LF of 30 inch pipe, along Staples Section 2 in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 840,300	$ 840,300
Contingency (30%)	$ 0	$ 0	$ 252,100	$ 252,100
Mobilization (10%)	$ 0	$ 0	$ 84,100	$ 84,100
Bond (5%)	$ 0	$ 0	$ 42,100	$ 42,100
OH&P (10%)	$ 0	$ 0	$ 84,100	$ 84,100
Design & Inspection (15%)	$ 0	$ 0	$ 126,100	$ 126,100
Total	**$ 0**	**$ 0**	**$ 1,428,800**	**$ 1,428,800**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 104 of 238

Project: Country Club

WWTP Service Area: Oso

Lift Station Sewershed: Oso WWTP

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 8,915

Current Peak Flow (gpm): 49,420

10-Year Peak Flow (gpm): 50,807

Ultimate Peak Flow (gpm): 53,623

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 260 LF of 24 inch pipe, 2000 LF of 30 inch pipe, along Country Club in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 1,725,900	$ 0	$ 0	$ 1,725,900
Contingency (30%)	$ 517,800	$ 0	$ 0	$ 517,800
Mobilization (10%)	$ 172,600	$ 0	$ 0	$ 172,600
Bond (5%)	$ 86,300	$ 0	$ 0	$ 86,300
OH&P (10%)	$ 172,600	$ 0	$ 0	$ 172,600
Design & Inspection (15%)	$ 258,900	$ 0	$ 0	$ 258,900
Total	**$ 2,934,100**	**$ 0**	**$ 0**	**$ 2,934,100**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 105 of 238

Project: Gaines

WWTP Service Area: Oso

Lift Station Sewershed: Oso WWTP

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 8,915

Current Peak Flow (gpm): 49,420

10-Year Peak Flow (gpm): 50,807

Ultimate Peak Flow (gpm): 53,623

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 4430 LF of 24 inch pipe, along Gaines in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 1,874,100	$ 0	$ 0	$ 1,874,100
Contingency (30%)	$ 562,300	$ 0	$ 0	$ 562,300
Mobilization (10%)	$ 187,500	$ 0	$ 0	$ 187,500
Bond (5%)	$ 93,800	$ 0	$ 0	$ 93,800
OH&P (10%)	$ 187,500	$ 0	$ 0	$ 187,500
Design & Inspection (15%)	$ 281,200	$ 0	$ 0	$ 281,200
Total	**$ 3,186,400**	**$ 0**	**$ 0**	**$ 3,186,400**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 106 of 238

Project: Jarvis

WWTP Service Area: Oso

Lift Station Sewershed: Oso WWTP

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 8,915

Current Peak Flow (gpm): 49,420

10-Year Peak Flow (gpm): 50,807

Ultimate Peak Flow (gpm): 53,623

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 1300 LF of 24 inch pipe, along Jarvis in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 526,900	$ 0	$ 0	$ 526,900
Contingency (30%)	$ 158,100	$ 0	$ 0	$ 158,100
Mobilization (10%)	$ 52,700	$ 0	$ 0	$ 52,700
Bond (5%)	$ 26,400	$ 0	$ 0	$ 26,400
OH&P (10%)	$ 52,700	$ 0	$ 0	$ 52,700
Design & Inspection (15%)	$ 79,100	$ 0	$ 0	$ 79,100
Total	**$ 895,900**	**$ 0**	**$ 0**	**$ 895,900**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 107 of 238

Project: Kentner

WWTP Service Area: Oso

Lift Station Sewershed: Oso WWTP

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 8,915

Current Peak Flow (gpm): 49,420

10-Year Peak Flow (gpm): 50,807

Ultimate Peak Flow (gpm): 53,623

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 5430 LF of 24 inch pipe, 50 LF of 30 inch pipe, along Kentner in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 2,302,900	$ 2,302,900
Contingency (30%)	$ 0	$ 0	$ 690,900	$ 690,900
Mobilization (10%)	$ 0	$ 0	$ 230,300	$ 230,300
Bond (5%)	$ 0	$ 0	$ 115,200	$ 115,200
OH&P (10%)	$ 0	$ 0	$ 230,300	$ 230,300
Design & Inspection (15%)	$ 0	$ 0	$ 345,500	$ 345,500
Total	**$ 0**	**$ 0**	**$ 3,915,100**	**$ 3,915,100**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 108 of 238

Project: Robert

WWTP Service Area: Oso

Lift Station Sewershed: Oso WWTP

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 8,915

Current Peak Flow (gpm): 49,420

10-Year Peak Flow (gpm): 50,807

Ultimate Peak Flow (gpm): 53,623

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 10 LF of 21 inch pipe, 730 LF of 24 inch pipe, along Robert in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 303,200	$ 0	$ 0	$ 303,200
Contingency (30%)	$ 91,000	$ 0	$ 0	$ 91,000
Mobilization (10%)	$ 30,400	$ 0	$ 0	$ 30,400
Bond (5%)	$ 15,200	$ 0	$ 0	$ 15,200
OH&P (10%)	$ 30,400	$ 0	$ 0	$ 30,400
Design & Inspection (15%)	$ 45,500	$ 0	$ 0	$ 45,500
Total	**$ 515,700**	**$ 0**	**$ 0**	**$ 515,700**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 109 of 238

Project: Gollihar Section 1

WWTP Service Area: Oso

Lift Station Sewershed: Oso WWTP

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 8,915

Current Peak Flow (gpm): 49,420

10-Year Peak Flow (gpm): 50,807

Ultimate Peak Flow (gpm): 53,623

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 1290 LF of 20 inch pipe, along Gollihar Section 1 in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 404,500	$ 404,500
Contingency (30%)	$ 0	$ 0	$ 121,400	$ 121,400
Mobilization (10%)	$ 0	$ 0	$ 40,500	$ 40,500
Bond (5%)	$ 0	$ 0	$ 20,300	$ 20,300
OH&P (10%)	$ 0	$ 0	$ 40,500	$ 40,500
Design & Inspection (15%)	$ 0	$ 0	$ 60,700	$ 60,700
Total	**$ 0**	**$ 0**	**$ 687,900**	**$ 687,900**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 110 of 238

Project: Mcardle Section 1

WWTP Service Area: Oso

Lift Station Sewershed: Oso WWTP

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 8,915

Current Peak Flow (gpm): 49,420

10-Year Peak Flow (gpm): 50,807

Ultimate Peak Flow (gpm): 53,623

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 4160 LF of 18 inch pipe, along Mcardle Section 1 in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 1,665,300	$ 0	$ 0	$ 1,665,300
Contingency (30%)	$ 499,600	$ 0	$ 0	$ 499,600
Mobilization (10%)	$ 166,600	$ 0	$ 0	$ 166,600
Bond (5%)	$ 83,300	$ 0	$ 0	$ 83,300
OH&P (10%)	$ 166,600	$ 0	$ 0	$ 166,600
Design & Inspection (15%)	$ 249,800	$ 0	$ 0	$ 249,800
Total	**$ 2,831,200**	**$ 0**	**$ 0**	**$ 2,831,200**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 111 of 238

Project: Nile

WWTP Service Area: Oso

Lift Station Sewershed: Oso WWTP

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 8,915

Current Peak Flow (gpm): 49,420

10-Year Peak Flow (gpm): 50,807

Ultimate Peak Flow (gpm): 53,623

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: 10-yr

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Parallel a 24" pipe next to the existing 42". A 24" at this slope could take all flow from the Perry Place LS branch.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 162,200	$ 162,200
Contingency (30%)	$ 0	$ 0	$ 48,700	$ 48,700
Mobilization (10%)	$ 0	$ 0	$ 16,300	$ 16,300
Bond (5%)	$ 0	$ 0	$ 8,200	$ 8,200
OH&P (10%)	$ 0	$ 0	$ 16,300	$ 16,300
Design & Inspection (15%)	$ 0	$ 0	$ 24,400	$ 24,400
Total	**$ 0**	**$ 0**	**$ 276,100**	**$ 276,100**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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Capital Improvement Plan

City of Corpus Christi, Texas

Project # 112 of 238

Project: Easter

WWTP Service Area: Oso

Lift Station Sewershed: Oso WWTP

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 8,915

Current Peak Flow (gpm): 49,420

10-Year Peak Flow (gpm): 50,807

Ultimate Peak Flow (gpm): 53,623

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 1080 LF of 12 inch pipe, along Easter in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 326,500	$ 0	$ 0	$ 326,500
Contingency (30%)	$ 98,000	$ 0	$ 0	$ 98,000
Mobilization (10%)	$ 32,700	$ 0	$ 0	$ 32,700
Bond (5%)	$ 16,400	$ 0	$ 0	$ 16,400
OH&P (10%)	$ 32,700	$ 0	$ 0	$ 32,700
Design & Inspection (15%)	$ 49,000	$ 0	$ 0	$ 49,000
Total	**$ 555,300**	**$ 0**	**$ 0**	**$ 555,300**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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Capital Improvement Plan

City of Corpus Christi, Texas

Project # 113 of 238

Project: Mcardle Section 2

WWTP Service Area: Oso

Lift Station Sewershed: Oso WWTP

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 8,915

Current Peak Flow (gpm): 49,420

10-Year Peak Flow (gpm): 50,807

Ultimate Peak Flow (gpm): 53,623

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 100 LF of 12 inch pipe, along Mcardle Section 2 in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 29,000	$ 0	$ 0	$ 29,000
Contingency (30%)	$ 8,700	$ 0	$ 0	$ 8,700
Mobilization (10%)	$ 2,900	$ 0	$ 0	$ 2,900
Bond (5%)	$ 1,500	$ 0	$ 0	$ 1,500
OH&P (10%)	$ 2,900	$ 0	$ 0	$ 2,900
Design & Inspection (15%)	$ 4,400	$ 0	$ 0	$ 4,400
Total	**$ 49,400**	**$ 0**	**$ 0**	**$ 49,400**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 114 of 238

Project: Christie

WWTP Service Area: Oso

Lift Station Sewershed: Oso WWTP

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 8,915

Current Peak Flow (gpm): 49,420

10-Year Peak Flow (gpm): 50,807

Ultimate Peak Flow (gpm): 53,623

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 20 LF of 16 inch pipe, 2340 LF of 20 inch pipe, along Christie in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 1,185,800	$ 0	$ 0	$ 1,185,800
Contingency (30%)	$ 355,800	$ 0	$ 0	$ 355,800
Mobilization (10%)	$ 118,600	$ 0	$ 0	$ 118,600
Bond (5%)	$ 59,300	$ 0	$ 0	$ 59,300
OH&P (10%)	$ 118,600	$ 0	$ 0	$ 118,600
Design & Inspection (15%)	$ 177,900	$ 0	$ 0	$ 177,900
Total	**$ 2,016,000**	**$ 0**	**$ 0**	**$ 2,016,000**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 115 of 238

Project: Cuiper

WWTP Service Area: Oso

Lift Station Sewershed: Oso WWTP

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 8,915

Current Peak Flow (gpm): 49,420

10-Year Peak Flow (gpm): 50,807

Ultimate Peak Flow (gpm): 53,623

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 150 LF of 20 inch pipe, along Cuiper in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 78,000	$ 0	$ 0	$ 78,000
Contingency (30%)	$ 23,400	$ 0	$ 0	$ 23,400
Mobilization (10%)	$ 7,800	$ 0	$ 0	$ 7,800
Bond (5%)	$ 3,900	$ 0	$ 0	$ 3,900
OH&P (10%)	$ 7,800	$ 0	$ 0	$ 7,800
Design & Inspection (15%)	$ 11,700	$ 0	$ 0	$ 11,700
Total	**$ 132,600**	**$ 0**	**$ 0**	**$ 132,600**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 116 of 238

Project: Gollihar Section 2

WWTP Service Area: Oso

Lift Station Sewershed: Oso WWTP

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 8,915

Current Peak Flow (gpm): 49,420

10-Year Peak Flow (gpm): 50,807

Ultimate Peak Flow (gpm): 53,623

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 660 LF of 30 inch pipe, along Gollihar Section 2 in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 557,900	$ 0	$ 0	$ 557,900
Contingency (30%)	$ 167,400	$ 0	$ 0	$ 167,400
Mobilization (10%)	$ 55,800	$ 0	$ 0	$ 55,800
Bond (5%)	$ 27,900	$ 0	$ 0	$ 27,900
OH&P (10%)	$ 55,800	$ 0	$ 0	$ 55,800
Design & Inspection (15%)	$ 83,700	$ 0	$ 0	$ 83,700
Total	**$ 948,500**	**$ 0**	**$ 0**	**$ 948,500**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 117 of 238

Project: Santa Fe Section 1

WWTP Service Area: Oso

Lift Station Sewershed: Oso WWTP

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 8,915

Current Peak Flow (gpm): 49,420

10-Year Peak Flow (gpm): 50,807

Ultimate Peak Flow (gpm): 53,623

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 1110 LF of 16 inch pipe, 1220 LF of 18 inch pipe, 9160 LF of 24 inch pipe, 640 LF of 30 inch pipe, along Santa Fe Section 1 in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 5,639,400	$ 0	$ 0	$ 5,639,400
Contingency (30%)	$ 1,691,900	$ 0	$ 0	$ 1,691,900
Mobilization (10%)	$ 564,000	$ 0	$ 0	$ 564,000
Bond (5%)	$ 282,000	$ 0	$ 0	$ 282,000
OH&P (10%)	$ 564,000	$ 0	$ 0	$ 564,000
Design & Inspection (15%)	$ 846,000	$ 0	$ 0	$ 846,000
Total	**$ 9,587,300**	**$ 0**	**$ 0**	**$ 9,587,300**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 118 of 238

Project: Everhart Section 2

WWTP Service Area: Oso

Lift Station Sewershed: Oso WWTP

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 8,915

Current Peak Flow (gpm): 49,420

10-Year Peak Flow (gpm): 50,807

Ultimate Peak Flow (gpm): 53,623

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 4960 LF of 36 inch pipe, along Everhart Section 2 in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 3,059,400	$ 0	$ 0	$ 3,059,400
Contingency (30%)	$ 917,900	$ 0	$ 0	$ 917,900
Mobilization (10%)	$ 306,000	$ 0	$ 0	$ 306,000
Bond (5%)	$ 153,000	$ 0	$ 0	$ 153,000
OH&P (10%)	$ 306,000	$ 0	$ 0	$ 306,000
Design & Inspection (15%)	$ 459,000	$ 0	$ 0	$ 459,000
Total	**$ 5,201,300**	**$ 0**	**$ 0**	**$ 5,201,300**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 119 of 238

Project: Santa Fe Section 2

WWTP Service Area: Oso

Lift Station Sewershed: Oso WWTP

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 8,915

Current Peak Flow (gpm): 49,420

10-Year Peak Flow (gpm): 50,807

Ultimate Peak Flow (gpm): 53,623

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 170 LF of 12 inch pipe, along Santa Fe Section 2 in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 6,100	$ 0	$ 0	$ 6,100
Contingency (30%)	$ 1,900	$ 0	$ 0	$ 1,900
Mobilization (10%)	$ 700	$ 0	$ 0	$ 700
Bond (5%)	$ 400	$ 0	$ 0	$ 400
OH&P (10%)	$ 700	$ 0	$ 0	$ 700
Design & Inspection (15%)	$ 1,000	$ 0	$ 0	$ 1,000
Total	**$ 10,800**	**$ 0**	**$ 0**	**$ 10,800**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 120 of 238

Project: Acushnet

WWTP Service Area: Oso

Lift Station Sewershed: Station 5 WW

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 1,421

Current Peak Flow (gpm): 3,300

10-Year Peak Flow (gpm): 3,185

Ultimate Peak Flow (gpm): 3,125

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 2380 LF of 18 inch pipe, along Acushnet in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 1,138,800	$ 0	$ 0	$ 1,138,800
Contingency (30%)	$ 341,700	$ 0	$ 0	$ 341,700
Mobilization (10%)	$ 113,900	$ 0	$ 0	$ 113,900
Bond (5%)	$ 57,000	$ 0	$ 0	$ 57,000
OH&P (10%)	$ 113,900	$ 0	$ 0	$ 113,900
Design & Inspection (15%)	$ 170,900	$ 0	$ 0	$ 170,900
Total	**$ 1,936,200**	**$ 0**	**$ 0**	**$ 1,936,200**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 121 of 238

Project: Alley (Pvy)

WWTP Service Area: Oso

Lift Station Sewershed: Station 5 WW

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 1,421

Current Peak Flow (gpm): 3,300

10-Year Peak Flow (gpm): 3,185

Ultimate Peak Flow (gpm): 3,125

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 350 LF of 20 inch pipe, 660 LF of 24 inch pipe, 700 LF of 30 inch pipe, along Alley (Pvy) in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 805,400	$ 805,400
Contingency (30%)	$ 0	$ 0	$ 241,700	$ 241,700
Mobilization (10%)	$ 0	$ 0	$ 80,600	$ 80,600
Bond (5%)	$ 0	$ 0	$ 40,300	$ 40,300
OH&P (10%)	$ 0	$ 0	$ 80,600	$ 80,600
Design & Inspection (15%)	$ 0	$ 0	$ 120,900	$ 120,900
Total	**$ 0**	**$ 0**	**$ 1,369,500**	**$ 1,369,500**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 122 of 238

Project: Braesvalley

WWTP Service Area: Oso

Lift Station Sewershed: Station 5 WW

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 1,421

Current Peak Flow (gpm): 3,300

10-Year Peak Flow (gpm): 3,185

Ultimate Peak Flow (gpm): 3,125

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 970 LF of 16 inch pipe, along Braesvalley in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 317,600	$ 0	$ 0	$ 317,600
Contingency (30%)	$ 95,300	$ 0	$ 0	$ 95,300
Mobilization (10%)	$ 31,800	$ 0	$ 0	$ 31,800
Bond (5%)	$ 15,900	$ 0	$ 0	$ 15,900
OH&P (10%)	$ 31,800	$ 0	$ 0	$ 31,800
Design & Inspection (15%)	$ 47,700	$ 0	$ 0	$ 47,700
Total	**$ 540,100**	**$ 0**	**$ 0**	**$ 540,100**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 123 of 238

Project: Everhart Section 3

WWTP Service Area: Oso

Lift Station Sewershed: Station 5 WW

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 1,421

Current Peak Flow (gpm): 3,300

10-Year Peak Flow (gpm): 3,185

Ultimate Peak Flow (gpm): 3,125

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 2890 LF of 20 inch pipe, 440 LF of 21 inch pipe, 130 LF of 24 inch pipe, along Everhart Section 3 in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 1,589,300	$ 0	$ 0	$ 1,589,300
Contingency (30%)	$ 476,800	$ 0	$ 0	$ 476,800
Mobilization (10%)	$ 159,000	$ 0	$ 0	$ 159,000
Bond (5%)	$ 79,500	$ 0	$ 0	$ 79,500
OH&P (10%)	$ 159,000	$ 0	$ 0	$ 159,000
Design & Inspection (15%)	$ 238,400	$ 0	$ 0	$ 238,400
Total	**$ 2,702,000**	**$ 0**	**$ 0**	**$ 2,702,000**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 124 of 238

Project: Middlecoff

WWTP Service Area: Oso

Lift Station Sewershed: Station 5 WW

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 1,421

Current Peak Flow (gpm): 3,300

10-Year Peak Flow (gpm): 3,185

Ultimate Peak Flow (gpm): 3,125

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 1020 LF of 20 inch pipe, along Middlecoff in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 504,600	$ 0	$ 0	$ 504,600
Contingency (30%)	$ 151,400	$ 0	$ 0	$ 151,400
Mobilization (10%)	$ 50,500	$ 0	$ 0	$ 50,500
Bond (5%)	$ 25,300	$ 0	$ 0	$ 25,300
OH&P (10%)	$ 50,500	$ 0	$ 0	$ 50,500
Design & Inspection (15%)	$ 75,700	$ 0	$ 0	$ 75,700
Total	**$ 858,000**	**$ 0**	**$ 0**	**$ 858,000**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 125 of 238

Project: Sanders

WWTP Service Area: Oso

Lift Station Sewershed: Station 5 WW

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 1,421

Current Peak Flow (gpm): 3,300

10-Year Peak Flow (gpm): 3,185

Ultimate Peak Flow (gpm): 3,125

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 180 LF of 18 inch pipe, along Sanders in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 87,600	$ 0	$ 0	$ 87,600
Contingency (30%)	$ 26,300	$ 0	$ 0	$ 26,300
Mobilization (10%)	$ 8,800	$ 0	$ 0	$ 8,800
Bond (5%)	$ 4,400	$ 0	$ 0	$ 4,400
OH&P (10%)	$ 8,800	$ 0	$ 0	$ 8,800
Design & Inspection (15%)	$ 13,200	$ 0	$ 0	$ 13,200
Total	**$ 149,100**	**$ 0**	**$ 0**	**$ 149,100**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 126 of 238

Project: Shadowbend

WWTP Service Area: Oso

Lift Station Sewershed: Station 5 WW

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 1,421

Current Peak Flow (gpm): 3,300

10-Year Peak Flow (gpm): 3,185

Ultimate Peak Flow (gpm): 3,125

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 870 LF of 16 inch pipe, along Shadowbend in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 320,300	$ 0	$ 0	$ 320,300
Contingency (30%)	$ 96,100	$ 0	$ 0	$ 96,100
Mobilization (10%)	$ 32,100	$ 0	$ 0	$ 32,100
Bond (5%)	$ 16,100	$ 0	$ 0	$ 16,100
OH&P (10%)	$ 32,100	$ 0	$ 0	$ 32,100
Design & Inspection (15%)	$ 48,100	$ 0	$ 0	$ 48,100
Total	**$ 544,800**	**$ 0**	**$ 0**	**$ 544,800**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 127 of 238

Project: Staples Section 3

WWTP Service Area: Oso

Lift Station Sewershed: Station 5 WW

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 1,421

Current Peak Flow (gpm): 3,300

10-Year Peak Flow (gpm): 3,185

Ultimate Peak Flow (gpm): 3,125

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 1170 LF of 24 inch pipe, 5140 LF of 30 inch pipe, along Staples Section 3 in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 3,266,500	$ 3,266,500
Contingency (30%)	$ 0	$ 0	$ 980,000	$ 980,000
Mobilization (10%)	$ 0	$ 0	$ 326,700	$ 326,700
Bond (5%)	$ 0	$ 0	$ 163,400	$ 163,400
OH&P (10%)	$ 0	$ 0	$ 326,700	$ 326,700
Design & Inspection (15%)	$ 0	$ 0	$ 490,000	$ 490,000
Total	**$ 0**	**$ 0**	**$ 5,553,300**	**$ 5,553,300**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 128 of 238

Project: Timbergate

WWTP Service Area: Oso

Lift Station Sewershed: Station 5 WW

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 1,421

Current Peak Flow (gpm): 3,300

10-Year Peak Flow (gpm): 3,185

Ultimate Peak Flow (gpm): 3,125

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 1000 LF of 16 inch pipe, 640 LF of 20 inch pipe, along Timbergate in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 589,500	$ 0	$ 0	$ 589,500
Contingency (30%)	$ 176,900	$ 0	$ 0	$ 176,900
Mobilization (10%)	$ 59,000	$ 0	$ 0	$ 59,000
Bond (5%)	$ 29,500	$ 0	$ 0	$ 29,500
OH&P (10%)	$ 59,000	$ 0	$ 0	$ 59,000
Design & Inspection (15%)	$ 88,500	$ 0	$ 0	$ 88,500
Total	**$ 1,002,400**	**$ 0**	**$ 0**	**$ 1,002,400**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 129 of 238

Project: Willowick

WWTP Service Area: Oso

Lift Station Sewershed: Station 5 WW

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 1,421

Current Peak Flow (gpm): 3,300

10-Year Peak Flow (gpm): 3,185

Ultimate Peak Flow (gpm): 3,125

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 1260 LF of 16 inch pipe, along Willowick in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 465,600	$ 0	$ 0	$ 465,600
Contingency (30%)	$ 139,700	$ 0	$ 0	$ 139,700
Mobilization (10%)	$ 46,600	$ 0	$ 0	$ 46,600
Bond (5%)	$ 23,300	$ 0	$ 0	$ 23,300
OH&P (10%)	$ 46,600	$ 0	$ 0	$ 46,600
Design & Inspection (15%)	$ 69,900	$ 0	$ 0	$ 69,900
Total	**$ 791,700**	**$ 0**	**$ 0**	**$ 791,700**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 130 of 238

Project: Del Starr

WWTP Service Area: Oso

Lift Station Sewershed: Williams WW

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 5,637

Current Peak Flow (gpm): 15,000

10-Year Peak Flow (gpm): 14,520

Ultimate Peak Flow (gpm): 14,520

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 610 LF of 18 inch pipe, along Del Starr in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 227,000	$ 0	$ 0	$ 227,000
Contingency (30%)	$ 68,100	$ 0	$ 0	$ 68,100
Mobilization (10%)	$ 22,700	$ 0	$ 0	$ 22,700
Bond (5%)	$ 11,400	$ 0	$ 0	$ 11,400
OH&P (10%)	$ 22,700	$ 0	$ 0	$ 22,700
Design & Inspection (15%)	$ 34,100	$ 0	$ 0	$ 34,100
Total	**$ 386,000**	**$ 0**	**$ 0**	**$ 386,000**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 131 of 238

Project: Everhart Section 4

WWTP Service Area: Oso

Lift Station Sewershed: Williams WW

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 5,637

Current Peak Flow (gpm): 15,000

10-Year Peak Flow (gpm): 14,520

Ultimate Peak Flow (gpm): 14,520

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 1100 LF of 20 inch pipe, along Everhart Section 4 in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 639,900	$ 0	$ 0	$ 639,900
Contingency (30%)	$ 639,900	$ 0	$ 0	$ 639,900
Mobilization (10%)	$ 64,000	$ 0	$ 0	$ 64,000
Bond (5%)	$ 32,000	$ 0	$ 0	$ 32,000
OH&P (10%)	$ 64,000	$ 0	$ 0	$ 64,000
Design & Inspection (15%)	$ 96,000	$ 0	$ 0	$ 96,000
Total	**$ 1,535,800**	**$ 0**	**$ 0**	**$ 1,535,800**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 132 of 238

Project: Kerry

WWTP Service Area: Oso

Lift Station Sewershed: Williams WW

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 5,637

Current Peak Flow (gpm): 15,000

10-Year Peak Flow (gpm): 14,520

Ultimate Peak Flow (gpm): 14,520

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 1590 LF of 18 inch pipe, along Kerry in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 637,500	$ 0	$ 0	$ 637,500
Contingency (30%)	$ 191,300	$ 0	$ 0	$ 191,300
Mobilization (10%)	$ 63,800	$ 0	$ 0	$ 63,800
Bond (5%)	$ 31,900	$ 0	$ 0	$ 31,900
OH&P (10%)	$ 63,800	$ 0	$ 0	$ 63,800
Design & Inspection (15%)	$ 95,700	$ 0	$ 0	$ 95,700
Total	**$ 1,084,000**	**$ 0**	**$ 0**	**$ 1,084,000**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 133 of 238

Project: Kingston

WWTP Service Area: Oso

Lift Station Sewershed: Williams WW

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 5,637

Current Peak Flow (gpm): 15,000

10-Year Peak Flow (gpm): 14,520

Ultimate Peak Flow (gpm): 14,520

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 2790 LF of 30 inch pipe, along Kingston in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 1,380,300	$ 1,380,300
Contingency (30%)	$ 0	$ 0	$ 1,380,300	$ 1,380,300
Mobilization (10%)	$ 0	$ 0	$ 138,100	$ 138,100
Bond (5%)	$ 0	$ 0	$ 69,100	$ 69,100
OH&P (10%)	$ 0	$ 0	$ 138,100	$ 138,100
Design & Inspection (15%)	$ 0	$ 0	$ 207,100	$ 207,100
Total	**$ 0**	**$ 0**	**$ 3,313,000**	**$ 3,313,000**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 134 of 238

Project: Limerick

WWTP Service Area: Oso

Lift Station Sewershed: Williams WW

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 5,637

Current Peak Flow (gpm): 15,000

10-Year Peak Flow (gpm): 14,520

Ultimate Peak Flow (gpm): 14,520

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 550 LF of 20 inch pipe, along Limerick in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 250,300	$ 0	$ 0	$ 250,300
Contingency (30%)	$ 250,300	$ 0	$ 0	$ 250,300
Mobilization (10%)	$ 25,100	$ 0	$ 0	$ 25,100
Bond (5%)	$ 12,600	$ 0	$ 0	$ 12,600
OH&P (10%)	$ 25,100	$ 0	$ 0	$ 25,100
Design & Inspection (15%)	$ 37,600	$ 0	$ 0	$ 37,600
Total	**$ 601,000**	**$ 0**	**$ 0**	**$ 601,000**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 135 of 238

Project: O'Brian

WWTP Service Area: Oso

Lift Station Sewershed: Williams WW

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 5,637

Current Peak Flow (gpm): 15,000

10-Year Peak Flow (gpm): 14,520

Ultimate Peak Flow (gpm): 14,520

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 860 LF of 18 inch pipe, along O'Brian in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 333,000	$ 0	$ 0	$ 333,000
Contingency (30%)	$ 99,900	$ 0	$ 0	$ 99,900
Mobilization (10%)	$ 33,300	$ 0	$ 0	$ 33,300
Bond (5%)	$ 16,700	$ 0	$ 0	$ 16,700
OH&P (10%)	$ 33,300	$ 0	$ 0	$ 33,300
Design & Inspection (15%)	$ 50,000	$ 0	$ 0	$ 50,000
Total	**$ 566,200**	**$ 0**	**$ 0**	**$ 566,200**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 136 of 238

Project: Schanen

WWTP Service Area: Oso

Lift Station Sewershed: Williams WW

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 5,637

Current Peak Flow (gpm): 15,000

10-Year Peak Flow (gpm): 14,520

Ultimate Peak Flow (gpm): 14,520

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Upgrade gravity pipes in order to meet current flow conditions. Replace existing pipe with: 350 LF of 20 inch pipe, along Schanen in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 184,500	$ 0	$ 0	$ 184,500
Contingency (30%)	$ 184,500	$ 0	$ 0	$ 184,500
Mobilization (10%)	$ 18,500	$ 0	$ 0	$ 18,500
Bond (5%)	$ 9,300	$ 0	$ 0	$ 9,300
OH&P (10%)	$ 18,500	$ 0	$ 0	$ 18,500
Design & Inspection (15%)	$ 27,700	$ 0	$ 0	$ 27,700
Total	**$ 443,000**	**$ 0**	**$ 0**	**$ 443,000**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 137 of 238

Project: Shea

WWTP Service Area: Oso

Lift Station Sewershed: Williams WW

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 5,637

Current Peak Flow (gpm): 15,000

10-Year Peak Flow (gpm): 14,520

Ultimate Peak Flow (gpm): 14,520

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Upgrade gravity pipes in order to meet current flow conditions. Replace existing pipe with: 2280 LF of 20 inch pipe, along Shea in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 184,500	$ 0	$ 0	$ 184,500
Contingency (30%)	$ 184,500	$ 0	$ 0	$ 184,500
Mobilization (10%)	$ 18,500	$ 0	$ 0	$ 18,500
Bond (5%)	$ 9,300	$ 0	$ 0	$ 9,300
OH&P (10%)	$ 18,500	$ 0	$ 0	$ 18,500
Design & Inspection (15%)	$ 27,700	$ 0	$ 0	$ 27,700
Total	**$ 443,000**	**$ 0**	**$ 0**	**$ 443,000**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 138 of 238

Project: Audn

WWTP Service Area: Oso

Lift Station Sewershed: Wooldridge WW

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 3,406

Current Peak Flow (gpm): 14,280

10-Year Peak Flow (gpm): 14,848

Ultimate Peak Flow (gpm): 15,080

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 260 LF of 16 inch pipe, along Audn in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 96,700	$ 0	$ 0	$ 96,700
Contingency (30%)	$ 29,100	$ 0	$ 0	$ 29,100
Mobilization (10%)	$ 9,700	$ 0	$ 0	$ 9,700
Bond (5%)	$ 4,900	$ 0	$ 0	$ 4,900
OH&P (10%)	$ 9,700	$ 0	$ 0	$ 9,700
Design & Inspection (15%)	$ 14,600	$ 0	$ 0	$ 14,600
Total	**$ 164,700**	**$ 0**	**$ 0**	**$ 164,700**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 139 of 238

Project: Boardwalk

WWTP Service Area: Oso

Lift Station Sewershed: Wooldridge WW

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 3,406

Current Peak Flow (gpm): 14,280

10-Year Peak Flow (gpm): 14,848

Ultimate Peak Flow (gpm): 15,080

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 900 LF of 16 inch pipe, along Boardwalk in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 291,900	$ 0	$ 0	$ 291,900
Contingency (30%)	$ 87,600	$ 0	$ 0	$ 87,600
Mobilization (10%)	$ 29,200	$ 0	$ 0	$ 29,200
Bond (5%)	$ 14,600	$ 0	$ 0	$ 14,600
OH&P (10%)	$ 29,200	$ 0	$ 0	$ 29,200
Design & Inspection (15%)	$ 43,800	$ 0	$ 0	$ 43,800
Total	**$ 496,300**	**$ 0**	**$ 0**	**$ 496,300**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 140 of 238

Project: Bollinger

WWTP Service Area: Oso

Lift Station Sewershed: Wooldridge WW

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 3,406

Current Peak Flow (gpm): 14,280

10-Year Peak Flow (gpm): 14,848

Ultimate Peak Flow (gpm): 15,080

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 420 LF of 16 inch pipe, along Bollinger in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 137,800	$ 0	$ 0	$ 137,800
Contingency (30%)	$ 41,400	$ 0	$ 0	$ 41,400
Mobilization (10%)	$ 13,800	$ 0	$ 0	$ 13,800
Bond (5%)	$ 6,900	$ 0	$ 0	$ 6,900
OH&P (10%)	$ 13,800	$ 0	$ 0	$ 13,800
Design & Inspection (15%)	$ 20,700	$ 0	$ 0	$ 20,700
Total	**$ 234,400**	**$ 0**	**$ 0**	**$ 234,400**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 141 of 238

Project: Brockhampton

WWTP Service Area: Oso

Lift Station Sewershed: Wooldridge WW

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 3,406

Current Peak Flow (gpm): 14,280

10-Year Peak Flow (gpm): 14,848

Ultimate Peak Flow (gpm): 15,080

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 50 LF of 12 inch pipe, 610 LF of 16 inch pipe, along Brockhampton in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 233,600	$ 0	$ 0	$ 233,600
Contingency (30%)	$ 70,100	$ 0	$ 0	$ 70,100
Mobilization (10%)	$ 23,400	$ 0	$ 0	$ 23,400
Bond (5%)	$ 11,700	$ 0	$ 0	$ 11,700
OH&P (10%)	$ 23,400	$ 0	$ 0	$ 23,400
Design & Inspection (15%)	$ 35,100	$ 0	$ 0	$ 35,100
Total	**$ 397,300**	**$ 0**	**$ 0**	**$ 397,300**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 142 of 238

Project: Cimarron

WWTP Service Area: Oso

Lift Station Sewershed: Wooldridge WW

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 3,406

Current Peak Flow (gpm): 14,280

10-Year Peak Flow (gpm): 14,848

Ultimate Peak Flow (gpm): 15,080

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 280 LF of 12 inch pipe, 2370 LF of 24 inch pipe, 4640 LF of 30 inch pipe, along Cimarron in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 3,504,300	$ 0	$ 0	$ 3,504,300
Contingency (30%)	$ 1,051,300	$ 0	$ 0	$ 1,051,300
Mobilization (10%)	$ 350,500	$ 0	$ 0	$ 350,500
Bond (5%)	$ 175,300	$ 0	$ 0	$ 175,300
OH&P (10%)	$ 350,500	$ 0	$ 0	$ 350,500
Design & Inspection (15%)	$ 525,700	$ 0	$ 0	$ 525,700
Total	**$ 5,957,600**	**$ 0**	**$ 0**	**$ 5,957,600**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 143 of 238

Project: New Bedford

WWTP Service Area: Oso

Lift Station Sewershed: Wooldridge WW

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 3,406

Current Peak Flow (gpm): 14,280

10-Year Peak Flow (gpm): 14,848

Ultimate Peak Flow (gpm): 15,080

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 140 LF of 16 inch pipe, along New Bedford in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 45,500	$ 0	$ 0	$ 45,500
Contingency (30%)	$ 13,700	$ 0	$ 0	$ 13,700
Mobilization (10%)	$ 4,600	$ 0	$ 0	$ 4,600
Bond (5%)	$ 2,300	$ 0	$ 0	$ 2,300
OH&P (10%)	$ 4,600	$ 0	$ 0	$ 4,600
Design & Inspection (15%)	$ 6,900	$ 0	$ 0	$ 6,900
Total	**$ 77,600**	**$ 0**	**$ 0**	**$ 77,600**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 144 of 238

Project: Queen Bess

WWTP Service Area: Oso

Lift Station Sewershed: Wooldridge WW

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 3,406

Current Peak Flow (gpm): 14,280

10-Year Peak Flow (gpm): 14,848

Ultimate Peak Flow (gpm): 15,080

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 1130 LF of 20 inch pipe, along Queen Bess in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 458,300	$ 0	$ 0	$ 458,300
Contingency (30%)	$ 137,500	$ 0	$ 0	$ 137,500
Mobilization (10%)	$ 45,900	$ 0	$ 0	$ 45,900
Bond (5%)	$ 23,000	$ 0	$ 0	$ 23,000
OH&P (10%)	$ 45,900	$ 0	$ 0	$ 45,900
Design & Inspection (15%)	$ 68,800	$ 0	$ 0	$ 68,800
Total	**$ 779,400**	**$ 0**	**$ 0**	**$ 779,400**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 145 of 238

Project: Stonehenge

WWTP Service Area: Oso

Lift Station Sewershed: Wooldridge WW

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 3,406

Current Peak Flow (gpm): 14,280

10-Year Peak Flow (gpm): 14,848

Ultimate Peak Flow (gpm): 15,080

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 730 LF of 12 inch pipe, 820 LF of 16 inch pipe, along Stonehenge in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 463,500	$ 0	$ 0	$ 463,500
Contingency (30%)	$ 139,100	$ 0	$ 0	$ 139,100
Mobilization (10%)	$ 46,400	$ 0	$ 0	$ 46,400
Bond (5%)	$ 23,200	$ 0	$ 0	$ 23,200
OH&P (10%)	$ 46,400	$ 0	$ 0	$ 46,400
Design & Inspection (15%)	$ 69,600	$ 0	$ 0	$ 69,600
Total	**$ 788,200**	**$ 0**	**$ 0**	**$ 788,200**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 146 of 238

Project: Strateford

WWTP Service Area: Oso

Lift Station Sewershed: Wooldridge WW

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 3,406

Current Peak Flow (gpm): 14,280

10-Year Peak Flow (gpm): 14,848

Ultimate Peak Flow (gpm): 15,080

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 660 LF of 16 inch pipe, along Strateford in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 223,700	$ 0	$ 0	$ 223,700
Contingency (30%)	$ 67,200	$ 0	$ 0	$ 67,200
Mobilization (10%)	$ 22,400	$ 0	$ 0	$ 22,400
Bond (5%)	$ 11,200	$ 0	$ 0	$ 11,200
OH&P (10%)	$ 22,400	$ 0	$ 0	$ 22,400
Design & Inspection (15%)	$ 33,600	$ 0	$ 0	$ 33,600
Total	**$ 380,500**	**$ 0**	**$ 0**	**$ 380,500**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 147 of 238

Project: Washam

WWTP Service Area: Oso

Lift Station Sewershed: Wooldridge WW

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 3,406

Current Peak Flow (gpm): 14,280

10-Year Peak Flow (gpm): 14,848

Ultimate Peak Flow (gpm): 15,080

Type: Rehabilitate/Repair

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Near Term

Justification & Description

Rehabilitate/repair gravity pipes in order to meet current flow conditions. Replace existing pipe with: 1050 LF of 12 inch pipe, along Washam in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 311,100	$ 0	$ 0	$ 311,100
Contingency (30%)	$ 93,400	$ 0	$ 0	$ 93,400
Mobilization (10%)	$ 31,200	$ 0	$ 0	$ 31,200
Bond (5%)	$ 15,600	$ 0	$ 0	$ 15,600
OH&P (10%)	$ 31,200	$ 0	$ 0	$ 31,200
Design & Inspection (15%)	$ 46,700	$ 0	$ 0	$ 46,700
Total	**$ 529,200**	**$ 0**	**$ 0**	**$ 529,200**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 148 of 238

Project: Woolridge

WWTP Service Area: Oso

Lift Station Sewershed: Wooldridge WW

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 3,406

Current Peak Flow (gpm): 14,280

10-Year Peak Flow (gpm): 14,848

Ultimate Peak Flow (gpm): 15,080

Type: Upgrade

Useful Life: 50 years

Category: Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Critical

Status: Ultimate

Justification & Description

Upgrade gravity pipes in order to meet ultimate flow conditions. Replace existing pipe with: 1300 LF of 18 inch pipe, 600 LF of 20 inch pipe, along Woolridge in Oso WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 933,200	$ 933,200
Contingency (30%)	$ 0	$ 0	$ 933,200	$ 933,200
Mobilization (10%)	$ 0	$ 0	$ 93,400	$ 93,400
Bond (5%)	$ 0	$ 0	$ 46,700	$ 46,700
OH&P (10%)	$ 0	$ 0	$ 93,400	$ 93,400
Design & Inspection (15%)	$ 0	$ 0	$ 140,000	$ 140,000
Total	**$ 0**	**$ 0**	**$ 2,239,900**	**$ 2,239,900**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 149 of 238

Project: Grav to Clarkwood South 1

WWTP Service Area: Allison

Lift Station Sewershed: Clarkwood South

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 52

Current Peak Flow (gpm): 217

10-Year Peak Flow (gpm): 261

Ultimate Peak Flow (gpm): 460

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 7300 LF of new 15 inch gravity pipe, in Clarkwood South Lift Station Shed in Allison Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 2,189,100	$ 2,189,100
Contingency (30%)	$ 0	$ 0	$ 656,800	$ 656,800
Mobilization (10%)	$ 0	$ 0	$ 219,000	$ 219,000
Bond (5%)	$ 0	$ 0	$ 109,500	$ 109,500
OH&P (10%)	$ 0	$ 0	$ 219,000	$ 219,000
Design & Inspection (15%)	$ 0	$ 0	$ 328,400	$ 328,400
Total	**$ 0**	**$ 0**	**$ 3,721,800**	**$ 3,721,800**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 150 of 238

Project: Agnes St/Clarkwood

WWTP Service Area: Allison

Lift Station Sewershed: Clarkwood South

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 52

Current Peak Flow (gpm): 217

10-Year Peak Flow (gpm): 261

Ultimate Peak Flow (gpm): 460

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 2500 LF of new 8 inch gravity pipe, in Clarkwood South Lift Station Shed in Allison Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 625,700	$ 625,700
Contingency (30%)	$ 0	$ 0	$ 187,800	$ 187,800
Mobilization (10%)	$ 0	$ 0	$ 62,600	$ 62,600
Bond (5%)	$ 0	$ 0	$ 31,300	$ 31,300
OH&P (10%)	$ 0	$ 0	$ 62,600	$ 62,600
Design & Inspection (15%)	$ 0	$ 0	$ 93,900	$ 93,900
Total	**$ 0**	**$ 0**	**$ 1,063,900**	**$ 1,063,900**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 151 of 238

Project: Manning Rd

WWTP Service Area: Allison

Lift Station Sewershed: Stillwell

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 92

Current Peak Flow (gpm): 241

10-Year Peak Flow (gpm): 257

Ultimate Peak Flow (gpm): 782

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 6750 LF of new 12 inch gravity pipe, in Stillwell Lift Station Shed in Allison Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 1,911,200	$ 1,911,200
Contingency (30%)	$ 0	$ 0	$ 573,400	$ 573,400
Mobilization (10%)	$ 0	$ 0	$ 191,200	$ 191,200
Bond (5%)	$ 0	$ 0	$ 95,600	$ 95,600
OH&P (10%)	$ 0	$ 0	$ 191,200	$ 191,200
Design & Inspection (15%)	$ 0	$ 0	$ 286,700	$ 286,700
Total	**$ 0**	**$ 0**	**$ 3,249,300**	**$ 3,249,300**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 152 of 238

Project: Grav to Stillwell

WWTP Service Area: Allison

Lift Station Sewershed: Stillwell

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 92

Current Peak Flow (gpm): 241

10-Year Peak Flow (gpm): 257

Ultimate Peak Flow (gpm): 782

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 1880 LF of new 8 inch gravity pipe, in Stillwell Lift Station Shed in Allison Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 1,046,900	$ 1,046,900
Contingency (30%)	$ 0	$ 0	$ 314,100	$ 314,100
Mobilization (10%)	$ 0	$ 0	$ 104,700	$ 104,700
Bond (5%)	$ 0	$ 0	$ 52,400	$ 52,400
OH&P (10%)	$ 0	$ 0	$ 104,700	$ 104,700
Design & Inspection (15%)	$ 0	$ 0	$ 157,100	$ 157,100
Total	**$ 0**	**$ 0**	**$ 1,779,900**	**$ 1,779,900**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 153 of 238

Project: Grav to HWY 77 LS

WWTP Service Area: Allison

Lift Station Sewershed: Highway 77

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 1

Current Peak Flow (gpm): 1

10-Year Peak Flow (gpm): 960

Ultimate Peak Flow (gpm): 1,999

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 5290 LF of new 10 inch gravity pipe, in Highway 77 Lift Station Shed in Allison Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 1,269,500	$ 1,269,500
Contingency (30%)	$ 0	$ 0	$ 380,900	$ 380,900
Mobilization (10%)	$ 0	$ 0	$ 127,000	$ 127,000
Bond (5%)	$ 0	$ 0	$ 63,500	$ 63,500
OH&P (10%)	$ 0	$ 0	$ 127,000	$ 127,000
Design & Inspection (15%)	$ 0	$ 0	$ 190,500	$ 190,500
Total	**$ 0**	**$ 0**	**$ 2,158,400**	**$ 2,158,400**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 154 of 238

Project: Grav to Lakes NW 1

WWTP Service Area: Allison

Lift Station Sewershed: Lakes Northwest

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 14

Current Peak Flow (gpm): 14

10-Year Peak Flow (gpm): 758

Ultimate Peak Flow (gpm): 1,632

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 1830 LF of new 12 inch gravity pipe, in Lakes Northwest Lift Station Shed in Allison Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 703,000	$ 703,000
Contingency (30%)	$ 0	$ 0	$ 210,900	$ 210,900
Mobilization (10%)	$ 0	$ 0	$ 70,300	$ 70,300
Bond (5%)	$ 0	$ 0	$ 35,200	$ 35,200
OH&P (10%)	$ 0	$ 0	$ 70,300	$ 70,300
Design & Inspection (15%)	$ 0	$ 0	$ 105,500	$ 105,500
Total	**$ 0**	**$ 0**	**$ 1,195,200**	**$ 1,195,200**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 155 of 238

Project: Grav to Lakes NW 2

WWTP Service Area: Allison

Lift Station Sewershed: Lakes Northwest

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 14

Current Peak Flow (gpm): 14

10-Year Peak Flow (gpm): 758

Ultimate Peak Flow (gpm): 1,632

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 2510 LF of new 8 inch gravity pipe, in Lakes Northwest Lift Station Shed in Allison Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 679,000	$ 679,000
Contingency (30%)	$ 0	$ 0	$ 203,700	$ 203,700
Mobilization (10%)	$ 0	$ 0	$ 67,900	$ 67,900
Bond (5%)	$ 0	$ 0	$ 34,000	$ 34,000
OH&P (10%)	$ 0	$ 0	$ 67,900	$ 67,900
Design & Inspection (15%)	$ 0	$ 0	$ 101,900	$ 101,900
Total	**$ 0**	**$ 0**	**$ 1,154,400**	**$ 1,154,400**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 156 of 238

Project: Yellow Oak Ave Grav

WWTP Service Area: Allison

Lift Station Sewershed: Allison gravity

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 3,423

Current Peak Flow (gpm): 13,758

10-Year Peak Flow (gpm): 13,908

Ultimate Peak Flow (gpm): 14,227

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 2120 LF of new 12 inch gravity pipe, in Allison gravity Lift Station Shed in Allison Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 782,800	$ 782,800
Contingency (30%)	$ 0	$ 0	$ 234,900	$ 234,900
Mobilization (10%)	$ 0	$ 0	$ 78,300	$ 78,300
Bond (5%)	$ 0	$ 0	$ 39,200	$ 39,200
OH&P (10%)	$ 0	$ 0	$ 78,300	$ 78,300
Design & Inspection (15%)	$ 0	$ 0	$ 117,500	$ 117,500
Total	**$ 0**	**$ 0**	**$ 1,331,000**	**$ 1,331,000**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 157 of 238

Project: Warrior Dr Grav

WWTP Service Area: Allison

Lift Station Sewershed: Allison gravity

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 3,423

Current Peak Flow (gpm): 13,758

10-Year Peak Flow (gpm): 13,908

Ultimate Peak Flow (gpm): 14,227

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 1820 LF of new 8 inch gravity pipe, in Allison gravity Lift Station Shed in Allison Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 443,500	$ 443,500
Contingency (30%)	$ 0	$ 0	$ 133,100	$ 133,100
Mobilization (10%)	$ 0	$ 0	$ 44,400	$ 44,400
Bond (5%)	$ 0	$ 0	$ 22,200	$ 22,200
OH&P (10%)	$ 0	$ 0	$ 44,400	$ 44,400
Design & Inspection (15%)	$ 0	$ 0	$ 66,600	$ 66,600
Total	**$ 0**	**$ 0**	**$ 754,200**	**$ 754,200**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 158 of 238

Project: NW Crossing Grav 1

WWTP Service Area: Allison

Lift Station Sewershed: Northwest Crossing

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 88

Current Peak Flow (gpm): 485

10-Year Peak Flow (gpm): 818

Ultimate Peak Flow (gpm): 1,634

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 3810 LF of new 15 inch gravity pipe, in Northwest Crossing Lift Station Shed in Allison Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 1,620,200	$ 1,620,200
Contingency (30%)	$ 0	$ 0	$ 486,100	$ 486,100
Mobilization (10%)	$ 0	$ 0	$ 162,100	$ 162,100
Bond (5%)	$ 0	$ 0	$ 81,100	$ 81,100
OH&P (10%)	$ 0	$ 0	$ 162,100	$ 162,100
Design & Inspection (15%)	$ 0	$ 0	$ 243,100	$ 243,100
Total	**$ 0**	**$ 0**	**$ 2,754,700**	**$ 2,754,700**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 159 of 238

Project: NW Crossing Grav 2

WWTP Service Area: Allison

Lift Station Sewershed: Northwest Crossing

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 88

Current Peak Flow (gpm): 485

10-Year Peak Flow (gpm): 818

Ultimate Peak Flow (gpm): 1,634

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 3950 LF of new 12 inch gravity pipe, in Northwest Crossing Lift Station Shed in Allison Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 3,105,700	$ 3,105,700
Contingency (30%)	$ 0	$ 0	$ 931,800	$ 931,800
Mobilization (10%)	$ 0	$ 0	$ 310,600	$ 310,600
Bond (5%)	$ 0	$ 0	$ 155,300	$ 155,300
OH&P (10%)	$ 0	$ 0	$ 310,600	$ 310,600
Design & Inspection (15%)	$ 0	$ 0	$ 465,900	$ 465,900
Total	**$ 0**	**$ 0**	**$ 5,279,900**	**$ 5,279,900**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 160 of 238

Project: NW Crossing Grav 3

WWTP Service Area: Allison

Lift Station Sewershed: Northwest Crossing

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 88

Current Peak Flow (gpm): 485

10-Year Peak Flow (gpm): 818

Ultimate Peak Flow (gpm): 1,634

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 3620 LF of new 10 inch gravity pipe, in Northwest Crossing Lift Station Shed in Allison Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 1,537,300	$ 1,537,300
Contingency (30%)	$ 0	$ 0	$ 461,200	$ 461,200
Mobilization (10%)	$ 0	$ 0	$ 153,800	$ 153,800
Bond (5%)	$ 0	$ 0	$ 76,900	$ 76,900
OH&P (10%)	$ 0	$ 0	$ 153,800	$ 153,800
Design & Inspection (15%)	$ 0	$ 0	$ 230,600	$ 230,600
Total	**$ 0**	**$ 0**	**$ 2,613,600**	**$ 2,613,600**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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Capital Improvement Plan

City of Corpus Christi, Texas

Project # 161 of 238

Project: Nueces Acres Grav

WWTP Service Area: Allison

Lift Station Sewershed: Nueces Acres

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 28

Current Peak Flow (gpm): 114

10-Year Peak Flow (gpm): 220

Ultimate Peak Flow (gpm): 436

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 5030 LF of new 12 inch gravity pipe, 3820 LF of new 15 inch gravity pipe, in Nueces Acres Lift Station Shed in Allison Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 3,315,700	$ 3,315,700
Contingency (30%)	$ 0	$ 0	$ 994,800	$ 994,800
Mobilization (10%)	$ 0	$ 0	$ 331,600	$ 331,600
Bond (5%)	$ 0	$ 0	$ 165,800	$ 165,800
OH&P (10%)	$ 0	$ 0	$ 331,600	$ 331,600
Design & Inspection (15%)	$ 0	$ 0	$ 497,400	$ 497,400
Total	**$ 0**	**$ 0**	**$ 5,636,900**	**$ 5,636,900**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 162 of 238

Project: NW Crossing Grav 4

WWTP Service Area: Allison

Lift Station Sewershed: Northwest Crossing

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 88

Current Peak Flow (gpm): 485

10-Year Peak Flow (gpm): 818

Ultimate Peak Flow (gpm): 1,634

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 3540 LF of new 10 inch gravity pipe, in Northwest Crossing Lift Station Shed in Allison Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 2,206,600	$ 2,206,600
Contingency (30%)	$ 0	$ 0	$ 662,000	$ 662,000
Mobilization (10%)	$ 0	$ 0	$ 220,700	$ 220,700
Bond (5%)	$ 0	$ 0	$ 110,400	$ 110,400
OH&P (10%)	$ 0	$ 0	$ 220,700	$ 220,700
Design & Inspection (15%)	$ 0	$ 0	$ 331,000	$ 331,000
Total	**$ 0**	**$ 0**	**$ 3,751,400**	**$ 3,751,400**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 163 of 238

Project: NW Crossing Grav 5

WWTP Service Area: Allison

Lift Station Sewershed: Northwest Crossing

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 88

Current Peak Flow (gpm): 485

10-Year Peak Flow (gpm): 818

Ultimate Peak Flow (gpm): 1,634

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 3360 LF of new 12 inch gravity pipe, 1140 LF of new 15 inch gravity pipe, in Northwest Crossing Lift Station Shed in Allison Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 354,000	$ 354,000
Contingency (30%)	$ 0	$ 0	$ 106,200	$ 106,200
Mobilization (10%)	$ 0	$ 0	$ 35,400	$ 35,400
Bond (5%)	$ 0	$ 0	$ 17,700	$ 17,700
OH&P (10%)	$ 0	$ 0	$ 35,400	$ 35,400
Design & Inspection (15%)	$ 0	$ 0	$ 53,100	$ 53,100
Total	**$ 0**	**$ 0**	**$ 601,800**	**$ 601,800**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 164 of 238

Project: Bronco Rd

WWTP Service Area: Allison

Lift Station Sewershed: Stillwell

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 92

Current Peak Flow (gpm): 241

10-Year Peak Flow (gpm): 257

Ultimate Peak Flow (gpm): 782

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 1580 LF of new 8 inch gravity pipe, in Stillwell Lift Station Shed in Allison Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 395,000	$ 395,000
Contingency (30%)	$ 0	$ 0	$ 118,500	$ 118,500
Mobilization (10%)	$ 0	$ 0	$ 39,500	$ 39,500
Bond (5%)	$ 0	$ 0	$ 19,800	$ 19,800
OH&P (10%)	$ 0	$ 0	$ 39,500	$ 39,500
Design & Inspection (15%)	$ 0	$ 0	$ 59,300	$ 59,300
Total	**$ 0**	**$ 0**	**$ 671,600**	**$ 671,600**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 165 of 238

Project: Grav to Allison

WWTP Service Area: Allison

Lift Station Sewershed: Allison gravity

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 3,423

Current Peak Flow (gpm): 13,758

10-Year Peak Flow (gpm): 13,908

Ultimate Peak Flow (gpm): 14,227

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 8960 LF of new 16 inch gravity pipe, in Allison gravity Lift Station Shed in Allison Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 3,673,500	$ 3,673,500
Contingency (30%)	$ 0	$ 0	$ 1,102,100	$ 1,102,100
Mobilization (10%)	$ 0	$ 0	$ 367,400	$ 367,400
Bond (5%)	$ 0	$ 0	$ 183,700	$ 183,700
OH&P (10%)	$ 0	$ 0	$ 367,400	$ 367,400
Design & Inspection (15%)	$ 0	$ 0	$ 551,100	$ 551,100
Total	**$ 0**	**$ 0**	**$ 6,245,200**	**$ 6,245,200**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 166 of 238

Project: Calallen Center Grav

WWTP Service Area: Allison

Lift Station Sewershed: Calallen

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 0

Current Peak Flow (gpm): 0

10-Year Peak Flow (gpm): 564

Ultimate Peak Flow (gpm): 5,504

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 11900 LF of new 20 inch gravity pipe, in Calallen Lift Station Shed in Allison Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 5,473,600	$ 5,473,600
Contingency (30%)	$ 0	$ 0	$ 1,642,100	$ 1,642,100
Mobilization (10%)	$ 0	$ 0	$ 547,400	$ 547,400
Bond (5%)	$ 0	$ 0	$ 273,700	$ 273,700
OH&P (10%)	$ 0	$ 0	$ 547,400	$ 547,400
Design & Inspection (15%)	$ 0	$ 0	$ 821,100	$ 821,100
Total	**$ 0**	**$ 0**	**$ 9,305,300**	**$ 9,305,300**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 167 of 238

Project: Calallen East Grav

WWTP Service Area: Allison

Lift Station Sewershed: Calallen

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 0

Current Peak Flow (gpm): 0

10-Year Peak Flow (gpm): 564

Ultimate Peak Flow (gpm): 5,504

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 8860 LF of new 10 inch gravity pipe, in Calallen Lift Station Shed in Allison Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 2,303,117	$ 2,303,117
Contingency (30%)	$ 0	$ 0	$ 691,000	$ 691,000
Mobilization (10%)	$ 0	$ 0	$ 230,400	$ 230,400
Bond (5%)	$ 0	$ 0	$ 115,200	$ 115,200
OH&P (10%)	$ 0	$ 0	$ 230,400	$ 230,400
Design & Inspection (15%)	$ 0	$ 0	$ 345,500	$ 345,500
Total	**$ 0**	**$ 0**	**$ 3,915,617**	**$ 3,915,617**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 168 of 238

Project: Grav to Lakes NW 3

WWTP Service Area: Allison

Lift Station Sewershed: Lakes Northwest

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 2

Current Peak Flow (gpm): 14

10-Year Peak Flow (gpm): 758

Ultimate Peak Flow (gpm): 1,632

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 2190 LF of new 10 inch gravity pipe, in Lakes Northwest Lift Station Shed in Allison Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 679,300	$ 679,300
Contingency (30%)	$ 0	$ 0	$ 203,800	$ 203,800
Mobilization (10%)	$ 0	$ 0	$ 68,000	$ 68,000
Bond (5%)	$ 0	$ 0	$ 34,000	$ 34,000
OH&P (10%)	$ 0	$ 0	$ 68,000	$ 68,000
Design & Inspection (15%)	$ 0	$ 0	$ 101,900	$ 101,900
Total	**$ 0**	**$ 0**	**$ 1,155,000**	**$ 1,155,000**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 169 of 238

Project: NW Crossing Grav 5

WWTP Service Area: Allison

Lift Station Sewershed: Northwest Crossing

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 88

Current Peak Flow (gpm): 485

10-Year Peak Flow (gpm): 818

Ultimate Peak Flow (gpm): 1,634

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 3360 LF of new 12 inch gravity pipe, 1140 LF of new 15 inch gravity pipe, in Northwest Crossing Lift Station Shed in Allison Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 3,105,700	$ 3,105,700
Contingency (30%)	$ 0	$ 0	$ 931,800	$ 931,800
Mobilization (10%)	$ 0	$ 0	$ 310,600	$ 310,600
Bond (5%)	$ 0	$ 0	$ 155,300	$ 155,300
OH&P (10%)	$ 0	$ 0	$ 310,600	$ 310,600
Design & Inspection (15%)	$ 0	$ 0	$ 465,900	$ 465,900
Total	**$ 0**	**$ 0**	**$ 5,279,900**	**$ 5,279,900**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 170 of 238

Project: Erne Street

WWTP Service Area: Allison

Lift Station Sewershed: Stillwell

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 92

Current Peak Flow (gpm): 241

10-Year Peak Flow (gpm): 257

Ultimate Peak Flow (gpm): 782

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 1790 LF of new 12 inch gravity pipe, in Stillwell Lift Station Shed in Allison Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 483,100	$ 483,100
Contingency (30%)	$ 0	$ 0	$ 145,000	$ 145,000
Mobilization (10%)	$ 0	$ 0	$ 48,400	$ 48,400
Bond (5%)	$ 0	$ 0	$ 24,200	$ 24,200
OH&P (10%)	$ 0	$ 0	$ 48,400	$ 48,400
Design & Inspection (15%)	$ 0	$ 0	$ 72,500	$ 72,500
Total	**$ 0**	**$ 0**	**$ 821,600**	**$ 821,600**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 171 of 238

Project: New Grav Northwest/Hearn

WWTP Service Area: Allison

Lift Station Sewershed: Sharpsburg S

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 669

Current Peak Flow (gpm): 4,747

10-Year Peak Flow (gpm): 5,609

Ultimate Peak Flow (gpm): 8,850

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 4470 LF of new 18 inch gravity pipe, in Sharpsburg S Lift Station Shed in Allison Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 1,836,000	$ 1,836,000
Contingency (30%)	$ 0	$ 0	$ 550,800	$ 550,800
Mobilization (10%)	$ 0	$ 0	$ 183,600	$ 183,600
Bond (5%)	$ 0	$ 0	$ 91,800	$ 91,800
OH&P (10%)	$ 0	$ 0	$ 183,600	$ 183,600
Design & Inspection (15%)	$ 0	$ 0	$ 275,400	$ 275,400
Total	**$ 0**	**$ 0**	**$ 3,121,200**	**$ 3,121,200**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 172 of 238

Project: Future Grav To Allison Grav

WWTP Service Area: Allison

Lift Station Sewershed: Allison gravity

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 3,423

Current Peak Flow (gpm): 13,758

10-Year Peak Flow (gpm): 13,908

Ultimate Peak Flow (gpm): 14,227

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 9080 LF of new 18 inch gravity pipe, in Allison gravity Lift Station Shed in Allison Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 3,542,600	$ 3,542,600
Contingency (30%)	$ 0	$ 0	$ 1,062,800	$ 1,062,800
Mobilization (10%)	$ 0	$ 0	$ 354,300	$ 354,300
Bond (5%)	$ 0	$ 0	$ 177,200	$ 177,200
OH&P (10%)	$ 0	$ 0	$ 354,300	$ 354,300
Design & Inspection (15%)	$ 0	$ 0	$ 531,400	$ 531,400
Total	**$ 0**	**$ 0**	**$ 6,022,600**	**$ 6,022,600**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 173 of 238

Project: Grav to LS1003 WWTP 2

WWTP Service Area: Greenwood

Lift Station Sewershed: WW-LS 1003 WWTP-2

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 2,664

Current Peak Flow (gpm): 31,041

10-Year Peak Flow (gpm): 31,717

Ultimate Peak Flow (gpm): 34,599

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 2830 LF of new 15 inch gravity pipe, in WW-LS 1003 WWTP-2 Lift Station Shed in Greenwood Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 1,032,300	$ 1,032,300
Contingency (30%)	$ 0	$ 0	$ 309,700	$ 309,700
Mobilization (10%)	$ 0	$ 0	$ 103,300	$ 103,300
Bond (5%)	$ 0	$ 0	$ 51,700	$ 51,700
OH&P (10%)	$ 0	$ 0	$ 103,300	$ 103,300
Design & Inspection (15%)	$ 0	$ 0	$ 154,900	$ 154,900
Total	**$ 0**	**$ 0**	**$ 1,755,200**	**$ 1,755,200**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 174 of 238

Project: Grav to LS1003 WWTP 2

WWTP Service Area: Greenwood

Lift Station Sewershed: WW-LS 1003 WWTP-2

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 2,664

Current Peak Flow (gpm): 31,041

10-Year Peak Flow (gpm): 31,717

Ultimate Peak Flow (gpm): 34,599

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 2830 LF of new 15 inch gravity pipe, in WW-LS 1003 WWTP-2 Lift Station Shed in Greenwood Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 849,700	$ 849,700
Contingency (30%)	$ 0	$ 0	$ 255,000	$ 255,000
Mobilization (10%)	$ 0	$ 0	$ 85,000	$ 85,000
Bond (5%)	$ 0	$ 0	$ 42,500	$ 42,500
OH&P (10%)	$ 0	$ 0	$ 85,000	$ 85,000
Design & Inspection (15%)	$ 0	$ 0	$ 127,500	$ 127,500
Total	**$ 0**	**$ 0**	**$ 1,444,700**	**$ 1,444,700**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 175 of 238

Project: Grav to LS1003 WWTP 4_1

WWTP Service Area: Greenwood

Lift Station Sewershed: WW-LS 1003 WWTP-4

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 2,664

Current Peak Flow (gpm): 31,041

10-Year Peak Flow (gpm): 31,717

Ultimate Peak Flow (gpm): 34,599

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 3930 LF of new 15 inch gravity pipe, in WW-LS 1003 WWTP-4 Lift Station Shed in Greenwood Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 1,179,100	$ 1,179,100
Contingency (30%)	$ 0	$ 0	$ 353,800	$ 353,800
Mobilization (10%)	$ 0	$ 0	$ 118,000	$ 118,000
Bond (5%)	$ 0	$ 0	$ 59,000	$ 59,000
OH&P (10%)	$ 0	$ 0	$ 118,000	$ 118,000
Design & Inspection (15%)	$ 0	$ 0	$ 176,900	$ 176,900
Total	**$ 0**	**$ 0**	**$ 2,004,800**	**$ 2,004,800**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 176 of 238

Project: Grav to LS1003 WWTP 4_2

WWTP Service Area: Greenwood

Lift Station Sewershed: WW-LS 1003 WWTP-4

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 2,664

Current Peak Flow (gpm): 31,041

10-Year Peak Flow (gpm): 31,717

Ultimate Peak Flow (gpm): 34,599

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 2720 LF of new 8 inch gravity pipe, in WW-LS 1003 WWTP-4 Lift Station Shed in Greenwood Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 678,900	$ 678,900
Contingency (30%)	$ 0	$ 0	$ 203,700	$ 203,700
Mobilization (10%)	$ 0	$ 0	$ 67,900	$ 67,900
Bond (5%)	$ 0	$ 0	$ 34,000	$ 34,000
OH&P (10%)	$ 0	$ 0	$ 67,900	$ 67,900
Design & Inspection (15%)	$ 0	$ 0	$ 101,900	$ 101,900
Total	**$ 0**	**$ 0**	**$ 1,154,300**	**$ 1,154,300**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 177 of 238

Project: Grav to Coastal Meadows 1

WWTP Service Area: Greenwood

Lift Station Sewershed: Coastal Meadows

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 41

Current Peak Flow (gpm): 197

10-Year Peak Flow (gpm): 236

Ultimate Peak Flow (gpm): 745

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 16830 LF of new 18 inch gravity pipe, in Coastal Meadows Lift Station Shed in Greenwood Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 1,378,300	$ 1,378,300
Contingency (30%)	$ 0	$ 0	$ 413,500	$ 413,500
Mobilization (10%)	$ 0	$ 0	$ 137,900	$ 137,900
Bond (5%)	$ 0	$ 0	$ 69,000	$ 69,000
OH&P (10%)	$ 0	$ 0	$ 137,900	$ 137,900
Design & Inspection (15%)	$ 0	$ 0	$ 206,800	$ 206,800
Total	**$ 0**	**$ 0**	**$ 2,343,400**	**$ 2,343,400**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 178 of 238

Project: Grav to Coastal Meadows 2

WWTP Service Area: Greenwood

Lift Station Sewershed: WW-LS 1003 WWTP-2

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 2,664

Current Peak Flow (gpm): 31,041

10-Year Peak Flow (gpm): 31,717

Ultimate Peak Flow (gpm): 34,599

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 5300 LF of new 12 inch gravity pipe, in WW-LS 1003 WWTP-2 Lift Station Shed in Greenwood Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 6,393,800	$ 6,393,800
Contingency (30%)	$ 0	$ 0	$ 1,918,200	$ 1,918,200
Mobilization (10%)	$ 0	$ 0	$ 639,400	$ 639,400
Bond (5%)	$ 0	$ 0	$ 319,700	$ 319,700
OH&P (10%)	$ 0	$ 0	$ 639,400	$ 639,400
Design & Inspection (15%)	$ 0	$ 0	$ 959,100	$ 959,100
Total	**$ 0**	**$ 0**	**$ 10,869,600**	**$ 10,869,600**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 179 of 238

Project: Future Bates Rd

WWTP Service Area: Greenwood

Lift Station Sewershed: WW-LS 1003 WWTP-2

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 2,664

Current Peak Flow (gpm): 31,041

10-Year Peak Flow (gpm): 31,717

Ultimate Peak Flow (gpm): 34,599

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 5030 LF of new 8 inch gravity pipe, in WW-LS 1003 WWTP-2 Lift Station Shed in Greenwood Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 1,208,000	$ 1,208,000
Contingency (30%)	$ 0	$ 0	$ 362,400	$ 362,400
Mobilization (10%)	$ 0	$ 0	$ 120,800	$ 120,800
Bond (5%)	$ 0	$ 0	$ 60,400	$ 60,400
OH&P (10%)	$ 0	$ 0	$ 120,800	$ 120,800
Design & Inspection (15%)	$ 0	$ 0	$ 181,200	$ 181,200
Total	**$ 0**	**$ 0**	**$ 2,053,600**	**$ 2,053,600**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 180 of 238

Project: Grav to LS1003 WWTP 4_3

WWTP Service Area: Greenwood

Lift Station Sewershed: WW-LS 1003 WWTP-4

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 2,664

Current Peak Flow (gpm): 31,041

10-Year Peak Flow (gpm): 31,717

Ultimate Peak Flow (gpm): 34,599

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 2130 LF of new 12 inch gravity pipe, in WW-LS 1003 WWTP-4 Lift Station Shed in Greenwood Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 575,400	$ 575,400
Contingency (30%)	$ 0	$ 0	$ 172,700	$ 172,700
Mobilization (10%)	$ 0	$ 0	$ 57,600	$ 57,600
Bond (5%)	$ 0	$ 0	$ 28,800	$ 28,800
OH&P (10%)	$ 0	$ 0	$ 57,600	$ 57,600
Design & Inspection (15%)	$ 0	$ 0	$ 86,400	$ 86,400
Total	**$ 0**	**$ 0**	**$ 978,500**	**$ 978,500**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 181 of 238

Project: Grav to Highway Nine 1

WWTP Service Area: Greenwood

Lift Station Sewershed: Highway Nine New LS 2

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 52

Current Peak Flow (gpm): 1,031

10-Year Peak Flow (gpm): 1,178

Ultimate Peak Flow (gpm): 1,219

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 9370 LF of new 8 inch gravity pipe, in Highway Nine New LS 2 Lift Station Shed in Greenwood Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 2,249,000	$ 2,249,000
Contingency (30%)	$ 0	$ 0	$ 674,700	$ 674,700
Mobilization (10%)	$ 0	$ 0	$ 224,900	$ 224,900
Bond (5%)	$ 0	$ 0	$ 112,500	$ 112,500
OH&P (10%)	$ 0	$ 0	$ 224,900	$ 224,900
Design & Inspection (15%)	$ 0	$ 0	$ 337,400	$ 337,400
Total	**$ 0**	**$ 0**	**$ 3,823,400**	**$ 3,823,400**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 182 of 238

Project: Grav to Highway Nine 3

WWTP Service Area: Greenwood

Lift Station Sewershed: Highway Nine New LS 2

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 52

Current Peak Flow (gpm): 1,031

10-Year Peak Flow (gpm): 1,178

Ultimate Peak Flow (gpm): 1,219

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 3300 LF of new 10 inch gravity pipe, in Highway Nine New LS 2 Lift Station Shed in Greenwood Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 824,500	$ 824,500
Contingency (30%)	$ 0	$ 0	$ 247,400	$ 247,400
Mobilization (10%)	$ 0	$ 0	$ 82,500	$ 82,500
Bond (5%)	$ 0	$ 0	$ 41,300	$ 41,300
OH&P (10%)	$ 0	$ 0	$ 82,500	$ 82,500
Design & Inspection (15%)	$ 0	$ 0	$ 123,700	$ 123,700
Total	**$ 0**	**$ 0**	**$ 1,401,900**	**$ 1,401,900**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 183 of 238

Project: Grav to Highway Nine 2

WWTP Service Area: Greenwood

Lift Station Sewershed: Highway Nine New LS 1

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 52

Current Peak Flow (gpm): 1,031

10-Year Peak Flow (gpm): 1,178

Ultimate Peak Flow (gpm): 400

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 4560 LF of new 8 inch gravity pipe, in Highway Nine New LS 1 Lift Station Shed in Greenwood Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 1,185,300	$ 1,185,300
Contingency (30%)	$ 0	$ 0	$ 355,600	$ 355,600
Mobilization (10%)	$ 0	$ 0	$ 118,600	$ 118,600
Bond (5%)	$ 0	$ 0	$ 59,300	$ 59,300
OH&P (10%)	$ 0	$ 0	$ 118,600	$ 118,600
Design & Inspection (15%)	$ 0	$ 0	$ 177,800	$ 177,800
Total	**$ 0**	**$ 0**	**$ 2,015,200**	**$ 2,015,200**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 184 of 238

Project: Grav to LS 1003 WWTP 2 South

WWTP Service Area: Greenwood

Lift Station Sewershed: WW-LS 1003 WWTP-2

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 2,664

Current Peak Flow (gpm): 31,041

10-Year Peak Flow (gpm): 31,717

Ultimate Peak Flow (gpm): 34,599

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 4160 LF of new 8 inch gravity pipe, in WW-LS 1003 WWTP-2 Lift Station Shed in Greenwood Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 1,081,700	$ 1,081,700
Contingency (30%)	$ 0	$ 0	$ 324,600	$ 324,600
Mobilization (10%)	$ 0	$ 0	$ 108,200	$ 108,200
Bond (5%)	$ 0	$ 0	$ 54,100	$ 54,100
OH&P (10%)	$ 0	$ 0	$ 108,200	$ 108,200
Design & Inspection (15%)	$ 0	$ 0	$ 162,300	$ 162,300
Total	**$ 0**	**$ 0**	**$ 1,839,100**	**$ 1,839,100**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 185 of 238

Project: Grav to Waldron 1A

WWTP Service Area: Laguna Madre

Lift Station Sewershed: New LS to Waldron 1A

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 202

Current Peak Flow (gpm): 1,615

10-Year Peak Flow (gpm): 1,732

Ultimate Peak Flow (gpm): 1,541

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 4890 LF of new 15 inch gravity pipe, in New LS to Waldron 1A Lift Station Shed in Laguna Madre Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 1,466,500	$ 1,466,500
Contingency (30%)	$ 0	$ 0	$ 440,000	$ 440,000
Mobilization (10%)	$ 0	$ 0	$ 146,700	$ 146,700
Bond (5%)	$ 0	$ 0	$ 73,400	$ 73,400
OH&P (10%)	$ 0	$ 0	$ 146,700	$ 146,700
Design & Inspection (15%)	$ 0	$ 0	$ 220,000	$ 220,000
Total	**$ 0**	**$ 0**	**$ 2,493,300**	**$ 2,493,300**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 186 of 238

Project: Lola Johnson Rd

WWTP Service Area: Laguna Madre

Lift Station Sewershed: Jamaica

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 25

Current Peak Flow (gpm): 52

10-Year Peak Flow (gpm): 61

Ultimate Peak Flow (gpm): 177

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 2380 LF of new 8 inch gravity pipe, in Jamaica Lift Station Shed in Laguna Madre Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 617,800	$ 617,800
Contingency (30%)	$ 0	$ 0	$ 185,400	$ 185,400
Mobilization (10%)	$ 0	$ 0	$ 61,800	$ 61,800
Bond (5%)	$ 0	$ 0	$ 30,900	$ 30,900
OH&P (10%)	$ 0	$ 0	$ 61,800	$ 61,800
Design & Inspection (15%)	$ 0	$ 0	$ 92,700	$ 92,700
Total	**$ 0**	**$ 0**	**$ 1,050,400**	**$ 1,050,400**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 187 of 238

Project: Yorktown Blvd

WWTP Service Area: Laguna Madre

Lift Station Sewershed: New LS to Waldron 1B

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 202

Current Peak Flow (gpm): 1,615

10-Year Peak Flow (gpm): 1,732

Ultimate Peak Flow (gpm): 700

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 3280 LF of new 8 inch gravity pipe, in New LS to Waldron 1B Lift Station Shed in Laguna Madre Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 1,111,800	$ 1,111,800
Contingency (30%)	$ 0	$ 0	$ 333,600	$ 333,600
Mobilization (10%)	$ 0	$ 0	$ 111,200	$ 111,200
Bond (5%)	$ 0	$ 0	$ 55,600	$ 55,600
OH&P (10%)	$ 0	$ 0	$ 111,200	$ 111,200
Design & Inspection (15%)	$ 0	$ 0	$ 166,800	$ 166,800
Total	**$ 0**	**$ 0**	**$ 1,890,200**	**$ 1,890,200**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 188 of 238

Project: Glenoak Dr

WWTP Service Area: Laguna Madre

Lift Station Sewershed: New LS to Waldron 1B

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 202

Current Peak Flow (gpm): 1,615

10-Year Peak Flow (gpm): 1,732

Ultimate Peak Flow (gpm): 700

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 5720 LF of new 15 inch gravity pipe, in New LS to Waldron 1B Lift Station Shed in Laguna Madre Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 1,715,800	$ 1,715,800
Contingency (30%)	$ 0	$ 0	$ 514,800	$ 514,800
Mobilization (10%)	$ 0	$ 0	$ 171,600	$ 171,600
Bond (5%)	$ 0	$ 0	$ 85,800	$ 85,800
OH&P (10%)	$ 0	$ 0	$ 171,600	$ 171,600
Design & Inspection (15%)	$ 0	$ 0	$ 257,400	$ 257,400
Total	**$ 0**	**$ 0**	**$ 2,917,000**	**$ 2,917,000**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 189 of 238

Project: Roscher Rd

WWTP Service Area: Laguna Madre

Lift Station Sewershed: New LS to Waldron 1B

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 202

Current Peak Flow (gpm): 1,615

10-Year Peak Flow (gpm): 1,732

Ultimate Peak Flow (gpm): 700

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 6510 LF of new 15 inch gravity pipe, in New LS to Waldron 1B Lift Station Shed in Laguna Madre Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 1,866,600	$ 1,866,600
Contingency (30%)	$ 0	$ 0	$ 560,000	$ 560,000
Mobilization (10%)	$ 0	$ 0	$ 186,700	$ 186,700
Bond (5%)	$ 0	$ 0	$ 93,400	$ 93,400
OH&P (10%)	$ 0	$ 0	$ 186,700	$ 186,700
Design & Inspection (15%)	$ 0	$ 0	$ 280,000	$ 280,000
Total	**$ 0**	**$ 0**	**$ 3,173,400**	**$ 3,173,400**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 190 of 238

Project: Grav to Waldron 1A-2

WWTP Service Area: Laguna Madre

Lift Station Sewershed: New LS to Waldron 1A

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 202

Current Peak Flow (gpm): 1,615

10-Year Peak Flow (gpm): 1,732

Ultimate Peak Flow (gpm): 1,541

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 2220 LF of new 12 inch gravity pipe, in New LS to Waldron 1A Lift Station Shed in Laguna Madre Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 666,000	$ 666,000
Contingency (30%)	$ 0	$ 0	$ 199,800	$ 199,800
Mobilization (10%)	$ 0	$ 0	$ 66,600	$ 66,600
Bond (5%)	$ 0	$ 0	$ 33,300	$ 33,300
OH&P (10%)	$ 0	$ 0	$ 66,600	$ 66,600
Design & Inspection (15%)	$ 0	$ 0	$ 99,900	$ 99,900
Total	**$ 0**	**$ 0**	**$ 1,132,200**	**$ 1,132,200**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 191 of 238

Project: New_London1

WWTP Service Area: London

Lift Station Sewershed: London

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 150

Current Peak Flow (gpm): 21,920

10-Year Peak Flow (gpm): 1,658

Ultimate Peak Flow (gpm): 14,315

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 5300 LF of new 15 inch gravity pipe, 3800 LF of new 21 inch gravity pipe, in London Lift Station Shed in London Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 3,316,700	$ 3,316,700
Contingency (30%)	$ 0	$ 0	$ 995,100	$ 995,100
Mobilization (10%)	$ 0	$ 0	$ 331,700	$ 331,700
Bond (5%)	$ 0	$ 0	$ 165,900	$ 165,900
OH&P (10%)	$ 0	$ 0	$ 331,700	$ 331,700
Design & Inspection (15%)	$ 0	$ 0	$ 497,600	$ 497,600
Total	**$ 0**	**$ 0**	**$ 5,638,700**	**$ 5,638,700**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 192 of 238

Project: New_London2

WWTP Service Area: London

Lift Station Sewershed: London

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 150

Current Peak Flow (gpm): 21,920

10-Year Peak Flow (gpm): 1,658

Ultimate Peak Flow (gpm): 6,905

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: 10-year

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 2000 LF of new 15 inch gravity pipe, 2500 LF of new 18 inch gravity pipe, 2200 LF of new 24 inch gravity pipe, 4700 LF of new 36 inch gravity pipe, 5100 LF of new 48 inch gravity pipe, in London Lift Station Shed in London Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 11,163,500	$ 0	$ 11,163,500
Contingency (30%)	$ 0	$ 3,349,100	$ 0	$ 3,349,100
Mobilization (10%)	$ 0	$ 1,116,400	$ 0	$ 1,116,400
Bond (5%)	$ 0	$ 558,200	$ 0	$ 558,200
OH&P (10%)	$ 0	$ 1,116,400	$ 0	$ 1,116,400
Design & Inspection (15%)	$ 0	$ 1,674,600	$ 0	$ 1,674,600
Total	**$ 0**	**$ 18,978,200**	**$ 0**	**$ 18,978,200**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 193 of 238

Project: New_London3

WWTP Service Area: London

Lift Station Sewershed: London

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 150

Current Peak Flow (gpm): 21,920

10-Year Peak Flow (gpm): 1,658

Ultimate Peak Flow (gpm): 6,905

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: 10-year

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 2000 LF of new 8 inch gravity pipe, 1200 LF of new 10 inch gravity pipe, 1500 LF of new 24 inch gravity pipe, 1400 LF of new 30 inch gravity pipe, in London Lift Station Shed in London Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 1,710,600	$ 0	$ 1,710,600
Contingency (30%)	$ 0	$ 513,200	$ 0	$ 513,200
Mobilization (10%)	$ 0	$ 171,100	$ 0	$ 171,100
Bond (5%)	$ 0	$ 85,600	$ 0	$ 85,600
OH&P (10%)	$ 0	$ 171,100	$ 0	$ 171,100
Design & Inspection (15%)	$ 0	$ 256,600	$ 0	$ 256,600
Total	**$ 0**	**$ 2,908,200**	**$ 0**	**$ 2,908,200**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 194 of 238

Project: New_London4

WWTP Service Area: London

Lift Station Sewershed: London

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 150

Current Peak Flow (gpm): 21,920

10-Year Peak Flow (gpm): 1,658

Ultimate Peak Flow (gpm): 14,315

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 3000 LF of new 24 inch gravity pipe, 1950 LF of new 36 inch gravity pipe, 2360 LF of new 48 inch gravity pipe, in London Lift Station Shed in London Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 1,229,900	$ 1,229,900
Contingency (30%)	$ 0	$ 0	$ 369,000	$ 369,000
Mobilization (10%)	$ 0	$ 0	$ 123,000	$ 123,000
Bond (5%)	$ 0	$ 0	$ 61,500	$ 61,500
OH&P (10%)	$ 0	$ 0	$ 123,000	$ 123,000
Design & Inspection (15%)	$ 0	$ 0	$ 184,500	$ 184,500
Total	**$ 0**	**$ 0**	**$ 2,090,900**	**$ 2,090,900**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 195 of 238

Project: New_London5

WWTP Service Area: London

Lift Station Sewershed: London

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 150

Current Peak Flow (gpm): 21,920

10-Year Peak Flow (gpm): 1,658

Ultimate Peak Flow (gpm): 14,315

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 7900 LF of new 54 inch gravity pipe, in London Lift Station Shed in London Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 7,824,200	$ 7,824,200
Contingency (30%)	$ 0	$ 0	$ 2,347,300	$ 2,347,300
Mobilization (10%)	$ 0	$ 0	$ 782,500	$ 782,500
Bond (5%)	$ 0	$ 0	$ 391,300	$ 391,300
OH&P (10%)	$ 0	$ 0	$ 782,500	$ 782,500
Design & Inspection (15%)	$ 0	$ 0	$ 1,173,700	$ 1,173,700
Total	**$ 0**	**$ 0**	**$ 13,301,500**	**$ 13,301,500**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 196 of 238

Project: New_London6

WWTP Service Area: London

Lift Station Sewershed: London

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 150

Current Peak Flow (gpm): 21,920

10-Year Peak Flow (gpm): 1,658

Ultimate Peak Flow (gpm): 14,315

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: 10-year

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 2000 LF of new 10 inch gravity pipe, 5300 LF of new 18 inch gravity pipe, 3100 LF of new 24 inch gravity pipe, 2940 LF of new 36 inch gravity pipe, in London Lift Station Shed in London Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 5,622,700	$ 0	$ 5,622,700
Contingency (30%)	$ 0	$ 1,686,900	$ 0	$ 1,686,900
Mobilization (10%)	$ 0	$ 562,300	$ 0	$ 562,300
Bond (5%)	$ 0	$ 281,200	$ 0	$ 281,200
OH&P (10%)	$ 0	$ 562,300	$ 0	$ 562,300
Design & Inspection (15%)	$ 0	$ 843,500	$ 0	$ 843,500
Total	**$ 0**	**$ 9,558,900**	**$ 0**	**$ 9,558,900**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 197 of 238

Project: New_London7

WWTP Service Area: London

Lift Station Sewershed: London

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 150

Current Peak Flow (gpm): 21,920

10-Year Peak Flow (gpm): 1,658

Ultimate Peak Flow (gpm): 14,315

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 1500 LF of new 8 inch gravity pipe, 9140 LF of new 12 inch gravity pipe, 3500 LF of new 18 inch gravity pipe, 1010 LF of new 24 inch gravity pipe, in London Lift Station Shed in London Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 4,834,500	$ 4,834,500
Contingency (30%)	$ 0	$ 0	$ 1,450,400	$ 1,450,400
Mobilization (10%)	$ 0	$ 0	$ 483,500	$ 483,500
Bond (5%)	$ 0	$ 0	$ 241,800	$ 241,800
OH&P (10%)	$ 0	$ 0	$ 483,500	$ 483,500
Design & Inspection (15%)	$ 0	$ 0	$ 725,200	$ 725,200
Total	**$ 0**	**$ 0**	**$ 8,218,900**	**$ 8,218,900**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 198 of 238

Project: New_London8

WWTP Service Area: London

Lift Station Sewershed: London

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 150

Current Peak Flow (gpm): 21,920

10-Year Peak Flow (gpm): 1,658

Ultimate Peak Flow (gpm): 6,905

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: 10-year

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 3400 LF of new 42 inch gravity pipe, 4760 LF of new 54 inch gravity pipe, in London Lift Station Shed in London Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 7,162,200	$ 0	$ 7,162,200
Contingency (30%)	$ 0	$ 2,148,700	$ 0	$ 2,148,700
Mobilization (10%)	$ 0	$ 716,300	$ 0	$ 716,300
Bond (5%)	$ 0	$ 358,200	$ 0	$ 358,200
OH&P (10%)	$ 0	$ 716,300	$ 0	$ 716,300
Design & Inspection (15%)	$ 0	$ 1,074,400	$ 0	$ 1,074,400
Total	**$ 0**	**$ 12,176,100**	**$ 0**	**$ 12,176,100**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 199 of 238

Project: New_London9

WWTP Service Area: London

Lift Station Sewershed: London

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 150

Current Peak Flow (gpm): 21,920

10-Year Peak Flow (gpm): 1,658

Ultimate Peak Flow (gpm): 6,905

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 2650 LF of new 15 inch gravity pipe, in London Lift Station Shed in London Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 1,298,400	$ 1,298,400
Contingency (30%)	$ 0	$ 0	$ 389,600	$ 389,600
Mobilization (10%)	$ 0	$ 0	$ 129,900	$ 129,900
Bond (5%)	$ 0	$ 0	$ 65,000	$ 65,000
OH&P (10%)	$ 0	$ 0	$ 129,900	$ 129,900
Design & Inspection (15%)	$ 0	$ 0	$ 194,800	$ 194,800
Total	**$ 0**	**$ 0**	**$ 2,207,600**	**$ 2,207,600**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 200 of 238

Project: New_London10

WWTP Service Area: London

Lift Station Sewershed: London

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 150

Current Peak Flow (gpm): 21,920

10-Year Peak Flow (gpm): 1,658

Ultimate Peak Flow (gpm): 6,905

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: 10-year

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 4150 LF of new 24 inch gravity pipe, 3900 LF of new 36 inch gravity pipe, in London Lift Station Shed in London Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 5,168,600	$ 0	$ 5,168,600
Contingency (30%)	$ 0	$ 1,550,600	$ 0	$ 1,550,600
Mobilization (10%)	$ 0	$ 516,900	$ 0	$ 516,900
Bond (5%)	$ 0	$ 258,500	$ 0	$ 258,500
OH&P (10%)	$ 0	$ 516,900	$ 0	$ 516,900
Design & Inspection (15%)	$ 0	$ 775,300	$ 0	$ 775,300
Total	**$ 0**	**$ 8,786,800**	**$ 0**	**$ 8,786,800**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 201 of 238

Project: New_London11

WWTP Service Area: London

Lift Station Sewershed: London

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 150

Current Peak Flow (gpm): 21,920

10-Year Peak Flow (gpm): 1,658

Ultimate Peak Flow (gpm): 6,905

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 3300 LF of new 15 inch gravity pipe, in London Lift Station Shed in London Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 1,617,000	$ 1,617,000
Contingency (30%)	$ 0	$ 0	$ 485,100	$ 485,100
Mobilization (10%)	$ 0	$ 0	$ 161,700	$ 161,700
Bond (5%)	$ 0	$ 0	$ 80,900	$ 80,900
OH&P (10%)	$ 0	$ 0	$ 161,700	$ 161,700
Design & Inspection (15%)	$ 0	$ 0	$ 242,600	$ 242,600
Total	**$ 0**	**$ 0**	**$ 2,749,000**	**$ 2,749,000**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 202 of 238

Project: New_London12

WWTP Service Area: London

Lift Station Sewershed: London

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 150

Current Peak Flow (gpm): 21,920

10-Year Peak Flow (gpm): 1,658

Ultimate Peak Flow (gpm): 14,315

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 2370 LF of new 60 inch gravity pipe, in London Lift Station Shed in London Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 2,587,400	$ 2,587,400
Contingency (30%)	$ 0	$ 0	$ 776,300	$ 776,300
Mobilization (10%)	$ 0	$ 0	$ 258,800	$ 258,800
Bond (5%)	$ 0	$ 0	$ 129,400	$ 129,400
OH&P (10%)	$ 0	$ 0	$ 258,800	$ 258,800
Design & Inspection (15%)	$ 0	$ 0	$ 388,200	$ 388,200
Total	**$ 0**	**$ 0**	**$ 4,398,900**	**$ 4,398,900**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 203 of 238

Project: New_London13

WWTP Service Area: London

Lift Station Sewershed: London

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 150

Current Peak Flow (gpm): 21,920

10-Year Peak Flow (gpm): 1,658

Ultimate Peak Flow (gpm): 14,315

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 4840 LF of new 54 inch gravity pipe, in London Lift Station Shed in London Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 4,595,700	$ 4,595,700
Contingency (30%)	$ 0	$ 0	$ 1,378,800	$ 1,378,800
Mobilization (10%)	$ 0	$ 0	$ 459,600	$ 459,600
Bond (5%)	$ 0	$ 0	$ 229,800	$ 229,800
OH&P (10%)	$ 0	$ 0	$ 459,600	$ 459,600
Design & Inspection (15%)	$ 0	$ 0	$ 689,400	$ 689,400
Total	**$ 0**	**$ 0**	**$ 7,812,900**	**$ 7,812,900**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 204 of 238

Project: New_London14

WWTP Service Area: London

Lift Station Sewershed: London

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 150

Current Peak Flow (gpm): 21,920

10-Year Peak Flow (gpm): 1,658

Ultimate Peak Flow (gpm): 14,315

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 6450 LF of new 36 inch gravity pipe, in London Lift Station Shed in London Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 3,867,500	$ 3,867,500
Contingency (30%)	$ 0	$ 0	$ 1,160,300	$ 1,160,300
Mobilization (10%)	$ 0	$ 0	$ 386,800	$ 386,800
Bond (5%)	$ 0	$ 0	$ 193,400	$ 193,400
OH&P (10%)	$ 0	$ 0	$ 386,800	$ 386,800
Design & Inspection (15%)	$ 0	$ 0	$ 580,200	$ 580,200
Total	**$ 0**	**$ 0**	**$ 6,575,000**	**$ 6,575,000**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 205 of 238

Project: New_London15

WWTP Service Area: London

Lift Station Sewershed: London

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 150

Current Peak Flow (gpm): 21,920

10-Year Peak Flow (gpm): 1,658

Ultimate Peak Flow (gpm): 14,315

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 1900 LF of new 15 inch gravity pipe, 1500 LF of new 21 inch gravity pipe, 2450 LF of new 24 inch gravity pipe, in London Lift Station Shed in London Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 2,252,600	$ 2,252,600
Contingency (30%)	$ 0	$ 0	$ 675,800	$ 675,800
Mobilization (10%)	$ 0	$ 0	$ 225,300	$ 225,300
Bond (5%)	$ 0	$ 0	$ 112,700	$ 112,700
OH&P (10%)	$ 0	$ 0	$ 225,300	$ 225,300
Design & Inspection (15%)	$ 0	$ 0	$ 337,900	$ 337,900
Total	**$ 0**	**$ 0**	**$ 3,829,600**	**$ 3,829,600**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 206 of 238

Project: New_London16

WWTP Service Area: London

Lift Station Sewershed: London

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 150

Current Peak Flow (gpm): 21,920

10-Year Peak Flow (gpm): 1,658

Ultimate Peak Flow (gpm): 14,315

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 1500 LF of new 10 inch gravity pipe, 6810 LF of new 15 inch gravity pipe, in London Lift Station Shed in London Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 2,501,900	$ 2,501,900
Contingency (30%)	$ 0	$ 0	$ 750,600	$ 750,600
Mobilization (10%)	$ 0	$ 0	$ 250,200	$ 250,200
Bond (5%)	$ 0	$ 0	$ 125,100	$ 125,100
OH&P (10%)	$ 0	$ 0	$ 250,200	$ 250,200
Design & Inspection (15%)	$ 0	$ 0	$ 375,300	$ 375,300
Total	**$ 0**	**$ 0**	**$ 4,253,300**	**$ 4,253,300**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 207 of 238

Project: New_Oso1

WWTP Service Area: Oso

Lift Station Sewershed: Everhardt and Staples

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 524

Current Peak Flow (gpm): 1,802

10-Year Peak Flow (gpm): 5,263

Ultimate Peak Flow (gpm): 8,725

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 50 LF of new 6 inch gravity pipe, in Everhardt and Staples Lift Station Shed in Oso Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 16,100	$ 16,100
Contingency (30%)	$ 0	$ 0	$ 4,900	$ 4,900
Mobilization (10%)	$ 0	$ 0	$ 1,700	$ 1,700
Bond (5%)	$ 0	$ 0	$ 900	$ 900
OH&P (10%)	$ 0	$ 0	$ 1,700	$ 1,700
Design & Inspection (15%)	$ 0	$ 0	$ 2,500	$ 2,500
Total	**$ 0**	**$ 0**	**$ 27,800**	**$ 27,800**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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Capital Improvement Plan

City of Corpus Christi, Texas

Project # 208 of 238

Project: New_Whitecap1

WWTP Service Area: Whitecap

Lift Station Sewershed: Coquino Bay

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 16

Current Peak Flow (gpm): 19

10-Year Peak Flow (gpm): 232

Ultimate Peak Flow (gpm): 323

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 2830 LF of new 10 inch gravity pipe, in Coquino Bay Lift Station Shed in Whitecap Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 707,500	$ 707,500
Contingency (30%)	$ 0	$ 0	$ 212,300	$ 212,300
Mobilization (10%)	$ 0	$ 0	$ 70,800	$ 70,800
Bond (5%)	$ 0	$ 0	$ 35,400	$ 35,400
OH&P (10%)	$ 0	$ 0	$ 70,800	$ 70,800
Design & Inspection (15%)	$ 0	$ 0	$ 106,200	$ 106,200
Total	**$ 0**	**$ 0**	**$ 1,203,000**	**$ 1,203,000**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 209 of 238

Project: New_Whitecap2

WWTP Service Area: Whitecap

Lift Station Sewershed: Coquino Bay

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 16

Current Peak Flow (gpm): 19

10-Year Peak Flow (gpm): 232

Ultimate Peak Flow (gpm): 323

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 1600 LF of new 10 inch gravity pipe, in Coquino Bay Lift Station Shed in Whitecap Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 399,100	$ 399,100
Contingency (30%)	$ 0	$ 0	$ 119,800	$ 119,800
Mobilization (10%)	$ 0	$ 0	$ 40,000	$ 40,000
Bond (5%)	$ 0	$ 0	$ 20,000	$ 20,000
OH&P (10%)	$ 0	$ 0	$ 40,000	$ 40,000
Design & Inspection (15%)	$ 0	$ 0	$ 59,900	$ 59,900
Total	**$ 0**	**$ 0**	**$ 678,800**	**$ 678,800**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 210 of 238

Project: New_Whitecap3

WWTP Service Area: Whitecap

Lift Station Sewershed: Lake Padre South

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 21

Current Peak Flow (gpm): 34

10-Year Peak Flow (gpm): 60

Ultimate Peak Flow (gpm): 291

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 1310 LF of new 8 inch gravity pipe, in Lake Padre South Lift Station Shed in Whitecap Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 314,800	$ 314,800
Contingency (30%)	$ 0	$ 0	$ 94,500	$ 94,500
Mobilization (10%)	$ 0	$ 0	$ 31,500	$ 31,500
Bond (5%)	$ 0	$ 0	$ 15,800	$ 15,800
OH&P (10%)	$ 0	$ 0	$ 31,500	$ 31,500
Design & Inspection (15%)	$ 0	$ 0	$ 47,300	$ 47,300
Total	**$ 0**	**$ 0**	**$ 535,400**	**$ 535,400**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 211 of 238

Project: New_Whitecap4

WWTP Service Area: Whitecap

Lift Station Sewershed: Swordfish

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 40

Current Peak Flow (gpm): 47

10-Year Peak Flow (gpm): 89

Ultimate Peak Flow (gpm): 89

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 1710 LF of new 8 inch gravity pipe, in Swordfish Lift Station Shed in Whitecap Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 426,500	$ 426,500
Contingency (30%)	$ 0	$ 0	$ 128,000	$ 128,000
Mobilization (10%)	$ 0	$ 0	$ 42,700	$ 42,700
Bond (5%)	$ 0	$ 0	$ 21,400	$ 21,400
OH&P (10%)	$ 0	$ 0	$ 42,700	$ 42,700
Design & Inspection (15%)	$ 0	$ 0	$ 64,000	$ 64,000
Total	**$ 0**	**$ 0**	**$ 725,300**	**$ 725,300**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 212 of 238

Project: New_Whitecap5

WWTP Service Area: Whitecap

Lift Station Sewershed: Verdemar

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 38

Current Peak Flow (gpm): 188

10-Year Peak Flow (gpm): 188

Ultimate Peak Flow (gpm): 278

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 1410 LF of new 8 inch gravity pipe, in Verdemar Lift Station Shed in Whitecap Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 352,700	$ 352,700
Contingency (30%)	$ 0	$ 0	$ 105,900	$ 105,900
Mobilization (10%)	$ 0	$ 0	$ 35,300	$ 35,300
Bond (5%)	$ 0	$ 0	$ 17,700	$ 17,700
OH&P (10%)	$ 0	$ 0	$ 35,300	$ 35,300
Design & Inspection (15%)	$ 0	$ 0	$ 53,000	$ 53,000
Total	**$ 0**	**$ 0**	**$ 599,900**	**$ 599,900**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 213 of 238

Project: New_Whitecap6

WWTP Service Area: Whitecap

Lift Station Sewershed: To ModelMH 124020240

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): No Data Available

Current Peak Flow (gpm): No Data Available

10-Year Peak Flow (gpm): No Data Available

Ultimate Peak Flow (gpm): 456

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 890 LF of new 6 inch gravity pipe, in To ModelMH 124020240 Lift Station Shed in Whitecap Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 232,400	$ 232,400
Contingency (30%)	$ 0	$ 0	$ 69,800	$ 69,800
Mobilization (10%)	$ 0	$ 0	$ 23,300	$ 23,300
Bond (5%)	$ 0	$ 0	$ 11,700	$ 11,700
OH&P (10%)	$ 0	$ 0	$ 23,300	$ 23,300
Design & Inspection (15%)	$ 0	$ 0	$ 34,900	$ 34,900
Total	**$ 0**	**$ 0**	**$ 395,400**	**$ 395,400**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 214 of 238

Project: New_Whitecap7

WWTP Service Area: Whitecap

Lift Station Sewershed: To ModelMH 124020240

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): No Data Available

Current Peak Flow (gpm): No Data Available

10-Year Peak Flow (gpm): No Data Available

Ultimate Peak Flow (gpm): 456

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 560 LF of new 6 inch gravity pipe, in To ModelMH 124020240 Lift Station Shed in Whitecap Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 146,900	$ 146,900
Contingency (30%)	$ 0	$ 0	$ 44,100	$ 44,100
Mobilization (10%)	$ 0	$ 0	$ 14,700	$ 14,700
Bond (5%)	$ 0	$ 0	$ 7,400	$ 7,400
OH&P (10%)	$ 0	$ 0	$ 14,700	$ 14,700
Design & Inspection (15%)	$ 0	$ 0	$ 22,100	$ 22,100
Total	**$ 0**	**$ 0**	**$ 249,900**	**$ 249,900**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 215 of 238

Project: New_Whitecap8

WWTP Service Area: Whitecap

Lift Station Sewershed: To ModelMH 124020240

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): No Data Available

Current Peak Flow (gpm): No Data Available

10-Year Peak Flow (gpm): No Data Available

Ultimate Peak Flow (gpm): 456

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 1180 LF of new 8 inch gravity pipe, in To ModelMH 124020240 Lift Station Shed in Whitecap Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 283,100	$ 283,100
Contingency (30%)	$ 0	$ 0	$ 85,000	$ 85,000
Mobilization (10%)	$ 0	$ 0	$ 28,400	$ 28,400
Bond (5%)	$ 0	$ 0	$ 14,200	$ 14,200
OH&P (10%)	$ 0	$ 0	$ 28,400	$ 28,400
Design & Inspection (15%)	$ 0	$ 0	$ 42,500	$ 42,500
Total	**$ 0**	**$ 0**	**$ 481,600**	**$ 481,600**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 216 of 238

Project: New_Whitecap9

WWTP Service Area: Whitecap

Lift Station Sewershed: To ModelMH 124040580

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): No Data Available

Current Peak Flow (gpm): No Data Available

10-Year Peak Flow (gpm): No Data Available

Ultimate Peak Flow (gpm): 496

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 1500 LF of new 10 inch gravity pipe, in To ModelMH 124040580 Lift Station Shed in Whitecap Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 388,900	$ 388,900
Contingency (30%)	$ 0	$ 0	$ 116,700	$ 116,700
Mobilization (10%)	$ 0	$ 0	$ 38,900	$ 38,900
Bond (5%)	$ 0	$ 0	$ 19,500	$ 19,500
OH&P (10%)	$ 0	$ 0	$ 38,900	$ 38,900
Design & Inspection (15%)	$ 0	$ 0	$ 58,400	$ 58,400
Total	**$ 0**	**$ 0**	**$ 661,300**	**$ 661,300**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 217 of 238

Project: New_Whitecap10

WWTP Service Area: Whitecap

Lift Station Sewershed: Zahn

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): No Data Available

Current Peak Flow (gpm): No Data Available

10-Year Peak Flow (gpm): No Data Available

Ultimate Peak Flow (gpm): 749

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 800 LF of new 4 inch gravity pipe, in Zahn Lift Station Shed in Whitecap Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 800	$ 800
Contingency (30%)	$ 0	$ 0	$ 300	$ 300
Mobilization (10%)	$ 0	$ 0	$ 100	$ 100
Bond (5%)	$ 0	$ 0	$ 100	$ 100
OH&P (10%)	$ 0	$ 0	$ 100	$ 100
Design & Inspection (15%)	$ 0	$ 0	$ 200	$ 200
Total	**$ 0**	**$ 0**	**$ 1,600**	**$ 1,600**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 218 of 238

Project: New LS to Waldron 1A

WWTP Service Area: Laguna Madre

Lift Station Sewershed: New LS to Waldron 1A

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): No Data Available

Current Peak Flow (gpm): No Data Available

10-Year Peak Flow (gpm): No Data Available

Ultimate Peak Flow (gpm): 1,541

Type: Future Project

Useful Life: 50 years

Category: Future Lift Station and Force Main

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Lift Station and Force Main in order to meet demands generated from anticipated growth. Install new Lift Station and Force Main in Laguna Madre WWTP Service Area

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 192,700	$ 192,700
Contingency (30%)	$ 0	$ 0	$ 57,900	$ 57,900
Mobilization (10%)	$ 0	$ 0	$ 19,300	$ 19,300
Bond (5%)	$ 0	$ 0	$ 9,700	$ 9,700
OH&P (10%)	$ 0	$ 0	$ 19,300	$ 19,300
Design & Inspection (15%)	$ 0	$ 0	$ 29,000	$ 29,000
Total	**$ 0**	**$ 0**	**$ 327,900**	**$ 327,900**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 219 of 238

Project: New LS to Waldron 1B

WWTP Service Area: Laguna Madre

Lift Station Sewershed: New LS to Waldron 1B

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): No Data Available

Current Peak Flow (gpm): No Data Available

10-Year Peak Flow (gpm): No Data Available

Ultimate Peak Flow (gpm): 700

Type: Future Project

Useful Life: 50 years

Category: Future Lift Station and Force Main

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Lift Station and Force Main in order to meet demands generated from anticipated growth. Install new Lift Station and Force Main in Laguna Madre WWTP Service Area

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 123,000	$ 123,000
Contingency (30%)	$ 0	$ 0	$ 36,900	$ 36,900
Mobilization (10%)	$ 0	$ 0	$ 12,300	$ 12,300
Bond (5%)	$ 0	$ 0	$ 6,200	$ 6,200
OH&P (10%)	$ 0	$ 0	$ 12,300	$ 12,300
Design & Inspection (15%)	$ 0	$ 0	$ 18,500	$ 18,500
Total	**$ 0**	**$ 0**	**$ 209,200**	**$ 209,200**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 220 of 238

Project: New LS to Waldron 2

WWTP Service Area: Laguna Madre

Lift Station Sewershed: New LS to Waldron 2

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): No Data Available

Current Peak Flow (gpm): No Data Available

10-Year Peak Flow (gpm): No Data Available

Ultimate Peak Flow (gpm): 290

Type: Future Project

Useful Life: 50 years

Category: Future Lift Station and Force Main

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Lift Station and Force Main in order to meet demands generated from anticipated growth. Install new Lift Station and Force Main in Laguna Madre WWTP Service Area

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 91,900	$ 91,900
Contingency (30%)	$ 0	$ 0	$ 27,600	$ 27,600
Mobilization (10%)	$ 0	$ 0	$ 9,200	$ 9,200
Bond (5%)	$ 0	$ 0	$ 4,600	$ 4,600
OH&P (10%)	$ 0	$ 0	$ 9,200	$ 9,200
Design & Inspection (15%)	$ 0	$ 0	$ 13,800	$ 13,800
Total	**$ 0**	**$ 0**	**$ 156,300**	**$ 156,300**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 221 of 238

Project: New LS to G1_1

WWTP Service Area: Greenwood

Lift Station Sewershed: G1

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): No Data Available

Current Peak Flow (gpm): No Data Available

10-Year Peak Flow (gpm): No Data Available

Ultimate Peak Flow (gpm): 906

Type: Future Project

Useful Life: 50 years

Category: Future Lift Station and Force Main

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Lift Station and Force Main in order to meet demands generated from anticipated growth. Install new Lift Station and Force Main in Greenwood WWTP Service Area

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 387,800	$ 387,800
Contingency (30%)	$ 0	$ 0	$ 116,400	$ 116,400
Mobilization (10%)	$ 0	$ 0	$ 38,800	$ 38,800
Bond (5%)	$ 0	$ 0	$ 19,400	$ 19,400
OH&P (10%)	$ 0	$ 0	$ 38,800	$ 38,800
Design & Inspection (15%)	$ 0	$ 0	$ 58,200	$ 58,200
Total	**$ 0**	**$ 0**	**$ 659,400**	**$ 659,400**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 222 of 238

Project: New LS to LS1003WWTP2

WWTP Service Area: Greenwood

Lift Station Sewershed: WW-LS1003 WWTP-2

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 2,664

Current Peak Flow (gpm): 31,041

10-Year Peak Flow (gpm): 31,717

Ultimate Peak Flow (gpm): 34,599

Type: Future Project

Useful Life: 50 years

Category: Future Lift Station and Force Main

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Lift Station and Force Main in order to meet demands generated from anticipated growth. Install new Lift Station and Force Main in Greenwood WWTP Service Area

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 428,500	$ 428,500
Contingency (30%)	$ 0	$ 0	$ 128,600	$ 128,600
Mobilization (10%)	$ 0	$ 0	$ 42,900	$ 42,900
Bond (5%)	$ 0	$ 0	$ 21,500	$ 21,500
OH&P (10%)	$ 0	$ 0	$ 42,900	$ 42,900
Design & Inspection (15%)	$ 0	$ 0	$ 64,300	$ 64,300
Total	**$ 0**	**$ 0**	**$ 728,700**	**$ 728,700**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 223 of 238

Project: New LS to LS1003WWTP2- South

WWTP Service Area: Greenwood

Lift Station Sewershed: WW-LS1003 WWTP-2

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 2,664

Current Peak Flow (gpm): 31,041

10-Year Peak Flow (gpm): 31,717

Ultimate Peak Flow (gpm): 34,599

Type: Future Project

Useful Life: 50 years

Category: Future Lift Station and Force Main

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Lift Station and Force Main in order to meet demands generated from anticipated growth. Install new Lift Station and Force Main in Greenwood WWTP Service Area

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 116,700	$ 116,700
Contingency (30%)	$ 0	$ 0	$ 35,100	$ 35,100
Mobilization (10%)	$ 0	$ 0	$ 11,700	$ 11,700
Bond (5%)	$ 0	$ 0	$ 5,900	$ 5,900
OH&P (10%)	$ 0	$ 0	$ 11,700	$ 11,700
Design & Inspection (15%)	$ 0	$ 0	$ 17,600	$ 17,600
Total	**$ 0**	**$ 0**	**$ 198,700**	**$ 198,700**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 224 of 238

Project: New LS to WW-LS1003 WWTP-4

WWTP Service Area: Greenwood

Lift Station Sewershed: WW-LS1003 WWTP-4

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 2,664

Current Peak Flow (gpm): 31,041

10-Year Peak Flow (gpm): 31,717

Ultimate Peak Flow (gpm): 34,599

Type: Future Project

Useful Life: 50 years

Category: Future Lift Station and Force Main

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Lift Station and Force Main in order to meet demands generated from anticipated growth. Install new Lift Station and Force Main in Greenwood WWTP Service Area

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 479,100	$ 479,100
Contingency (30%)	$ 0	$ 0	$ 143,800	$ 143,800
Mobilization (10%)	$ 0	$ 0	$ 48,000	$ 48,000
Bond (5%)	$ 0	$ 0	$ 24,000	$ 24,000
OH&P (10%)	$ 0	$ 0	$ 48,000	$ 48,000
Design & Inspection (15%)	$ 0	$ 0	$ 71,900	$ 71,900
Total	**$ 0**	**$ 0**	**$ 814,800**	**$ 814,800**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 225 of 238

Project: New LS to Coquina Bay 2

WWTP Service Area: Whitecap

Lift Station Sewershed: Coquino Bay

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 16

Current Peak Flow (gpm): 19

10-Year Peak Flow (gpm): 232

Ultimate Peak Flow (gpm): 323

Type: Future Project

Useful Life: 50 years

Category: Future Lift Station and Force Main

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Lift Station and Force Main in order to meet demands generated from anticipated growth. Install new Lift Station and Force Main in Whitecap WWTP Service Area

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 208,500	$ 208,500
Contingency (30%)	$ 0	$ 0	$ 62,600	$ 62,600
Mobilization (10%)	$ 0	$ 0	$ 20,900	$ 20,900
Bond (5%)	$ 0	$ 0	$ 10,500	$ 10,500
OH&P (10%)	$ 0	$ 0	$ 20,900	$ 20,900
Design & Inspection (15%)	$ 0	$ 0	$ 31,300	$ 31,300
Total	**$ 0**	**$ 0**	**$ 354,700**	**$ 354,700**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 226 of 238

Project: New LS to Coquina Bay 1

WWTP Service Area: Whitecap

Lift Station Sewershed: Coquino Bay

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 16

Current Peak Flow (gpm): 19

10-Year Peak Flow (gpm): 232

Ultimate Peak Flow (gpm): 323

Type: Future Project

Useful Life: 50 years

Category: Future Lift Station and Force Main

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Lift Station and Force Main in order to meet demands generated from anticipated growth. Install new Lift Station and Force Main in Whitecap WWTP Service Area

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 285,100	$ 285,100
Contingency (30%)	$ 0	$ 0	$ 85,600	$ 85,600
Mobilization (10%)	$ 0	$ 0	$ 28,600	$ 28,600
Bond (5%)	$ 0	$ 0	$ 14,300	$ 14,300
OH&P (10%)	$ 0	$ 0	$ 28,600	$ 28,600
Design & Inspection (15%)	$ 0	$ 0	$ 42,800	$ 42,800
Total	**$ 0**	**$ 0**	**$ 485,000**	**$ 485,000**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 227 of 238

Project: New LS to Zahn 1

WWTP Service Area: Whitecap

Lift Station Sewershed: Zahn

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): No Data Available

Current Peak Flow (gpm): No Data Available

10-Year Peak Flow (gpm): No Data Available

Ultimate Peak Flow (gpm): 749

Type: Future Project

Useful Life: 50 years

Category: Future Lift Station and Force Main

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Lift Station and Force Main in order to meet demands generated from anticipated growth. Install new Lift Station and Force Main in Whitecap WWTP Service Area

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 301,500	$ 301,500
Contingency (30%)	$ 0	$ 0	$ 90,500	$ 90,500
Mobilization (10%)	$ 0	$ 0	$ 30,200	$ 30,200
Bond (5%)	$ 0	$ 0	$ 15,100	$ 15,100
OH&P (10%)	$ 0	$ 0	$ 30,200	$ 30,200
Design & Inspection (15%)	$ 0	$ 0	$ 45,300	$ 45,300
Total	**$ 0**	**$ 0**	**$ 512,800**	**$ 512,800**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 228 of 238

Project: New LS to Verdemar

WWTP Service Area: Whitecap

Lift Station Sewershed: Verdemar

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 38

Current Peak Flow (gpm): 188

10-Year Peak Flow (gpm): 188

Ultimate Peak Flow (gpm): 278

Type: Future Project

Useful Life: 50 years

Category: Future Lift Station and Force Main

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Lift Station and Force Main in order to meet demands generated from anticipated growth. Install new Lift Station and Force Main in Whitecap WWTP Service Area

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 144,400	$ 144,400
Contingency (30%)	$ 0	$ 0	$ 43,400	$ 43,400
Mobilization (10%)	$ 0	$ 0	$ 14,500	$ 14,500
Bond (5%)	$ 0	$ 0	$ 7,300	$ 7,300
OH&P (10%)	$ 0	$ 0	$ 14,500	$ 14,500
Design & Inspection (15%)	$ 0	$ 0	$ 21,700	$ 21,700
Total	**$ 0**	**$ 0**	**$ 245,800**	**$ 245,800**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 229 of 238

Project: New LS to MH 240 1

WWTP Service Area: Whitecap

Lift Station Sewershed: MH 240

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): No Data Available

Current Peak Flow (gpm): No Data Available

10-Year Peak Flow (gpm): No Data Available

Ultimate Peak Flow (gpm): 456

Type: Future Project

Useful Life: 50 years

Category: Future Lift Station and Force Main

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Lift Station and Force Main in order to meet demands generated from anticipated growth. Install new Lift Station and Force Main in Whitecap WWTP Service Area

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 181,300	$ 181,300
Contingency (30%)	$ 0	$ 0	$ 54,400	$ 54,400
Mobilization (10%)	$ 0	$ 0	$ 18,200	$ 18,200
Bond (5%)	$ 0	$ 0	$ 9,100	$ 9,100
OH&P (10%)	$ 0	$ 0	$ 18,200	$ 18,200
Design & Inspection (15%)	$ 0	$ 0	$ 27,200	$ 27,200
Total	**$ 0**	**$ 0**	**$ 308,400**	**$ 308,400**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 230 of 238

Project: New LS to MH 240 2

WWTP Service Area: Whitecap

Lift Station Sewershed: MH 240

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): No Data Available

Current Peak Flow (gpm): No Data Available

10-Year Peak Flow (gpm): No Data Available

Ultimate Peak Flow (gpm): 456

Type: Future Project

Useful Life: 50 years

Category: Future Lift Station and Force Main

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Lift Station and Force Main in order to meet demands generated from anticipated growth. Install new Lift Station and Force Main in Whitecap WWTP Service Area

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 144,300	$ 144,300
Contingency (30%)	$ 0	$ 0	$ 43,300	$ 43,300
Mobilization (10%)	$ 0	$ 0	$ 14,500	$ 14,500
Bond (5%)	$ 0	$ 0	$ 7,300	$ 7,300
OH&P (10%)	$ 0	$ 0	$ 14,500	$ 14,500
Design & Inspection (15%)	$ 0	$ 0	$ 21,700	$ 21,700
Total	**$ 0**	**$ 0**	**$ 245,600**	**$ 245,600**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 231 of 238

Project: New LS to MH 240 3

WWTP Service Area: Whitecap

Lift Station Sewershed: MH 240

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): No Data Available

Current Peak Flow (gpm): No Data Available

10-Year Peak Flow (gpm): No Data Available

Ultimate Peak Flow (gpm): 456

Type: Future Project

Useful Life: 50 years

Category: Future Lift Station and Force Main

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Lift Station and Force Main in order to meet demands generated from anticipated growth. Install new Lift Station and Force Main in Whitecap WWTP Service Area

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 208,600	$ 208,600
Contingency (30%)	$ 0	$ 0	$ 62,600	$ 62,600
Mobilization (10%)	$ 0	$ 0	$ 20,900	$ 20,900
Bond (5%)	$ 0	$ 0	$ 10,500	$ 10,500
OH&P (10%)	$ 0	$ 0	$ 20,900	$ 20,900
Design & Inspection (15%)	$ 0	$ 0	$ 31,300	$ 31,300
Total	**$ 0**	**$ 0**	**$ 354,800**	**$ 354,800**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 232 of 238

Project: New LS to Highway Nine 1

WWTP Service Area: Greenwood

Lift Station Sewershed: Highway Nine

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 52

Current Peak Flow (gpm): 1,031

10-Year Peak Flow (gpm): 1,178

Ultimate Peak Flow (gpm): 400

Type: Future Project

Useful Life: 50 years

Category: Future Lift Station and Force Main

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Lift Station and Force Main in order to meet demands generated from anticipated growth. Install new Lift Station and Force Main in Greenwood WWTP Service Area

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 196,800	$ 196,800
Contingency (30%)	$ 0	$ 0	$ 59,100	$ 59,100
Mobilization (10%)	$ 0	$ 0	$ 19,700	$ 19,700
Bond (5%)	$ 0	$ 0	$ 9,900	$ 9,900
OH&P (10%)	$ 0	$ 0	$ 19,700	$ 19,700
Design & Inspection (15%)	$ 0	$ 0	$ 29,600	$ 29,600
Total	**$ 0**	**$ 0**	**$ 334,800**	**$ 334,800**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 233 of 238

Project: New LS to Highway Nine 2

WWTP Service Area: Greenwood

Lift Station Sewershed: Highway Nine

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 52

Current Peak Flow (gpm): 1,031

10-Year Peak Flow (gpm): 1,178

Ultimate Peak Flow (gpm): 1,219

Type: Future Project

Useful Life: 50 years

Category: Future Lift Station and Force Main

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Lift Station and Force Main in order to meet demands generated from anticipated growth. Install new Lift Station and Force Main in Greenwood WWTP Service Area

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 394,500	$ 394,500
Contingency (30%)	$ 0	$ 0	$ 118,400	$ 118,400
Mobilization (10%)	$ 0	$ 0	$ 39,500	$ 39,500
Bond (5%)	$ 0	$ 0	$ 19,800	$ 19,800
OH&P (10%)	$ 0	$ 0	$ 39,500	$ 39,500
Design & Inspection (15%)	$ 0	$ 0	$ 59,200	$ 59,200
Total	**$ 0**	**$ 0**	**$ 670,900**	**$ 670,900**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 234 of 238

Project: New LS to MH 580

WWTP Service Area: Whitecap

Lift Station Sewershed: MH 580

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): No Data Available

Current Peak Flow (gpm): No Data Available

10-Year Peak Flow (gpm): No Data Available

Ultimate Peak Flow (gpm): 496

Type: Future Project

Useful Life: 50 years

Category: Future Lift Station and Force Main

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Lift Station and Force Main in order to meet demands generated from anticipated growth. Install new Lift Station and Force Main in Whitecap WWTP Service Area

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 283,400	$ 283,400
Contingency (30%)	$ 0	$ 0	$ 85,100	$ 85,100
Mobilization (10%)	$ 0	$ 0	$ 28,400	$ 28,400
Bond (5%)	$ 0	$ 0	$ 14,200	$ 14,200
OH&P (10%)	$ 0	$ 0	$ 28,400	$ 28,400
Design & Inspection (15%)	$ 0	$ 0	$ 42,600	$ 42,600
Total	**$ 0**	**$ 0**	**$ 482,100**	**$ 482,100**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 235 of 238

Project: Lakes NW LS

WWTP Service Area: Allison

Lift Station Sewershed: Lakes Northwest

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 2

Current Peak Flow (gpm): 14

10-Year Peak Flow (gpm): 758

Ultimate Peak Flow (gpm): 404

Type: Future Project

Useful Life: 50 years

Category: Future Lift Station and Force Main

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Lift Station and Force Main in order to meet demands generated from anticipated growth. Install new Lift Station and Force Main in Allison WWTP Service Area

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 91,900	$ 91,900
Contingency (30%)	$ 0	$ 0	$ 27,600	$ 27,600
Mobilization (10%)	$ 0	$ 0	$ 9,200	$ 9,200
Bond (5%)	$ 0	$ 0	$ 4,600	$ 4,600
OH&P (10%)	$ 0	$ 0	$ 9,200	$ 9,200
Design & Inspection (15%)	$ 0	$ 0	$ 13,800	$ 13,800
Total	**$ 0**	**$ 0**	**$ 156,300**	**$ 156,300**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

2022 *thru* Ultimate Growth

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 236 of 238

Project: Flour Bluff Rd

WWTP Service Area: Laguna Madre

Lift Station Sewershed: Flour Bluff

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 162

Current Peak Flow (gpm): 647

10-Year Peak Flow (gpm): 668

Ultimate Peak Flow (gpm): 734

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 5250 LF of new 12 inch gravity pipe, in Flour Bluff Lift Station Shed in Laguna Madre Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 1,417,900	$ 1,417,900
Contingency (30%)	$ 0	$ 0	$ 425,400	$ 425,400
Mobilization (10%)	$ 0	$ 0	$ 141,800	$ 141,800
Bond (5%)	$ 0	$ 0	$ 70,900	$ 70,900
OH&P (10%)	$ 0	$ 0	$ 141,800	$ 141,800
Design & Inspection (15%)	$ 0	$ 0	$ 212,700	$ 212,700
Total	**$ 0**	**$ 0**	**$ 2,410,500**	**$ 2,410,500**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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Capital Improvement Plan

City of Corpus Christi, Texas

Project # 237 of 238

Project: Grav to Waldron 2

WWTP Service Area: Laguna Madre

Lift Station Sewershed: New LS to Waldron 2

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 202

Current Peak Flow (gpm): 1,615

10-Year Peak Flow (gpm): 1,732

Ultimate Peak Flow (gpm): 1,541

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 2160 LF of new 8 inch gravity pipe, in New LS to Waldron 2 Lift Station Shed in Laguna Madre Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 561,800	$ 561,800
Contingency (30%)	$ 0	$ 0	$ 168,600	$ 168,600
Mobilization (10%)	$ 0	$ 0	$ 56,200	$ 56,200
Bond (5%)	$ 0	$ 0	$ 0	$ 0
OH&P (10%)	$ 0	$ 0	$ 56,200	$ 56,200
Design & Inspection (15%)	$ 0	$ 0	$ 84,300	$ 84,300
Total	**$ 0**	**$ 0**	**$ 927,100**	**$ 927,100**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
The cost projections listed have been developed for rough proportionality calculations only and should not be used for any future Capital Improvement Planning within the City of Corpus Christi. The cost projections use costs for 2023 and do not account for inflation.

Capital Improvement Plan

City of Corpus Christi, Texas

Project # 238 of 238

Project: Grav to Waldron

WWTP Service Area: Laguna Madre

Lift Station Sewershed: Grav to Waldron

Overall Lift Station Drainage Area Flows:

Current Average Flow (gpm): 202

Current Peak Flow (gpm): 1,615

10-Year Peak Flow (gpm): 1,732

Ultimate Peak Flow (gpm): 1,541

Type: Future Project

Useful Life: 50 years

Category: Future Gravity Pipe

Department: Wastewater

Contact: Director of Water Utilities

Priority: Future

Status: Ultimate

Justification & Description

Install new Gravity Pipes in order to meet demands generated from anticipated growth. Install: 8660 LF of new 12 inch gravity pipe, in Grav to Waldron Lift Station Shed in Laguna Madre Basin WWTP Service Area.

Expenditures	2022-2024	2025-2031	Ultimate	Total
Direct Construction Cost	$ 0	$ 0	$ 2,597,400	$ 2,597,400
Contingency (30%)	$ 0	$ 0	$ 779,300	$ 779,300
Mobilization (10%)	$ 0	$ 0	$ 259,800	$ 259,800
Bond (5%)	$ 0	$ 0	$ 0	$ 0
OH&P (10%)	$ 0	$ 0	$ 259,800	$ 259,800
Design & Inspection (15%)	$ 0	$ 0	$ 389,700	$ 389,700
Total	**$ 0**	**$ 0**	**$ 4,286,000**	**$ 4,286,000**

Funding Sources	2022-2024	2025-2026	Ultimate	Total
Total				

NOTE:
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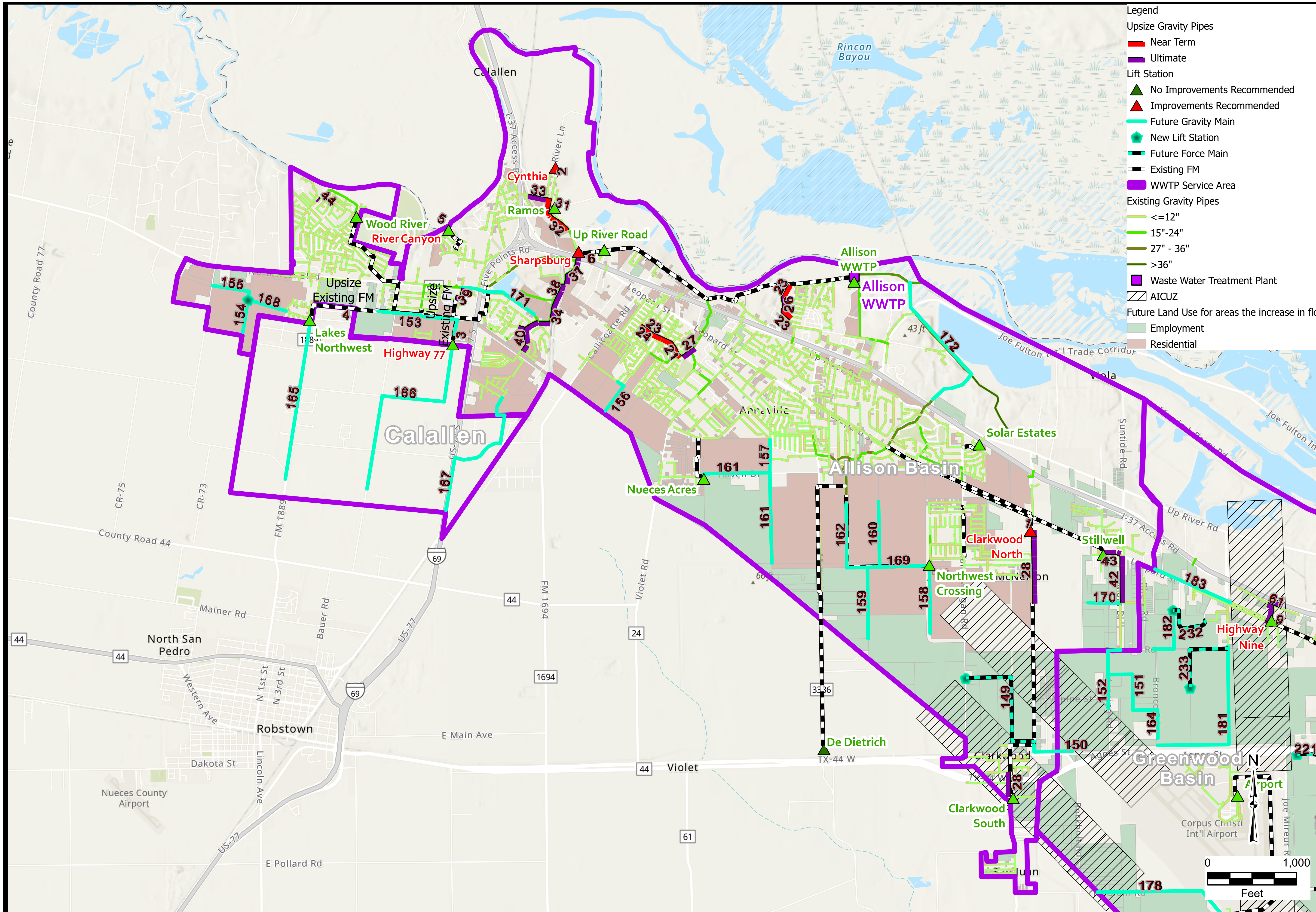
Appendix D. Individual Project Maps



Wastewater System Upgrades Project Guide

City of Corpus Christi

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Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended

- Future Gravity Main
- New Lift Station
- Future Force Main
- Existing FM
- WWTP Service Area

Existing Gravity Pipes
- <=12"
- 15"-24"
- 27" - 36"
- >36"
- Waste Water Treatment Plant
- AICUZ

Future Land Use for areas the increase in flow
- Employment
- Residential

Allison Basin
Greenwood Basin
Broadway Basin
Oso Basin
Madre Basin
London Lift Station

Nueces Acres
Solar Estates
Stillwell
Clarkwood North
Northwest Crossing
Highway Nine
De Dietrich
Clarkwood South
Airport
Levi County Jail
McBride
Charlie's Place
Nueces Bay
Resaca
Rincon North
Rincon South
North Beach "E"
North Beach "D"
North Beach "C"
North Beach "B"
Peoples Street "T" Head
Lawrence Street "T" Head
Studebaker
Coopers Alley "L" Head
Cole Park
Morgan
Oleander
Arcadia
Port/Pearse
Trojan
Lexington
London Lift Station
Rose Acres
Coastal Meadows
Upsize Existing FM
Greenwood WWTP
Sacky
Everhart/Staples
Kostoryz
Schanen
Oso WWTP # 2
Oso WWTP #1
TAMUCC
Pelican Bay
Sugar Tree
Anchor Habor
Turtle Cove
Travel Trailer
Williams
Wooldridge
Perry Place
Station #5
Greenfields By The Bay
Wooldridge II
Airline
Slough
Bay Drive
Starry
Purdue
Rhetta Place
Four Bluff
Country Club Estates
Webers Glen
The Lakes
Buckingham
Cimmaron
Kings Crossing
London East
London Lift Station
Cabaniss Field Nas
Tierra Grande
FM 43
Violet Rd
Up River Rd
Agnes St
Clarkwood Rd
Corpus Christi Int'l Airport

N
0 1,000
Feet

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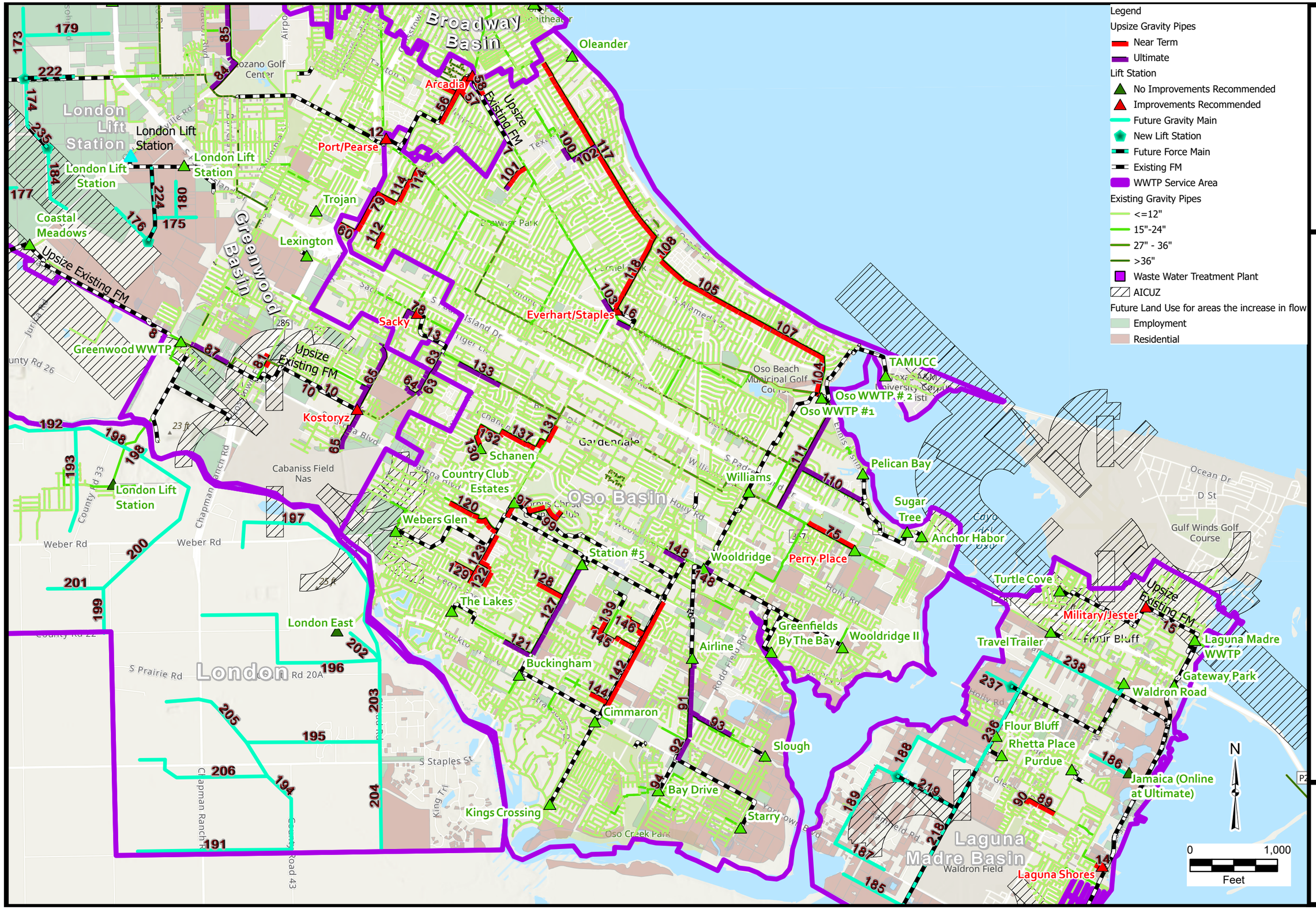

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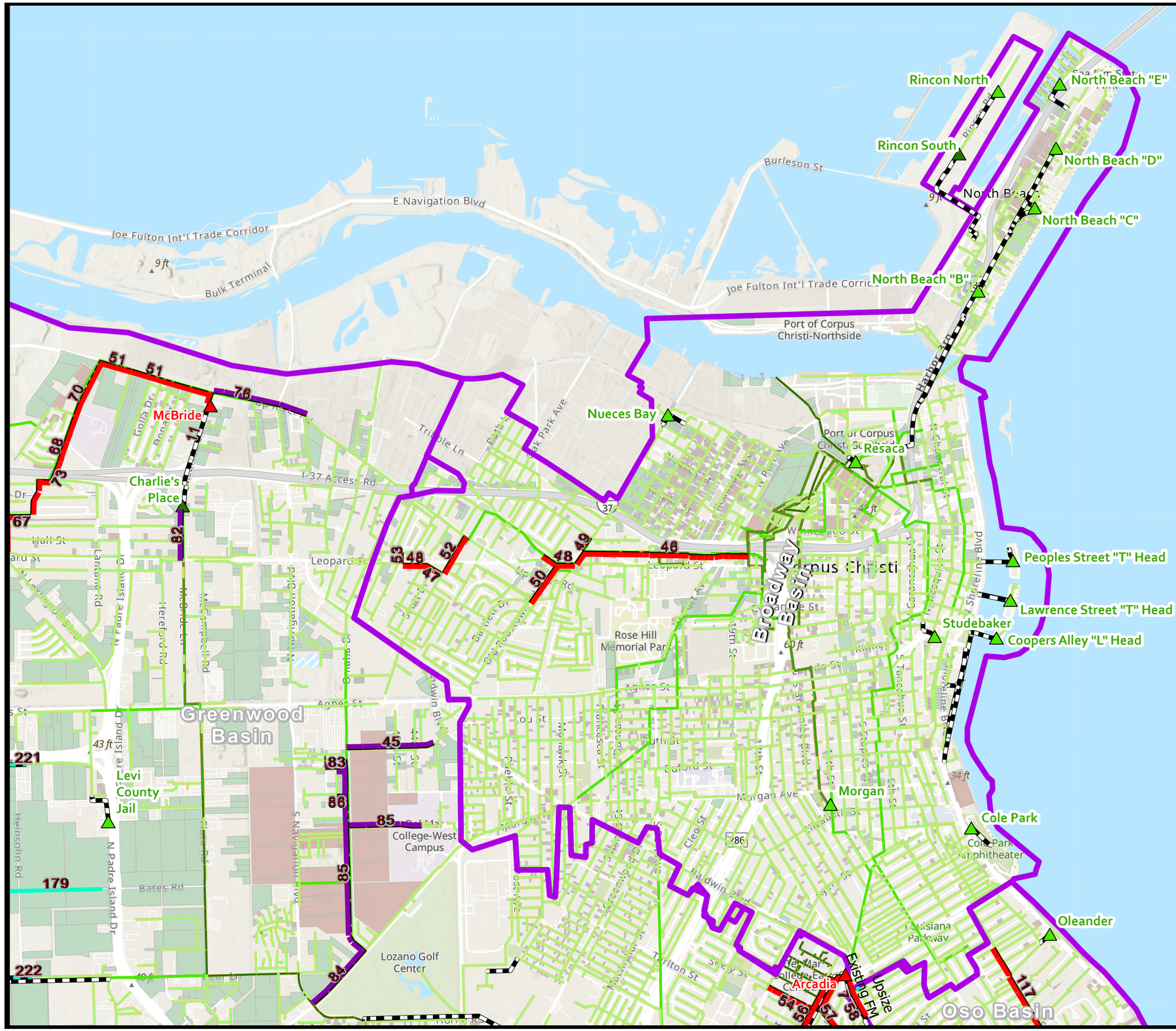
City of Corpus Christi



Legend

- Upsize Gravity Pipes
  - Near Term
  - Ultimate
- Lift Station
  - No Improvements Recommended
  - Improvements Recommended
  - Future Gravity Main
  - New Lift Station
  - Future Force Main
  - Existing FM
  - WWTP Service Area
- Existing Gravity Pipes
  - <=12"
  - 15"-24"
  - 27" - 36"
  - >36"
  - Waste Water Treatment Plant
  - AICUZ
- Future Land Use for areas the increase in flow
  - Employment
  - Residential

N

0 1,000 Feet

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Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended
- Future Gravity Main
- New Lift Station
- Future Force Main
- Existing FM
- WWTP Service Area

Existing Gravity Pipes
- <=12"
- 15"-24"
- 27" - 36"
- >36"
- Waste Water Treatment Plant
- AICUZ

Future Land Use for areas the increase in flow
- Employment
- Residential

Wooldridge
Perry Place
Turtle Cove
Military/Jester
Travel Trailer
Laguna Madre WWTP
Greenfields By The Bay
Wooldridge II
Airline
Oso Basin
Waldron Road
Gateway Park
Flour Bluff
Rhetta Place
Purdue
Jamaica (Online at Ultimate)
Slough
Starry
Laguna Madre Basin
Waldron Field
Laguna Shores
Rivieria
Rex
Tailings Pond
Whitecap Basin
Upsize Existing FM 15
148
147
91
93
92
237
220
238
236
188
219
189
187
218
185
190
186
90
89
88
14
215

0 1,000 Feet

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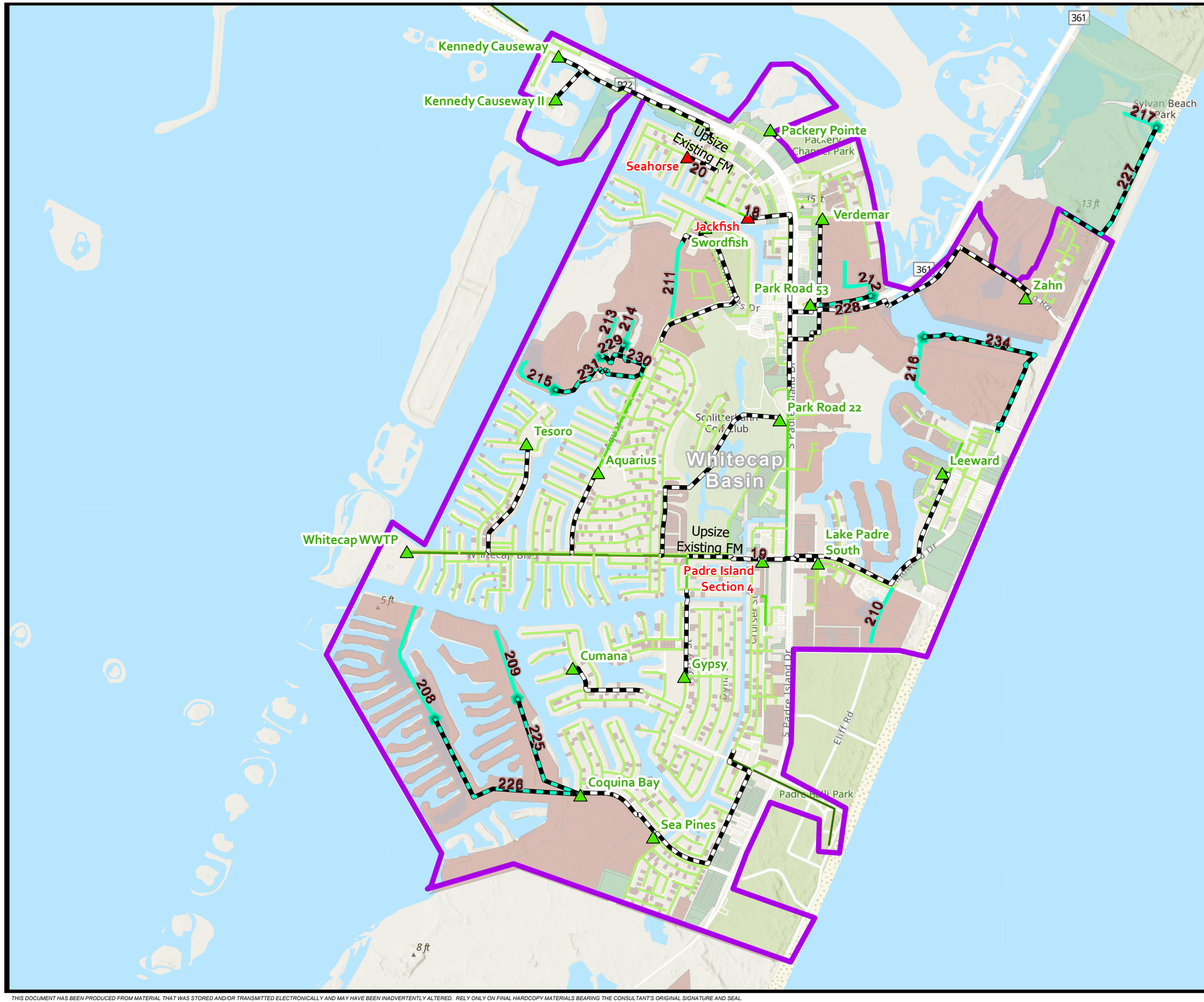

Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended
- Future Gravity Main
- New Lift Station
- Future Force Main
- Existing FM
- WWTP Service Area

Existing Gravity Pipes
- <=12"
- 15"-24"
- 27" - 36"
- >36"
- Waste Water Treatment Plant
- AICUZ

Future Land Use for areas the increase in flow
- Employment
- Residential

N

0 1,000 Feet

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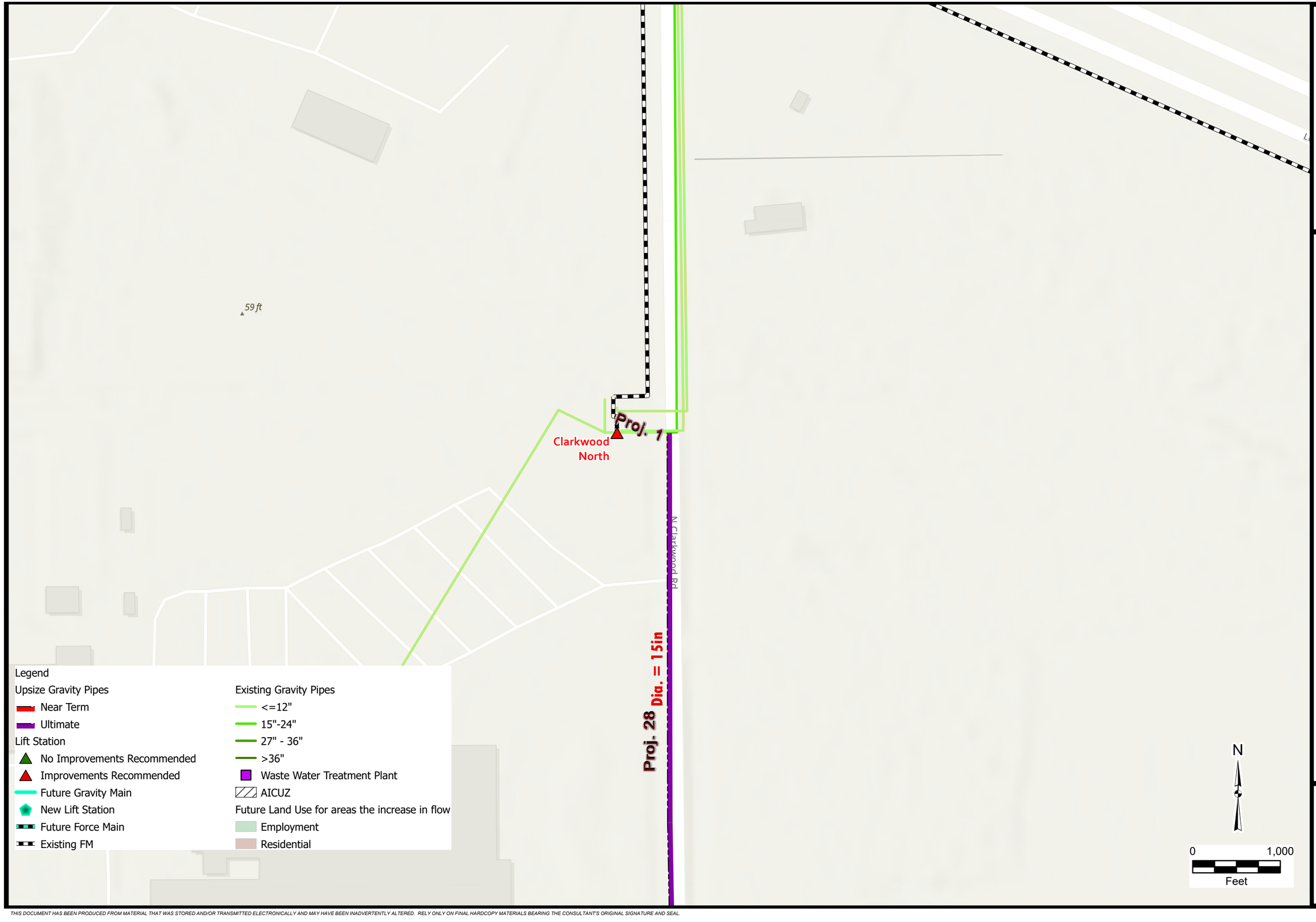

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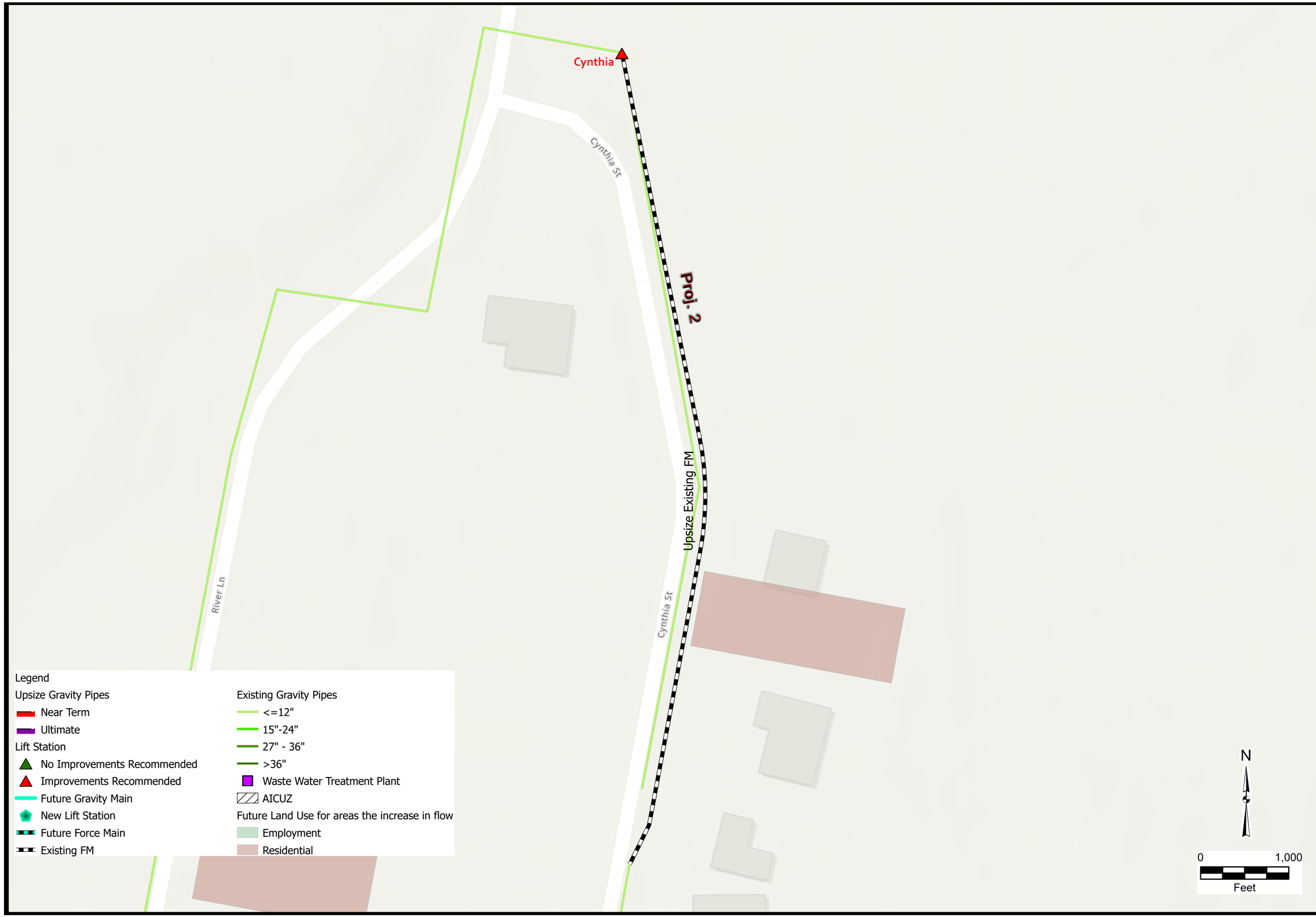

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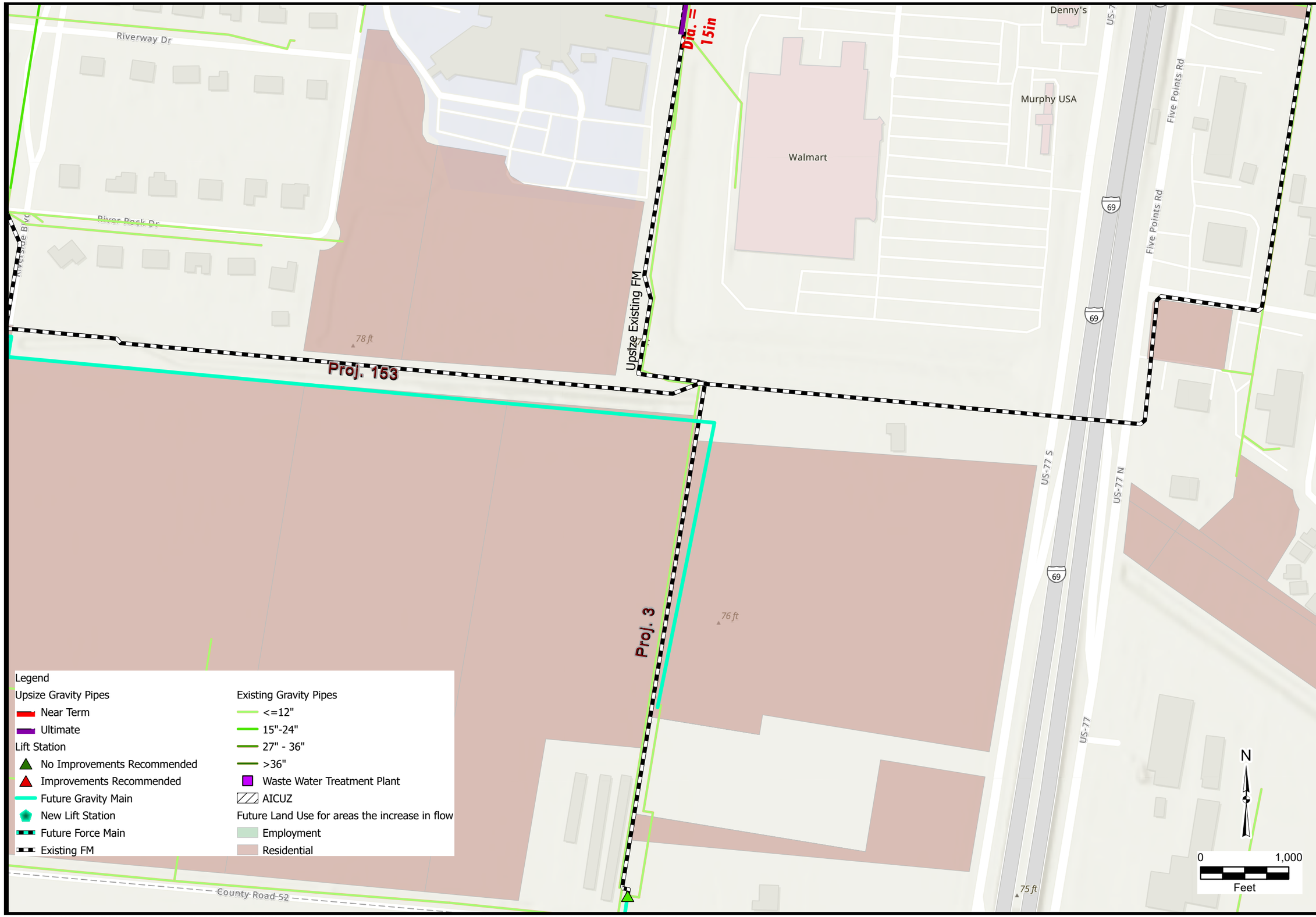

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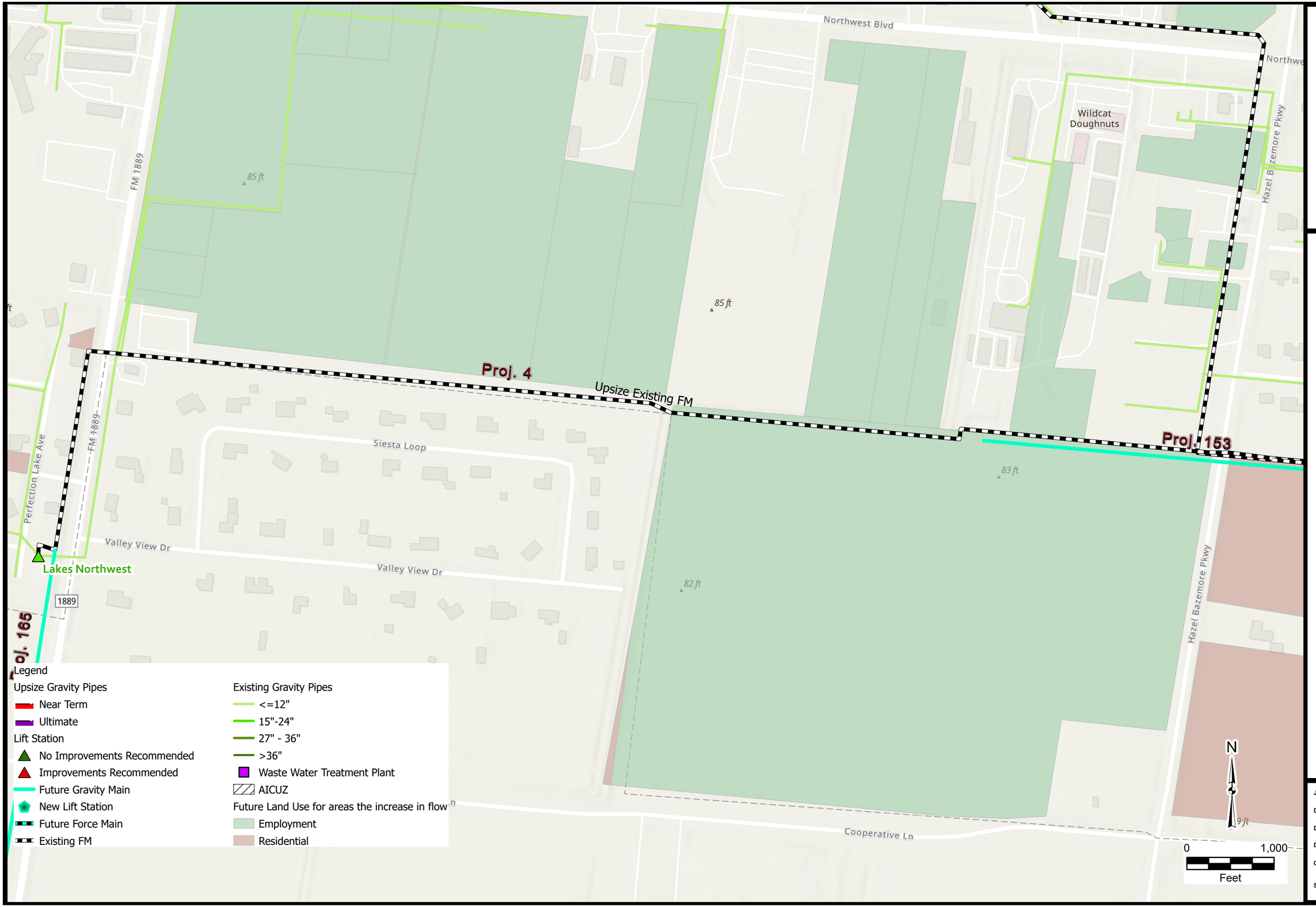

Legend

Upsize Gravity Pipes	Existing Gravity Pipes
Near Term	<=12"
Ultimate	15"-24"
Lift Station	27" - 36"
No Improvements Recommended	>36"
Improvements Recommended	Waste Water Treatment Plant
Future Gravity Main	AICUZ
New Lift Station	Future Land Use for areas the increase in flow
Future Force Main	Employment
Existing FM	Residential

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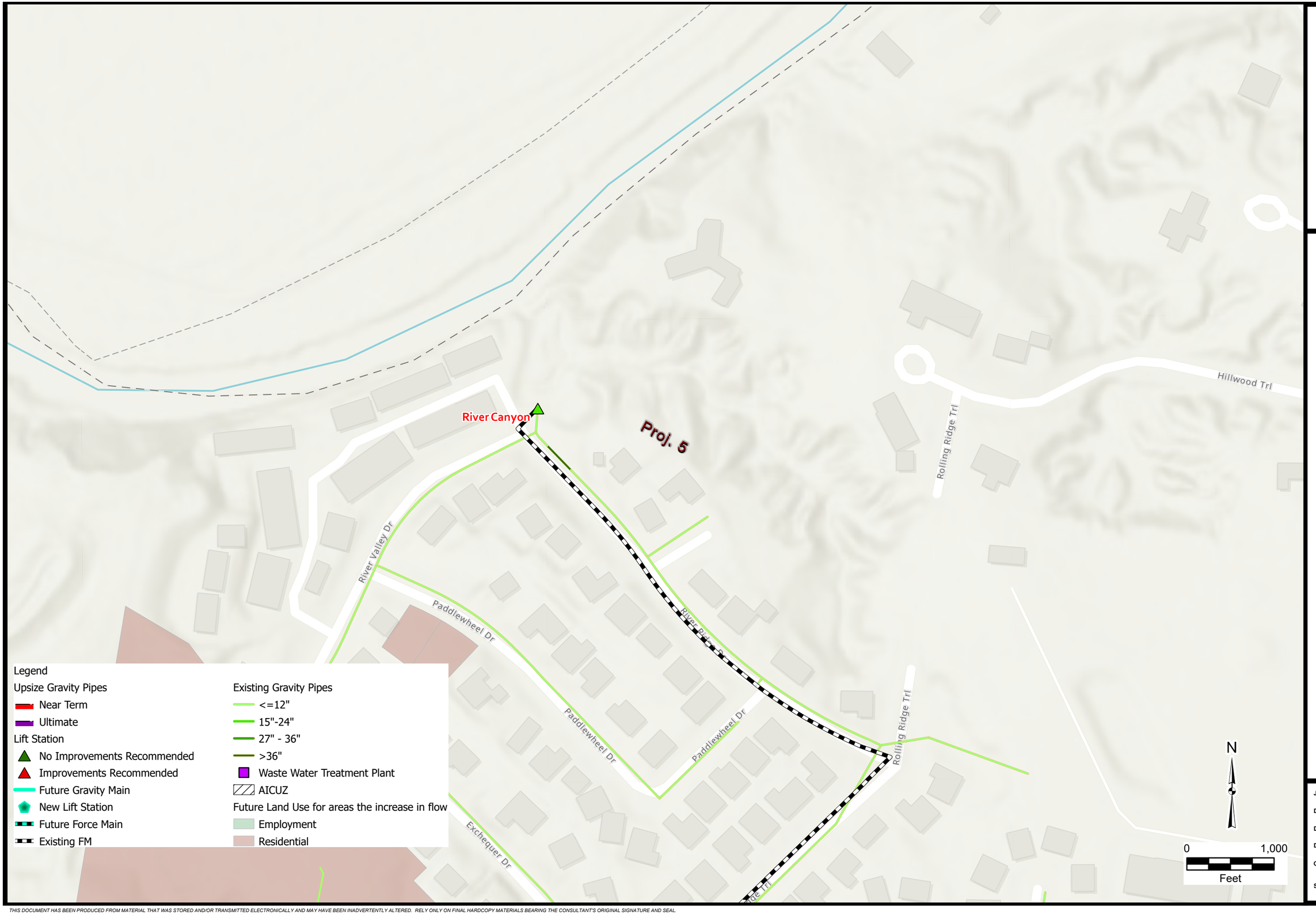

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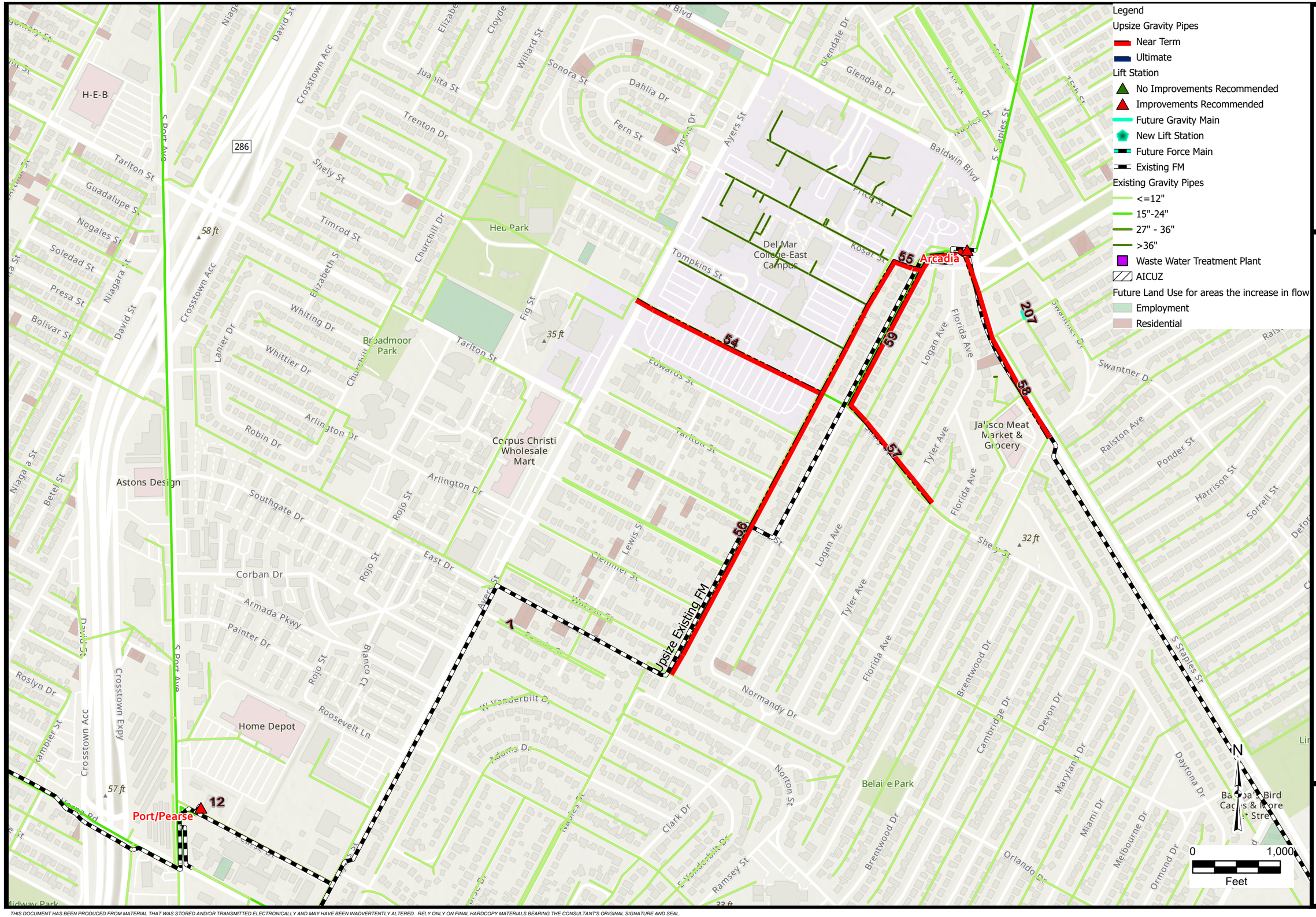

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City of Corpus Christi

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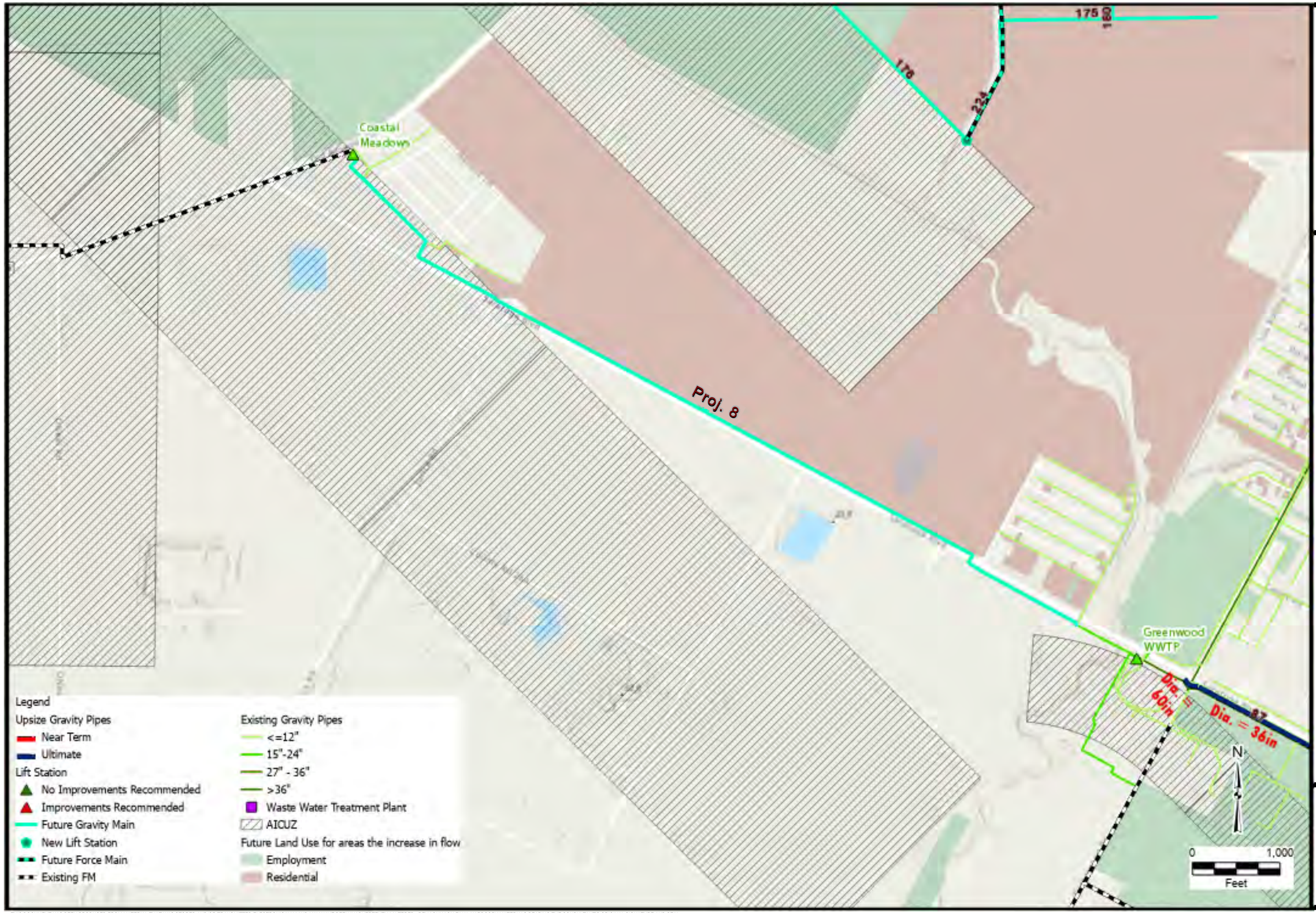

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Wastewater System Upgrades Project Guide

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Proj. 61

Dia. = 16in

Proj. 62

Highway Nine

Proj. 9

Dia. = 12in

41 ft

Rentals

Leopard St

Leopard St

Diamond Cur Dr

Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended
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Existing Gravity Pipes
- <=12"
- 15"-24"
- 27" - 36"
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- AICUZ

Future Land Use for areas the increase in flow
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N

0 1,000
Feet

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	9

Date: Aug 16, 2023 2:15 PM User: nvolinsky
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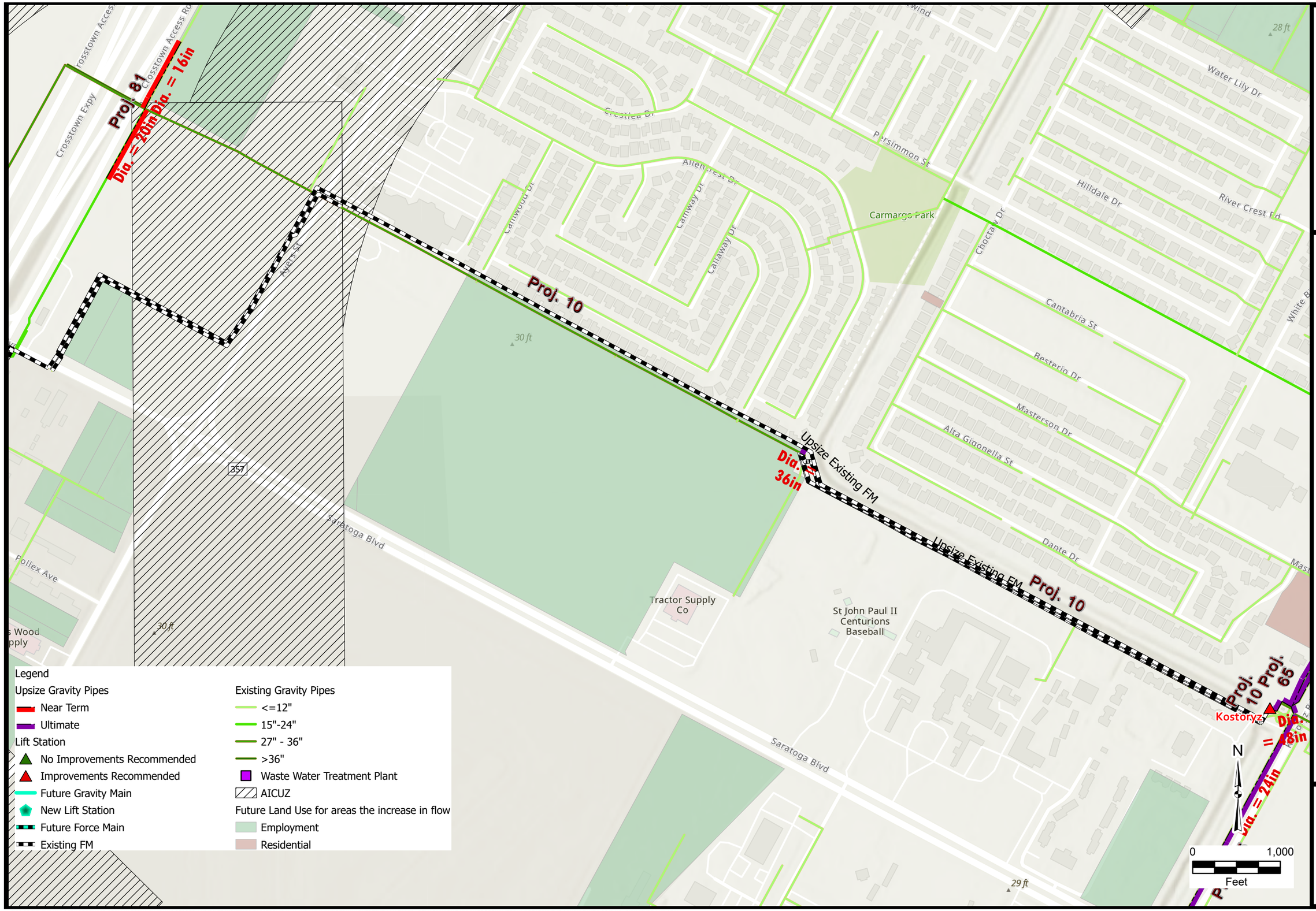

Legend

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Wastewater System Upgrades Project Guide

City of Corpus Christi

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
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CHECKED	AA
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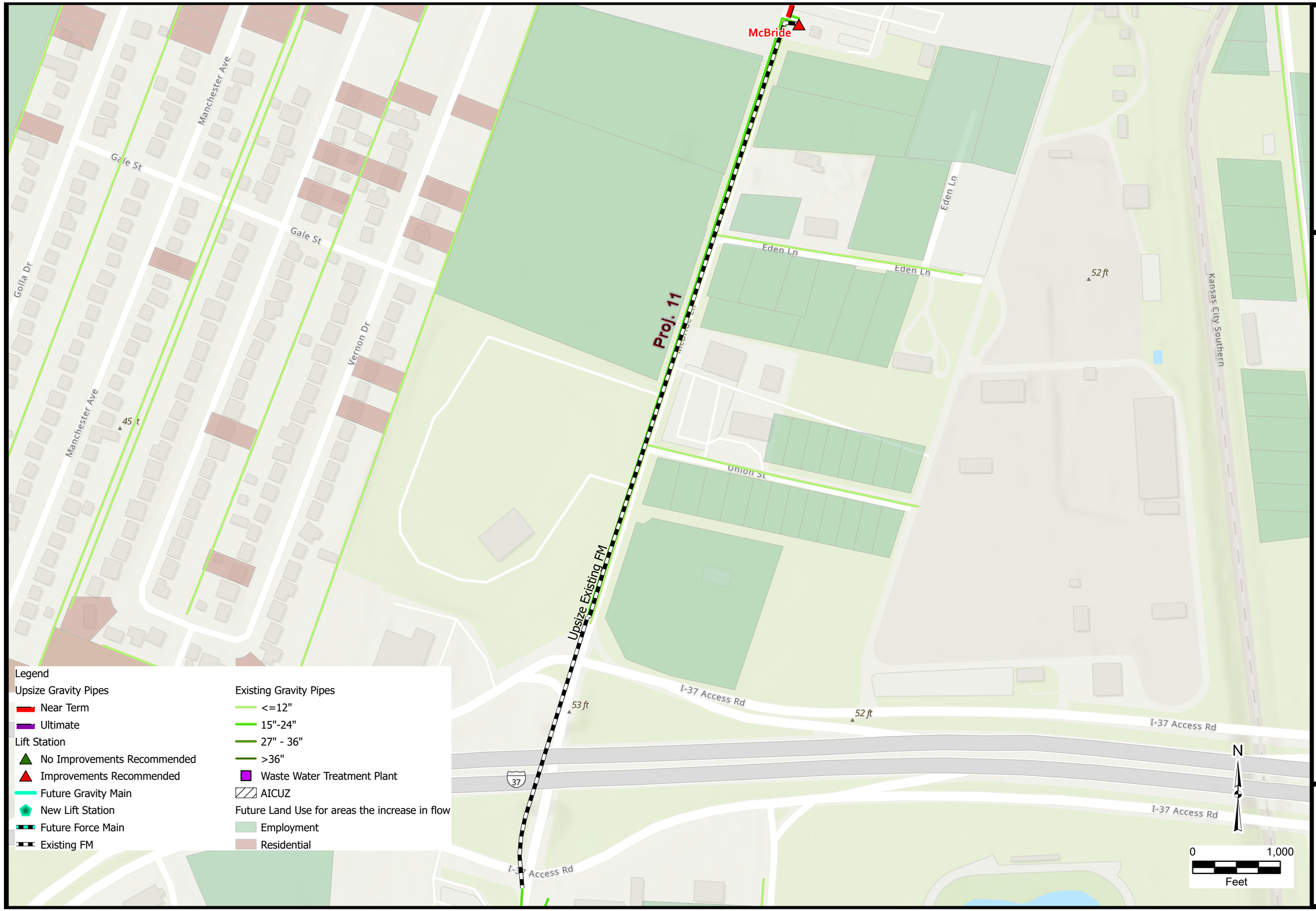

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DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	11

Legend

Upsize Gravity Pipes
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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
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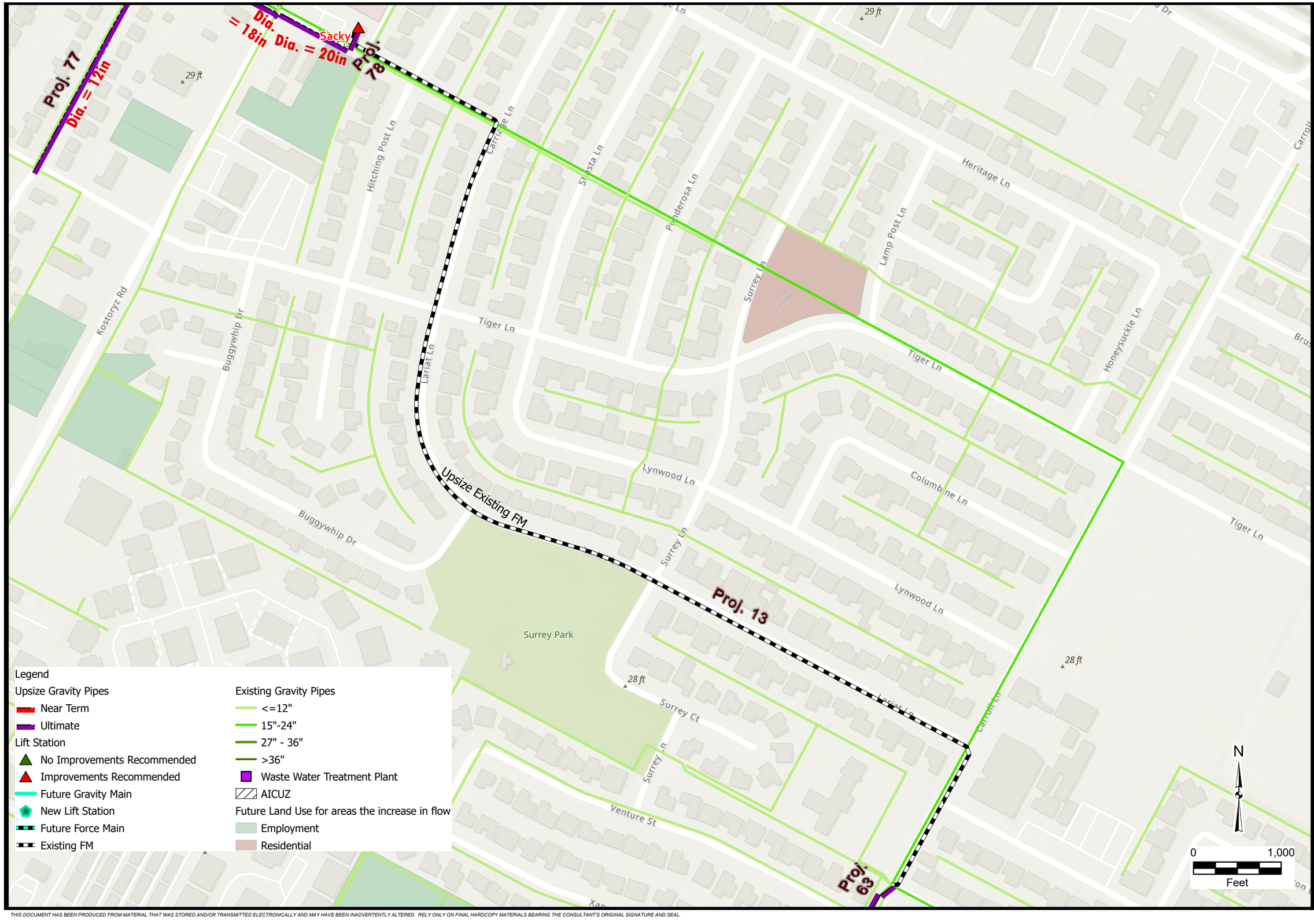

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	13

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JOB NO.	0000-00
DATE	Aug 2023
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CHECKED	AA
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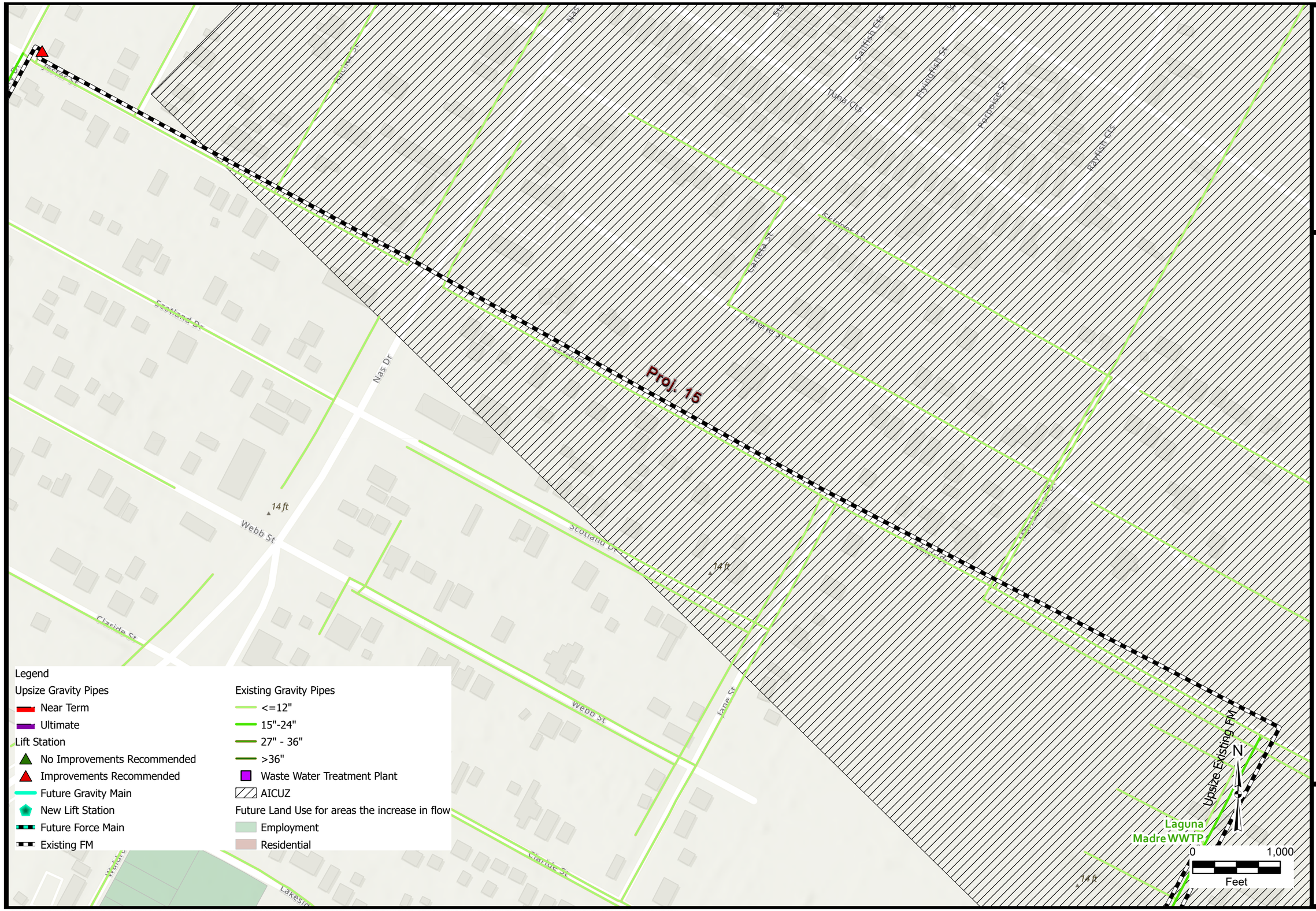

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
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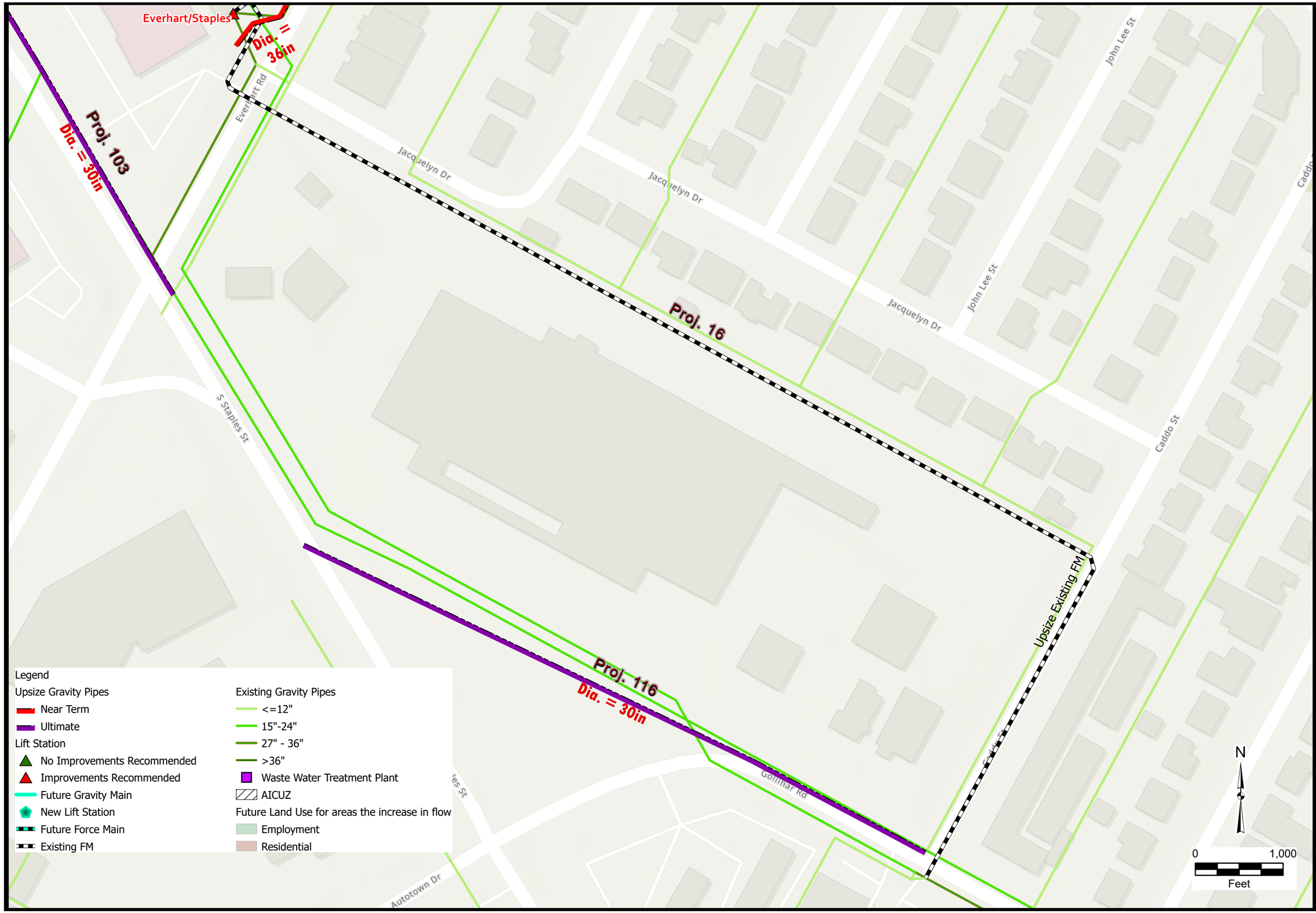

Legend

Upsize Gravity Pipes
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Date: Aug 18, 2023 2:15 PM User: nwolinsky
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JOB NO.	0000-00
DATE	Aug 2023
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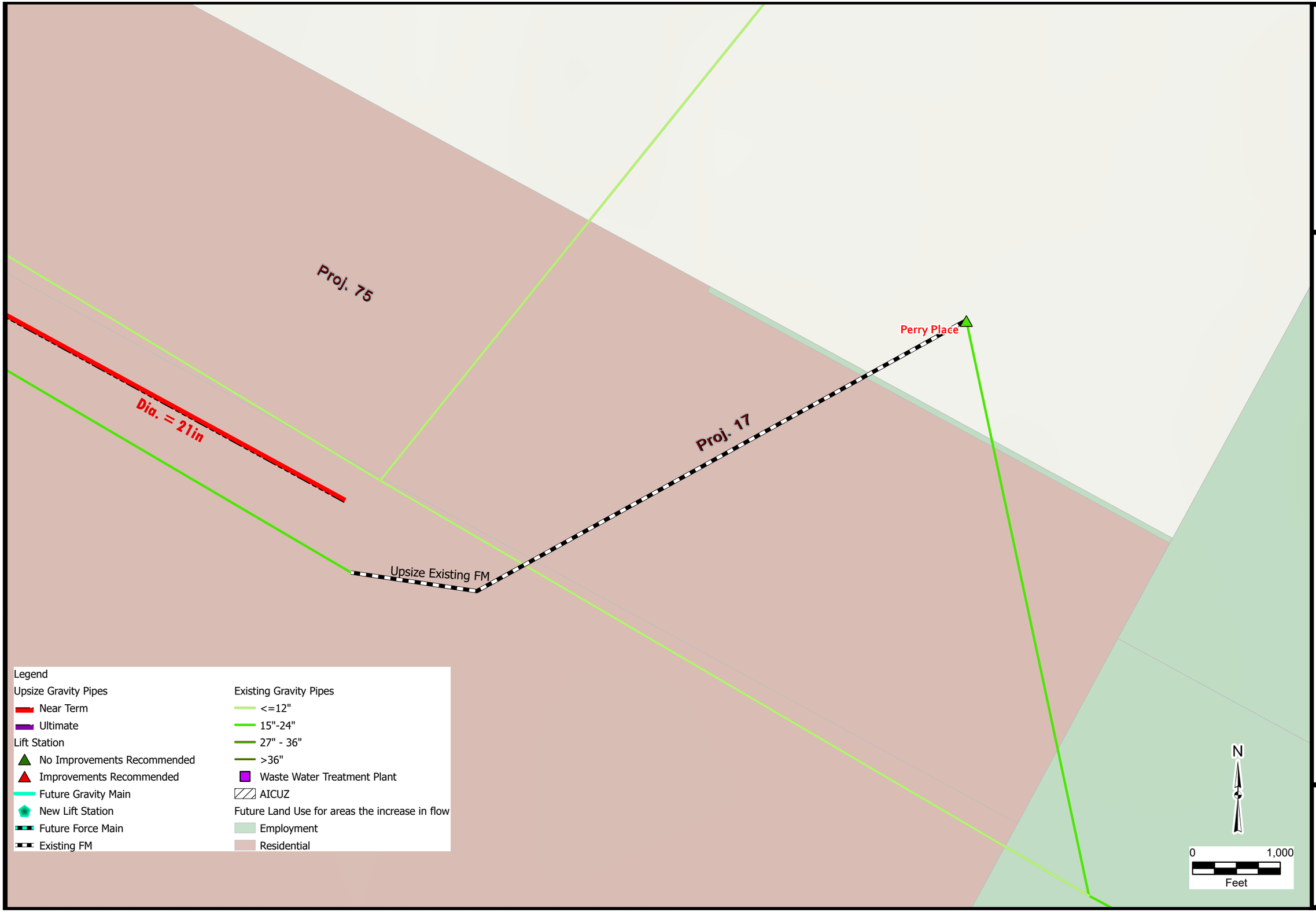
SHEET	16



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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
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SHEET	18

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City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
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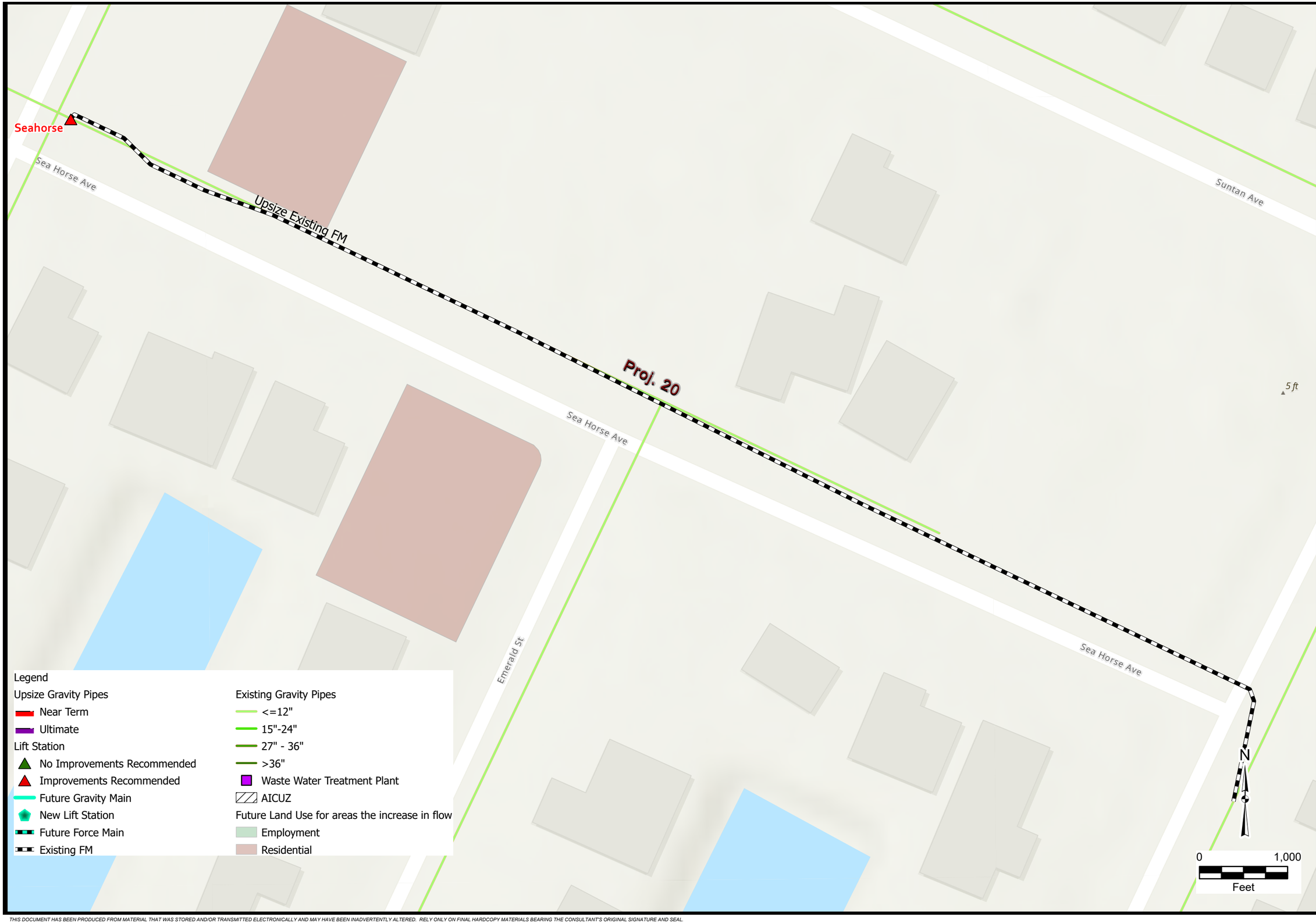

Legend

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DATE	Aug 2023
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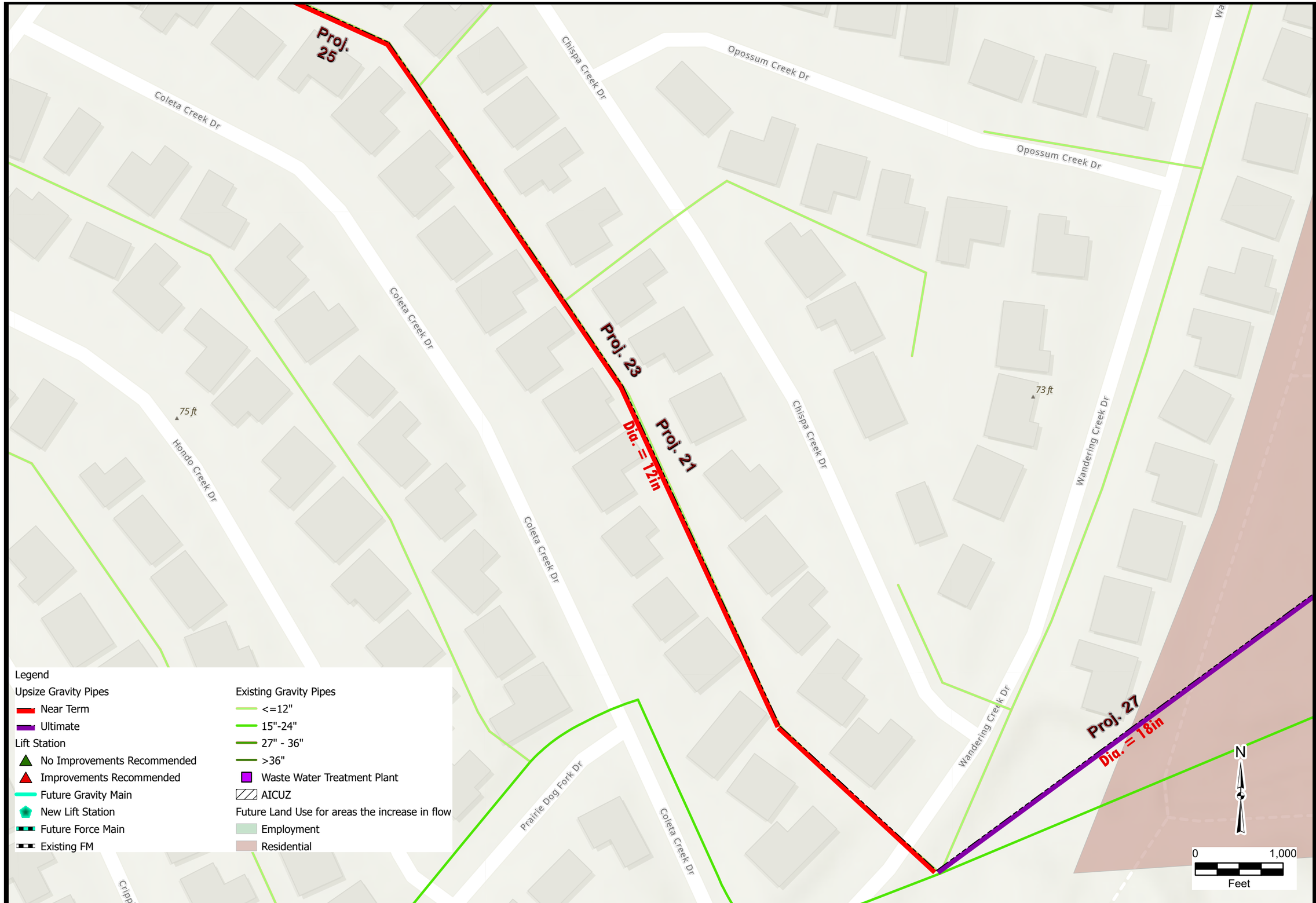

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City of Corpus Christi

JOB NO.	0000-00
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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
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CHECKED	AA
SHEET	22

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Wastewater System Upgrades Project Guide

City of Corpus Christi

Proj. 23
Ramos
Figueroa St
Proj. 31
Proj. 32
Dia. = 15in
Upsize Existing FM
Proj. 6
Up River Road
Sharpsburg
Dia. = 42in
Leopard St
Proj. 37
Dia. = 30in
Proj. 35
Proj. 38
Proj. 34
Dia. = 24in
Loma Alta Rd
Magee Ln
Rehfeld Rd
Rehfeld Rd
Mountain View Dr
Proj. 24
Dia. = 10in
Proj. 23
Dia. = 12in
Proj. 25
Proj. 22
Proj. 27
Dia. = 18in
Hart Rd
I-37 S
Hart Cemetery
I-37 Access Rd
Proj. 26
Dia. = 12in
Proj. 23
Sessions Rd
Timbergrove Ln
Violet Rd
Windsor St
Lott Ave
Emory Dr
10 ft
63 ft
5 ft
71 ft
1694

Legend

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N

0 1,000
Feet

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	23

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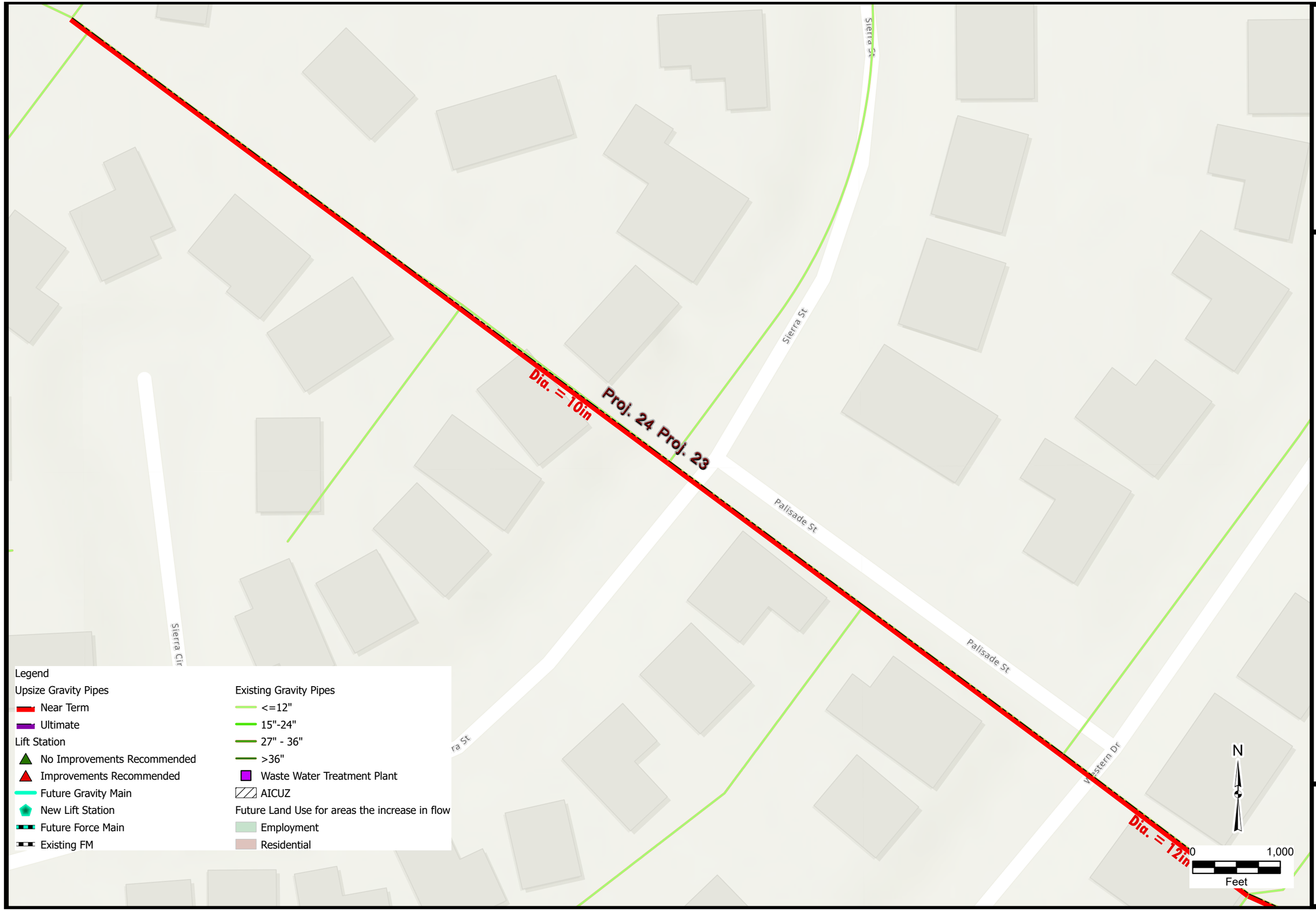

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JOB NO.	0000-00
DATE	Aug 2023
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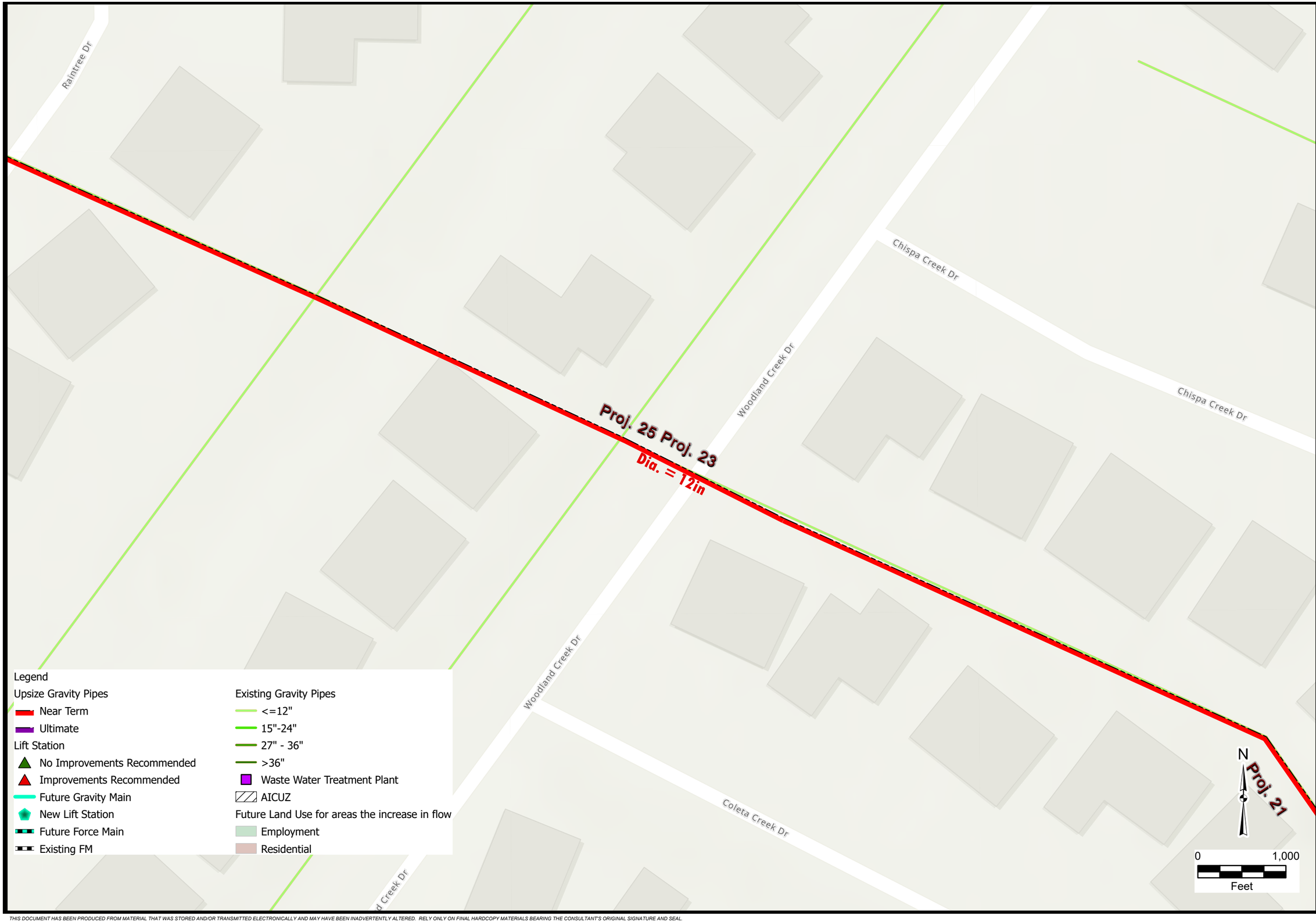

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
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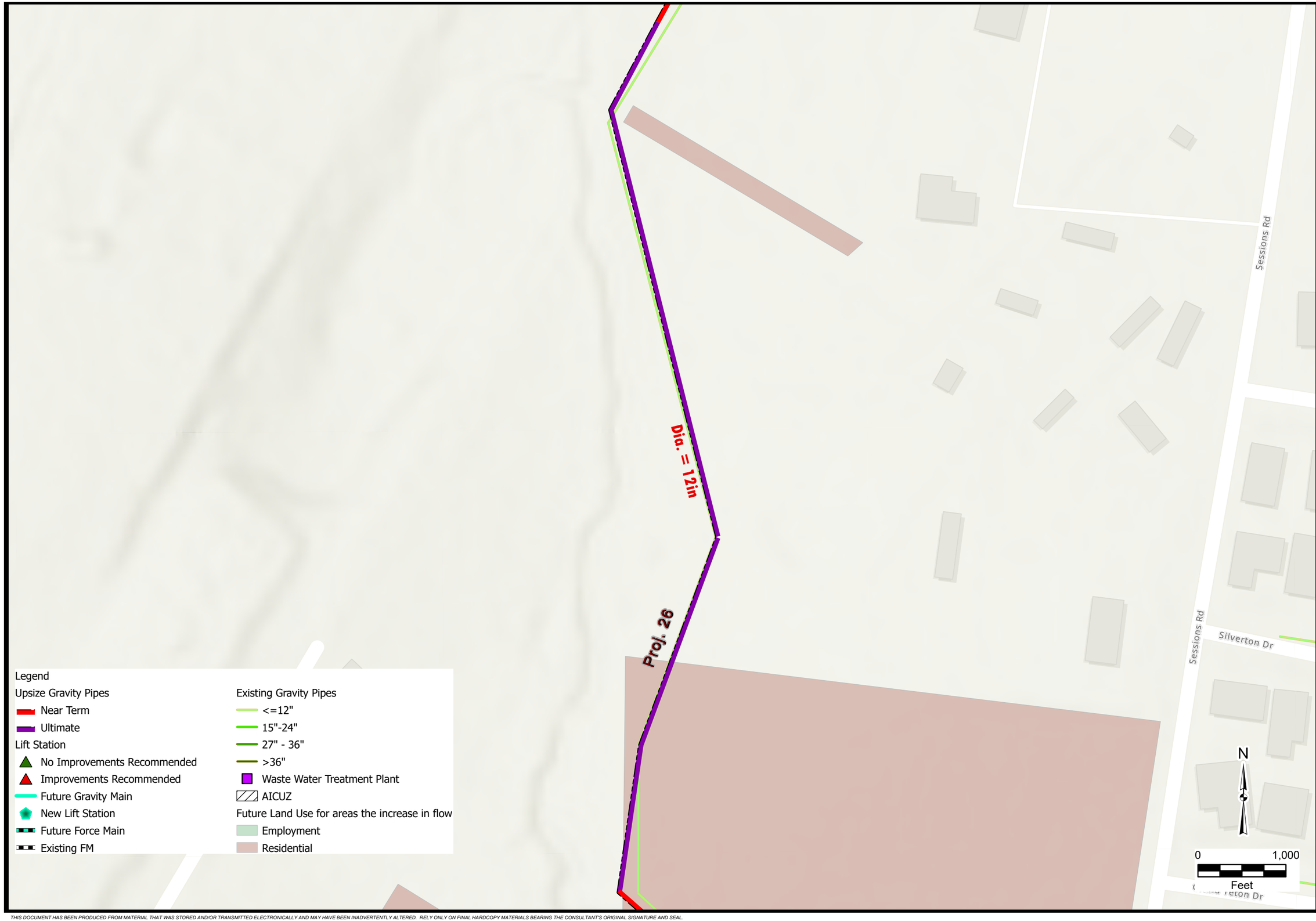

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
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JOB NO.	0000-00
DATE	Aug 2023
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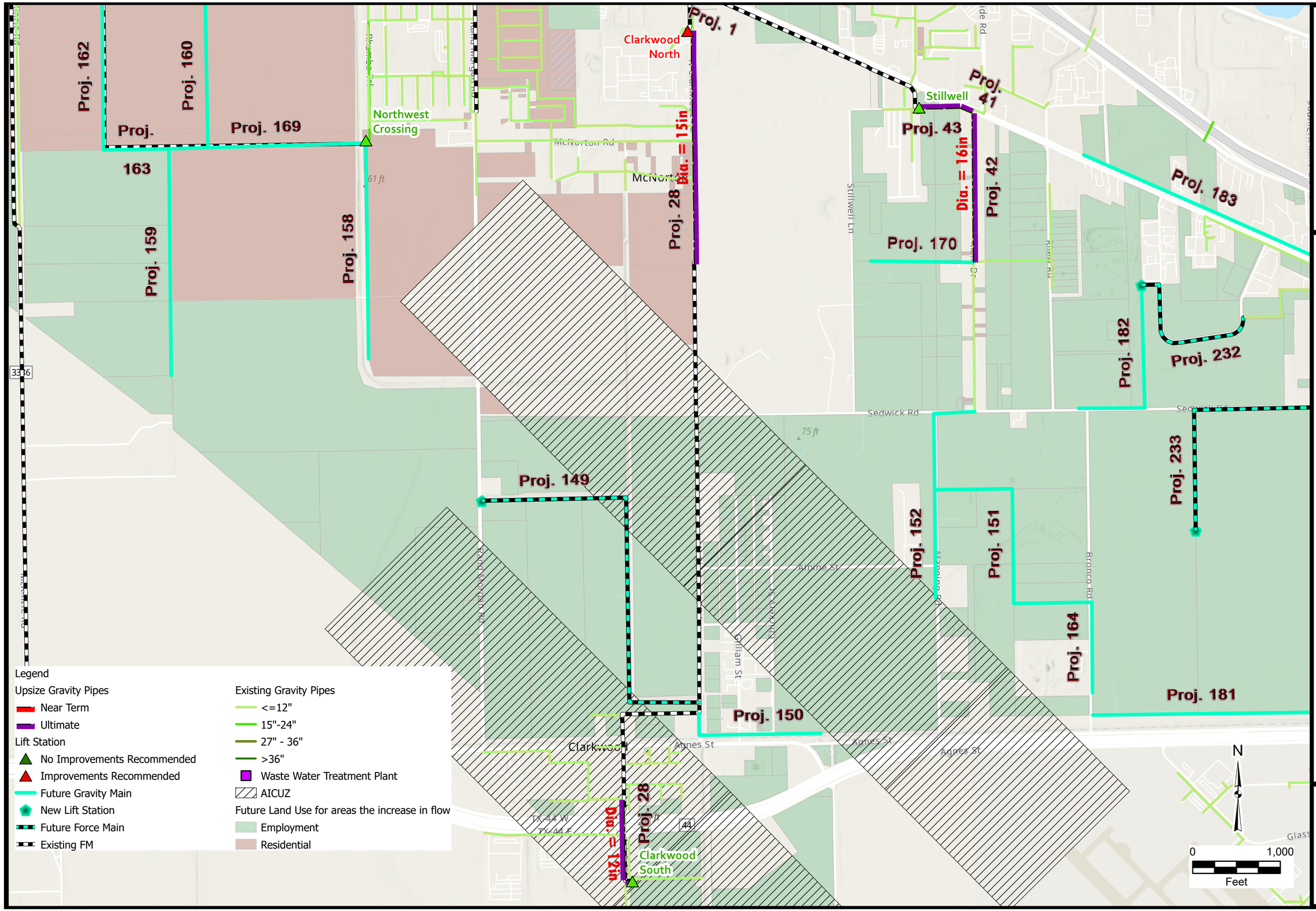

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DATE	Aug 2023
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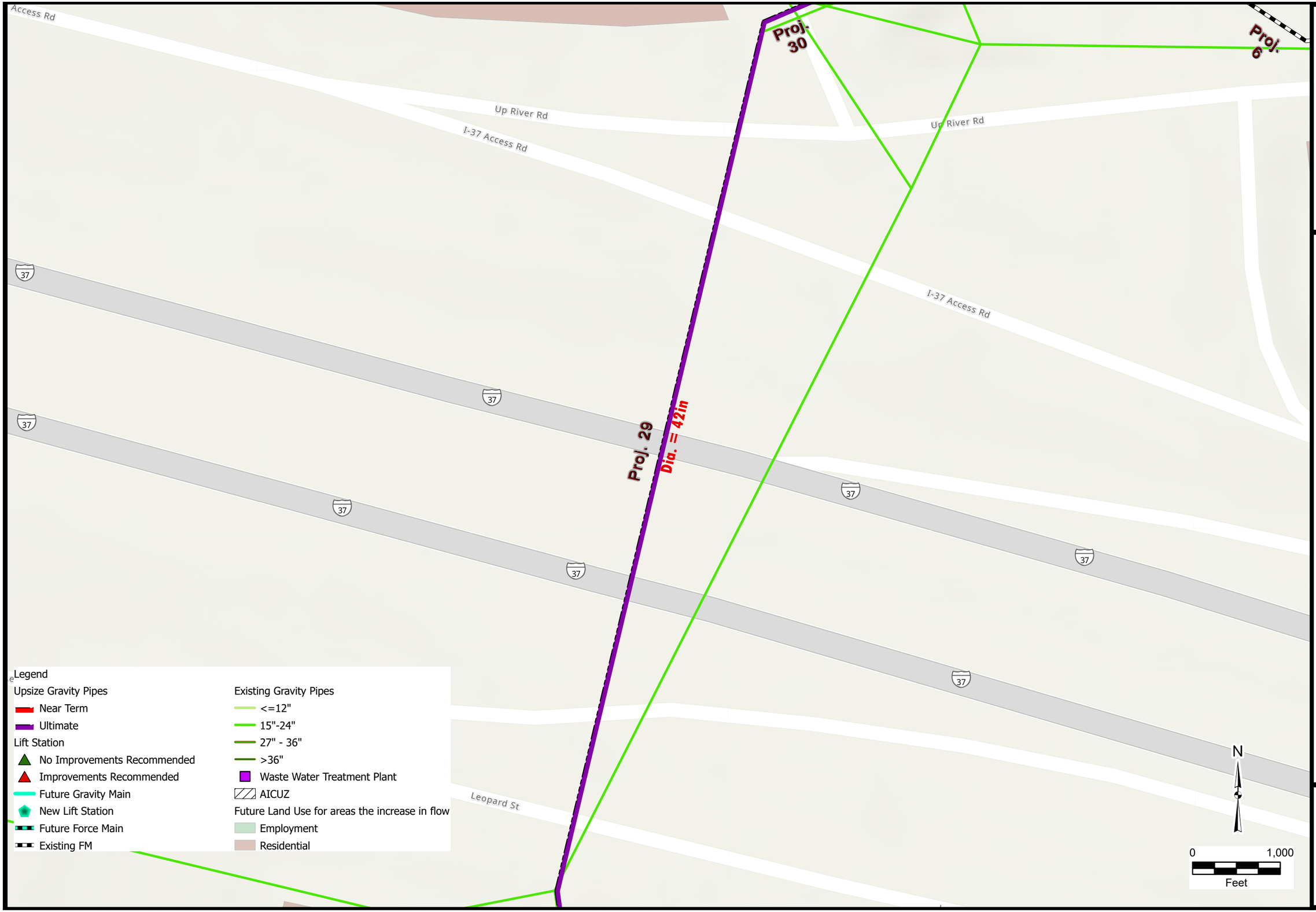

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JOB NO.	0000-00
DATE	Aug 2023
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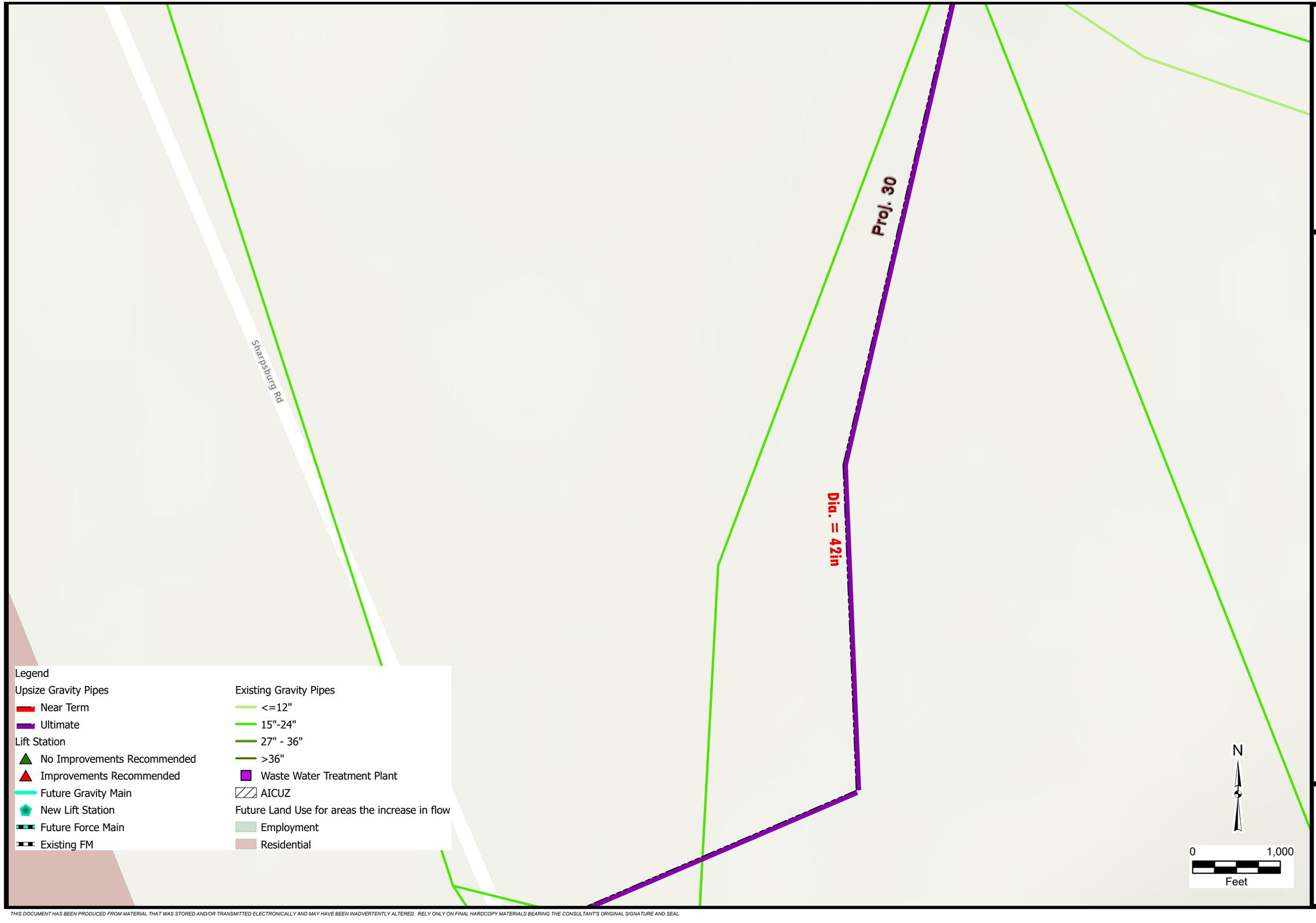

Wastewater System Upgrades Project Guide

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DATE	Aug 2023
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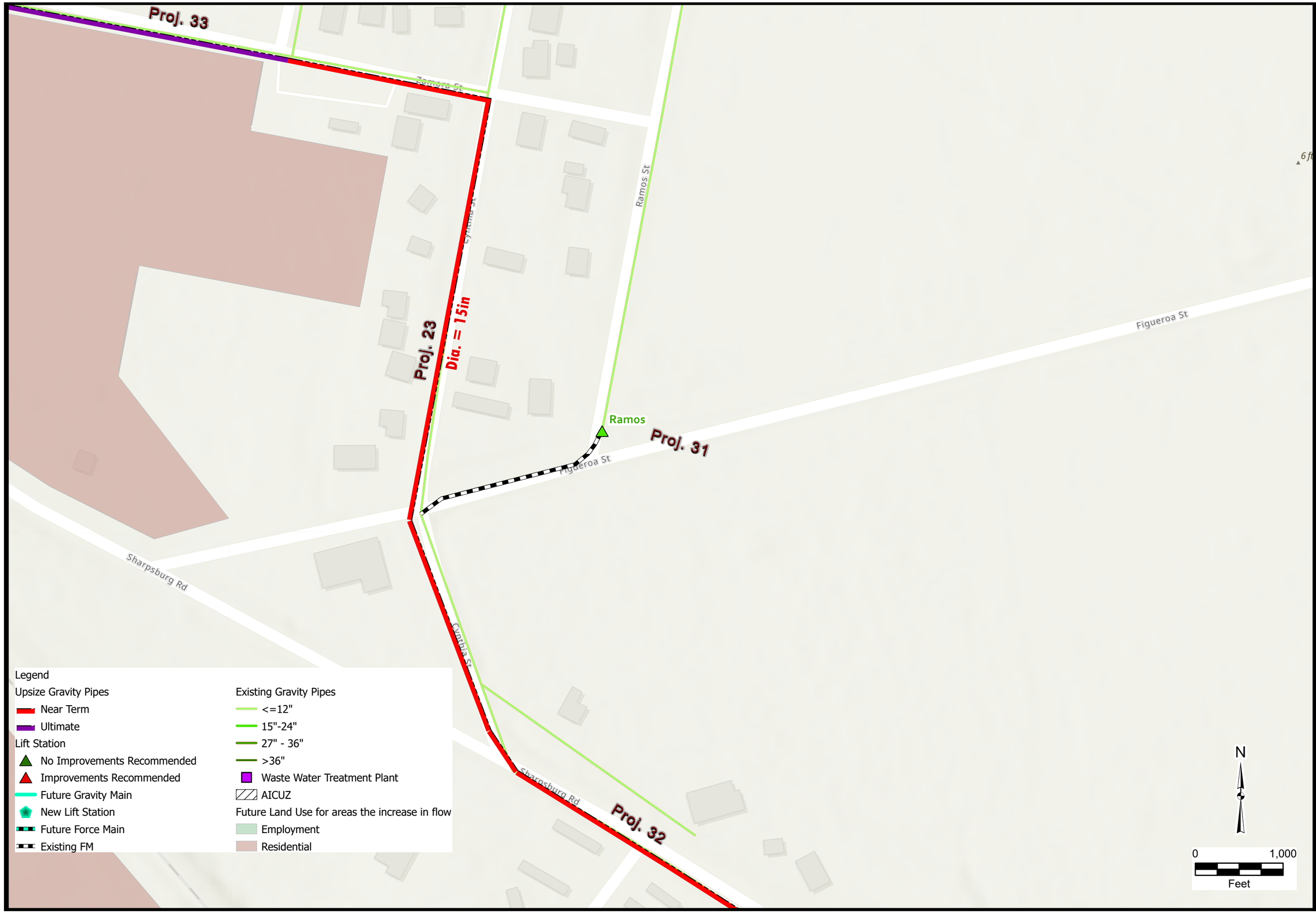

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DATE	Aug 2023
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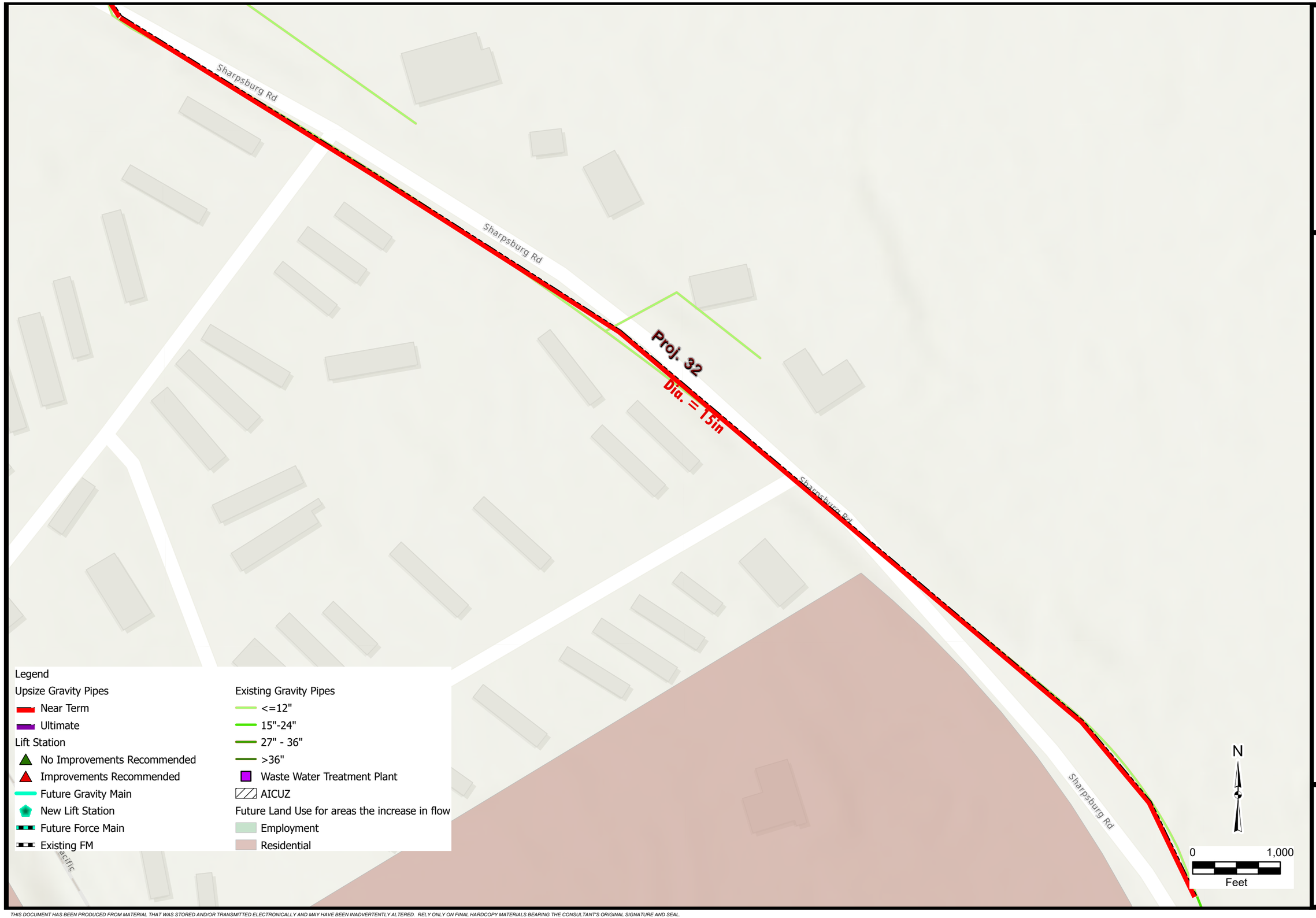

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Wastewater System Upgrades Project Guide

City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	32

Date: Aug 18, 2023 2:16 PM User: nwolinsky
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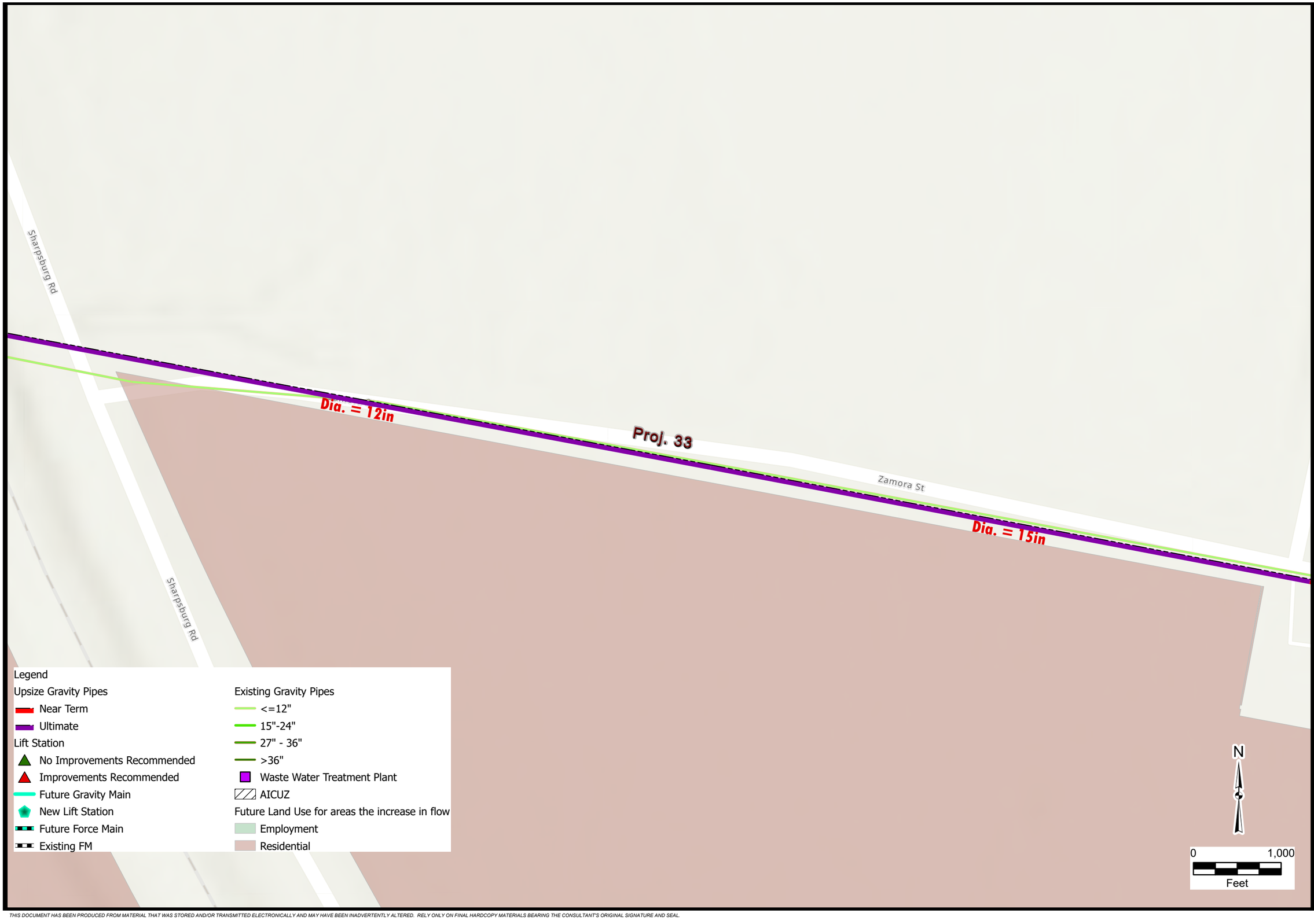

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Wastewater System Upgrades Project Guide

City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	33

Date: Aug 18, 2023 2:16 PM User: nwolinsky
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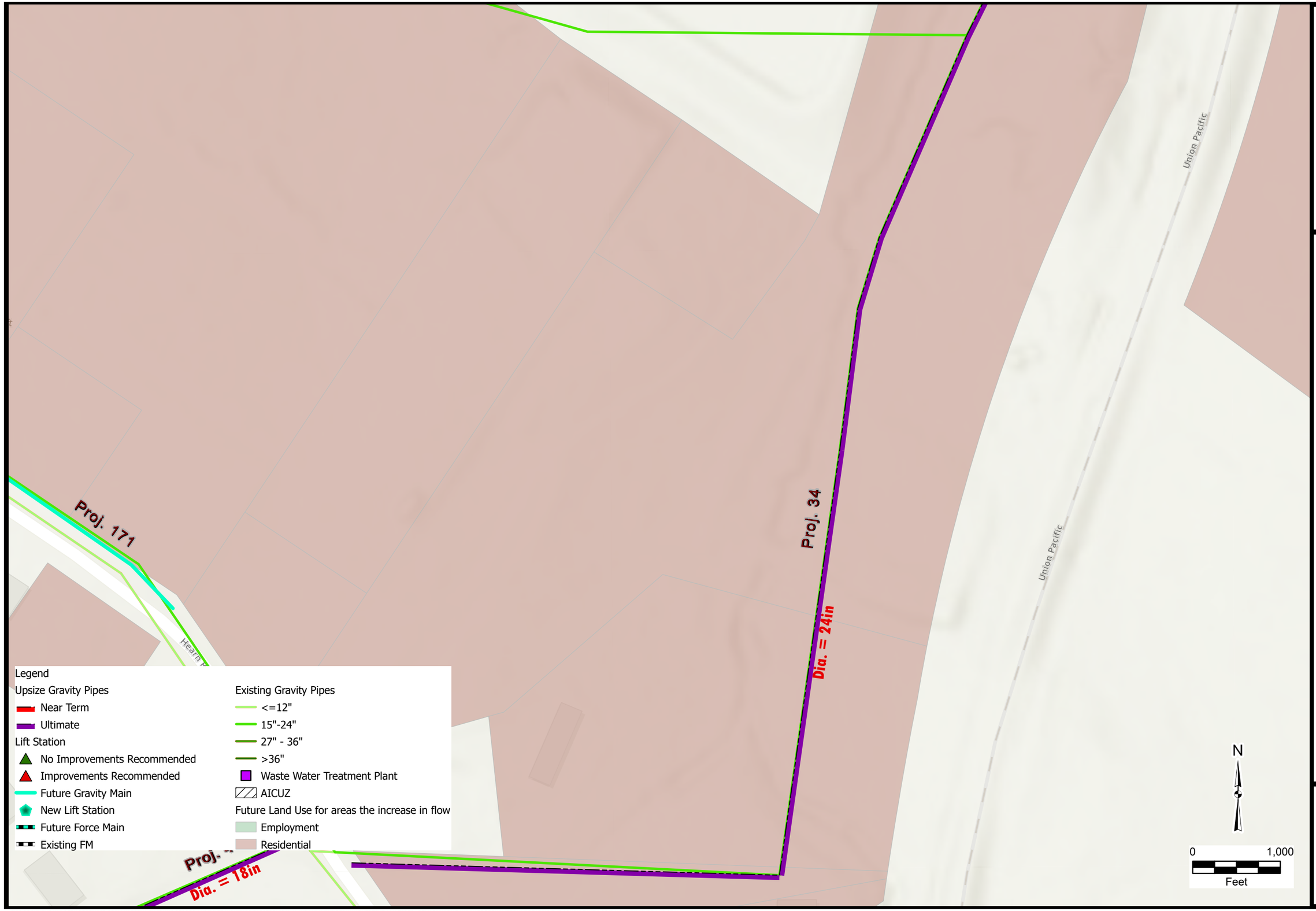

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Wastewater System Upgrades Project Guide

City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	34

Date: Aug 18, 2023 2:16 PM User: nwolinsky
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Wastewater System Upgrades Project Guide

City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	35

Date: Aug 18, 2023 2:16 PM User: nwolinsky
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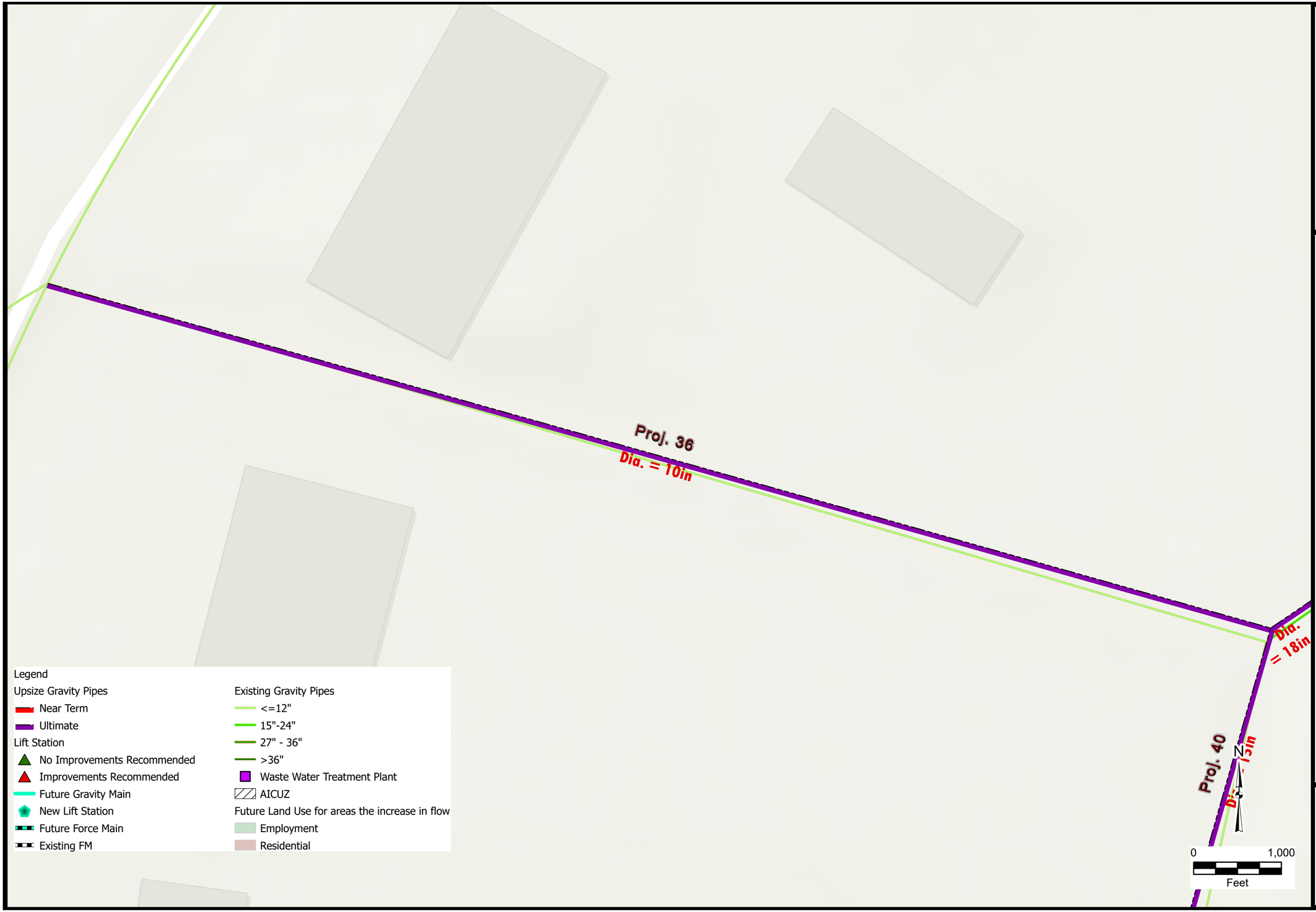

Legend

Upsize Gravity Pipes	Existing Gravity Pipes
Near Term	<=12"
Ultimate	15"-24"
Lift Station	27" - 36"
No Improvements Recommended	>36"
Improvements Recommended	Waste Water Treatment Plant
Future Gravity Main	AICUZ
New Lift Station	Future Land Use for areas the increase in flow
Future Force Main	Employment
Existing FM	Residential

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Wastewater System Upgrades Project Guide

City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	36

Date: Aug 18, 2023 2:16 PM User: rwolinsky
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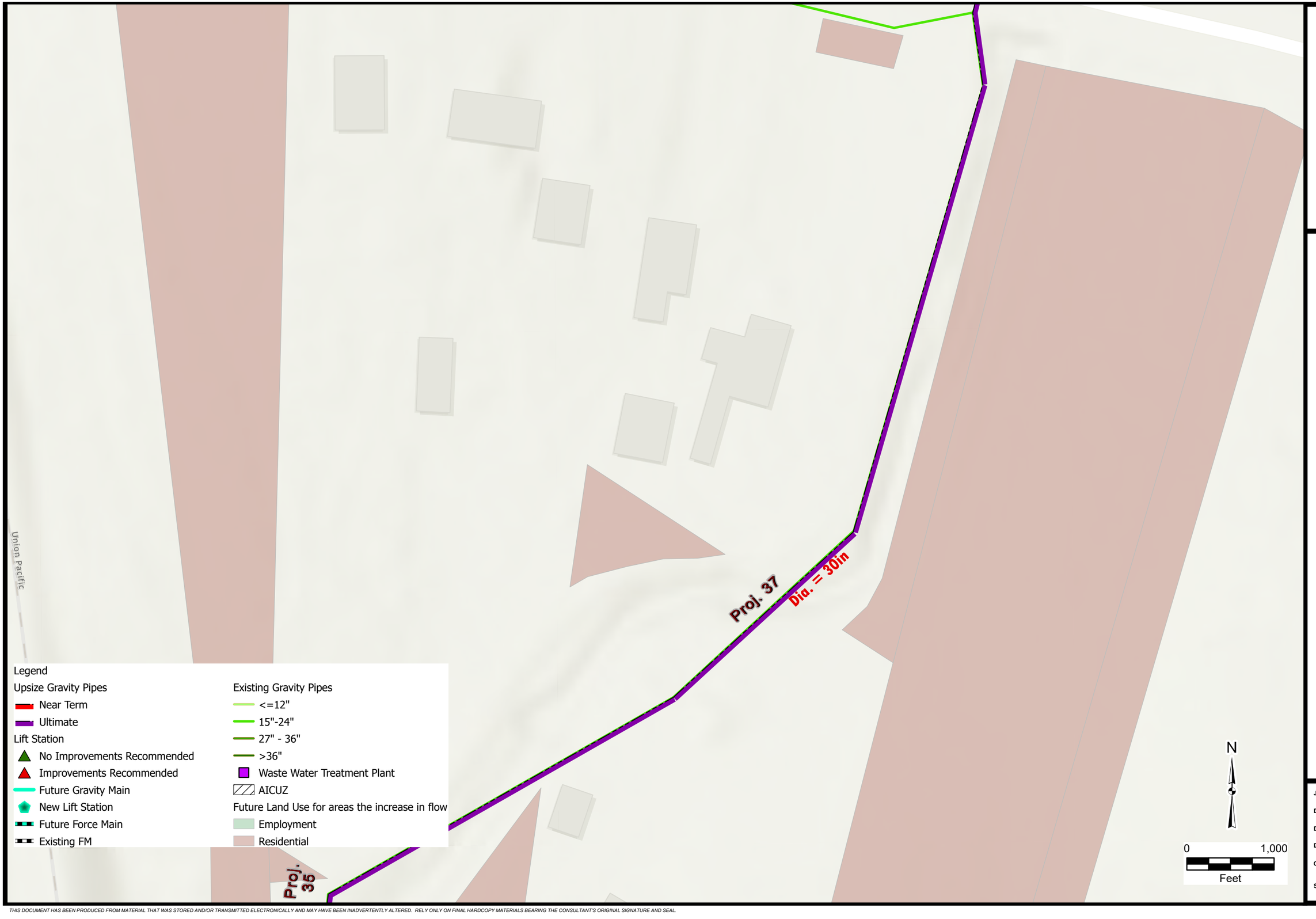

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	37

Date: Aug 18, 2023 2:16 PM User: nwolinsky
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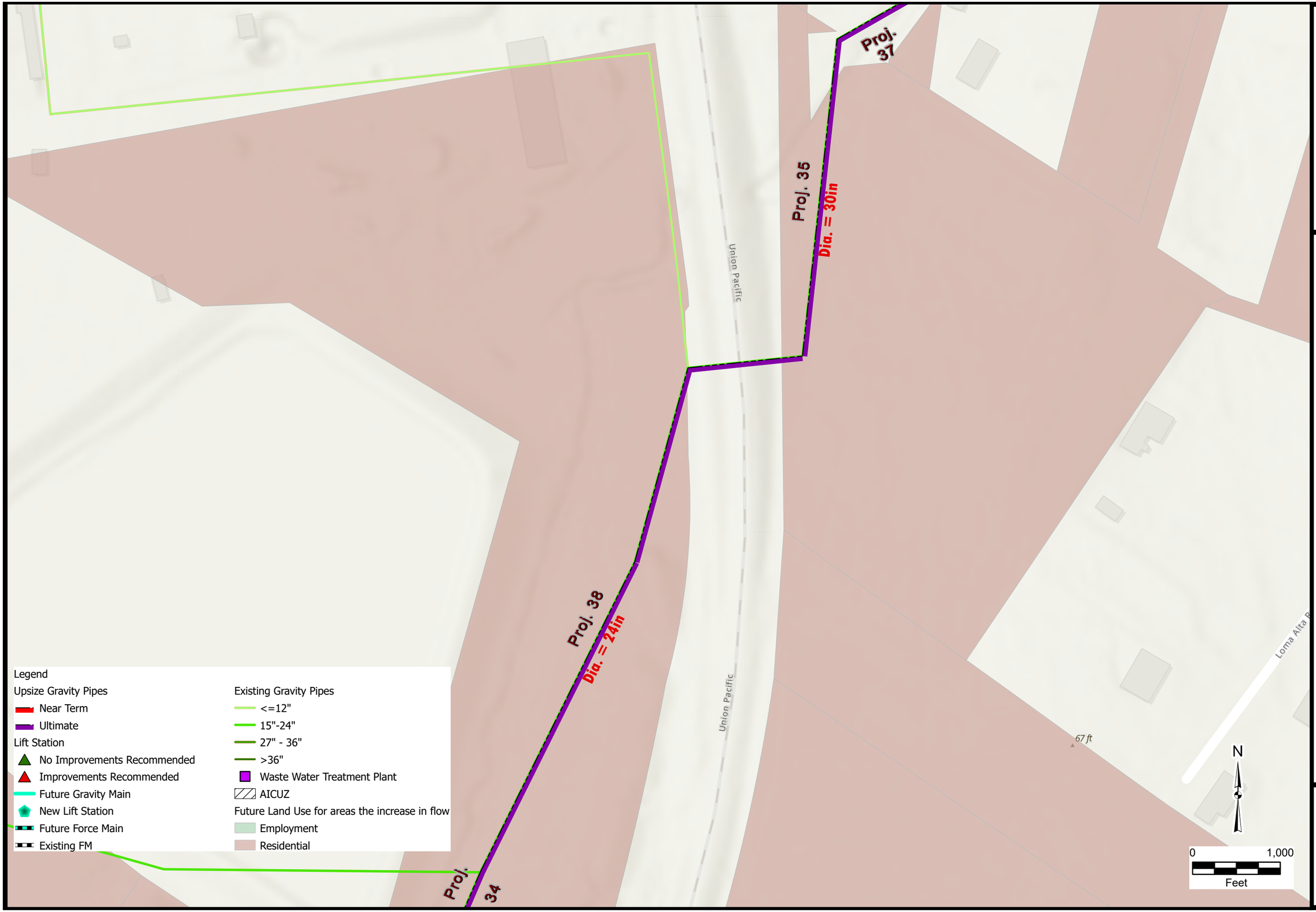

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Date: Aug 18, 2023 2:16 PM User: nvolinsky
File: P:\123\83\00\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]

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City of Corpus Christi

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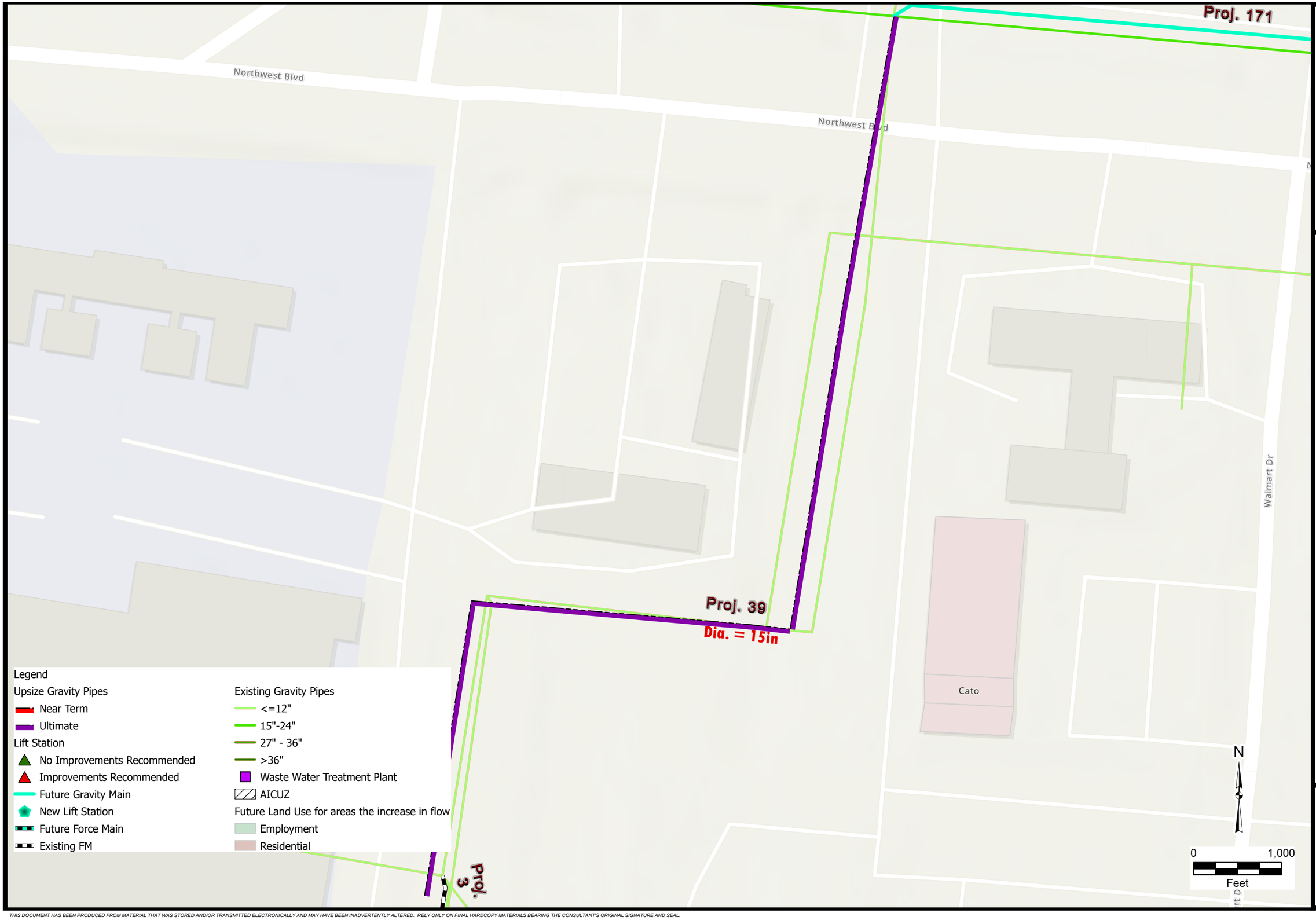
JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	38



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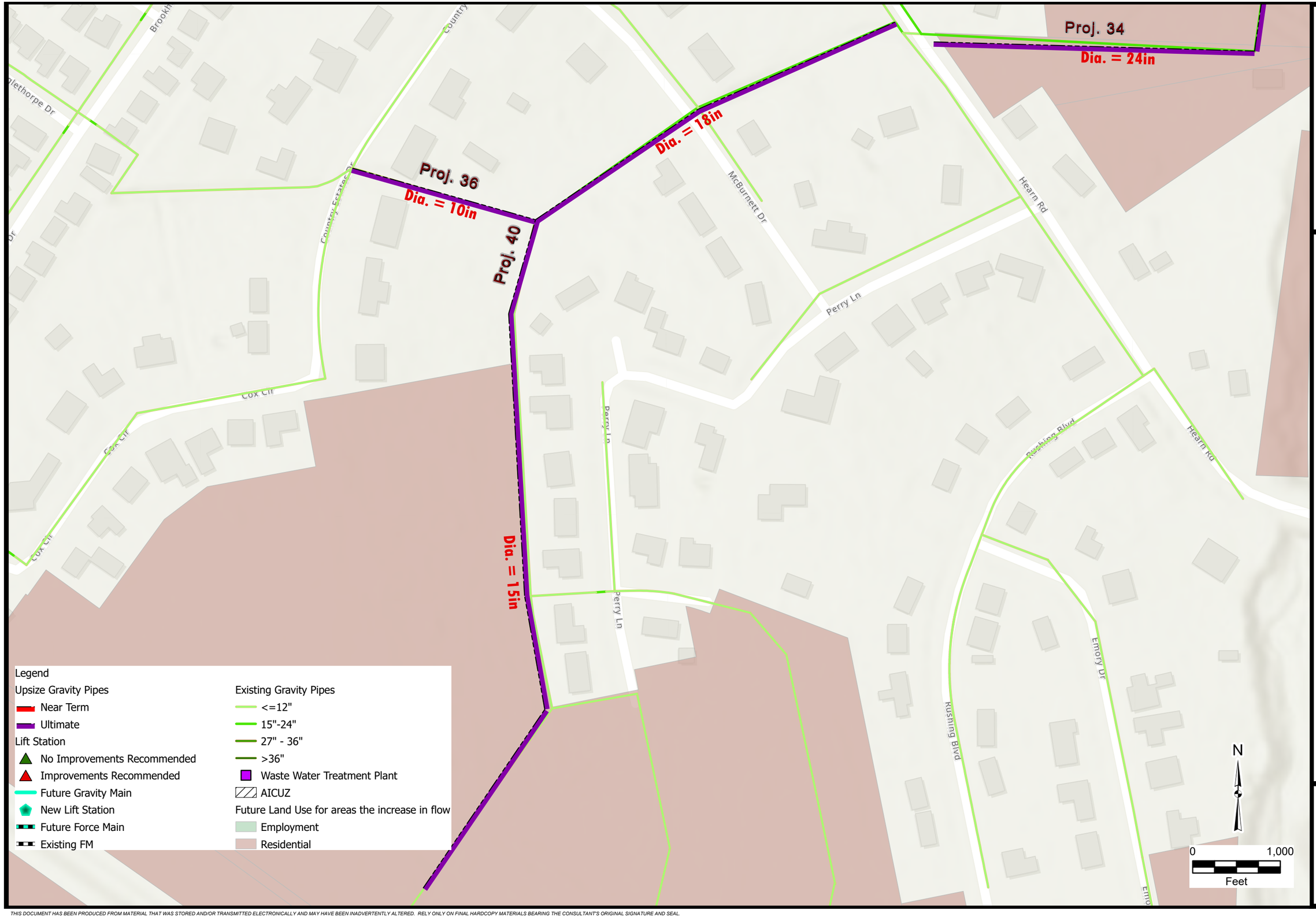
Wastewater System Upgrades Project Guide

City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	39

Date: Aug 18, 2023 2:16 PM User: nwolinsky
File: P:\123\83000\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]



Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended
- Future Gravity Main
- New Lift Station
- Future Force Main
- Existing FM

Existing Gravity Pipes
- <=12"
- 15"-24"
- 27" - 36"
- >36"
- Waste Water Treatment Plant
- AICUZ

Future Land Use for areas the increase in flow
- Employment
- Residential

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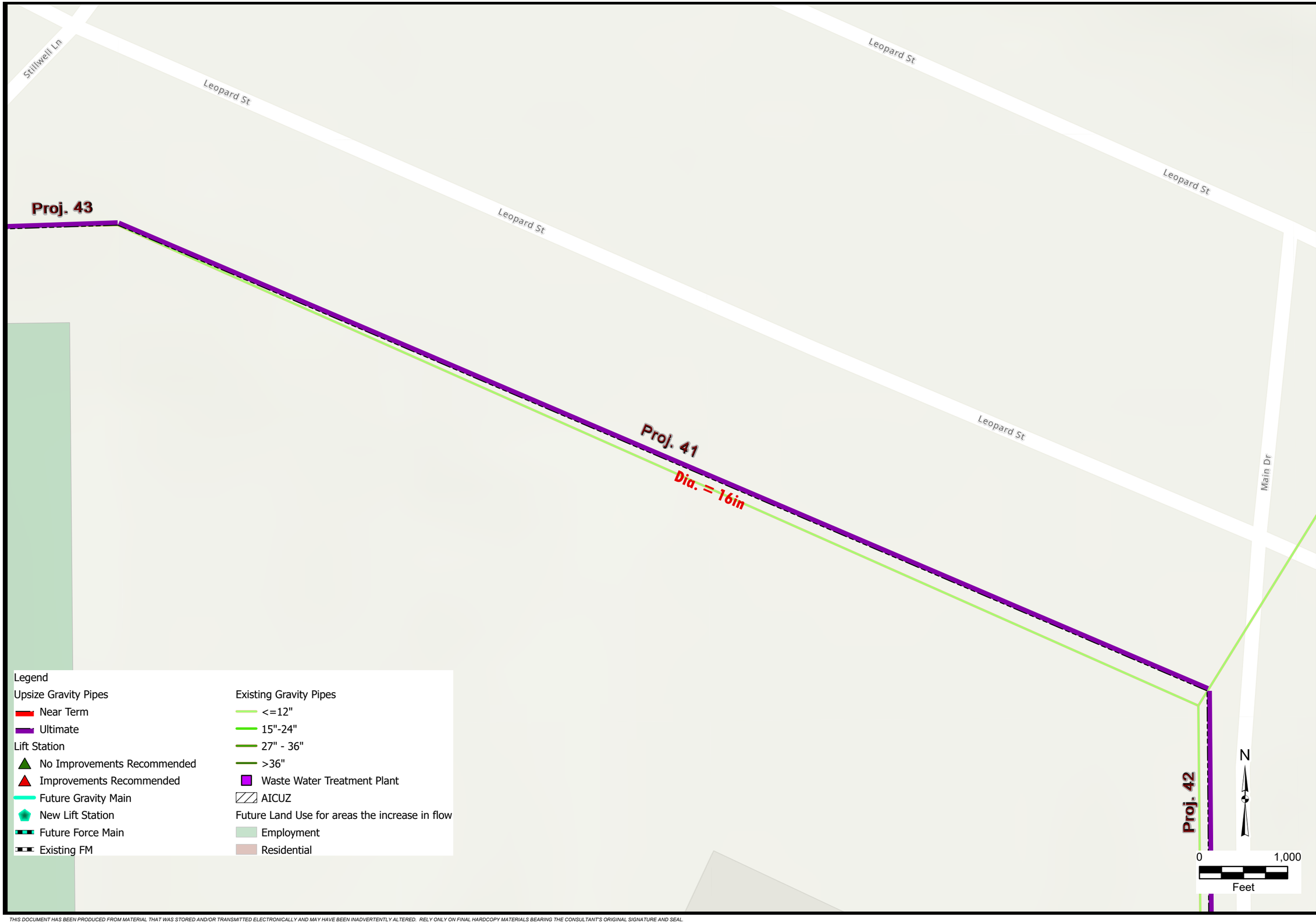
City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	40

Date: Aug 18, 2023 2:16 PM User: nwolinsky
File: P:\123\83000\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Cun_Projects1 Map: [empty]



Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended
- Future Gravity Main
- New Lift Station
- Future Force Main
- Existing FM

Existing Gravity Pipes
- <=12"
- 15"-24"
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Future Land Use for areas the increase in flow
- Employment
- Residential

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City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	41

Date: Aug 18, 2023 2:16 PM User: rwolinsky
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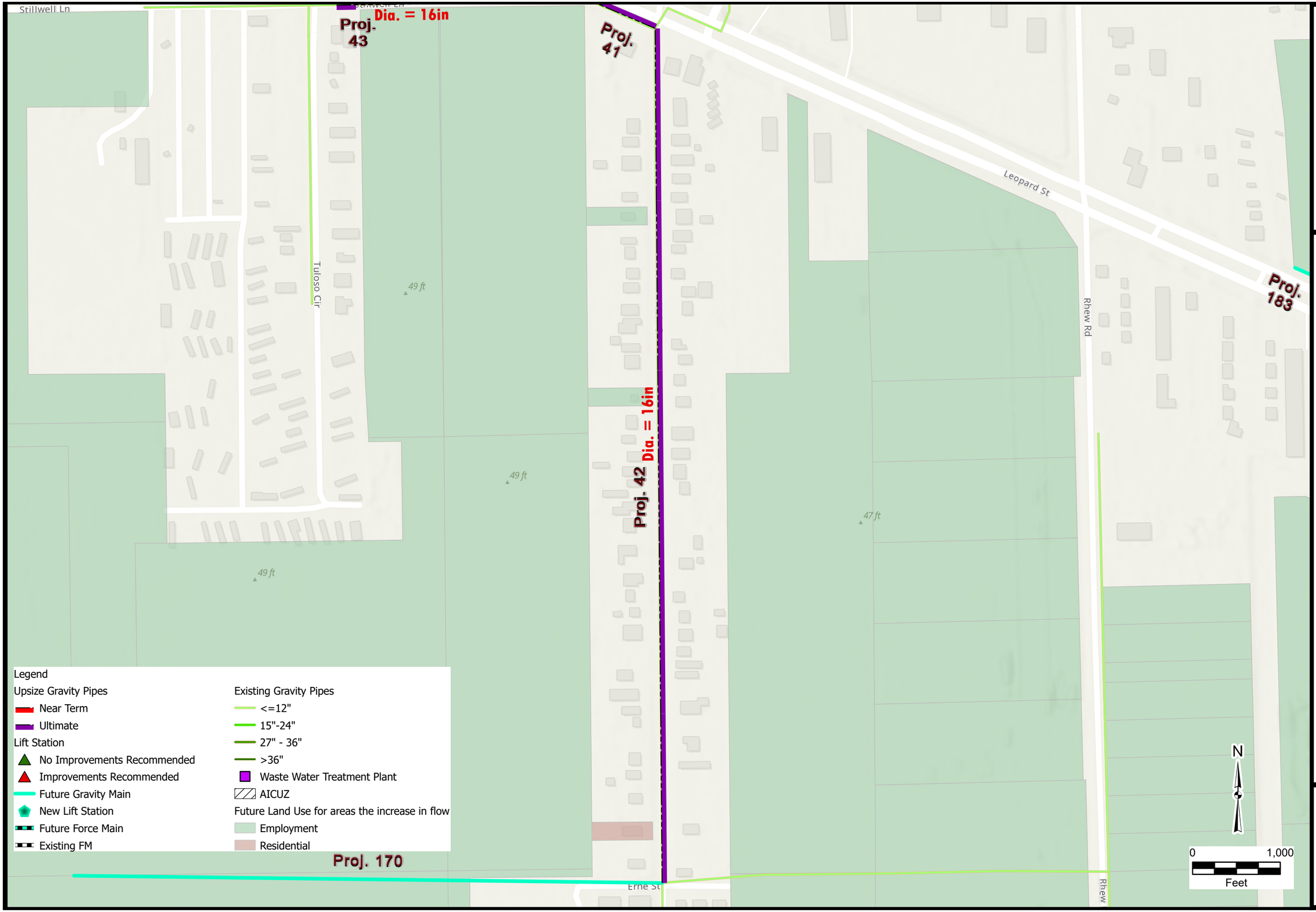

Legend

Upsize Gravity Pipes	Existing Gravity Pipes
Near Term	<=12"
Ultimate	15"-24"
Lift Station	27" - 36"
No Improvements Recommended	>36"
Improvements Recommended	Waste Water Treatment Plant
Future Gravity Main	AICUZ
New Lift Station	Future Land Use for areas the increase in flow
Future Force Main	Employment
Existing FM	Residential

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City of Corpus Christi

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	42

Date: Aug 16, 2023 2:16 PM User: rwolinsky
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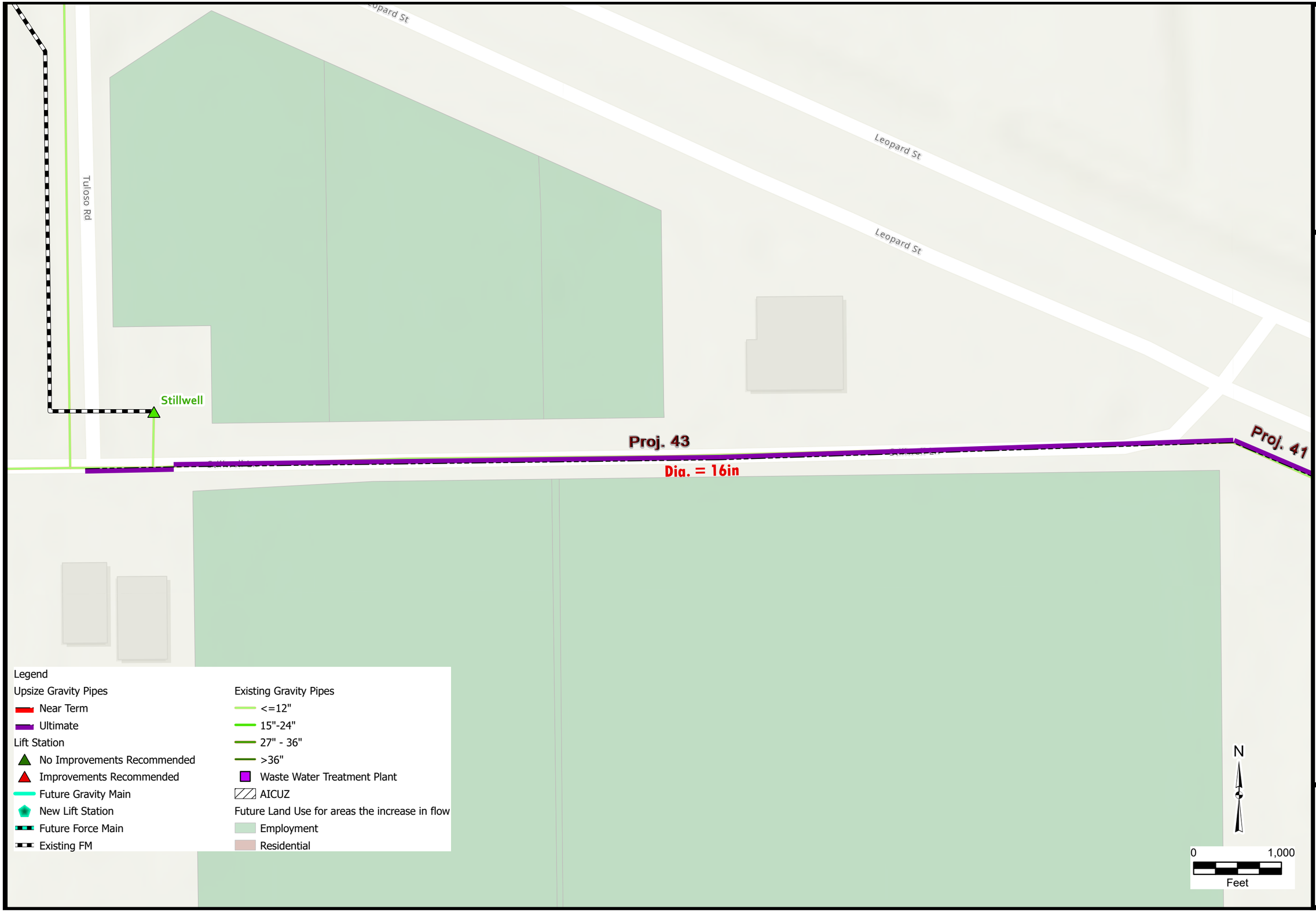

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City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	43

Date: Aug 18, 2023 2:16 PM User: rwolinsky
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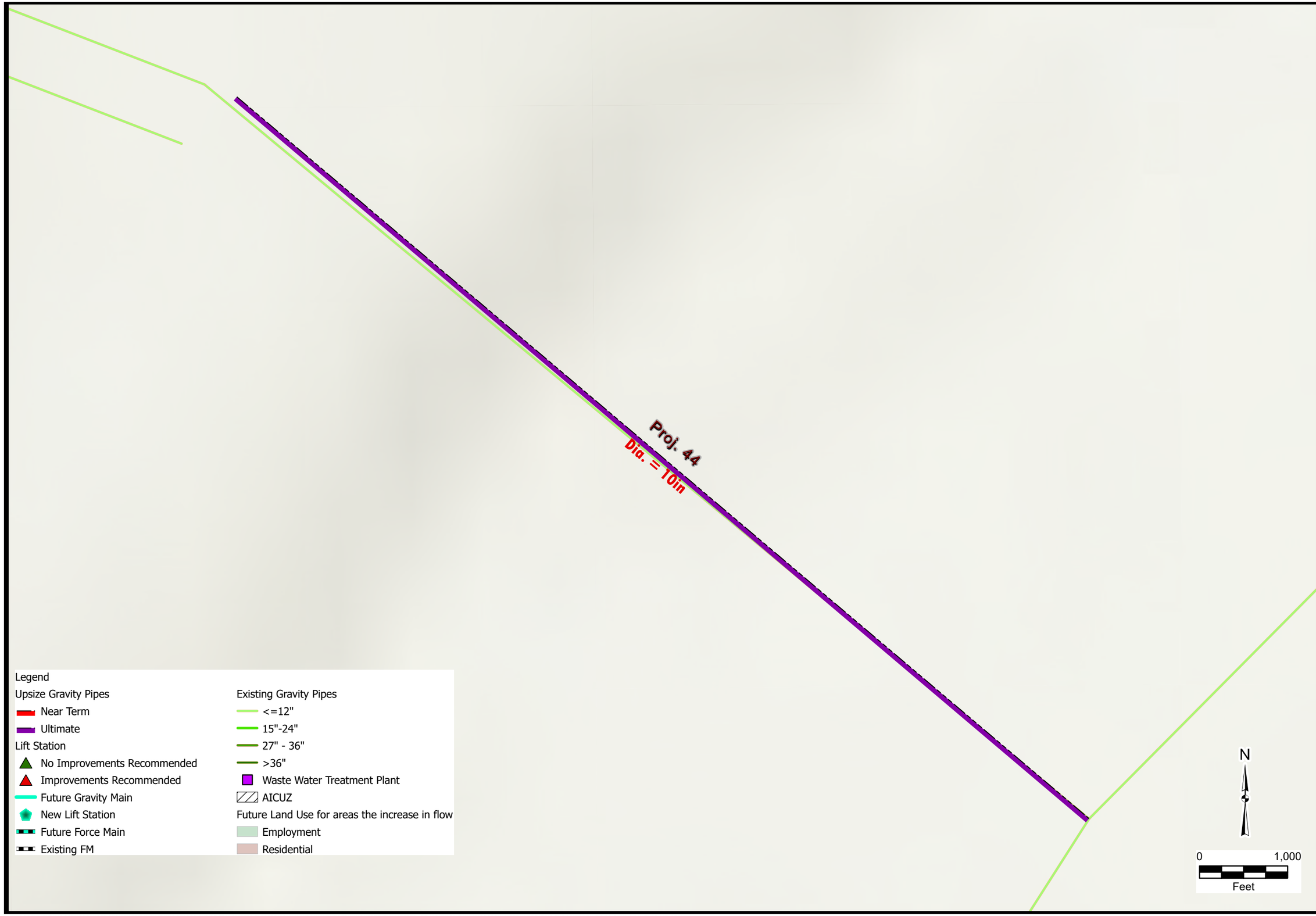

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	44

Date: Aug 18, 2023 2:16 PM User: rwolinsky
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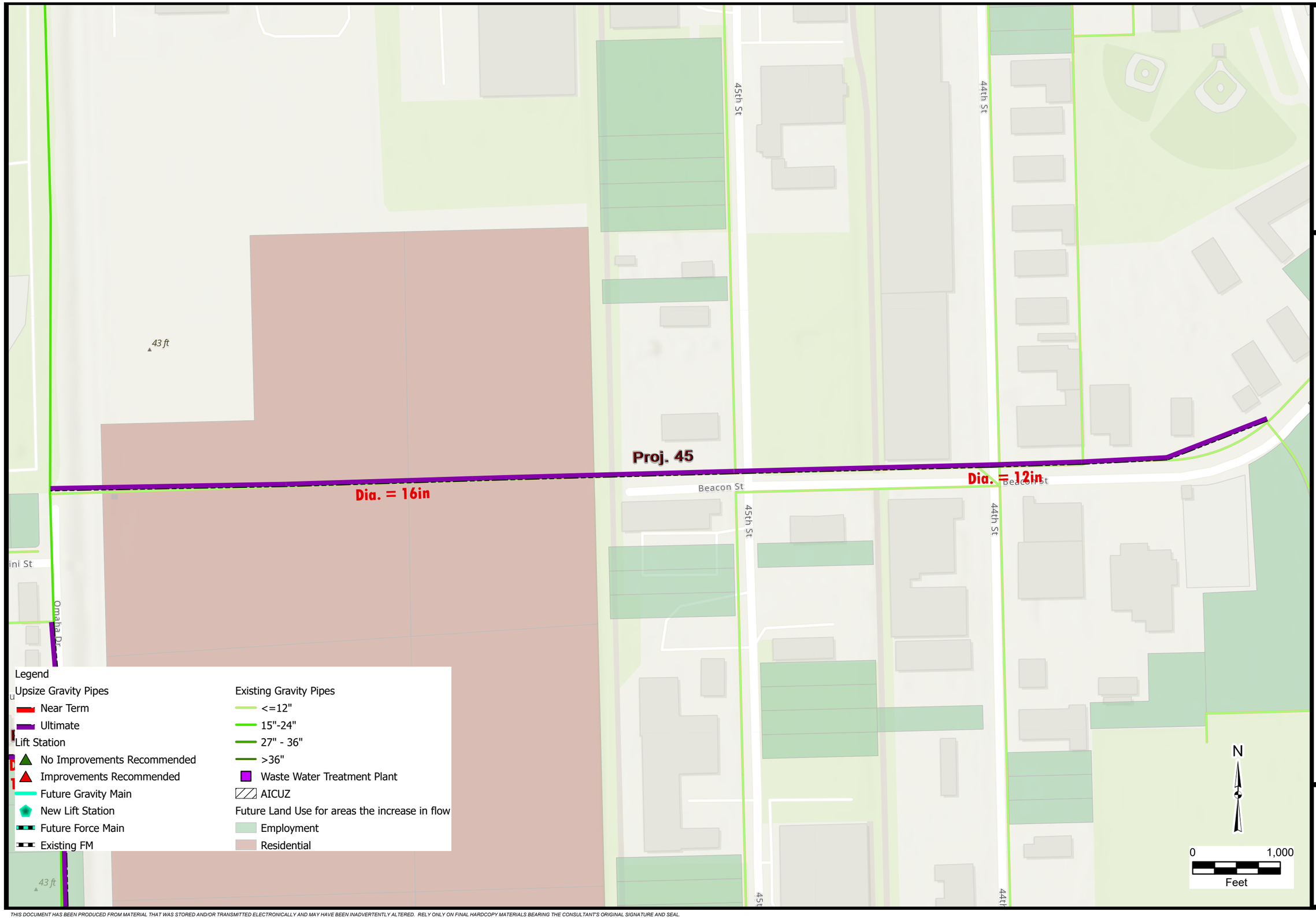

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	45

Date: Aug 18, 2023 2:17 PM User: nwolinsky
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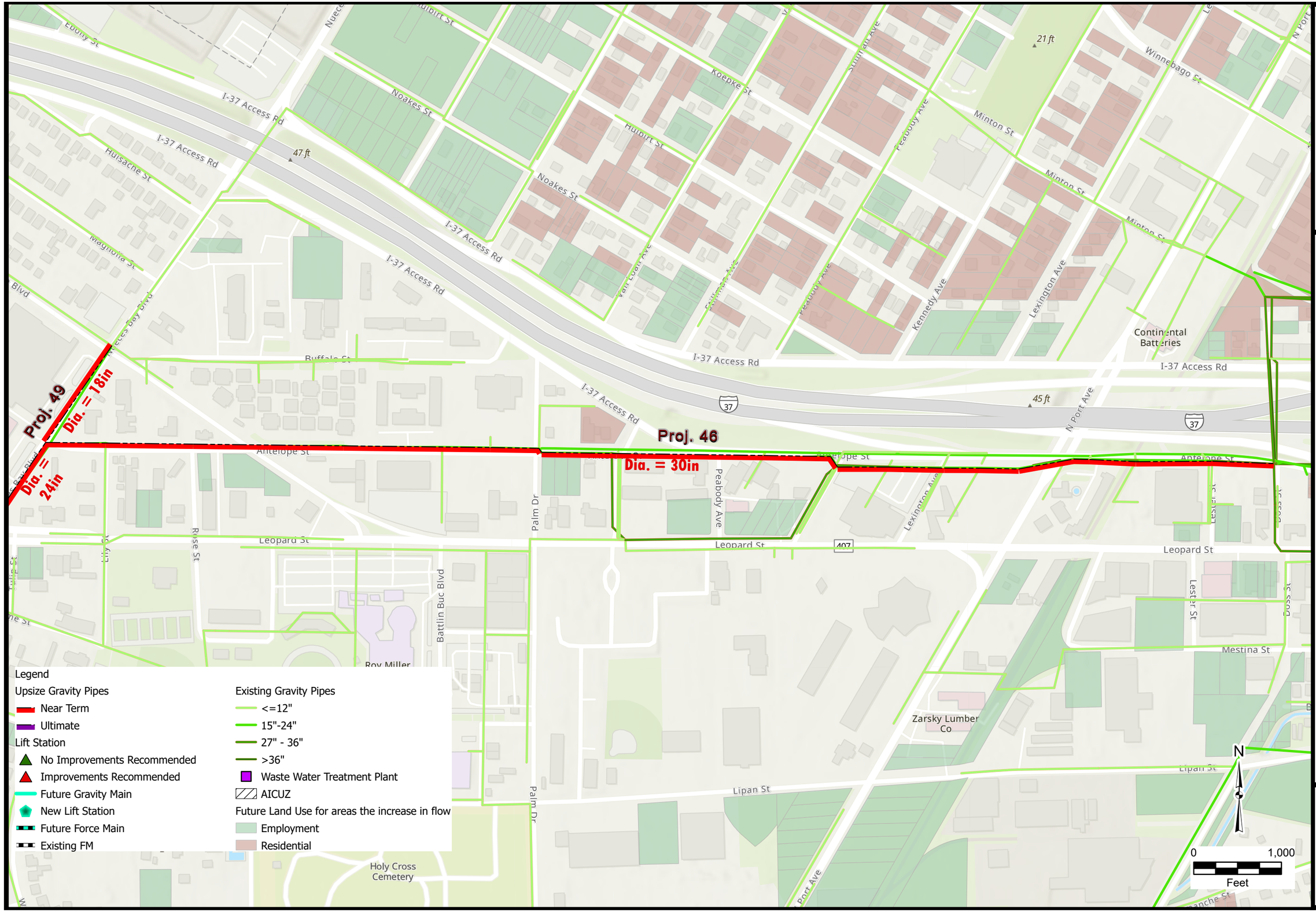

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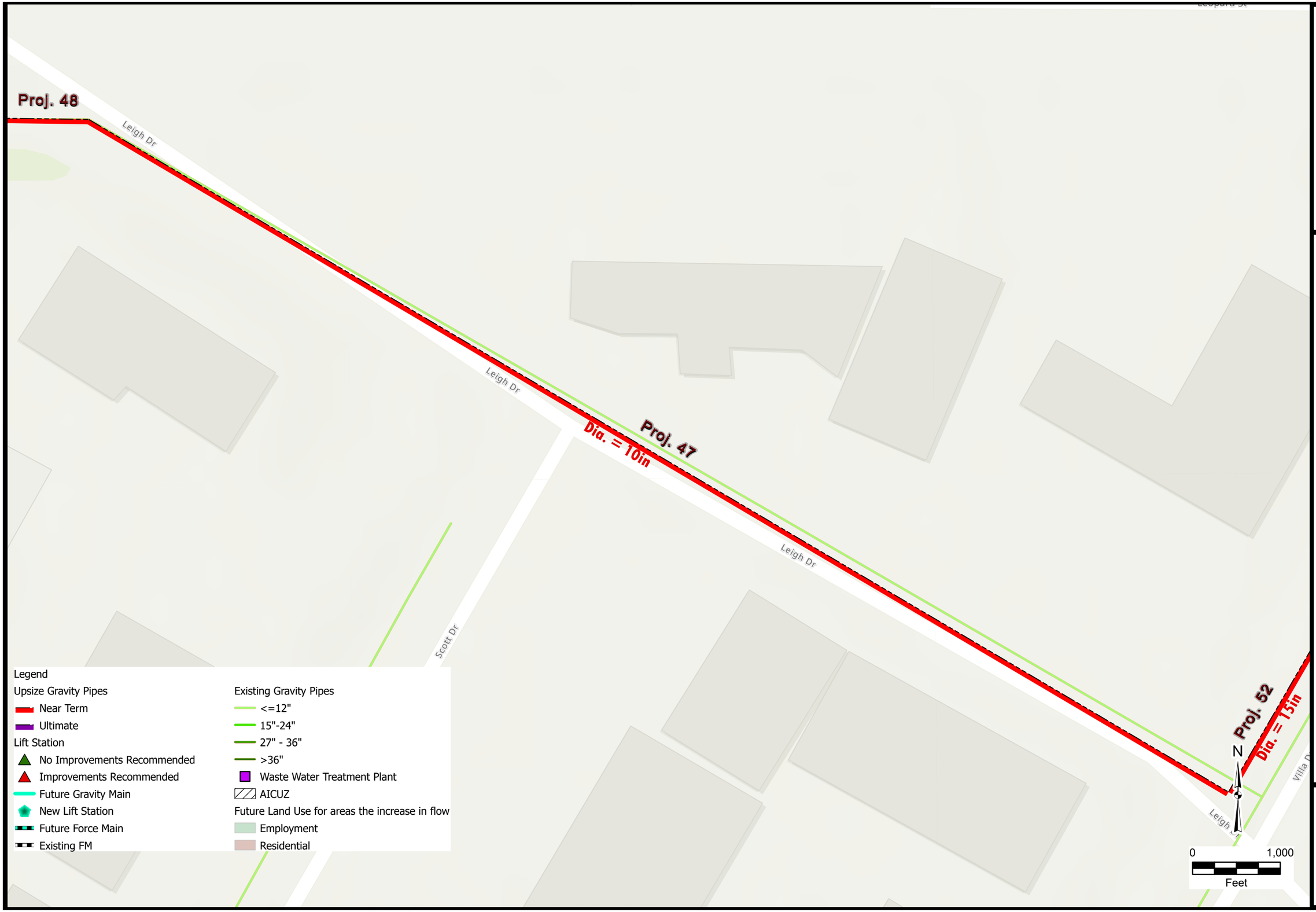
Wastewater System Upgrades Project Guide

City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	46

Date: Aug 18, 2023 2:17 PM User: nvolinsky
File: P:\123\83\00\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]



Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended
- Future Gravity Main
- New Lift Station
- Future Force Main
- Existing FM

Existing Gravity Pipes
- <=12"
- 15"-24"
- 27" - 36"
- >36"
- Waste Water Treatment Plant
- AICUZ

Future Land Use for areas the increase in flow
- Employment
- Residential

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City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	47

Date: Aug 16, 2023 2:17 PM User: rwolinsky
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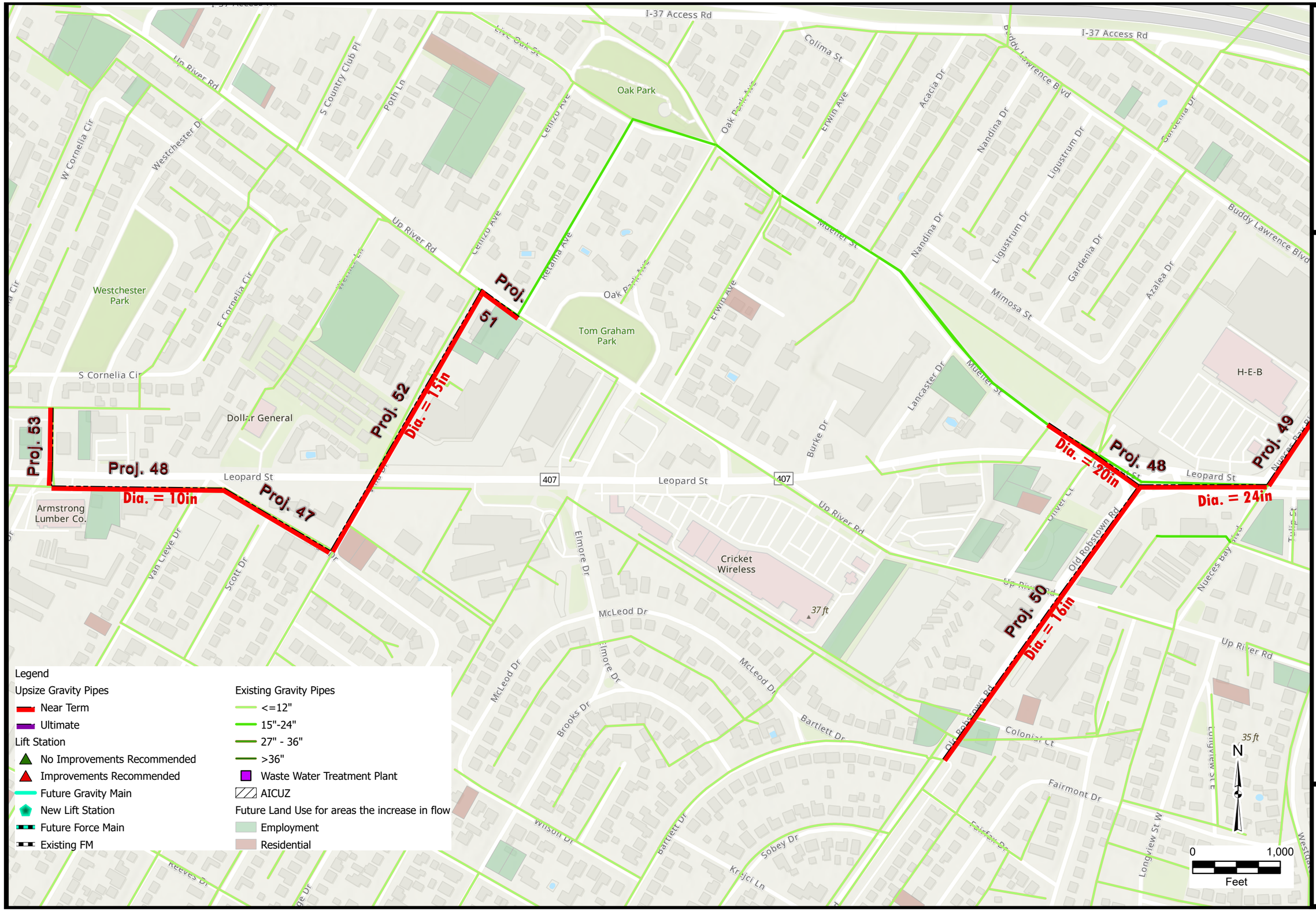

Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended
- Future Gravity Main
- New Lift Station
- Future Force Main
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Existing Gravity Pipes
- <=12"
- 15"-24"
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- AICUZ

Future Land Use for areas the increase in flow
- Employment
- Residential

N

0 1,000 Feet

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Wastewater System Upgrades Project Guide

City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	48

Date: Aug 18, 2023 2:17 PM User: rwolinsky
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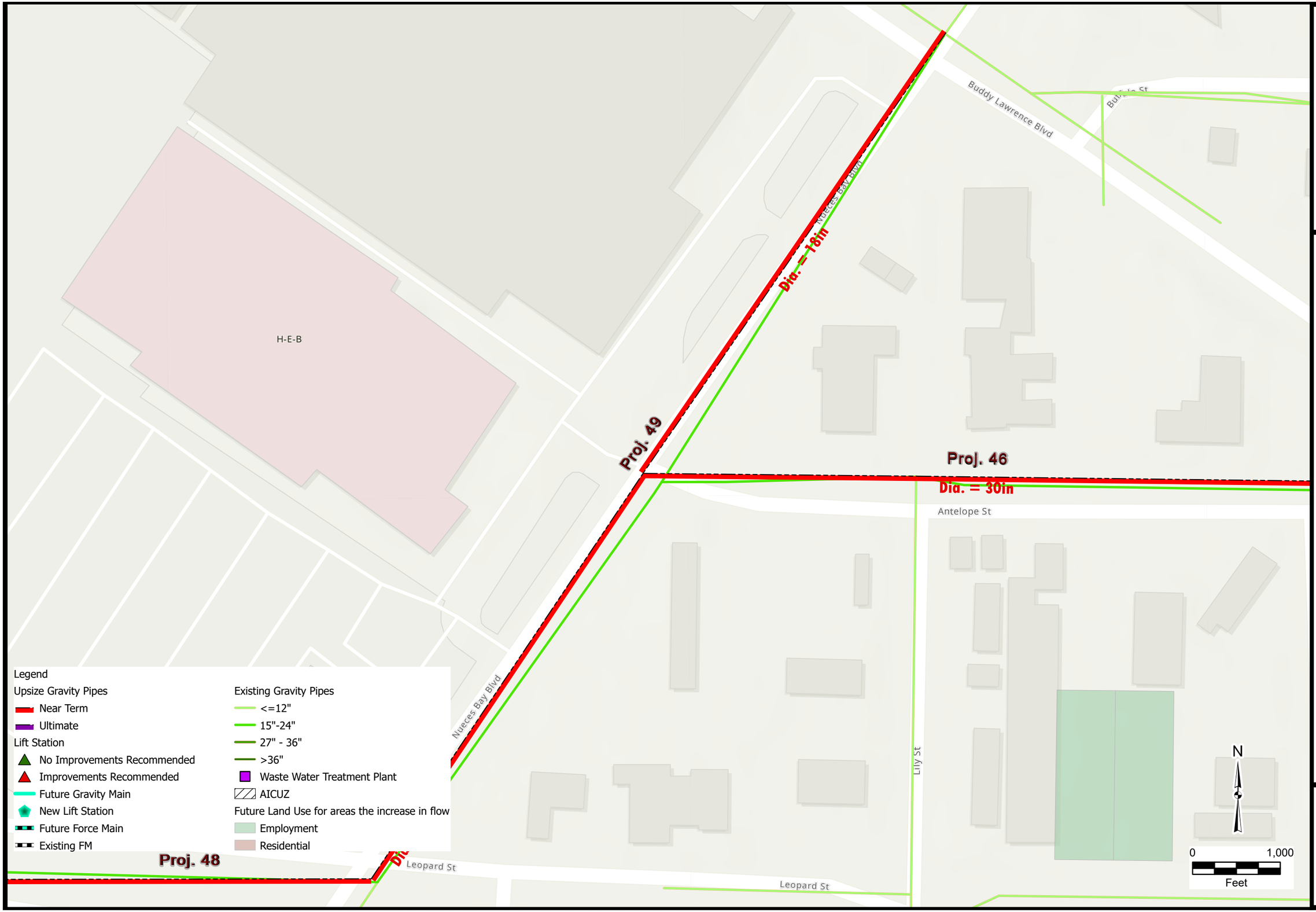

Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended
- Future Gravity Main
- New Lift Station
- Future Force Main
- Existing FM

Existing Gravity Pipes
- <=12"
- 15"-24"
- 27" - 36"
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- Waste Water Treatment Plant
- AICUZ

Future Land Use for areas the increase in flow
- Employment
- Residential

Wastewater System Upgrades Project Guide

City of Corpus Christi

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	49

Date: Aug 18, 2023 2:17 PM User: rwolinsky
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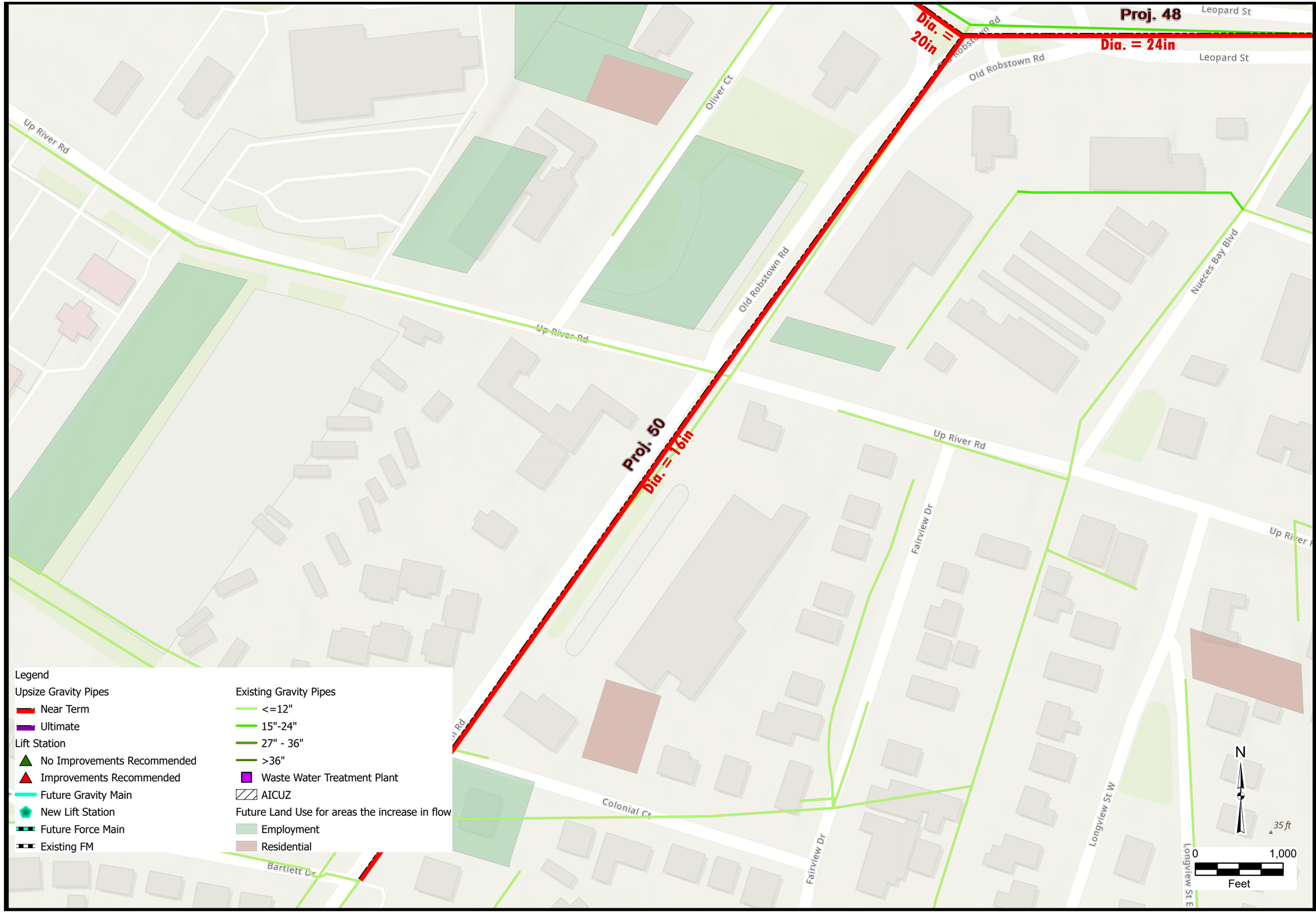

Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended
- Future Gravity Main
- New Lift Station
- Future Force Main
- Existing FM

Existing Gravity Pipes
- <=12"
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Future Land Use for areas the increase in flow
- Employment
- Residential

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City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	50

Date: Aug 18, 2023 2:17 PM User: rwolinsky
File: P:\123\83\00\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]

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City of Corpus Christi

Proj. 70
Dia. = 20in
Proj. 51
Proj. 51
Proj. 72
Dia. = 20in
Proj. 76
Dia. = 30in
McBride
Proj. 11
Upsize Existing FM
Charlie's Place
Proj. 53
Proj. 48
Dia. = 10in
Proj. 47
Proj. 52
Dia. = 15in
Proj. 51

Union Pacific
N Navigation Blvd
Kansas City Southern
I-37 Access Rd
Golla Dr
Gale St
Vernon Dr
N Padre Island Dr
James St
Nim St
Savage Ln
Up River Rd
Mueller St
Tribble Ln
Leopard St
Umana Dr
Lantana Rd
26 ft
69 ft
407

Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended
- Future Gravity Main
- New Lift Station
- Future Force Main
- Existing FM

Existing Gravity Pipes
- <=12"
- 15"-24"
- 27" - 36"
- >36"
- Waste Water Treatment Plant
- AICUZ

Future Land Use for areas the increase in flow
- Employment
- Residential

N

0 1,000 Feet

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	51

Date: Aug 16, 2023 2:17 PM User: nvolinsky
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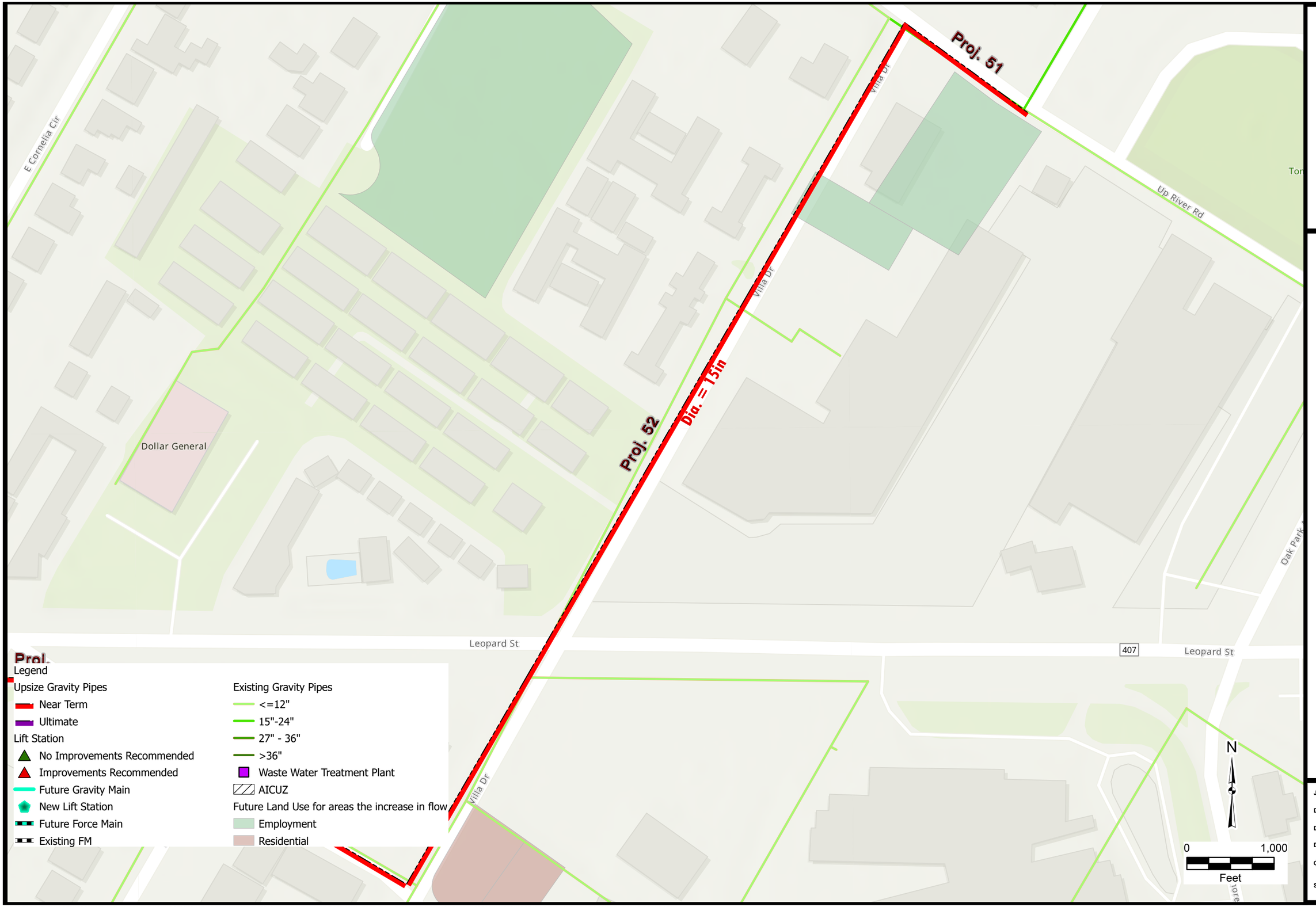

Legend

Upsize Gravity Pipes	Existing Gravity Pipes
Near Term	<=12"
Ultimate	15"-24"
Lift Station	27" - 36"
No Improvements Recommended	>36"
Improvements Recommended	Waste Water Treatment Plant
Future Gravity Main	AICUZ
New Lift Station	**Future Land Use for areas the increase in flow**
Future Force Main	Employment
Existing FM	Residential

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Wastewater System Upgrades Project Guide

City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	52

Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended
- Future Gravity Main
- New Lift Station
- Future Force Main
- Existing FM

Existing Gravity Pipes
- <=12"
- 15"-24"
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- Waste Water Treatment Plant
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Future Land Use for areas the increase in flow
- Employment
- Residential

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Wastewater System Upgrades Project Guide

City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	53

Date: Aug 18, 2023 2:17 PM User: nvolinsky
File: P:\123\83000\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]

Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended
- Future Gravity Main
- New Lift Station
- Future Force Main
- Existing FM

Existing Gravity Pipes
- <=12"
- 15"-24"
- 27" - 36"
- >36"
- Waste Water Treatment Plant
- AICUZ

Future Land Use for areas the increase in flow
- Employment
- Residential

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City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	54

Date: Aug 18, 2023 2:17 PM User: nwolinsky
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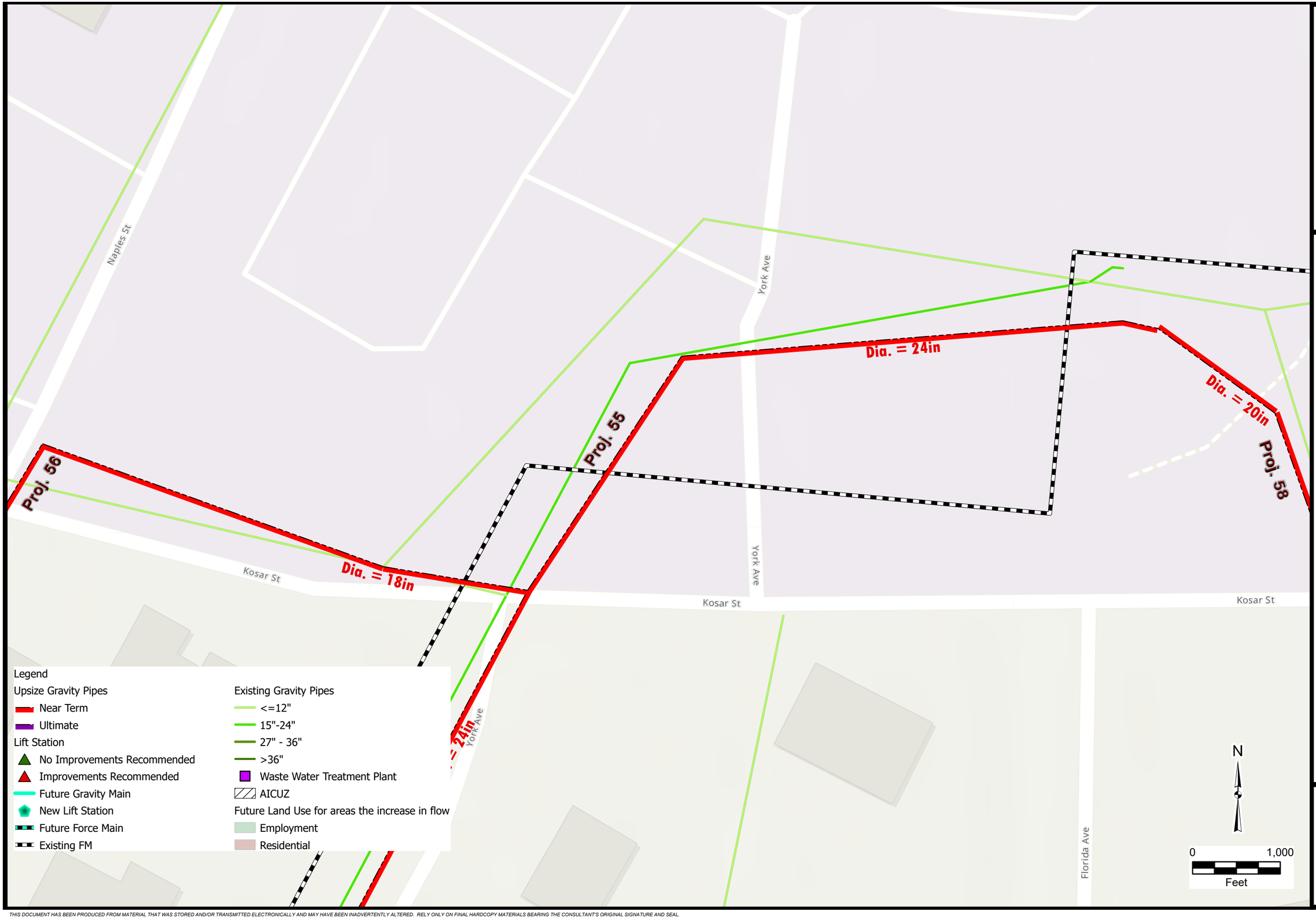

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City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	55

Date: Aug 18, 2023 2:17 PM User: nwolinsky
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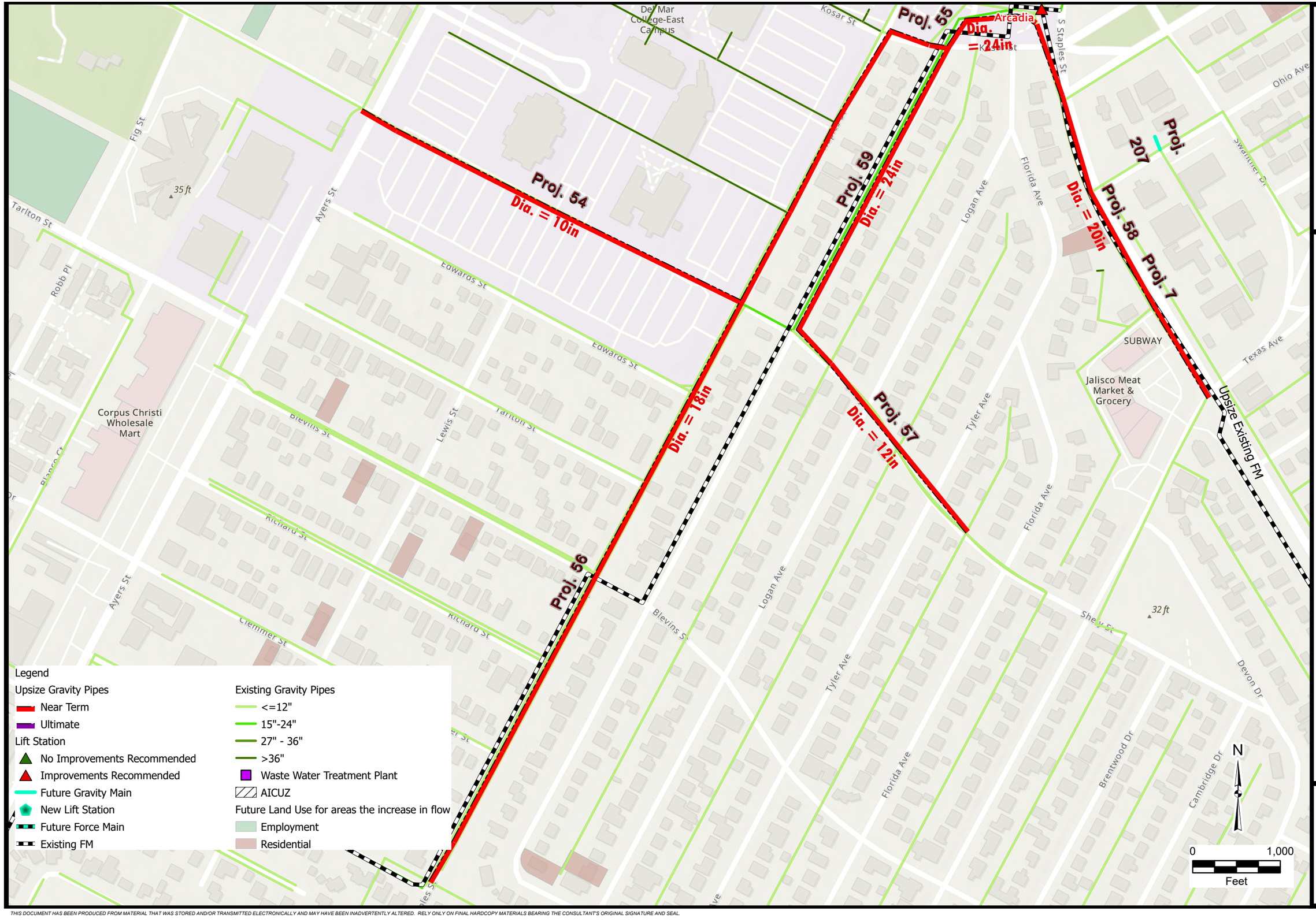

Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended
- Future Gravity Main
- New Lift Station
- Future Force Main
- Existing FM

Existing Gravity Pipes
- <=12"
- 15"-24"
- 27" - 36"
- >36"
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Future Land Use for areas the increase in flow
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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	56

Date: Aug 18, 2023 2:17 PM User: nwolinsky
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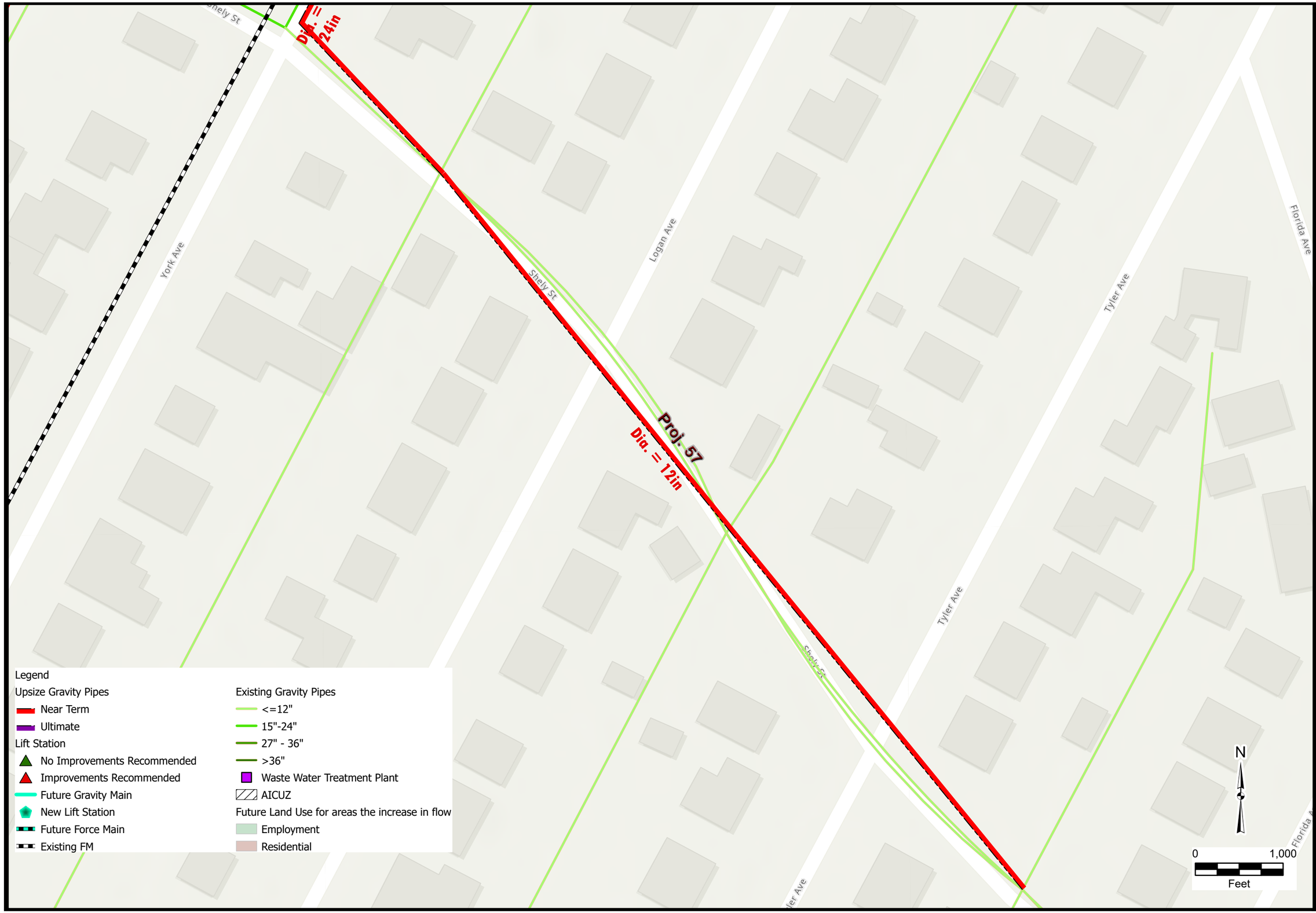

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City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	57

Date: Aug 16, 2023 2:18 PM User: rwolinsky
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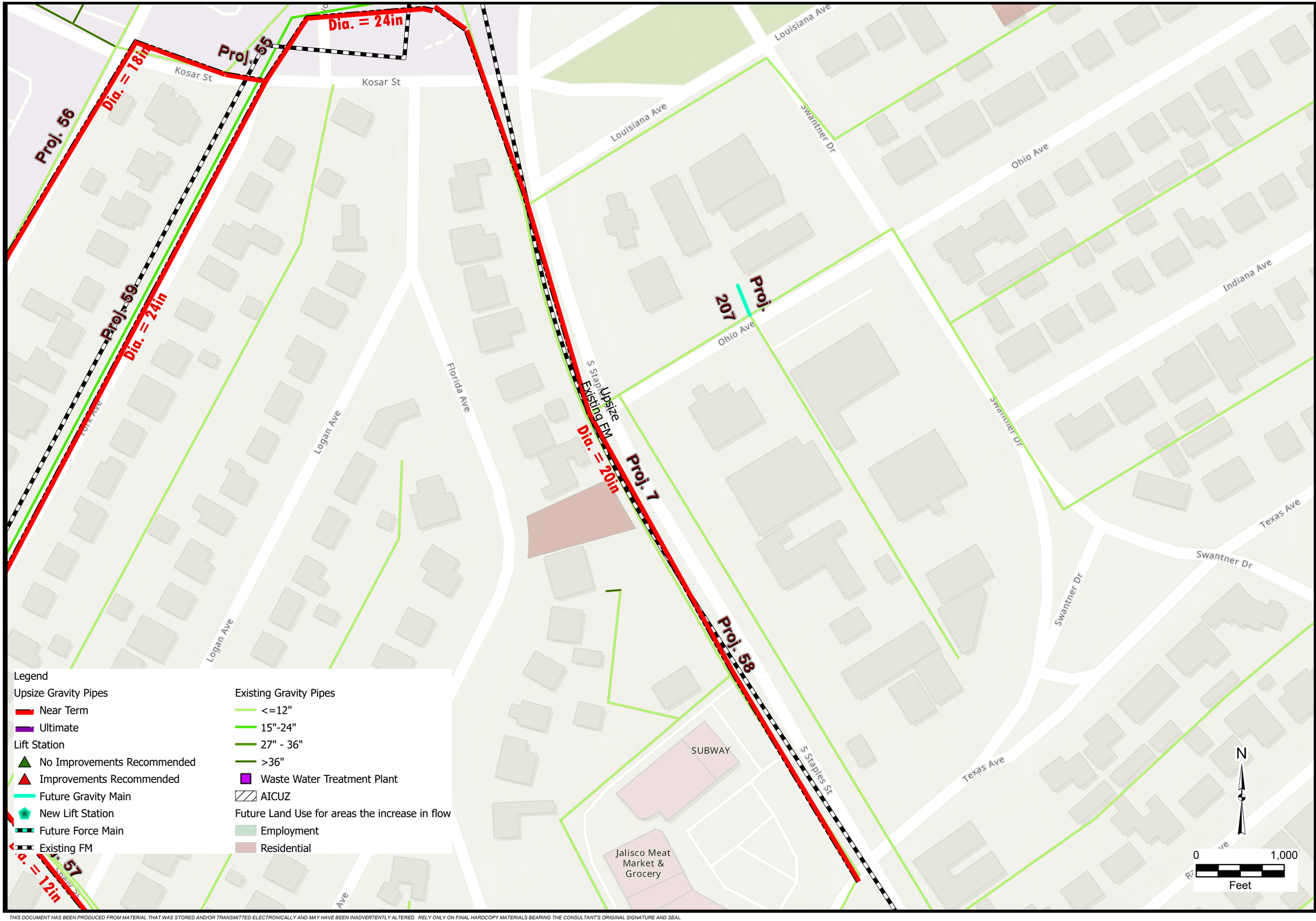

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	58

Date: Aug 18, 2023 2:18 PM User: nwolinsky
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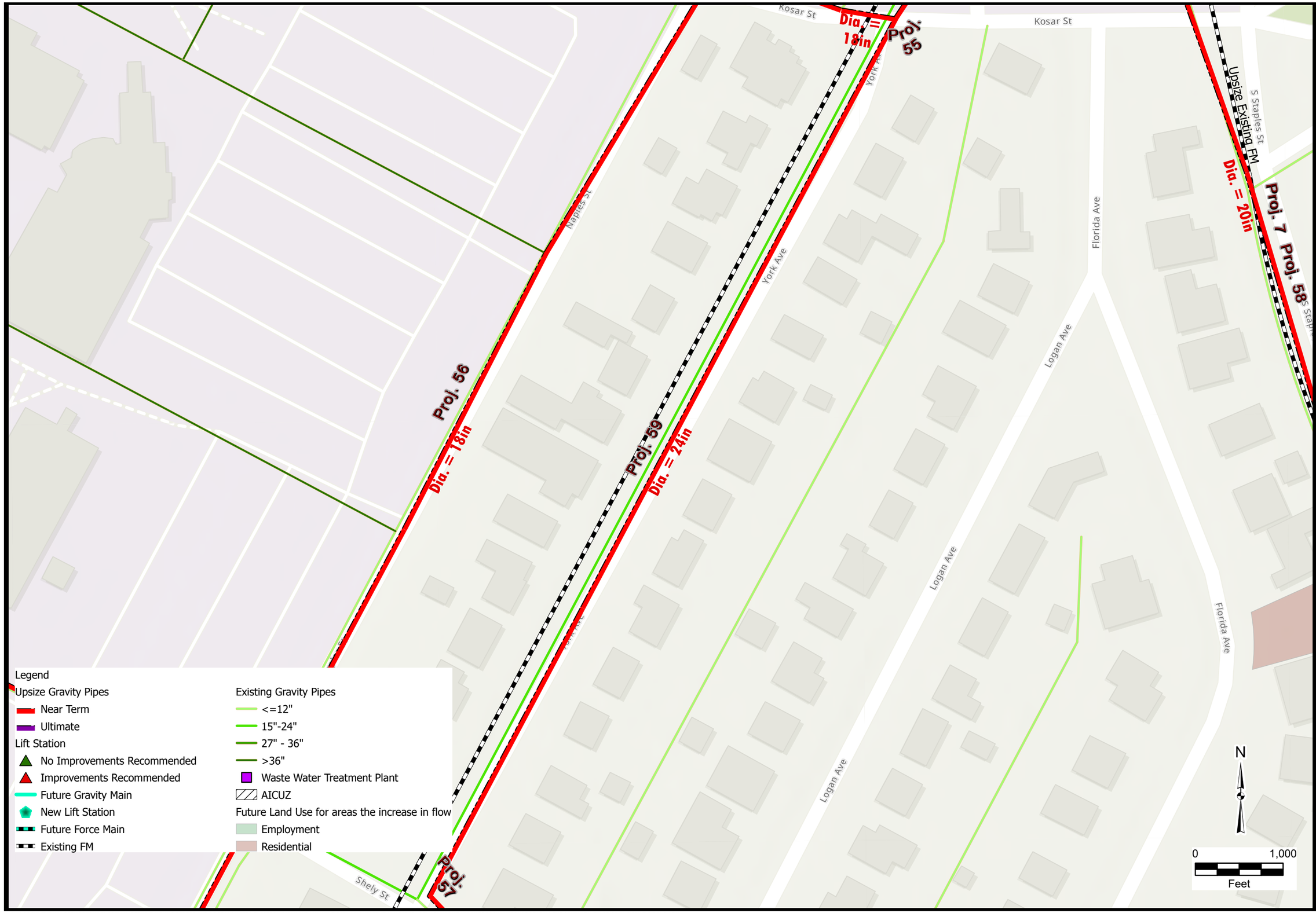

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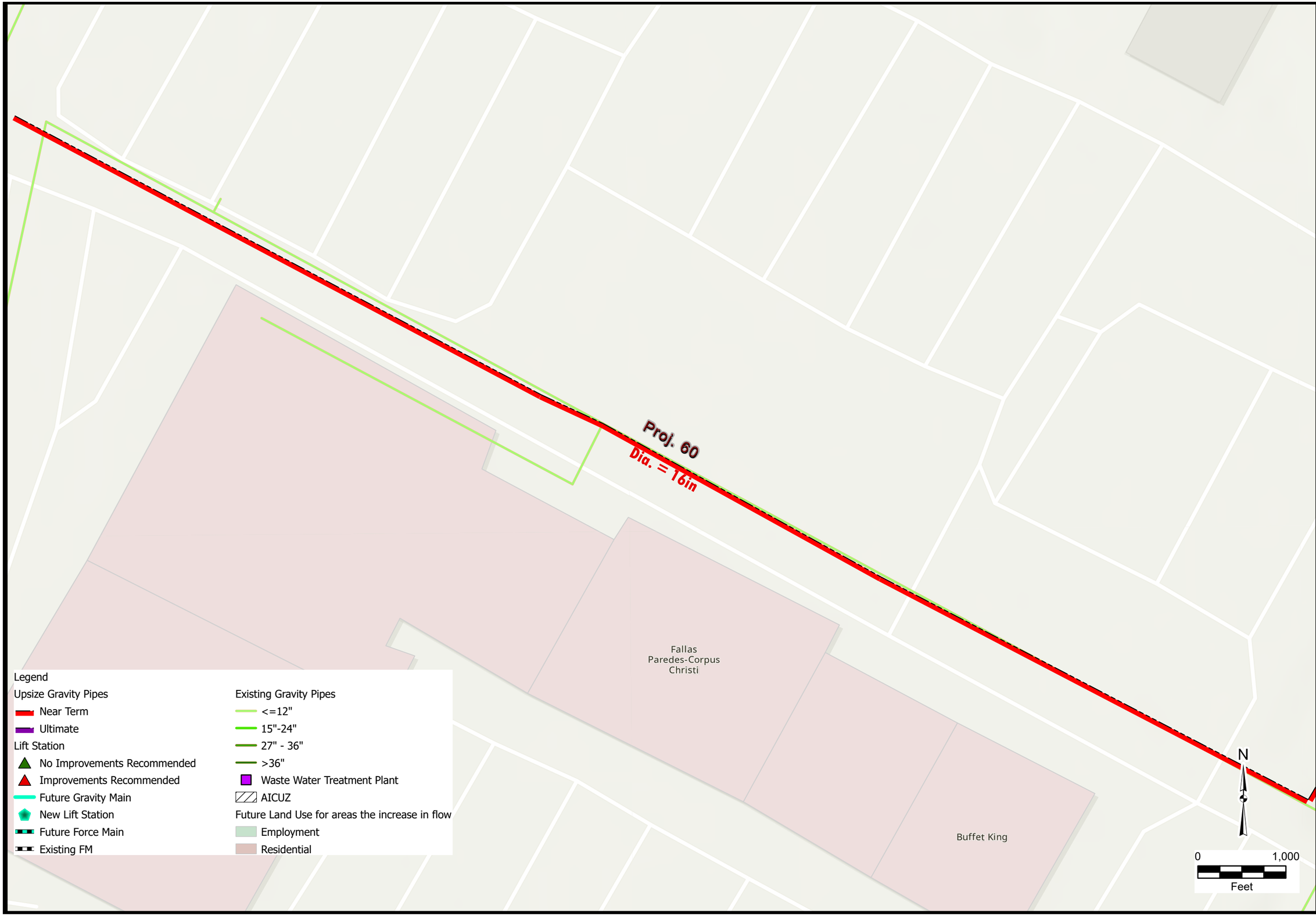
City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	59



Legend

Upsize Gravity Pipes	Existing Gravity Pipes
Near Term	<=12"
Ultimate	15"-24"
Lift Station	27" - 36"
No Improvements Recommended	>36"
Improvements Recommended	Waste Water Treatment Plant
Future Gravity Main	AICUZ
New Lift Station	Future Land Use for areas the increase in flow
Future Force Main	Employment
Existing FM	Residential

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	60

Date: Aug 18, 2023 2:18 PM User: nvolinsky
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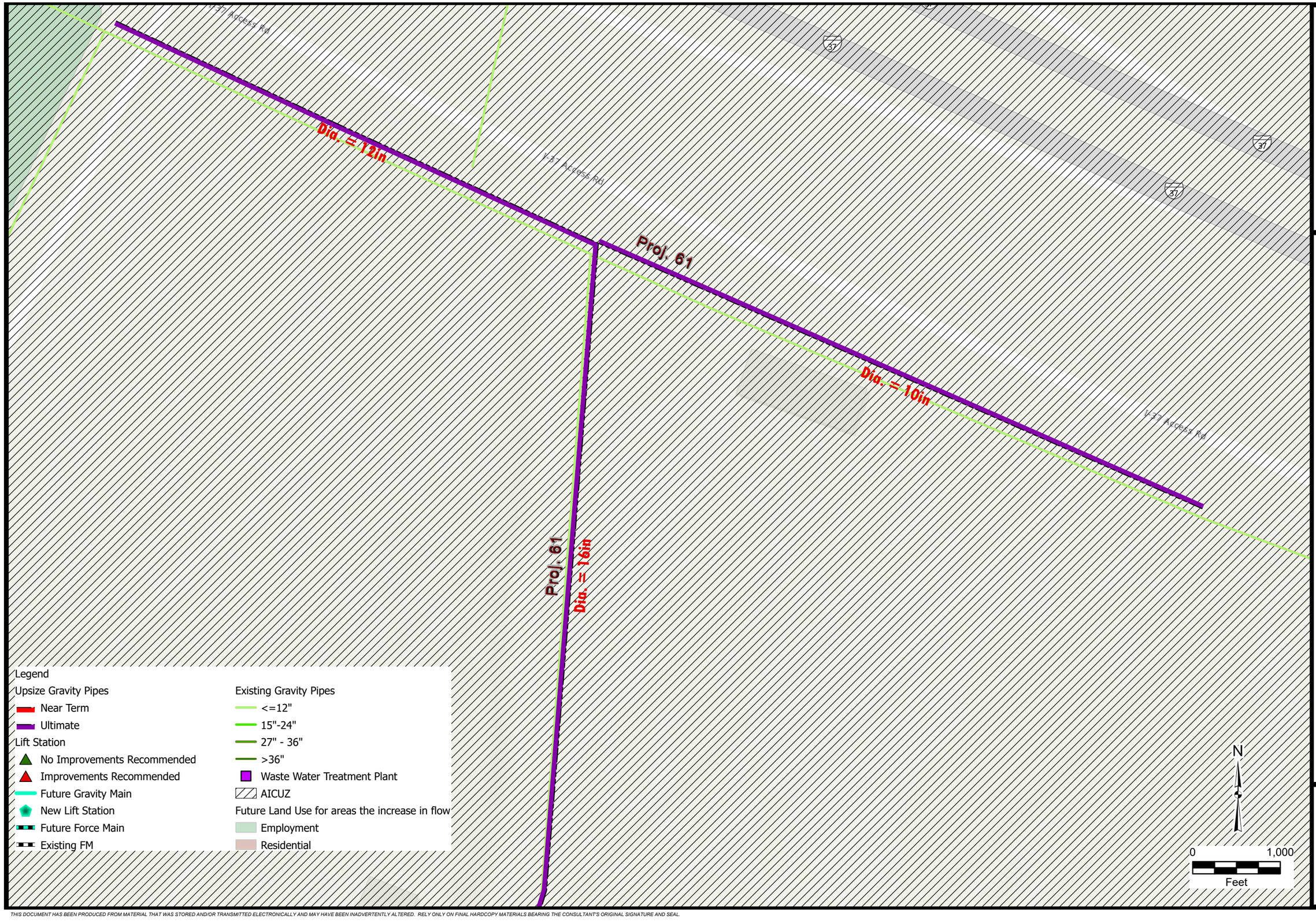

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	61

Date: Aug 18, 2023 2:18 PM User: nwolinsky
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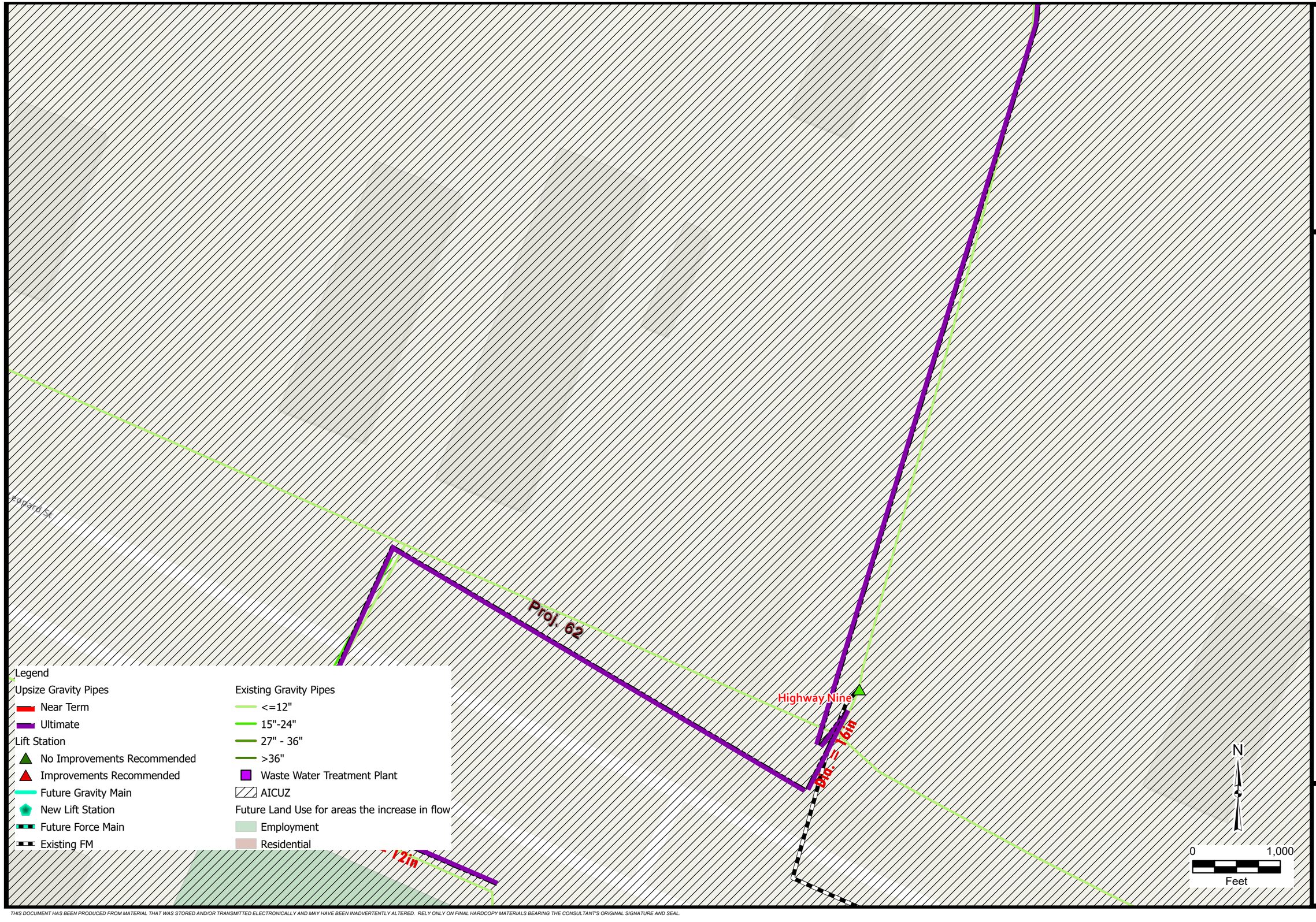

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	62

Date: Aug 18, 2023 2:18 PM User: nwolinsky
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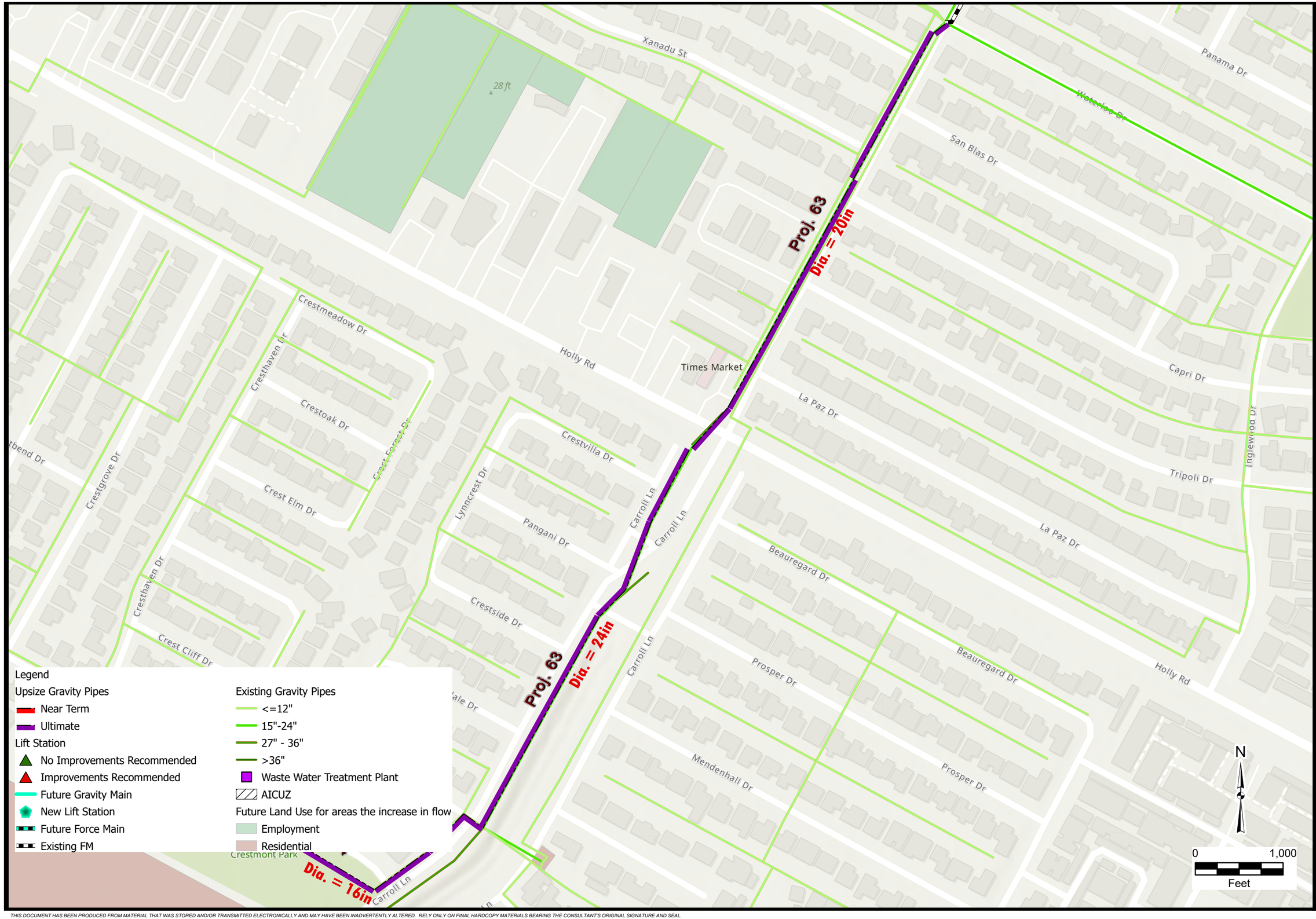

Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended
- Future Gravity Main
- New Lift Station
- Future Force Main
- Existing FM

Existing Gravity Pipes
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Future Land Use for areas the increase in flow
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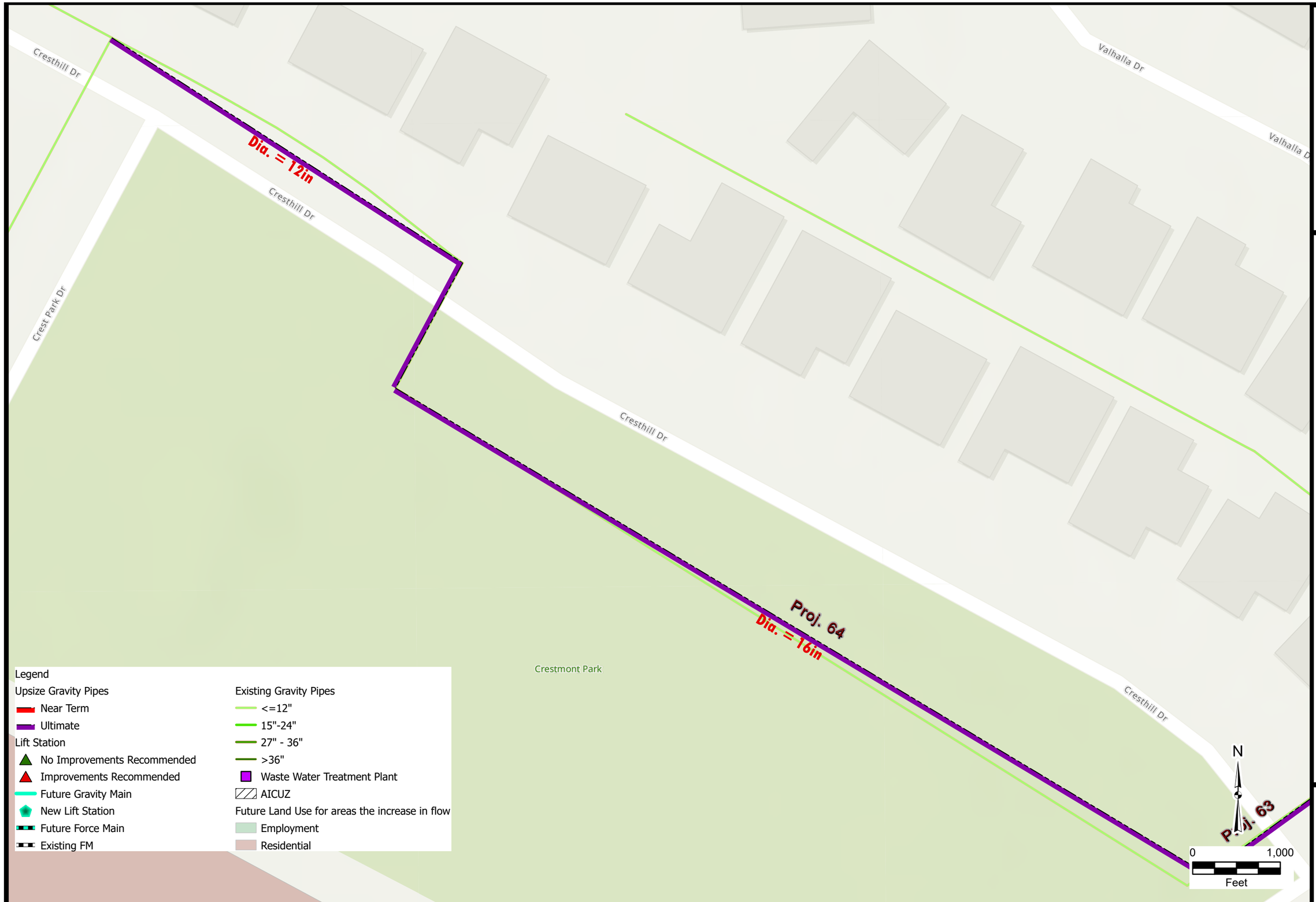
JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	63



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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	64

Date: Aug 16, 2023 2:18 PM User: rwolinsky
File: P:\123\83\00\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]

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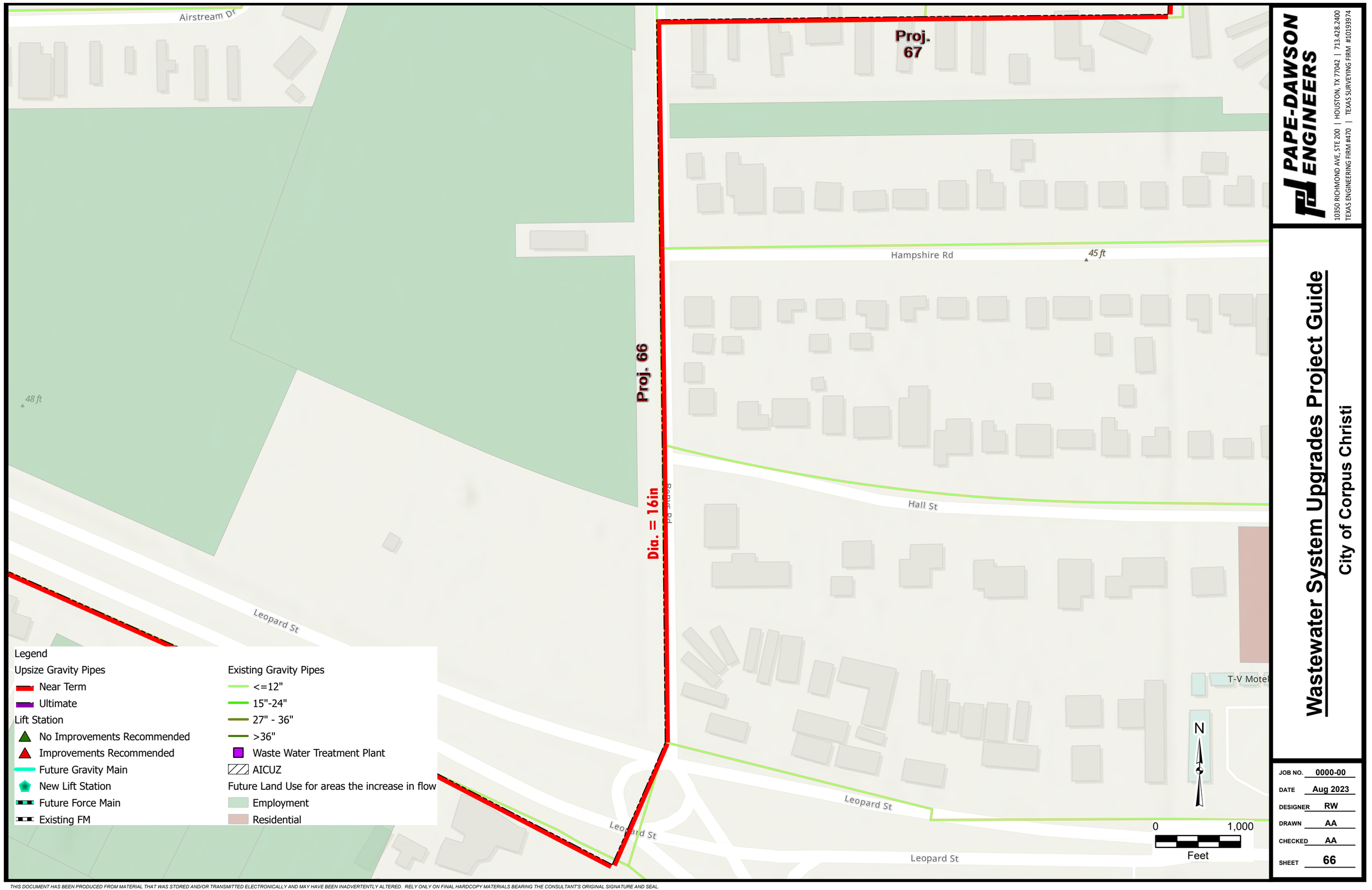
City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	65



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Wastewater System Upgrades Project Guide

City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	66

Date: Aug 18, 2023 2:18 PM User: nwolinsky
File: P:\12318300\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]

Clifton

Clifton

Proj. 67

Dia. = 16in

Benys Rd

Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended
- Future Gravity Main
- New Lift Station
- Future Force Main
- Existing FM

Existing Gravity Pipes
- <=12"
- 15"-24"
- 27" - 36"
- >36"
- Waste Water Treatment Plant
- AICUZ

Future Land Use for areas the increase in flow
- Employment
- Residential

N

0 1,000

Feet

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	67

Date: Aug 18, 2023 2:18 PM User: nwolinsky
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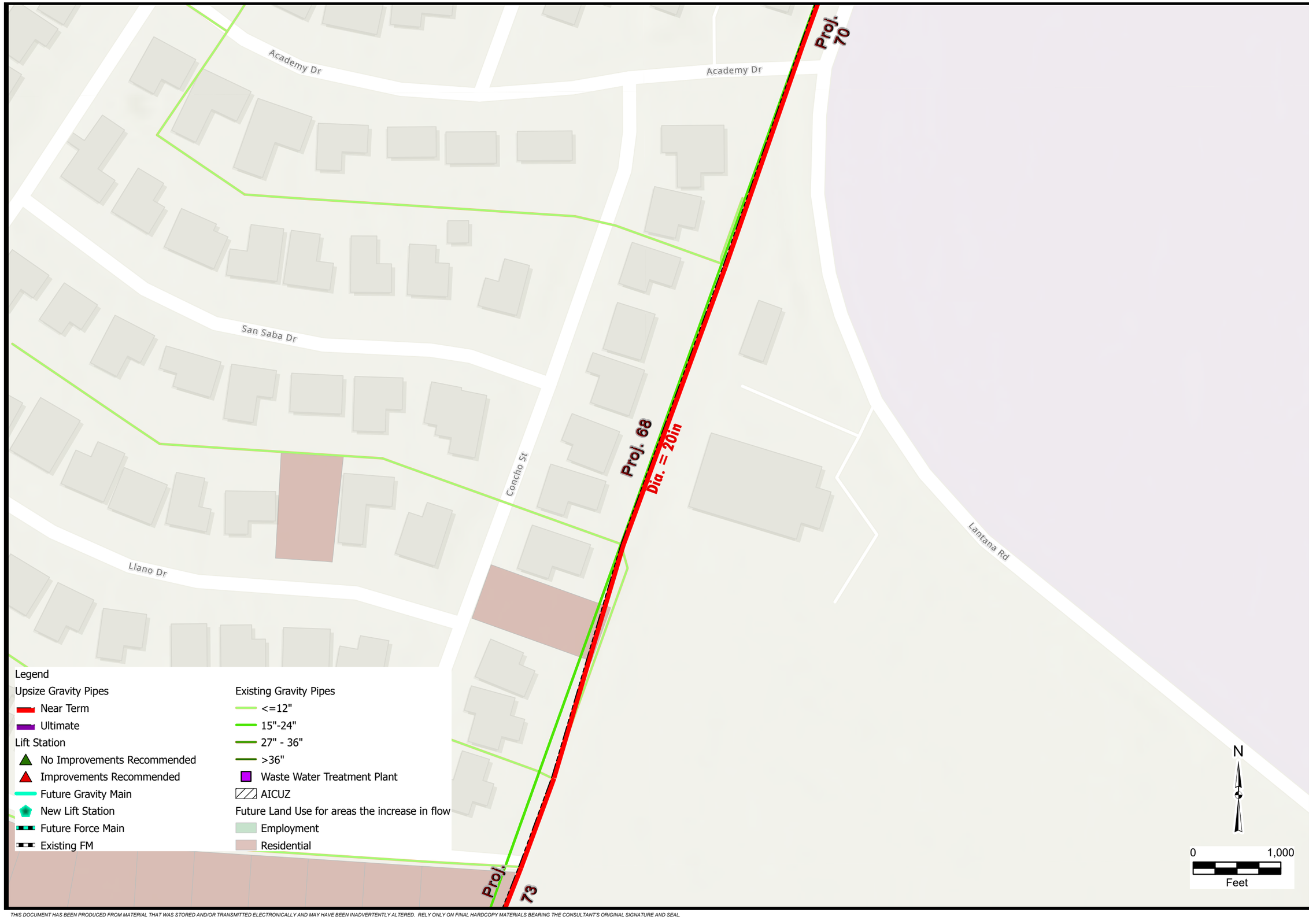

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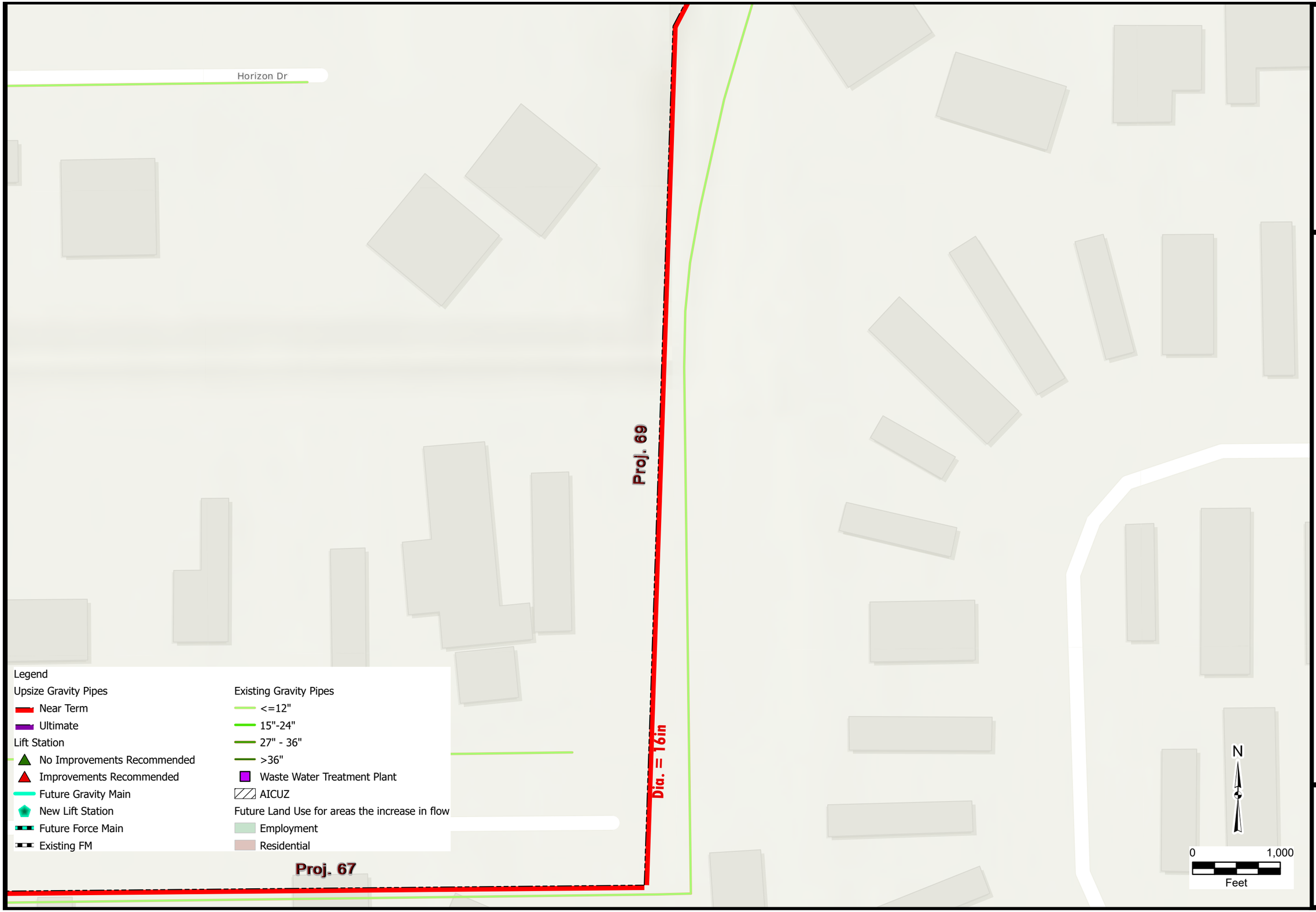
City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	68



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City of Corpus Christi

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
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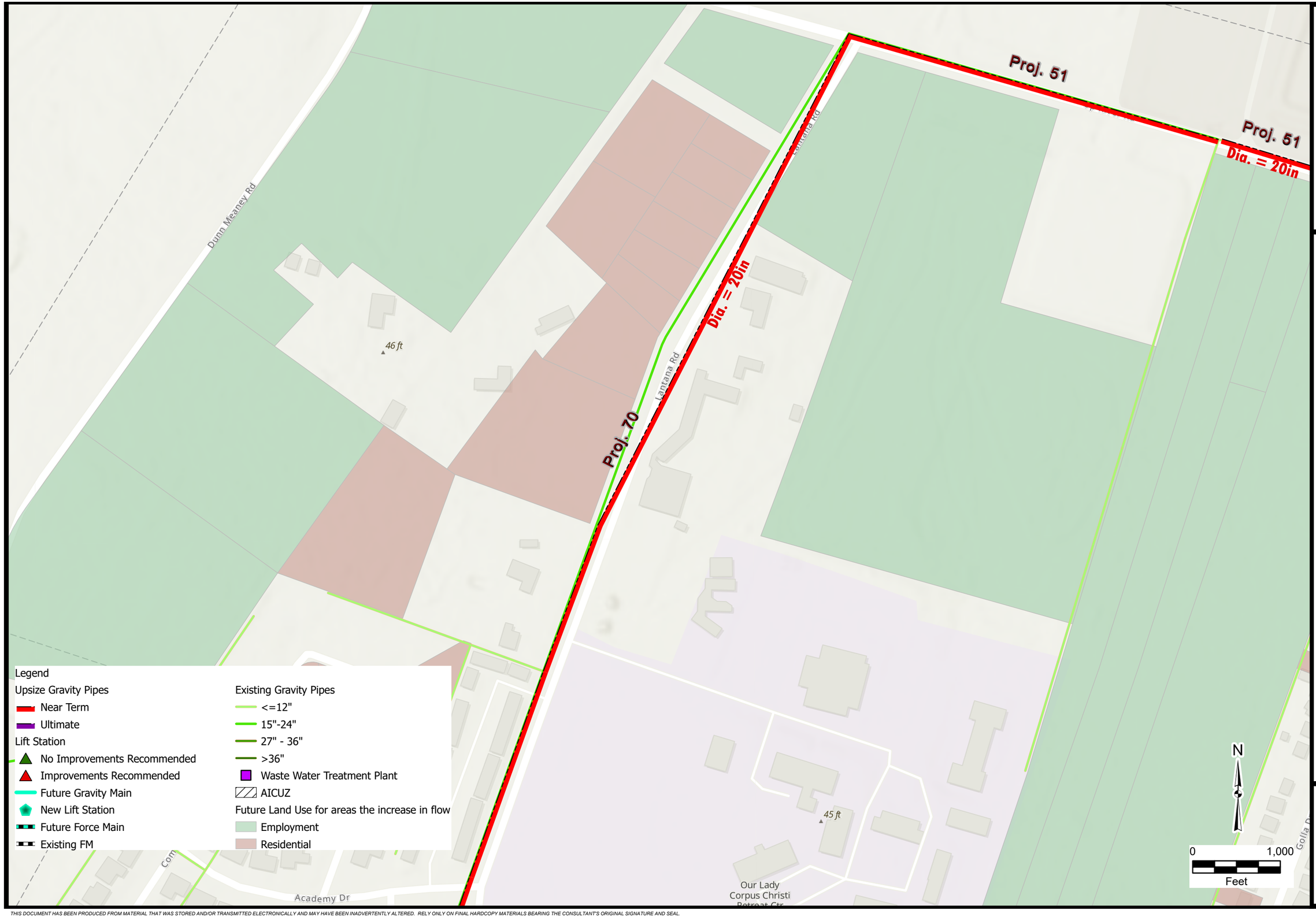

Wastewater System Upgrades Project Guide

City of Corpus Christi

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
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City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	71

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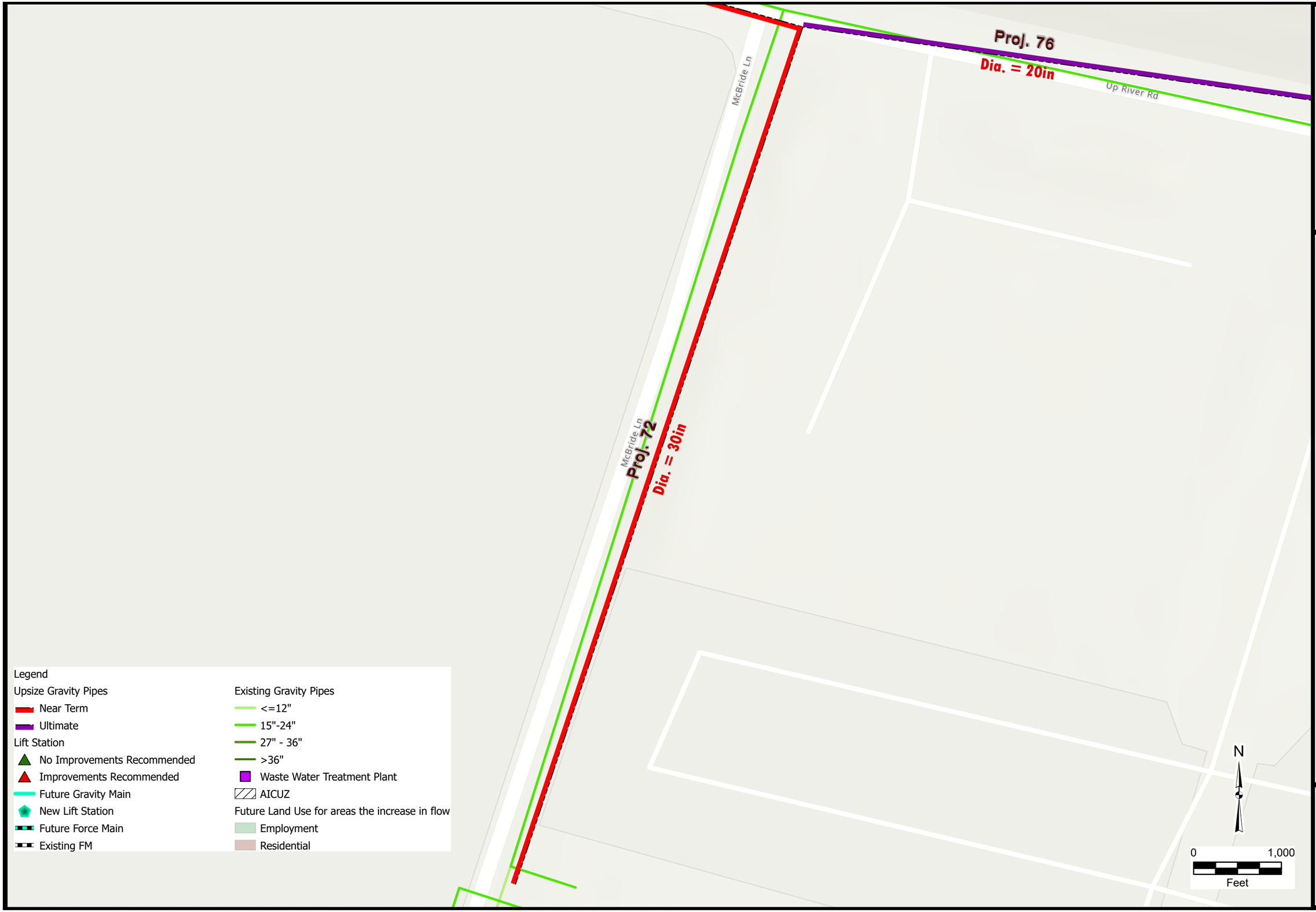

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
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SHEET	72

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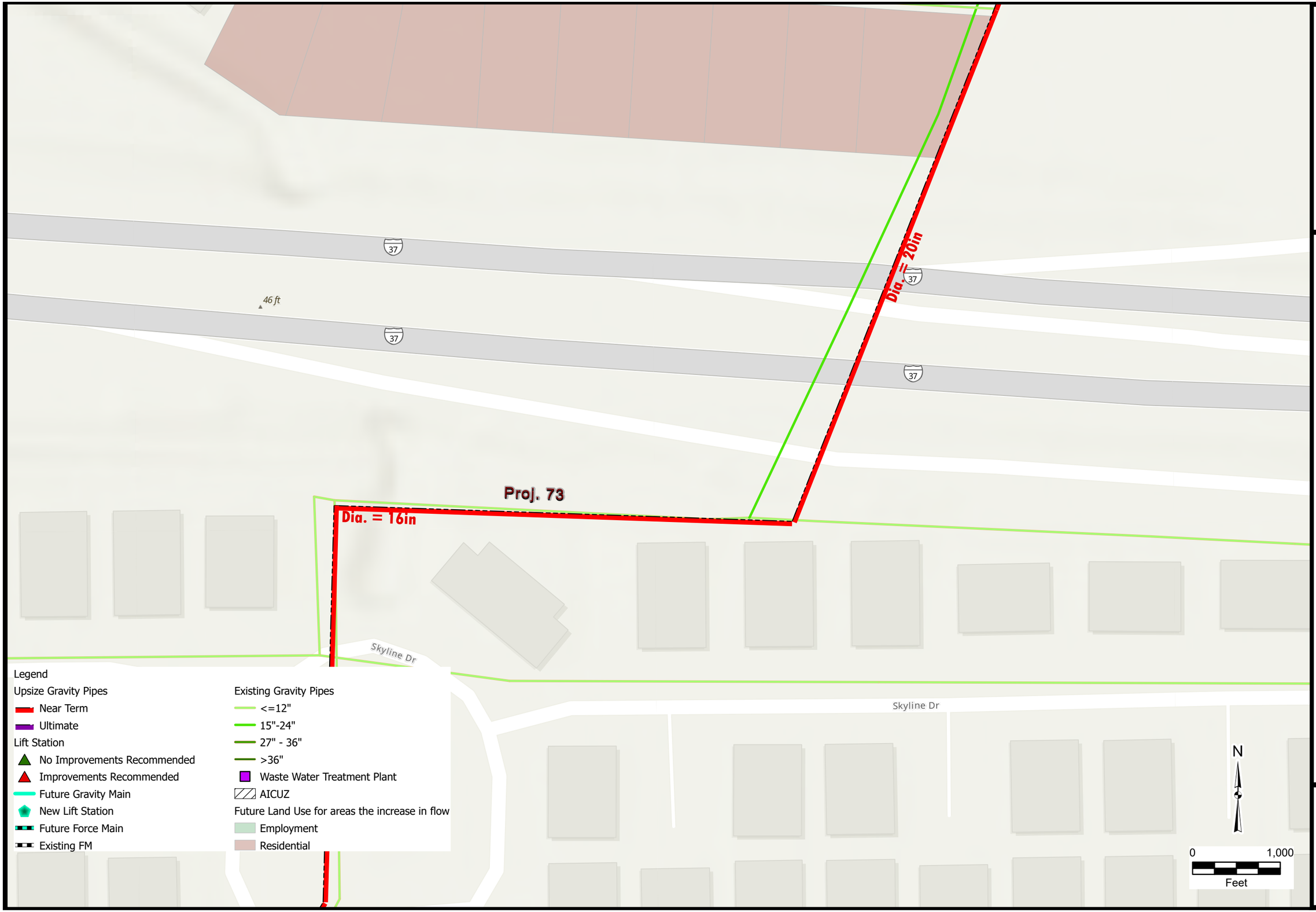

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
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Date: Aug 18, 2023 2:19 PM User: rwolinsky
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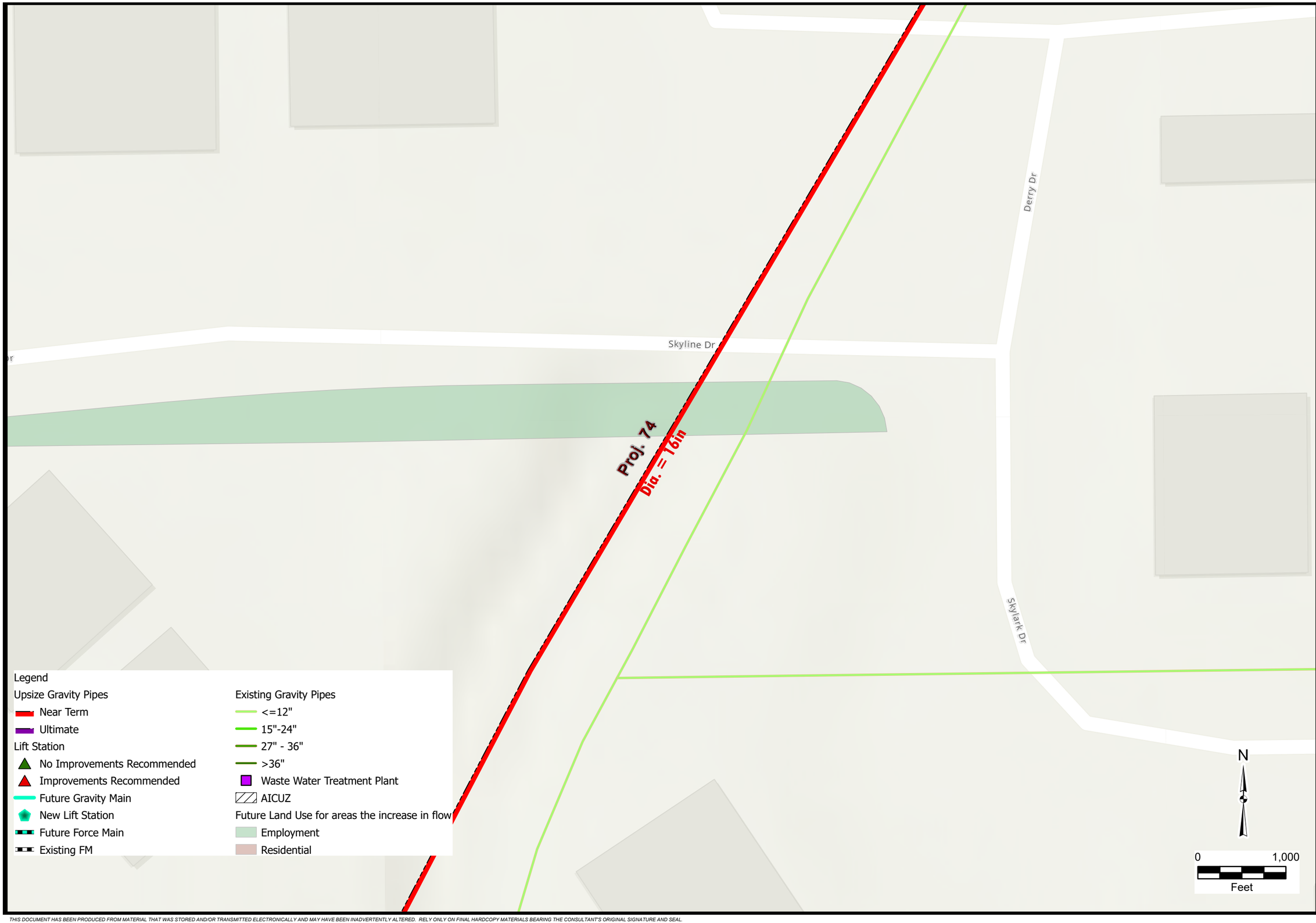

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	74

Date: Aug 18, 2023 2:19 PM User: nwolinsky
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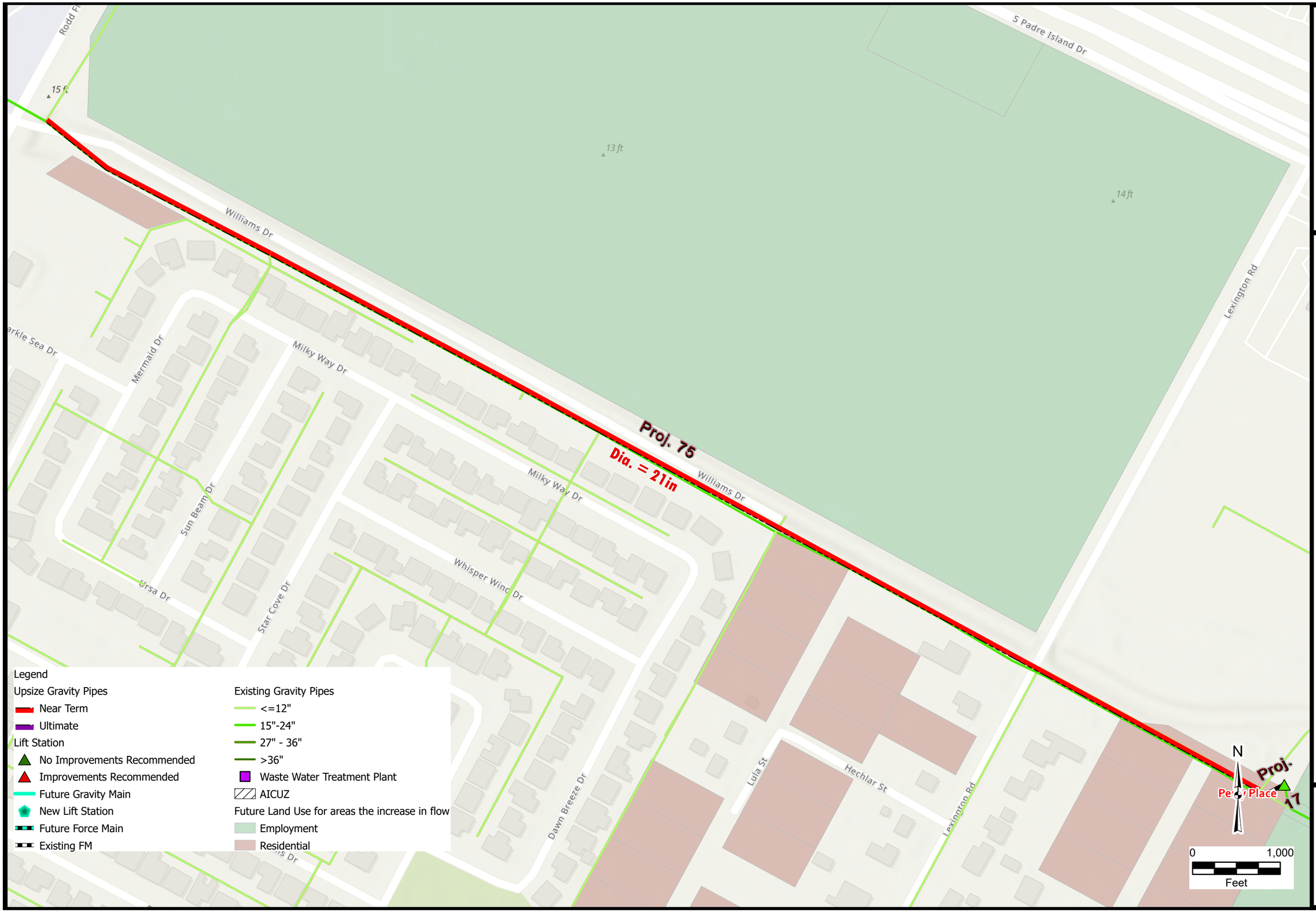

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DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	75

Date: Aug 18, 2023 2:19 PM User: rwolinsky
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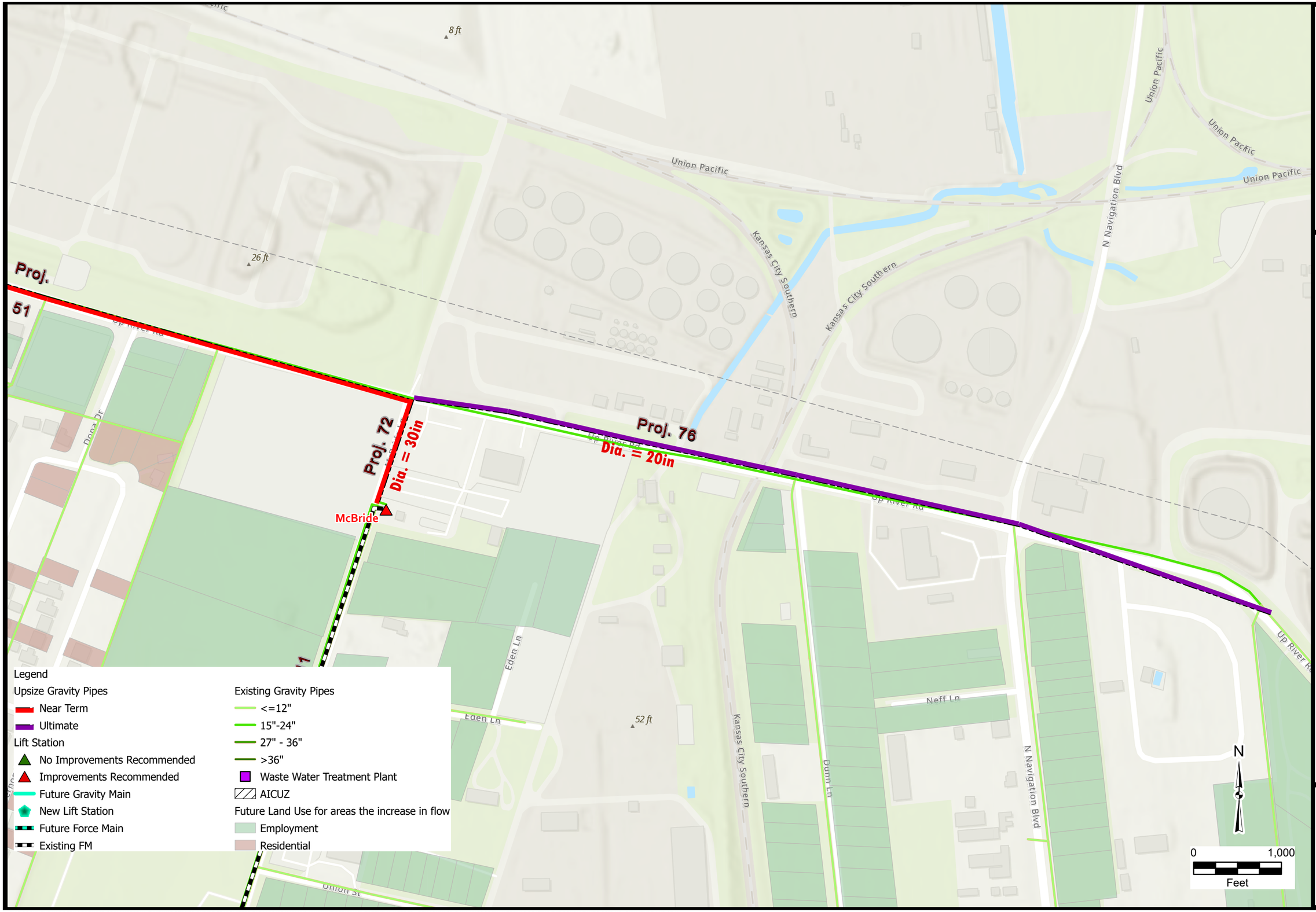

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DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	76

Date: Aug 16, 2023 2:19 PM User: rwolinsky
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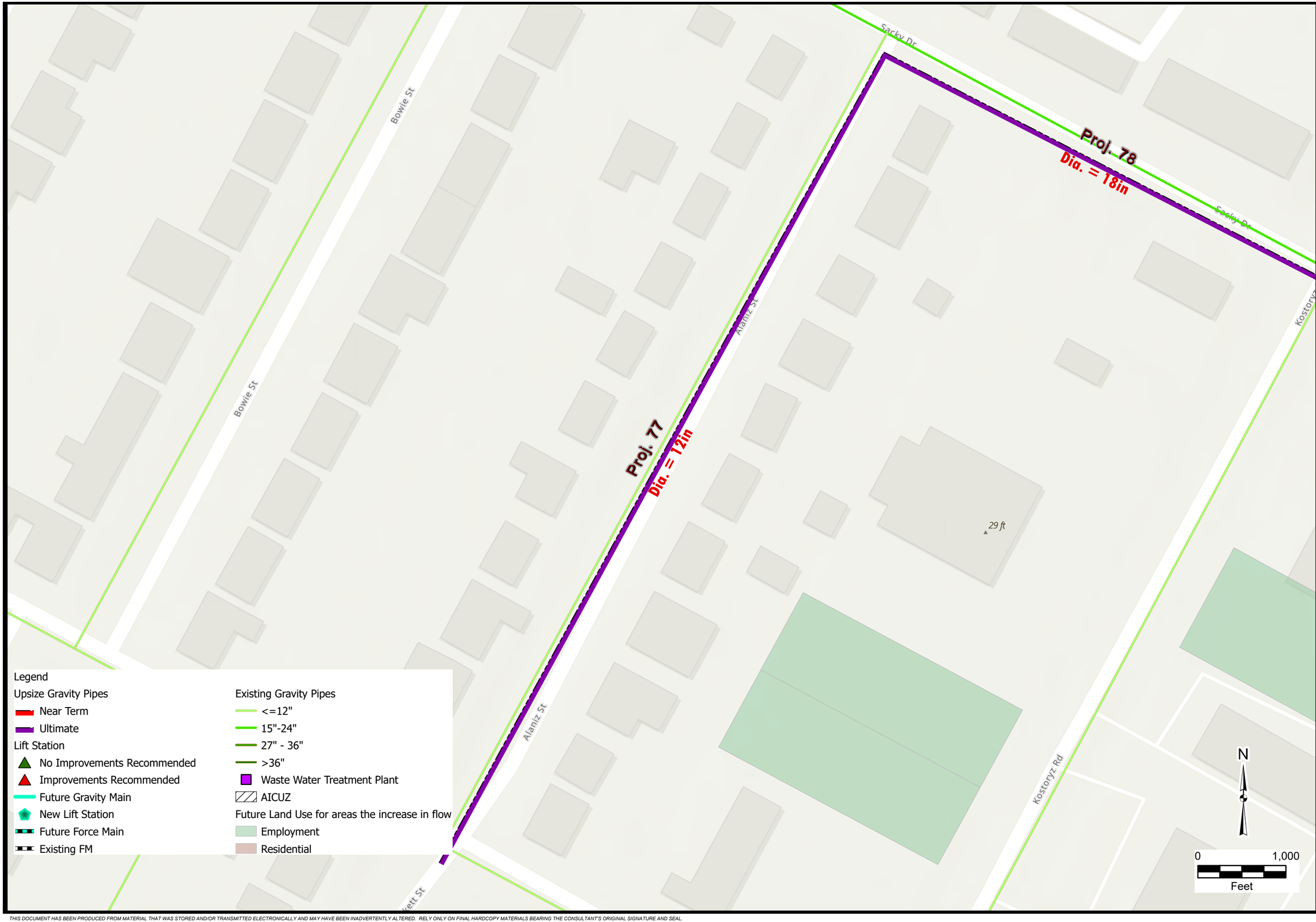

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DESIGNER	RW
DRAWN	AA
CHECKED	AA
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Date: Aug 18, 2023 2:19 PM User: nwolinsky
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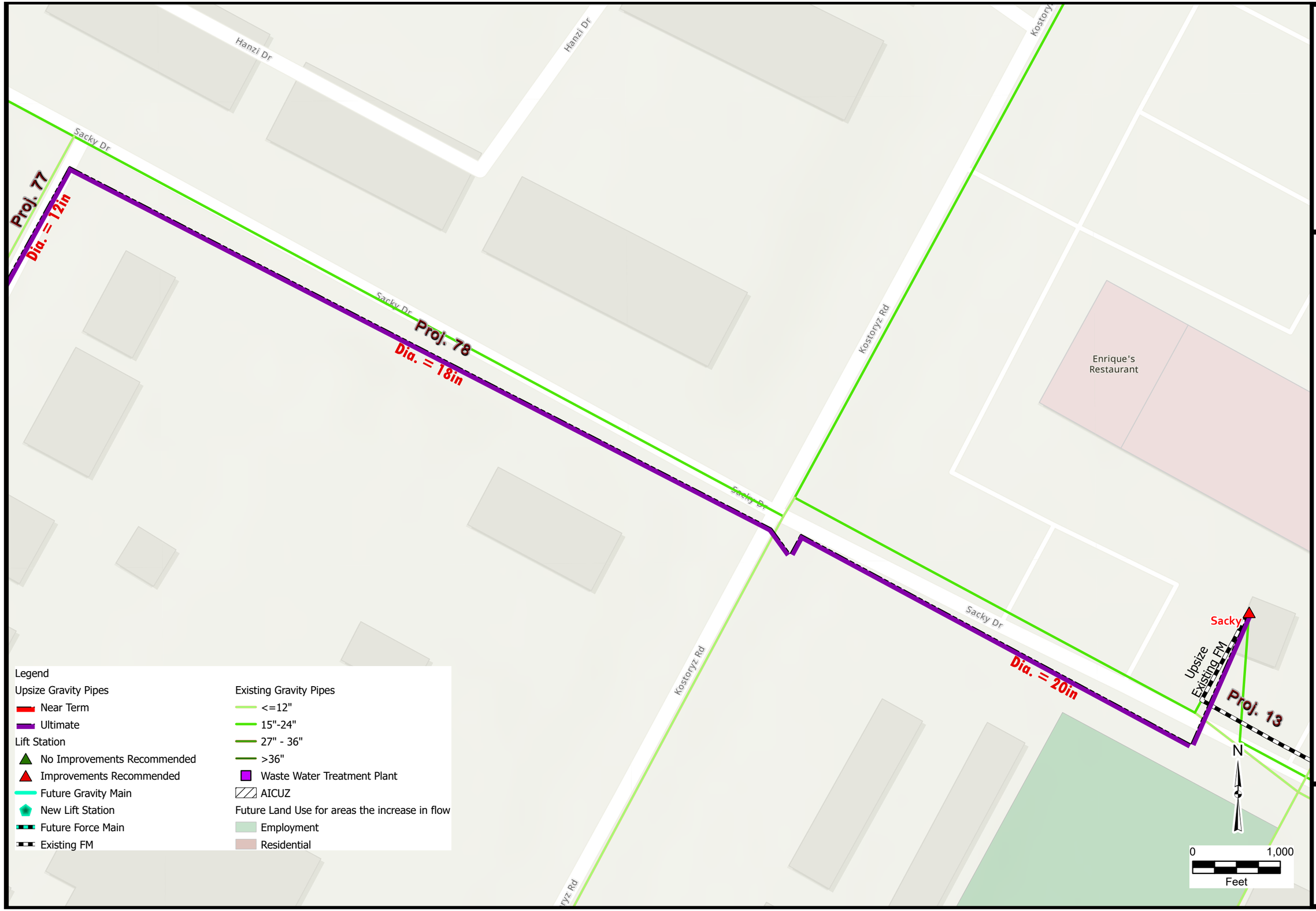

Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended
- Future Gravity Main
- New Lift Station
- Future Force Main
- Existing FM

Existing Gravity Pipes
- <=12"
- 15"-24"
- 27" - 36"
- >36"
- Waste Water Treatment Plant
- AICUZ

Future Land Use for areas the increase in flow
- Employment
- Residential

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Wastewater System Upgrades Project Guide

City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	78

Date: Aug 16, 2023 2:19 PM User: rwolinsky
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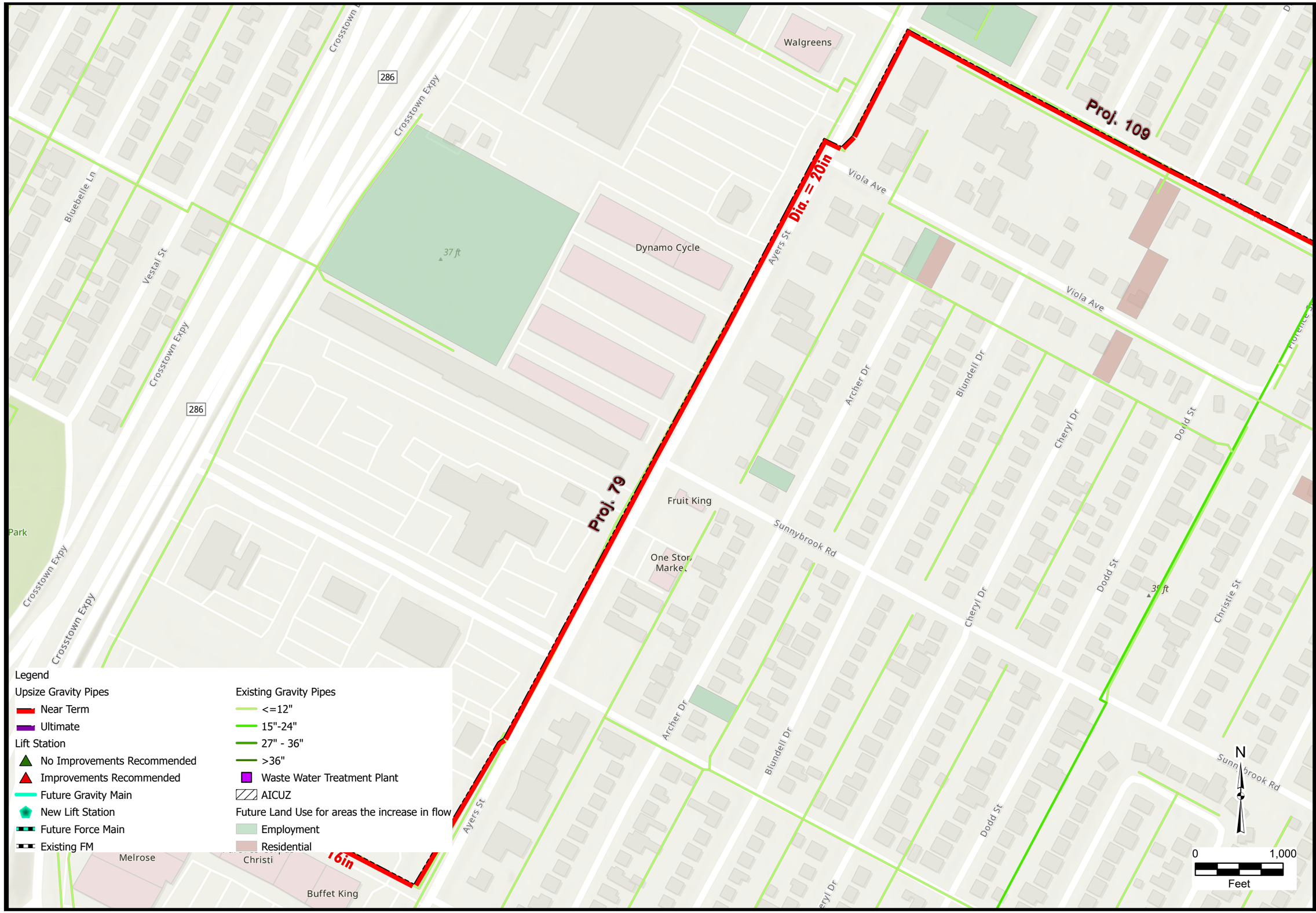

Legend

Upsize Gravity Pipes
- Near Term
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Lift Station
- No Improvements Recommended
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- Future Gravity Main
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City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	79

Date: Aug 18, 2023 2:19 PM User: rwolinsky
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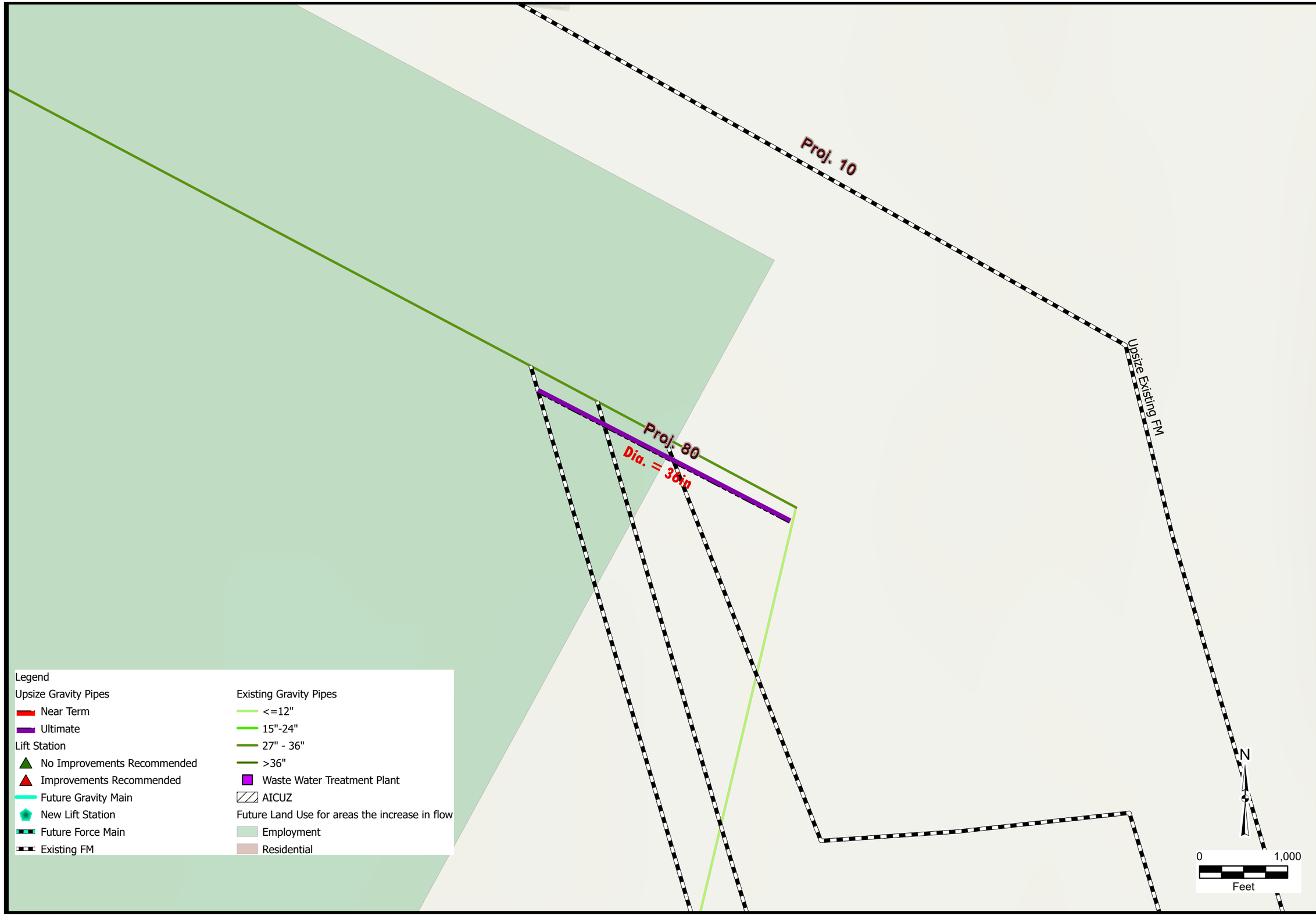

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Wastewater System Upgrades Project Guide

City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	80

Date: Aug 18, 2023 2:19 PM User: nvolinsky
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Date: Aug 18, 2023 2:19 PM User: nwolinsky
File: P:\123\83000\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]

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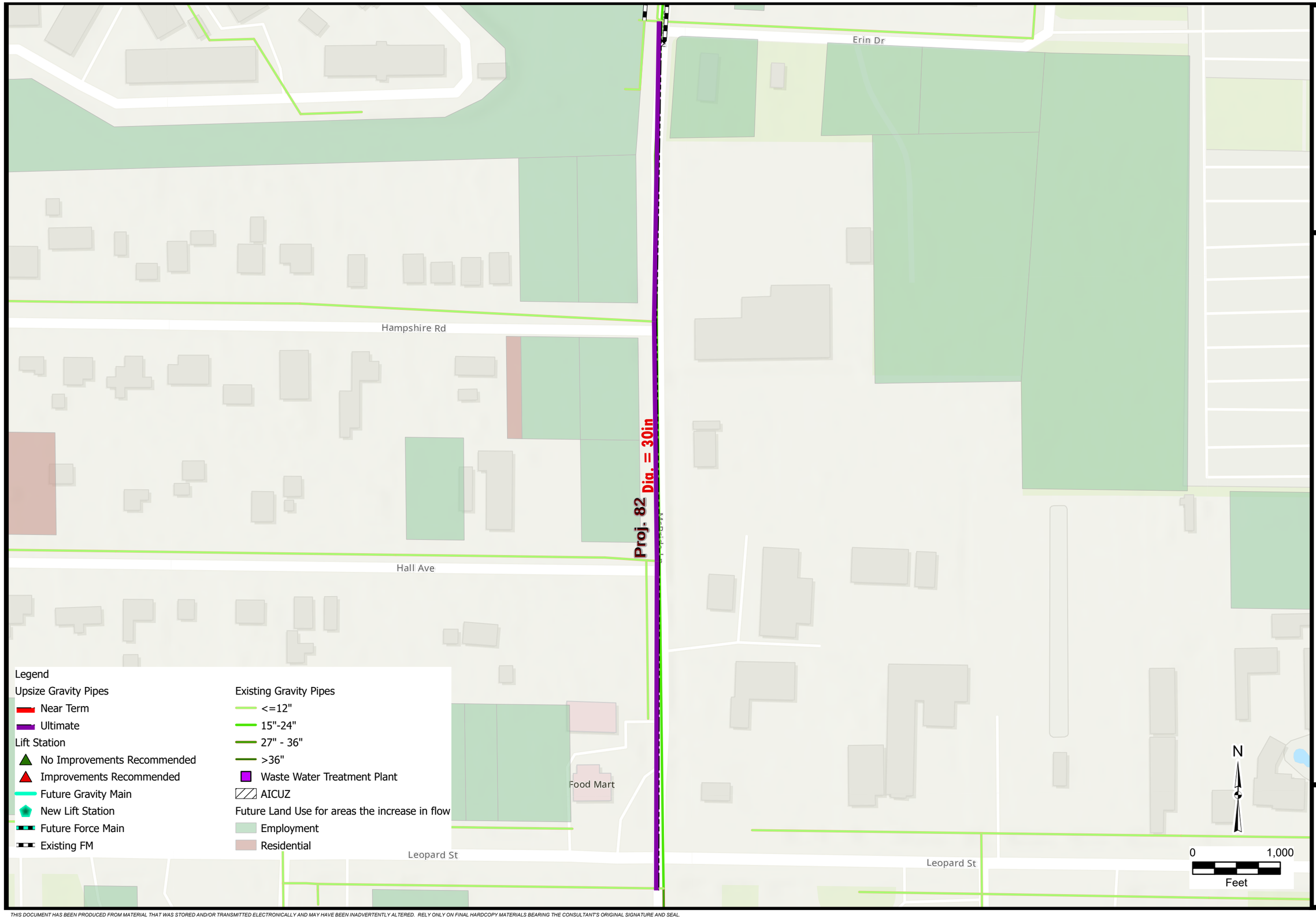
City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	81



Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended
- Future Gravity Main
- New Lift Station
- Future Force Main
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Existing Gravity Pipes
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Future Land Use for areas the increase in flow
- Employment
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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	82

Date: Aug 18, 2023 2:19 PM User: nvolinsky
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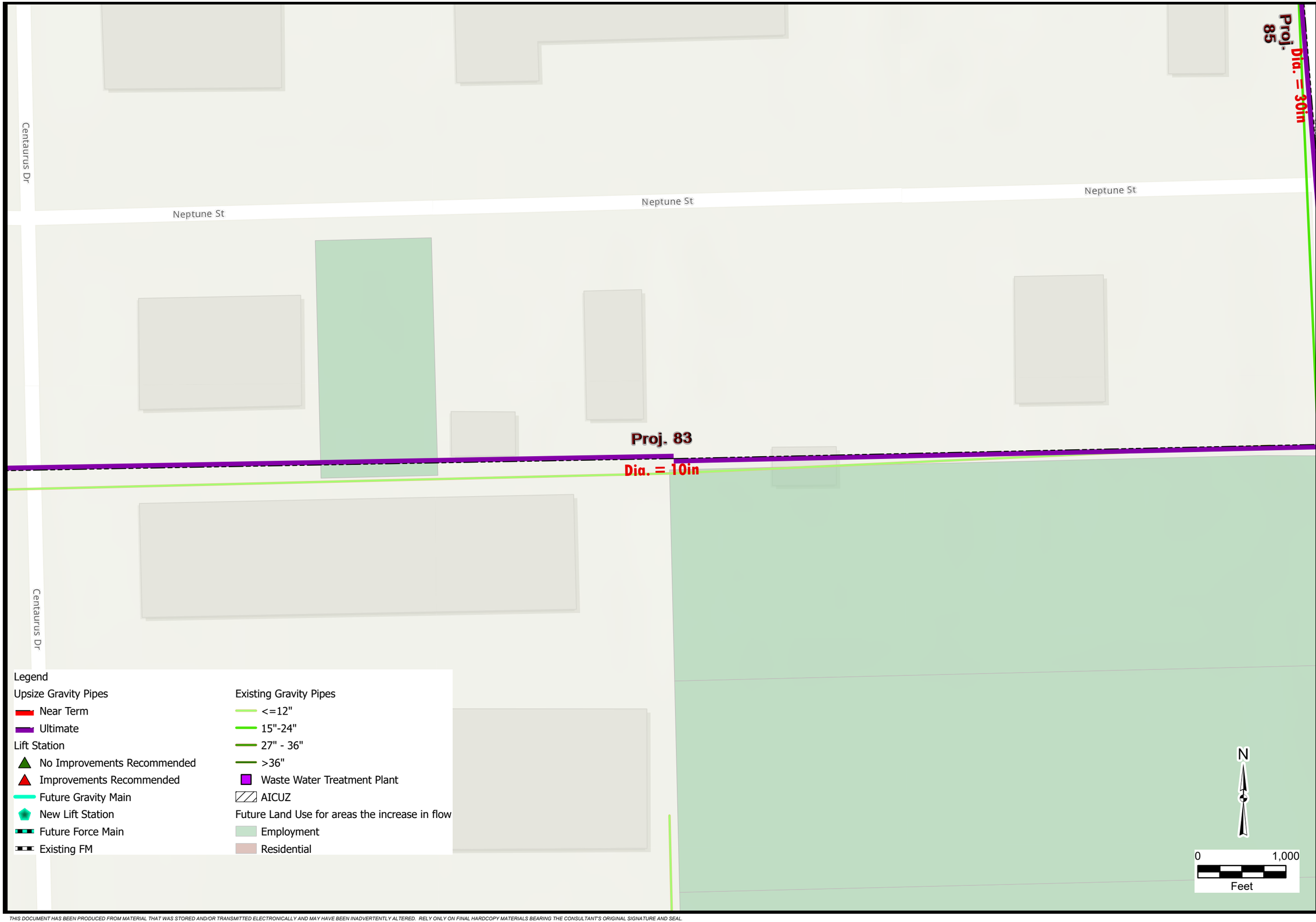

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	83

Date: Aug 18, 2023 2:19 PM User: nwolinsky
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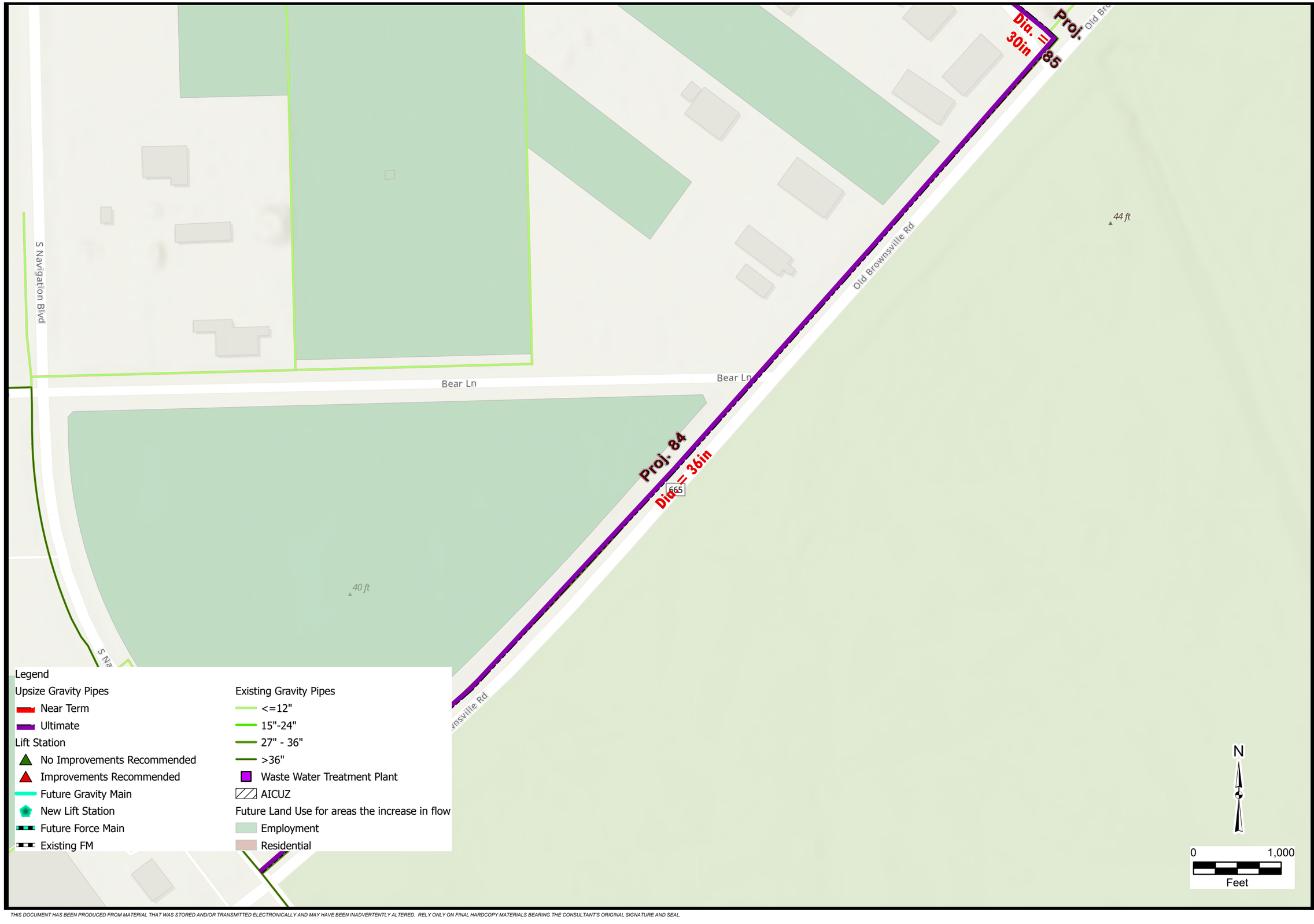

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	84

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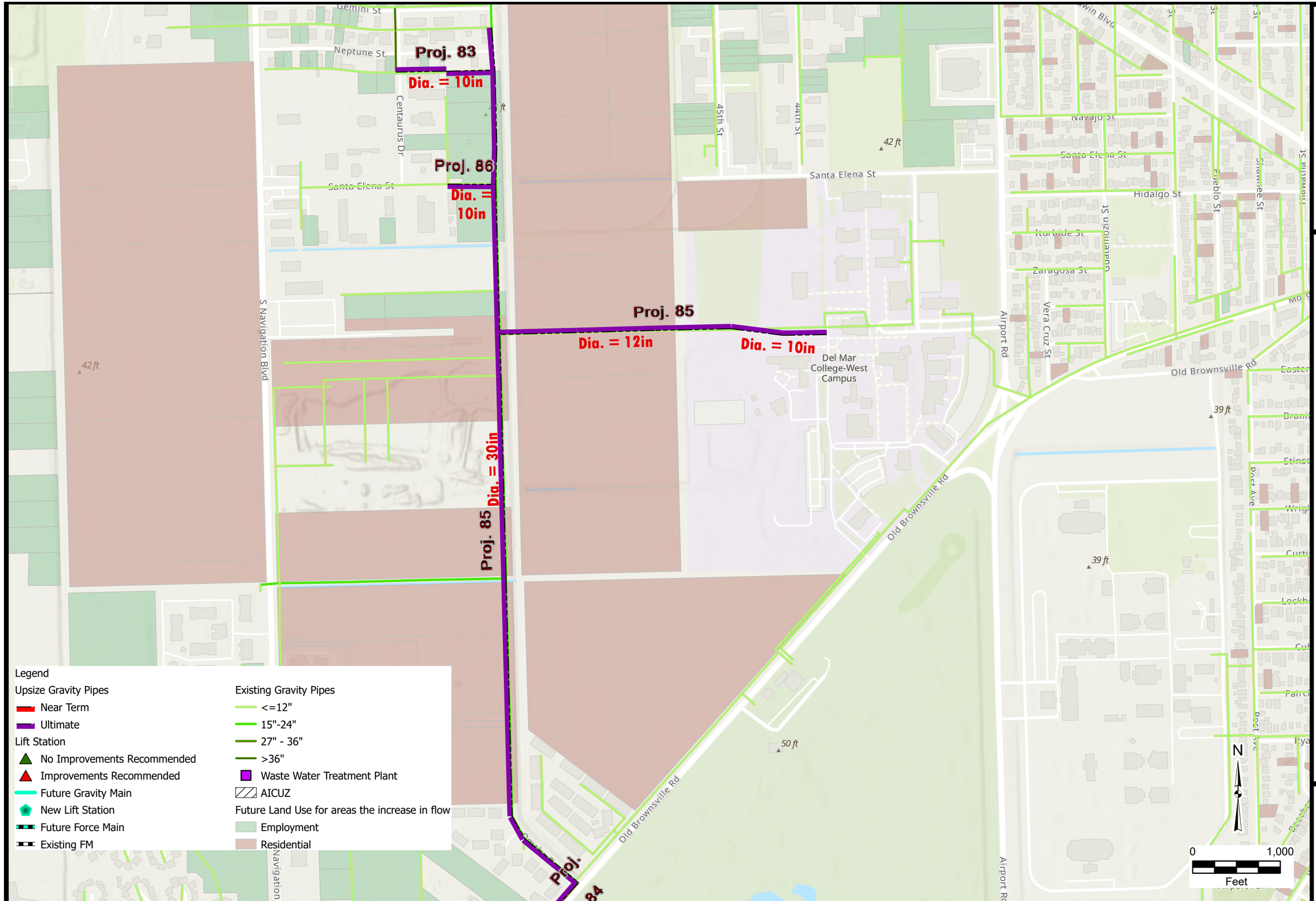

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	85

Date: Aug 16, 2023 2:19 PM User: rwolinsky
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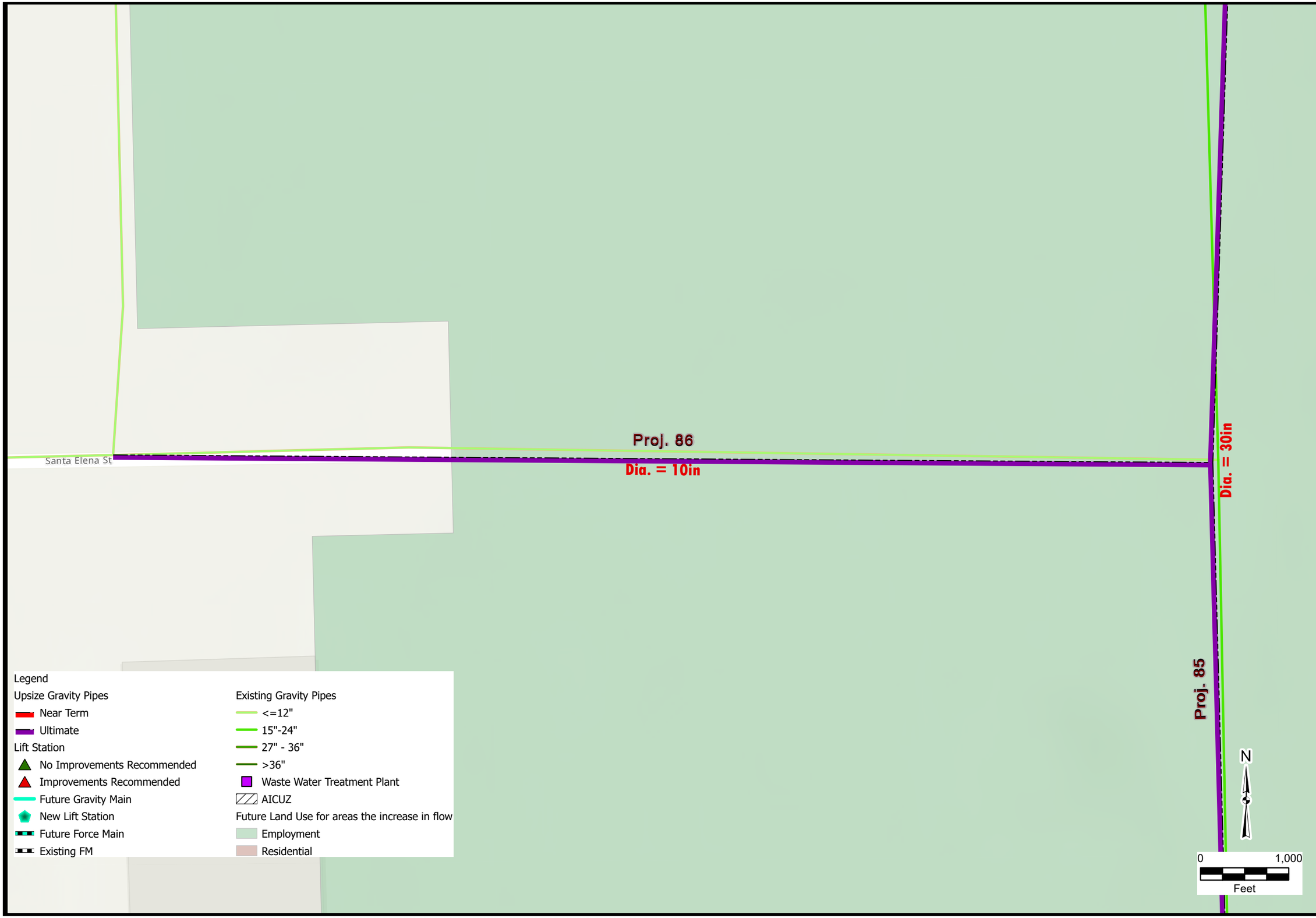

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	86

Date: Aug 18, 2023 2:19 PM User: rwolinsky
File: P:\123\83001\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]

Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended
- Future Gravity Main
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Future Land Use for areas the increase in flow
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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	87

Date: Aug 18, 2023 2:19 PM User: nwolinsky
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Proj. 14

Legend

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	88

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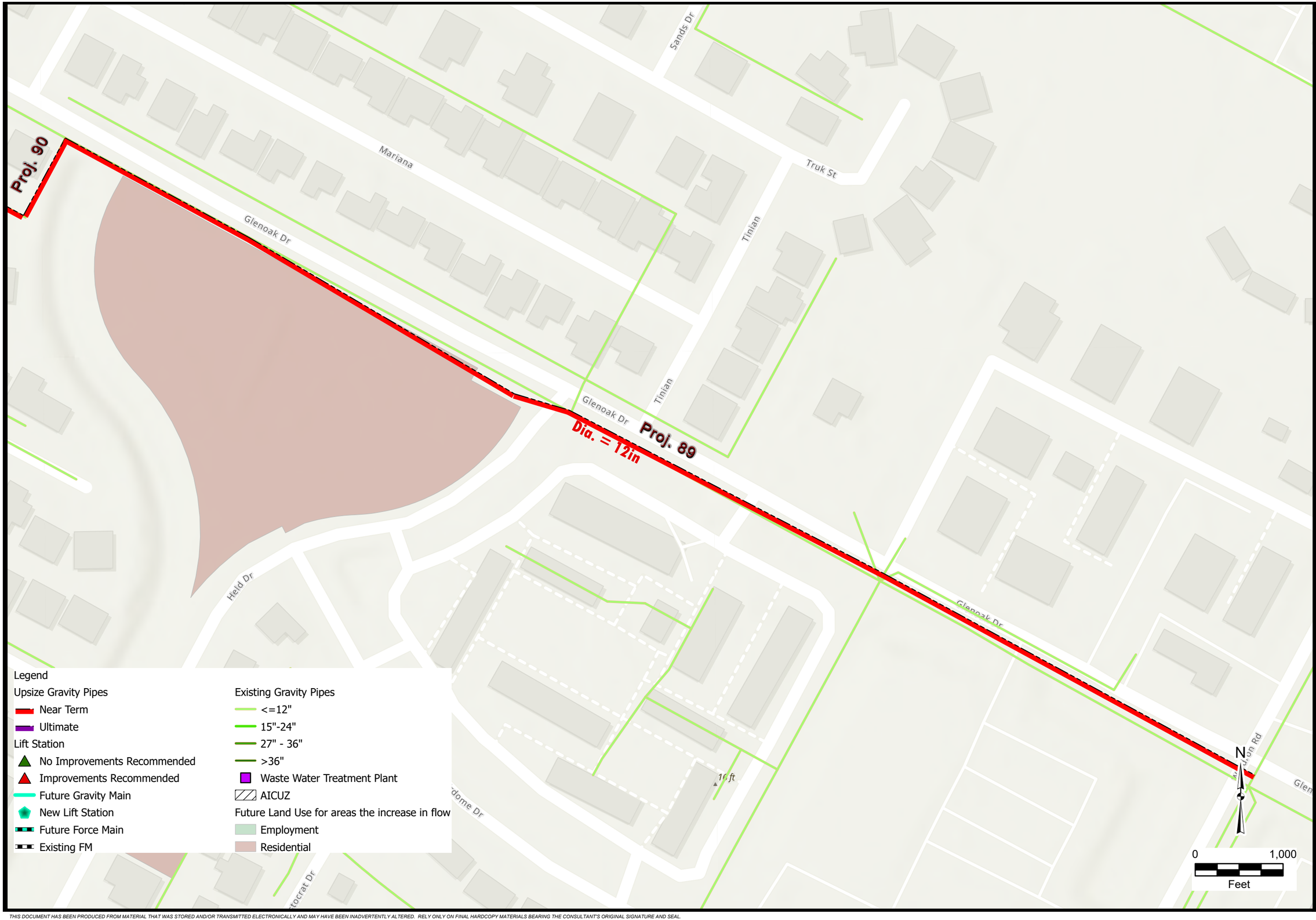

Legend

Upsize Gravity Pipes
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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	89

Date: Aug 18, 2023 2:19 PM User: nwolinsky
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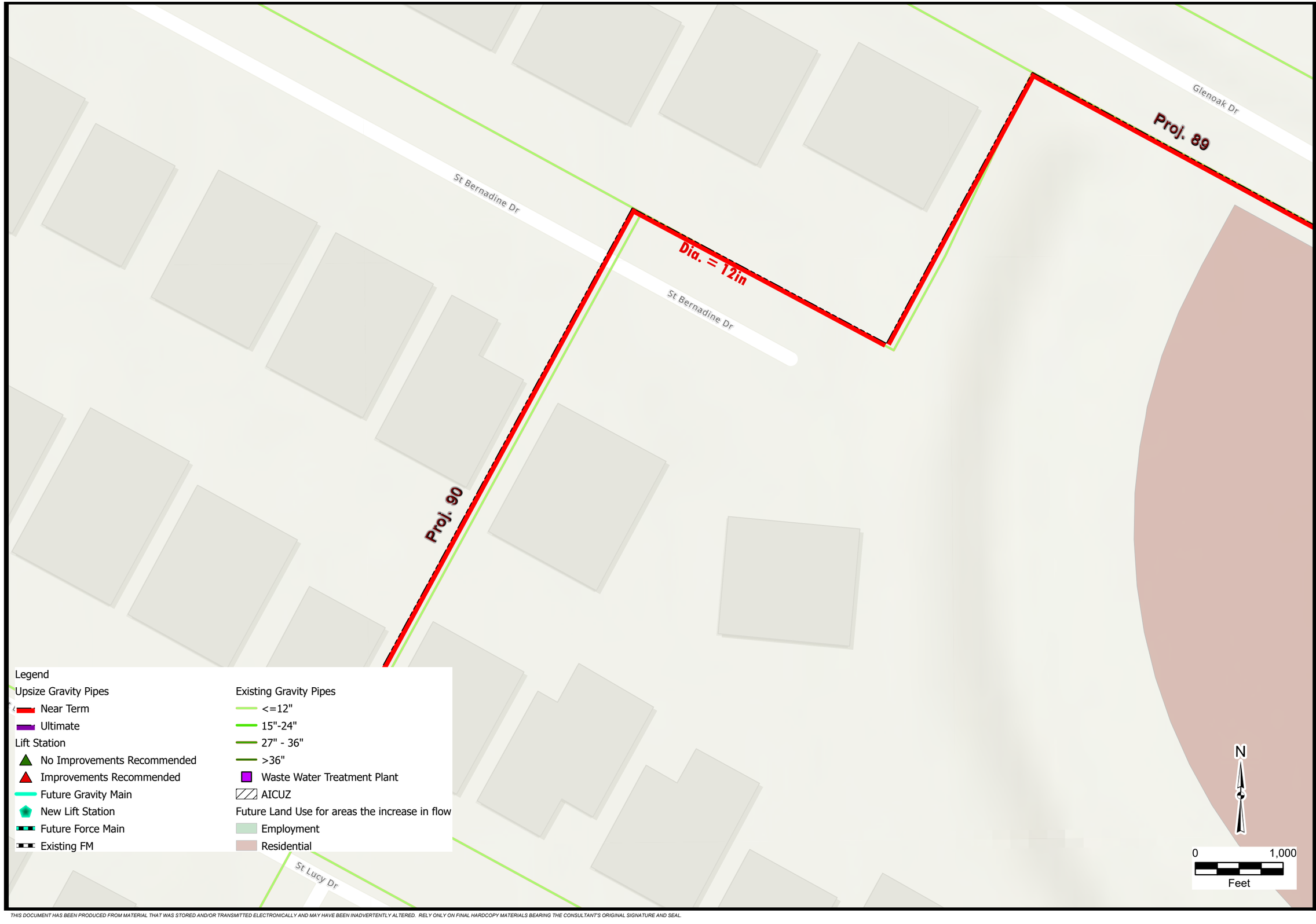

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Wastewater System Upgrades Project Guide

City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	90

Date: Aug 18, 2023 2:20 PM User: nwolinsky
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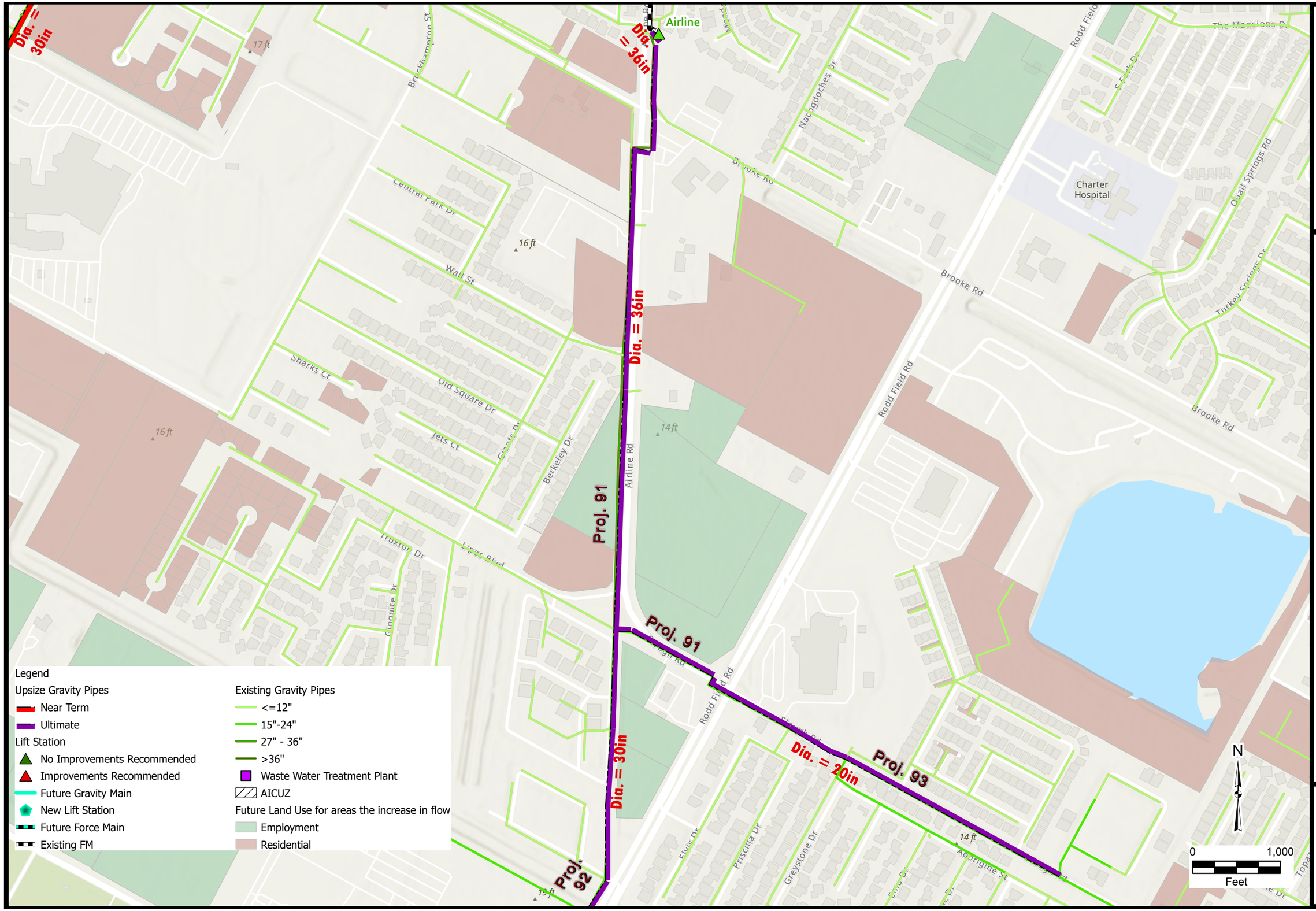

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Date: Aug 18, 2023 2:20 PM User: nwolinsky
File: P:\123\83000\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]

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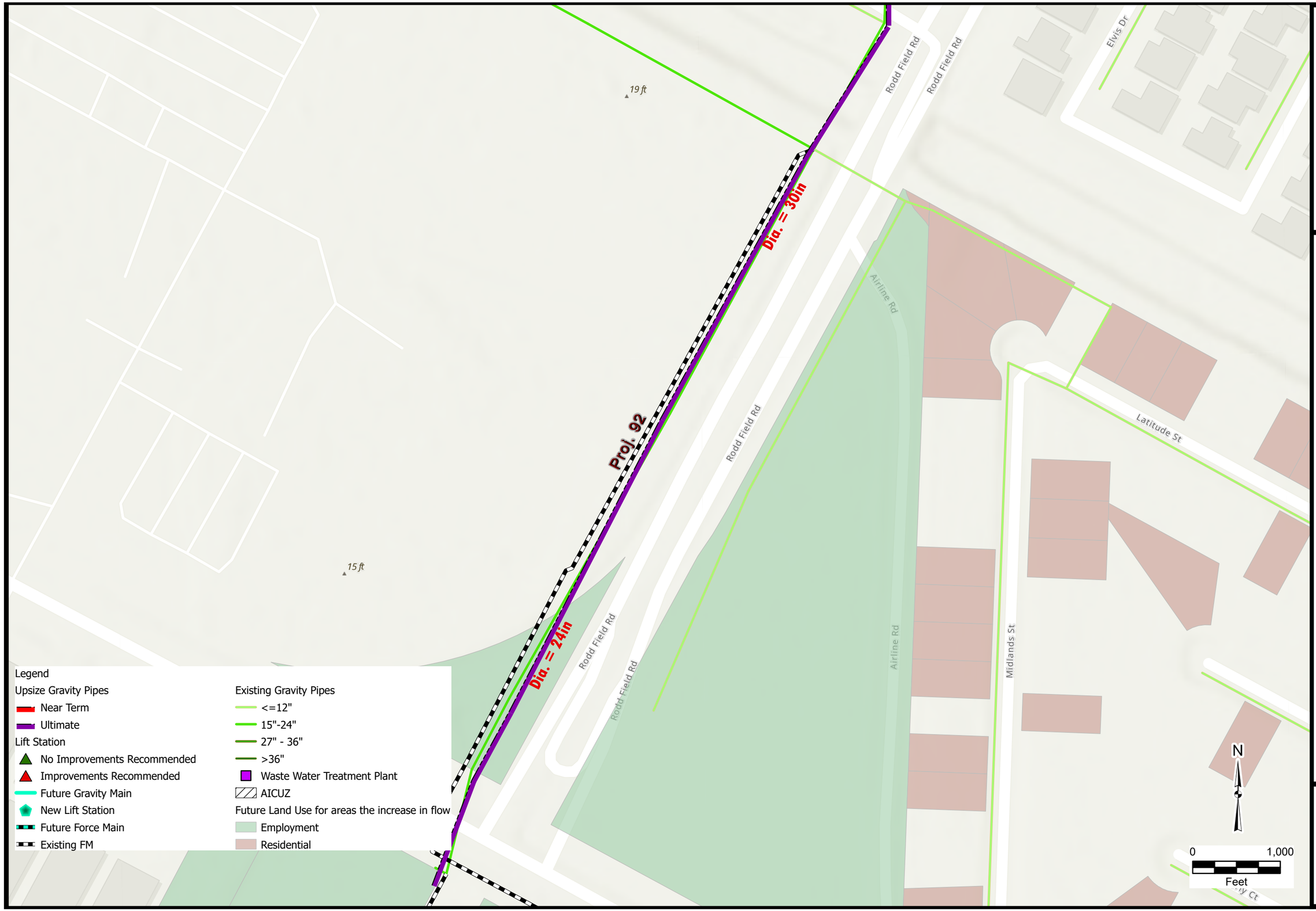
City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	91



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Date: Aug 18, 2023 2:20 PM User: nwolinsky
File: P:\123\83001\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]

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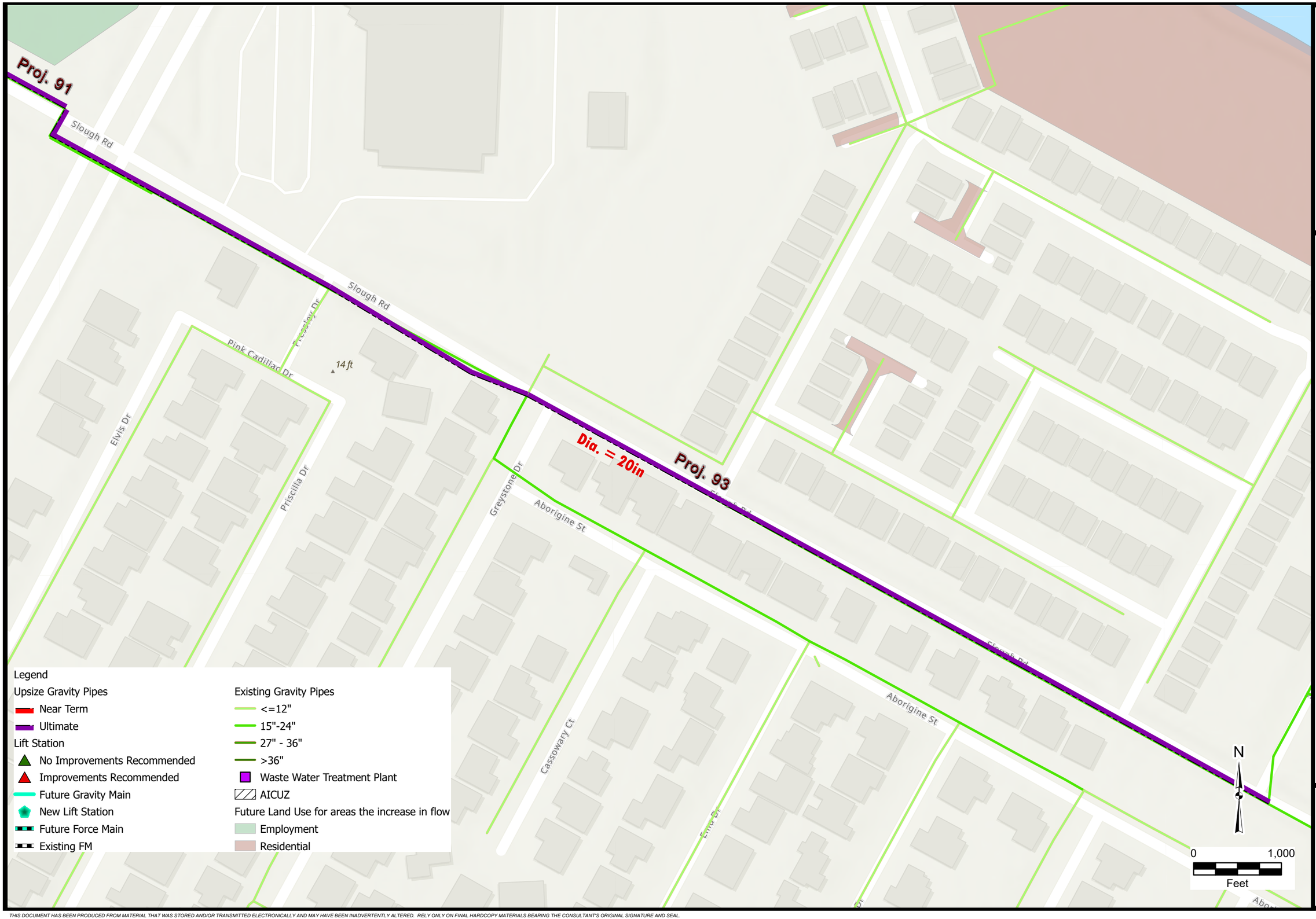
Wastewater System Upgrades Project Guide

City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	92



Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended
- Future Gravity Main
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Future Land Use for areas the increase in flow
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City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	93

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Wastewater System Upgrades Project Guide

City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	94

Date: Aug 18, 2023 2:20 PM User: nwolinsky
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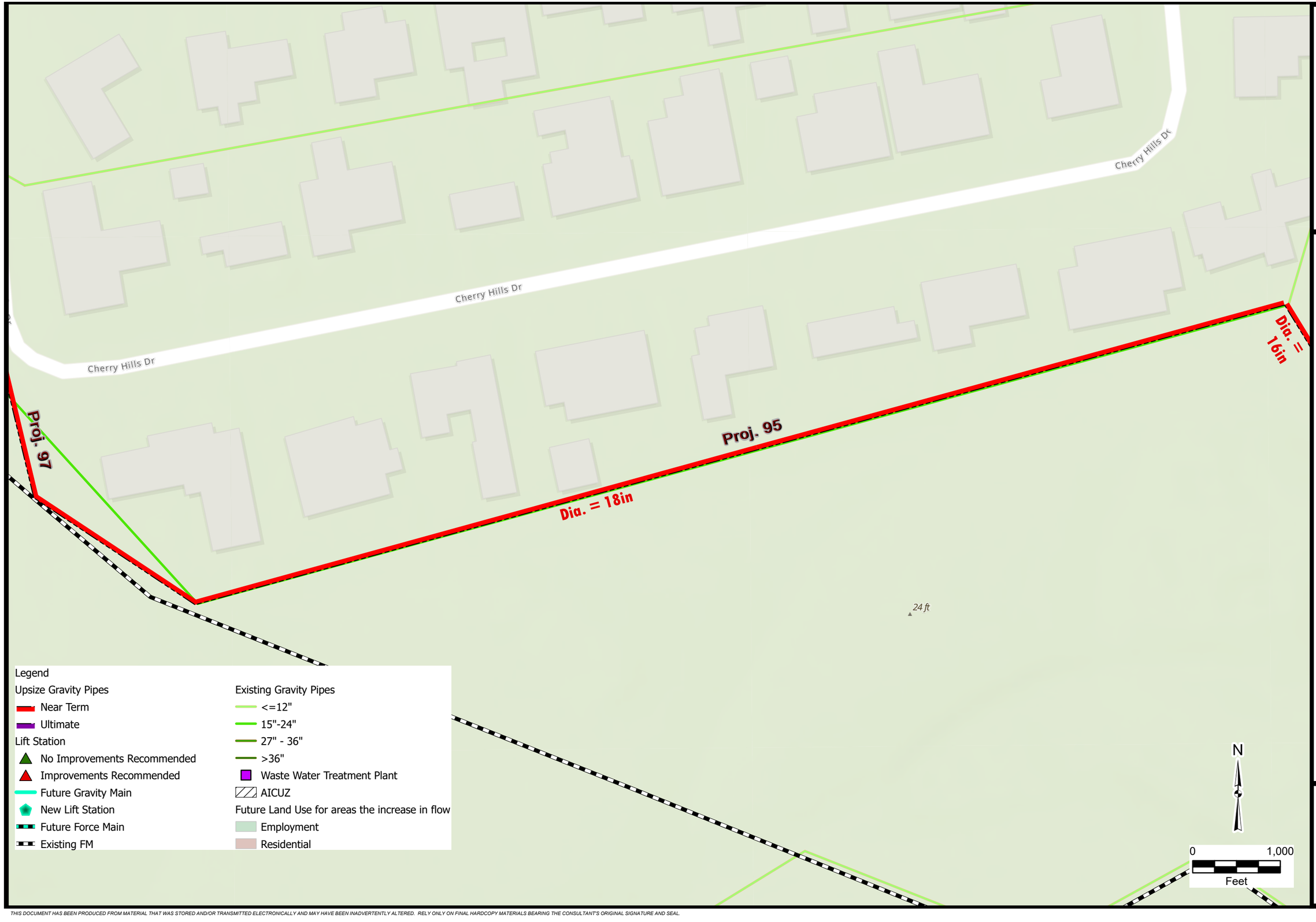

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City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	95

Date: Aug 18, 2023 2:20 PM User: nwolinsky
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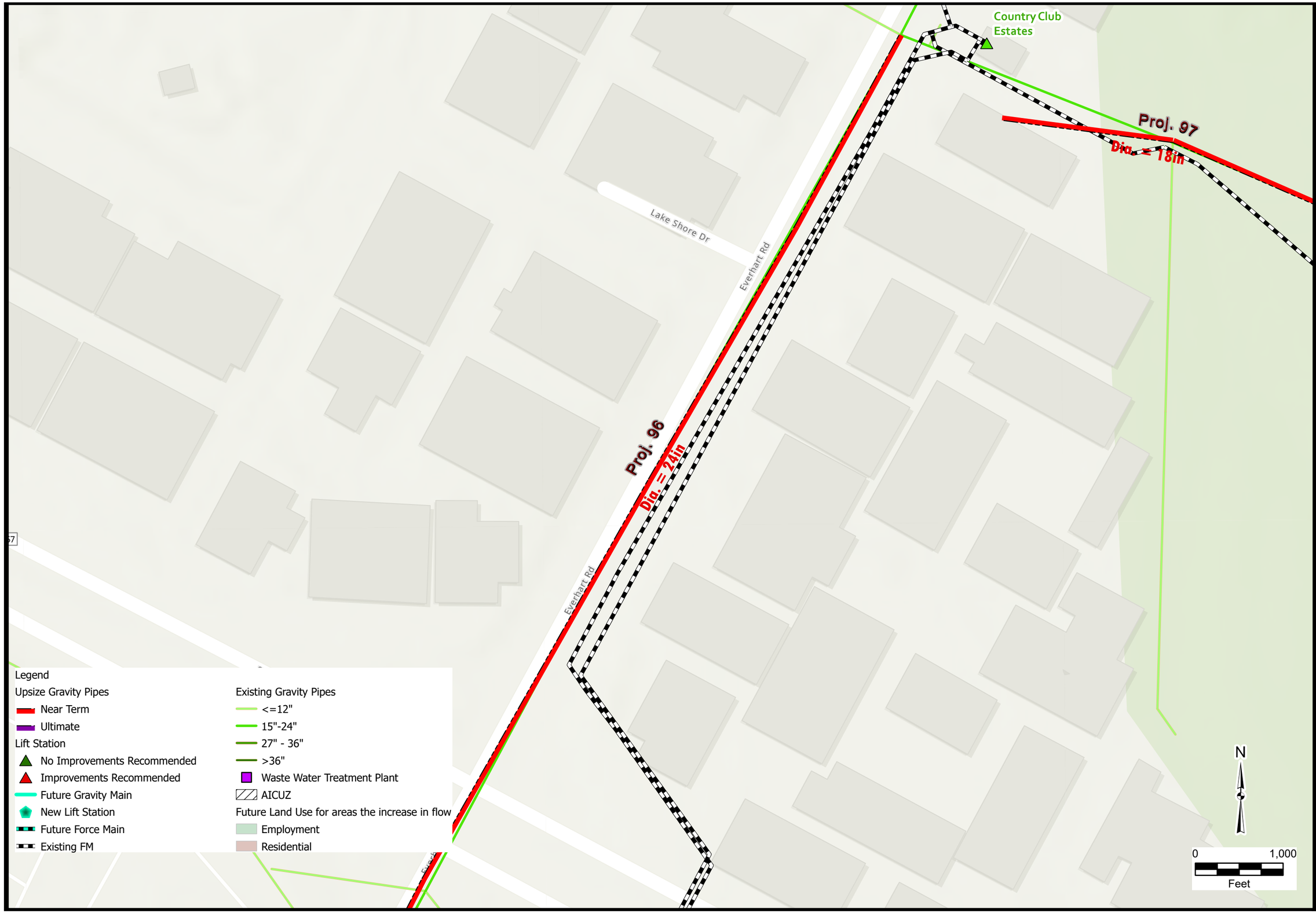

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City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	96

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City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	97

Date: Aug 18, 2023 2:20 PM User: rwolinsky
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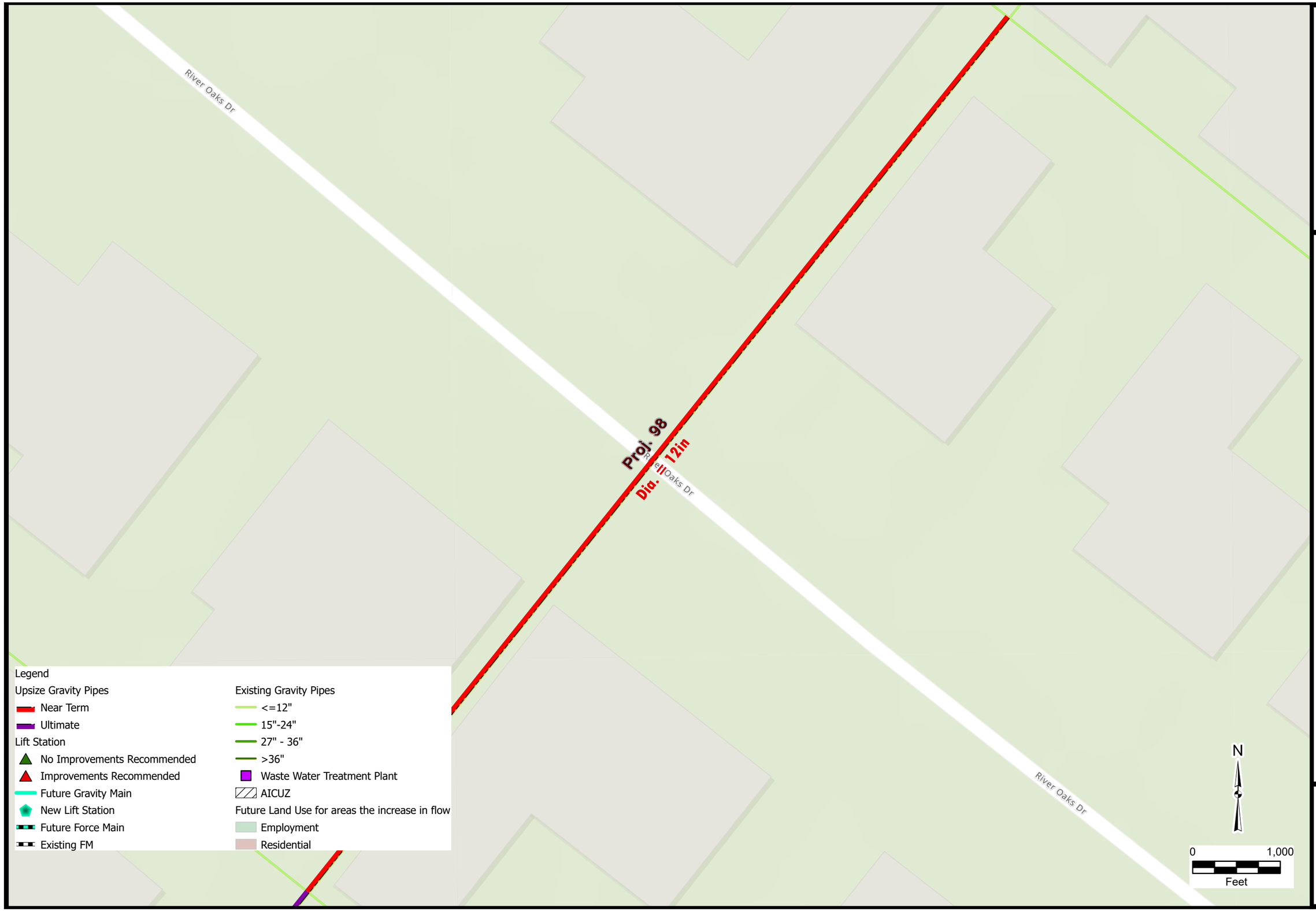

Wastewater System Upgrades Project Guide

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	98

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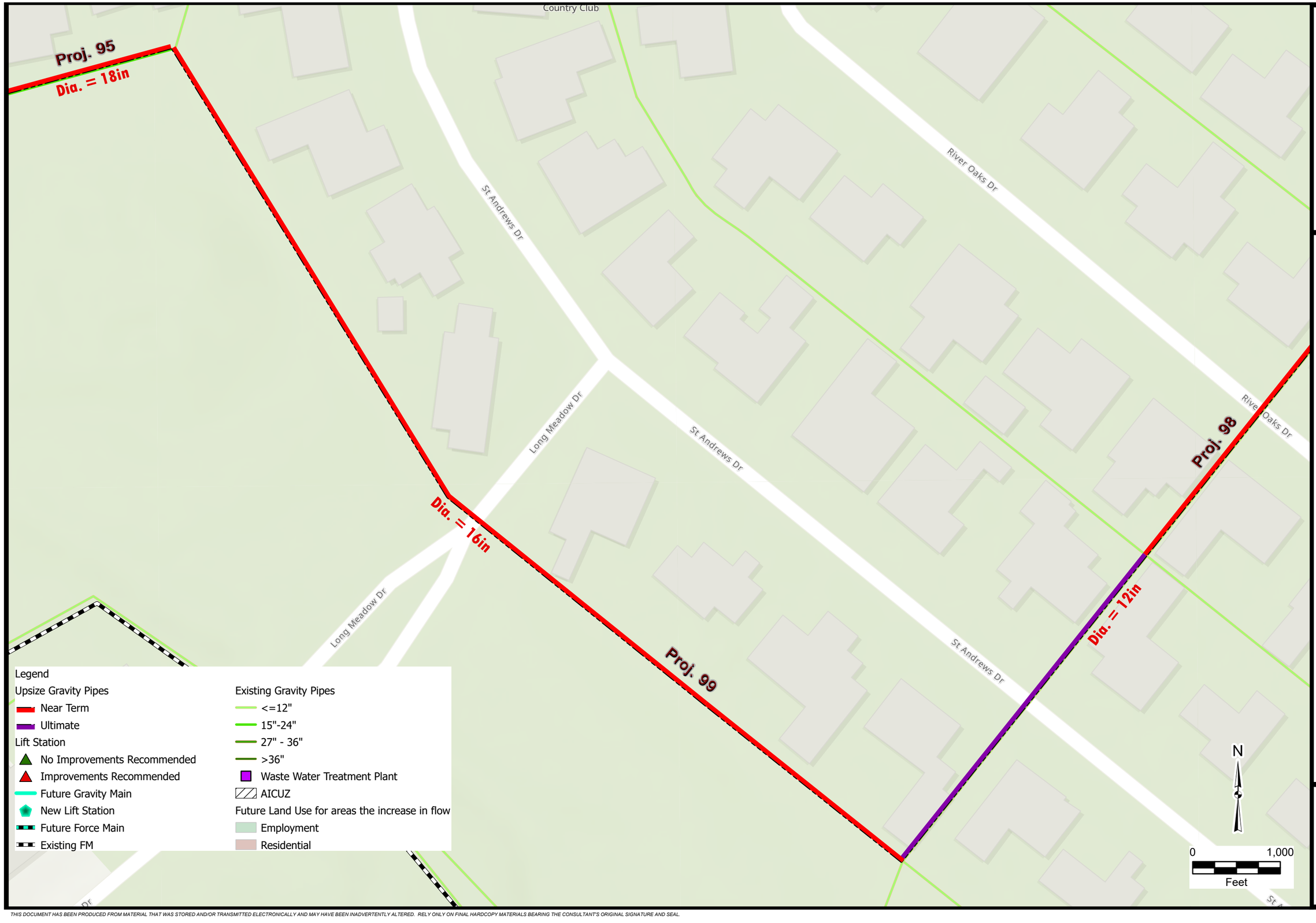

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City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	99

Date: Aug 18, 2023 2:20 PM User: nwolinsky
File: P:\123\83000\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Cur_Projects1 Map: [empty]

Legend

Upsize Gravity Pipes	Existing Gravity Pipes
Near Term	<=12"
Ultimate	15"-24"
Lift Station	27" - 36"
No Improvements Recommended	>36"
Improvements Recommended	Waste Water Treatment Plant
Future Gravity Main	AICUZ
New Lift Station	Future Land Use for areas the increase in flow
Future Force Main	Employment
Existing FM	Residential

Wastewater System Upgrades Project Guide

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	100

Date: Aug 18, 2023 2:20 PM User: nwolinsky
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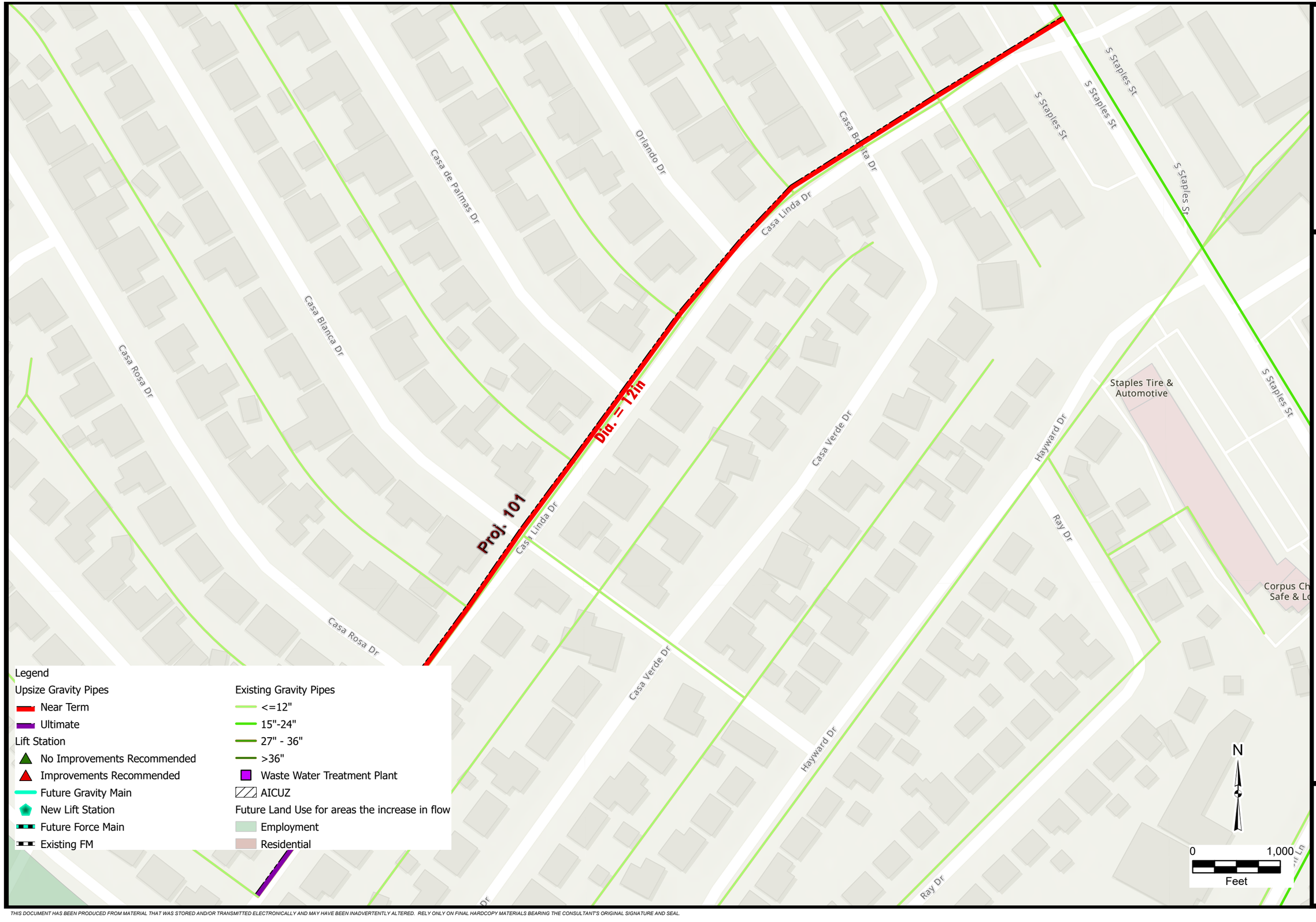

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Wastewater System Upgrades Project Guide

City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	101

Date: Aug 18, 2023 2:22 PM User: nwolinsky
File: P:\123\83000\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]

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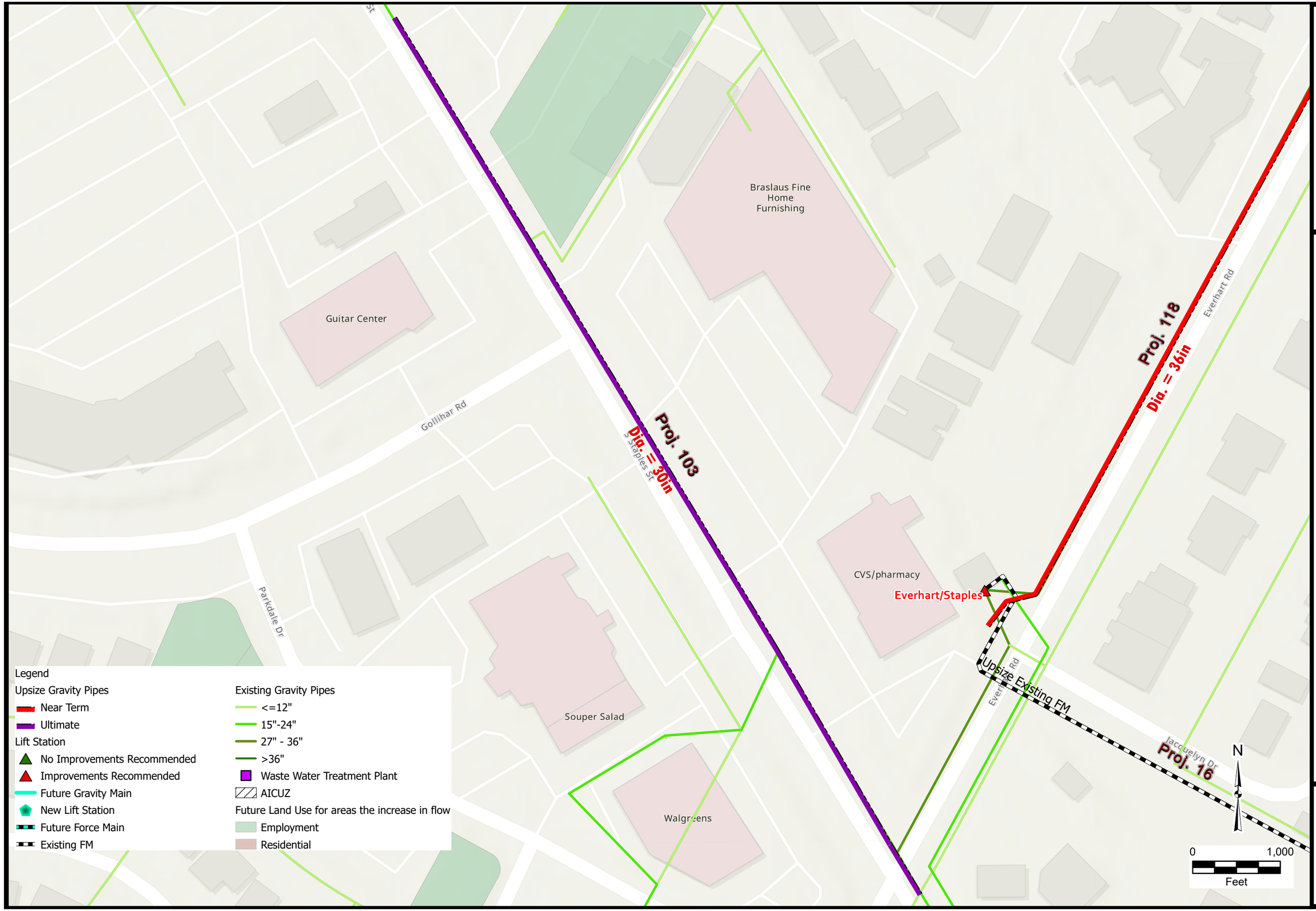
Wastewater System Upgrades Project Guide

City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	102

Date: Aug 18, 2023 2:22 PM User: nwolinsky
File: P:\123\83300\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]



Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended
- Future Gravity Main
- New Lift Station
- Future Force Main
- Existing FM

Existing Gravity Pipes
- <=12"
- 15"-24"
- 27" - 36"
- >36"
- Waste Water Treatment Plant
- AICUZ

Future Land Use for areas the increase in flow
- Employment
- Residential

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Wastewater System Upgrades Project Guide

City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	103

Date: Aug 18, 2023 2:22 PM User: rwolinsky
File: P:\123\83\00\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]

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City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	104

Date: Aug 18, 2023 2:22 PM User: nwolinsky
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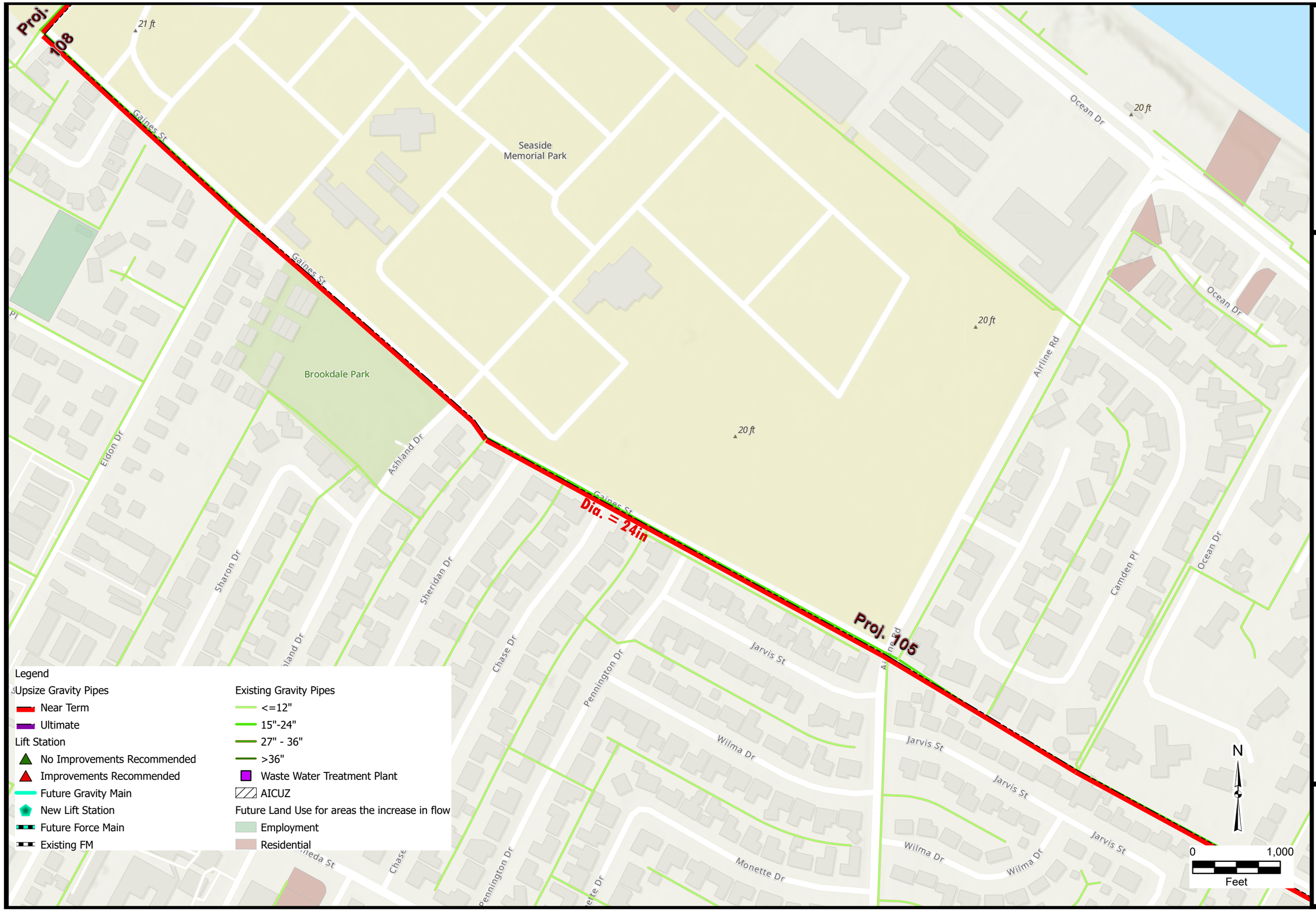

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Wastewater System Upgrades Project Guide

City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	105

Date: Aug 18, 2023 2:22 PM User: rwolinsky
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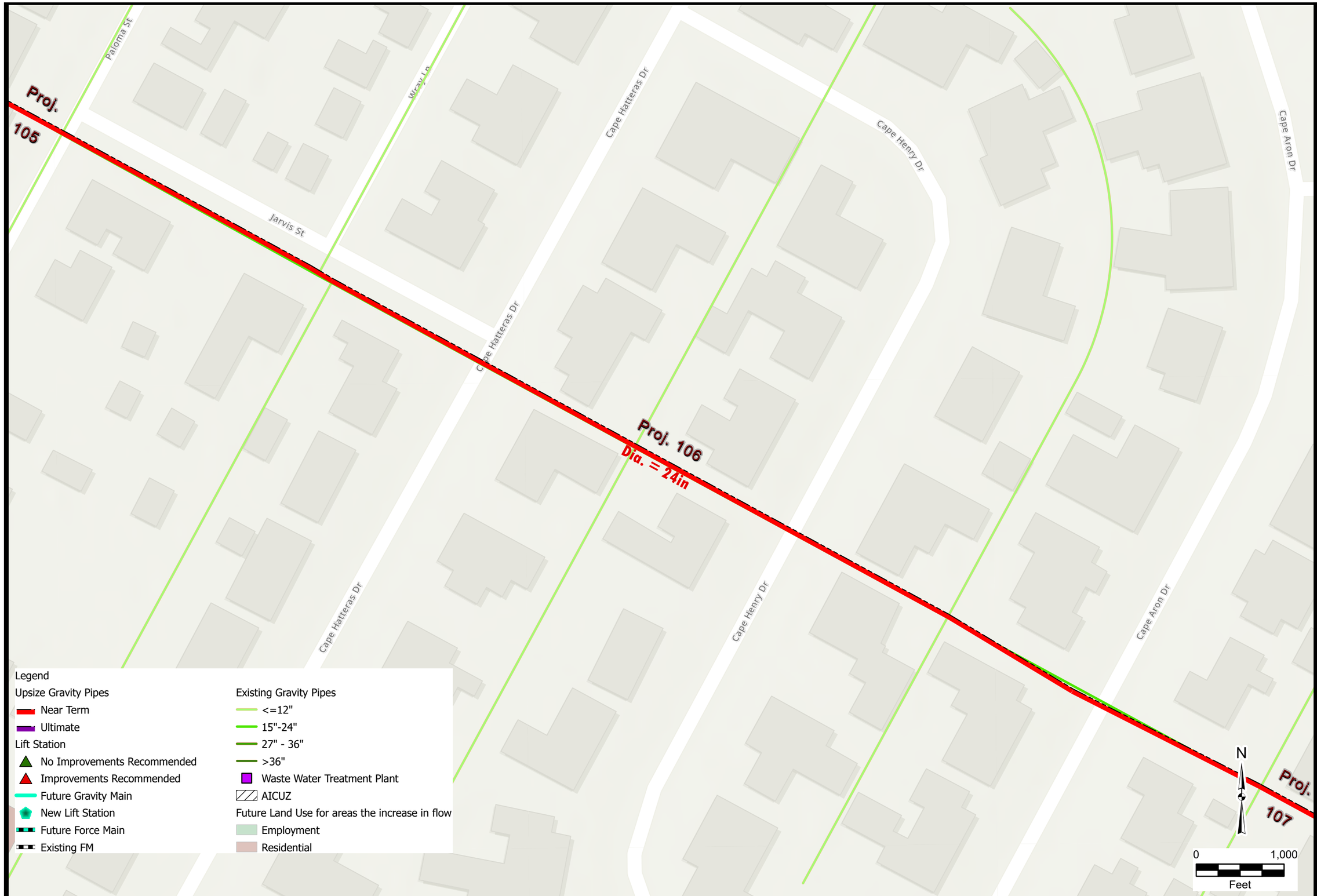

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City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	106

Date: Aug 16, 2023 2:22 PM User: rwolinsky
File: P:\123\83\00\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]

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Wastewater System Upgrades Project Guide

City of Corpus Christi

Proj. 106

Dia. = 24in

Dia. = 30in

Proj. 107

Dia. = 24in

Proj. 104

Dia. = 24in

Palmetto Park

Frank Carmona Beach

Cape Aron Dr

Cape Ann Dr

Cape Cod Dr

Bayshore Dr

Baycliff Dr

Montclair Dr

Poenisch Dr

Chevy Chase Dr

Troy Dr

Palmetto St

Claremore St

Ocean Dr

Kentner St

Parade Dr

Colony Dr

17 ft

Haroldson Dr

University Dr

Homecrest St

Glenmore St

Waverly Dr

Canterbury Dr

Whitehall Dr

Hinman Dr

Greenway Dr

S Alameda St

Greely Dr

Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended
- Future Gravity Main
- New Lift Station
- Future Force Main
- Existing FM

Existing Gravity Pipes
- <=12"
- 15"-24"
- 27" - 36"
- >36"
- Waste Water Treatment Plant
- AICUZ

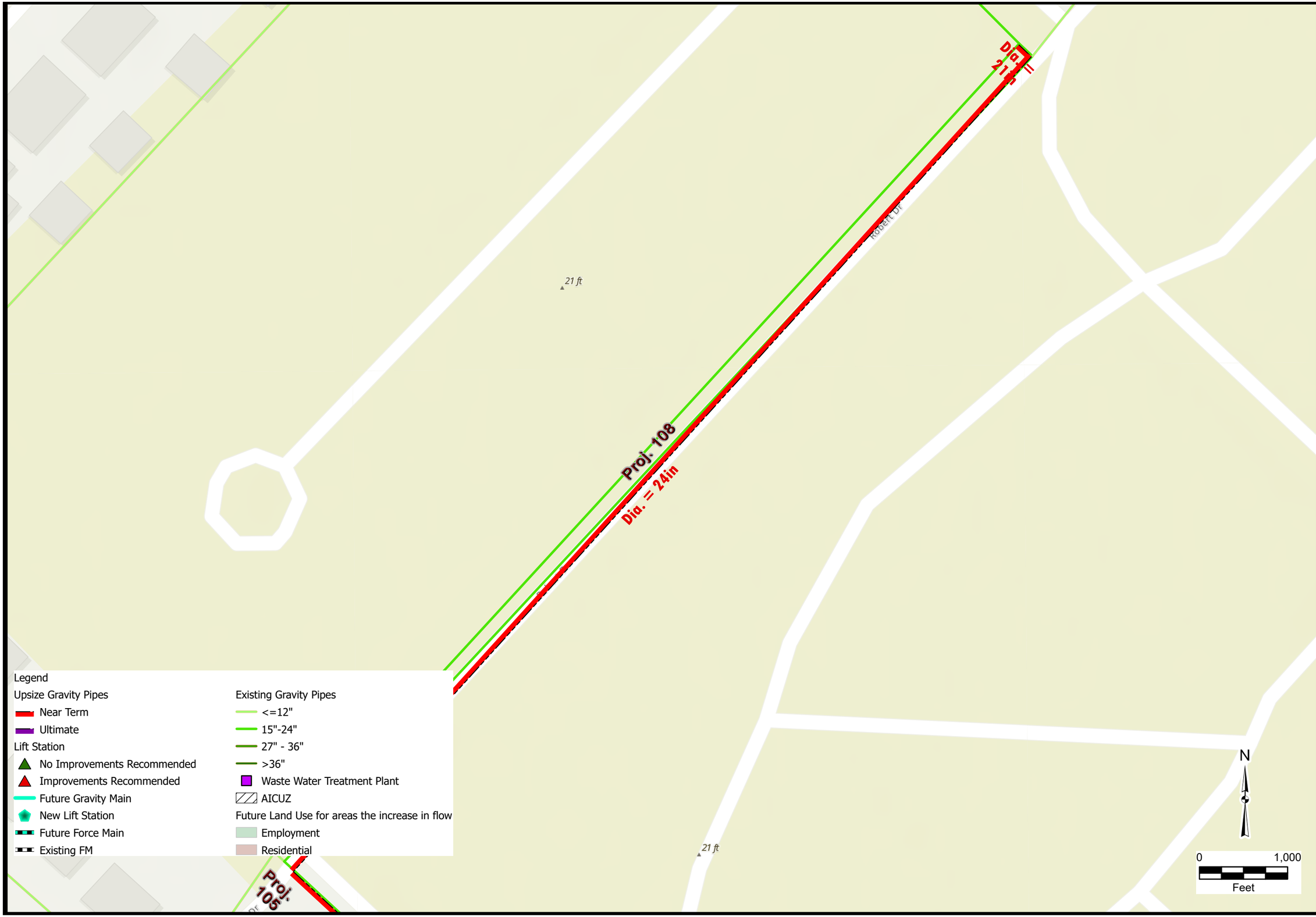
Future Land Use for areas the increase in flow
- Employment
- Residential

N

0 1,000' Feet

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	107

Date: Aug 18, 2023 2:22 PM User: nwolinsky
File: P:\123\83\00\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]



Legend

Upsize Gravity Pipes	Existing Gravity Pipes
Near Term	<=12"
Ultimate	15"-24"
Lift Station	27" - 36"
No Improvements Recommended	>36"
Improvements Recommended	Waste Water Treatment Plant
Future Gravity Main	AICUZ
New Lift Station	Future Land Use for areas the increase in flow
Future Force Main	Employment
Existing FM	Residential

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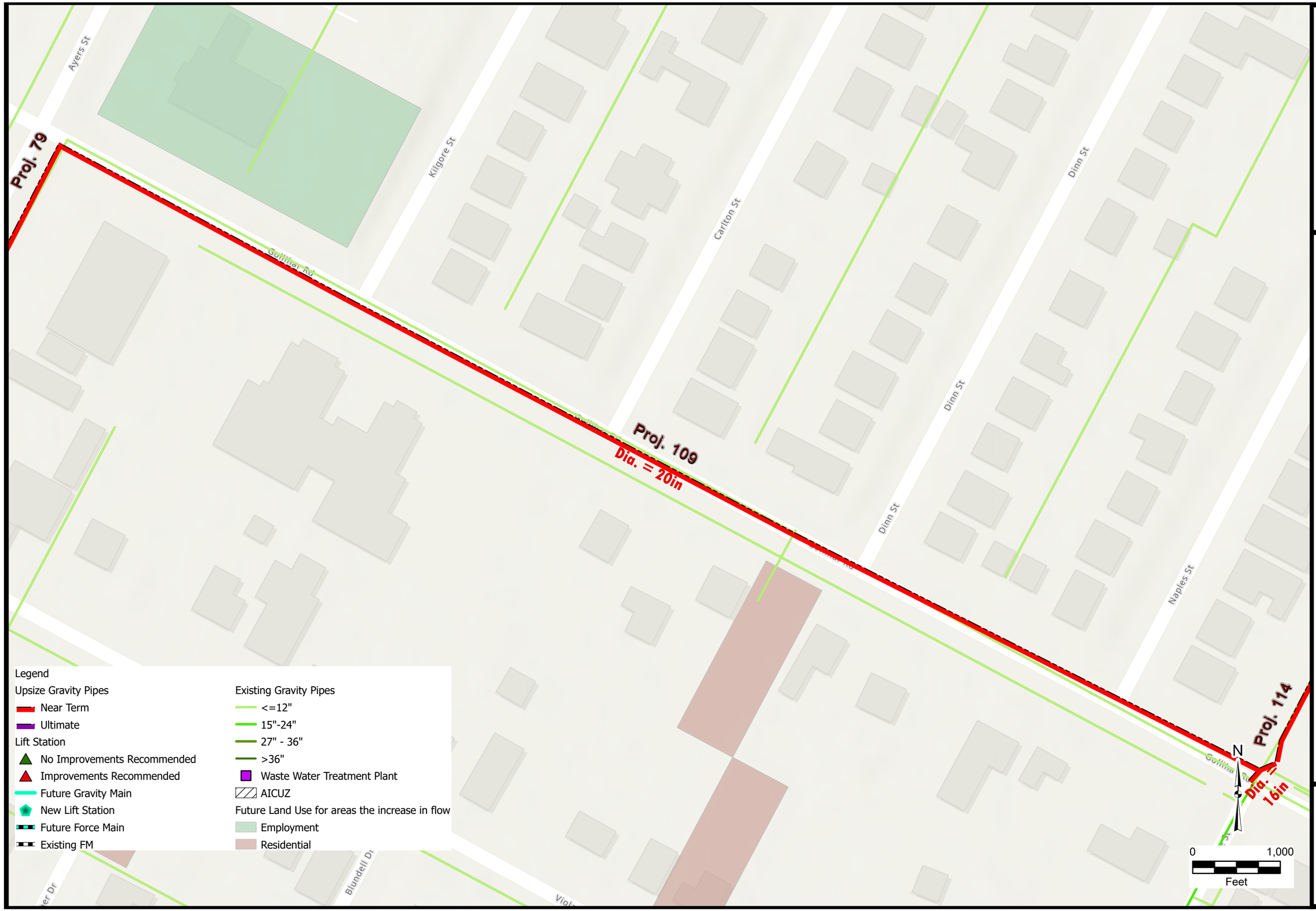
JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	108

Date: Aug 18, 2023 2:22 PM User: rwolinsky
File: P:\12383\00\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]



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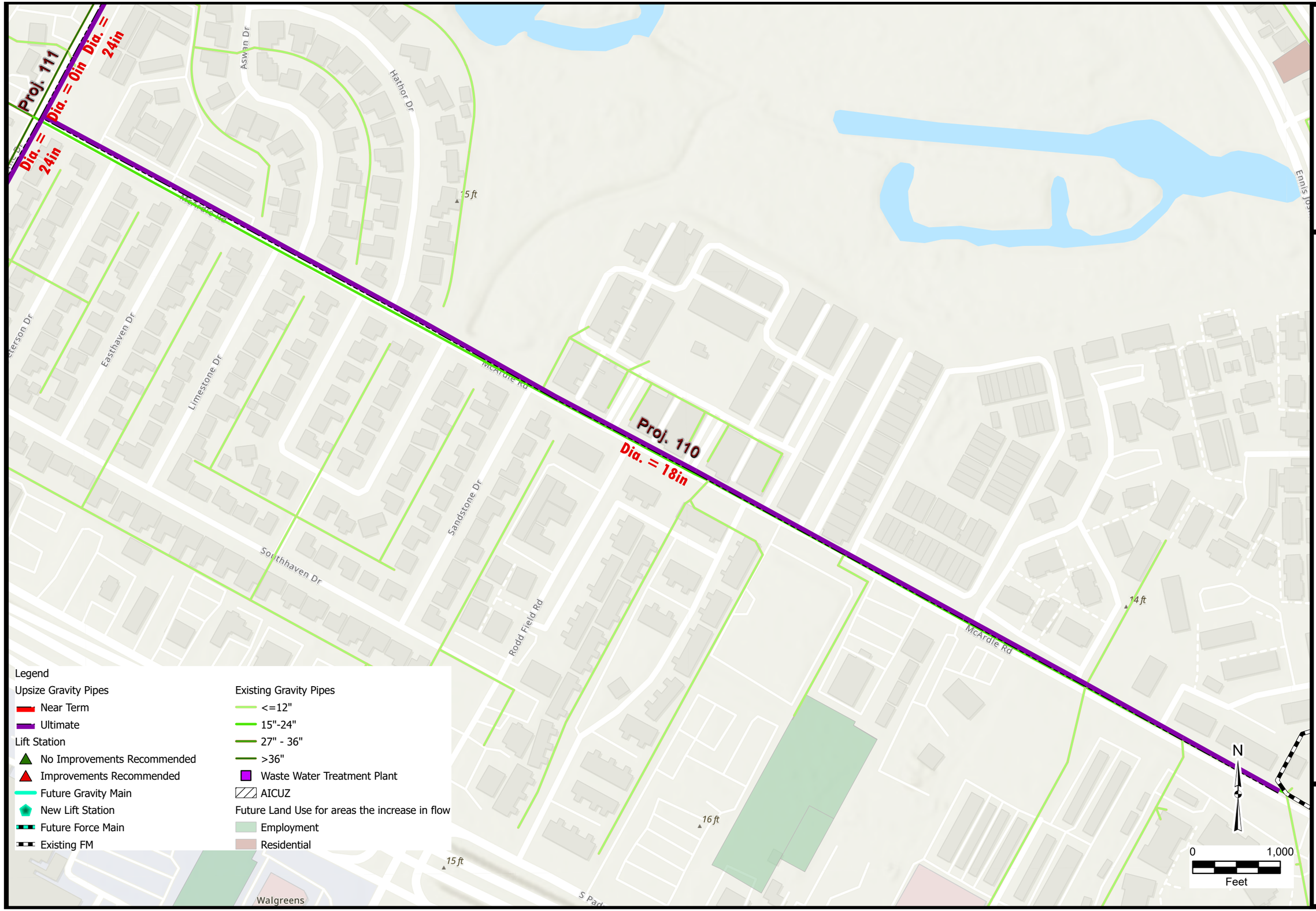
City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	109

Date: Aug 18, 2023 2:23 PM User: rwolinsky
File: P:\123\8300\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]



Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended
- Future Gravity Main
- New Lift Station
- Future Force Main
- Existing FM

Existing Gravity Pipes
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Future Land Use for areas the increase in flow
- Employment
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City of Corpus Christi

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DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	110

Date: Aug 16, 2023 2:23 PM User: rwolinsky
File: P:\123\83000\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]

Legend

Upsize Gravity Pipes
- Near Term
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Lift Station
- No Improvements Recommended
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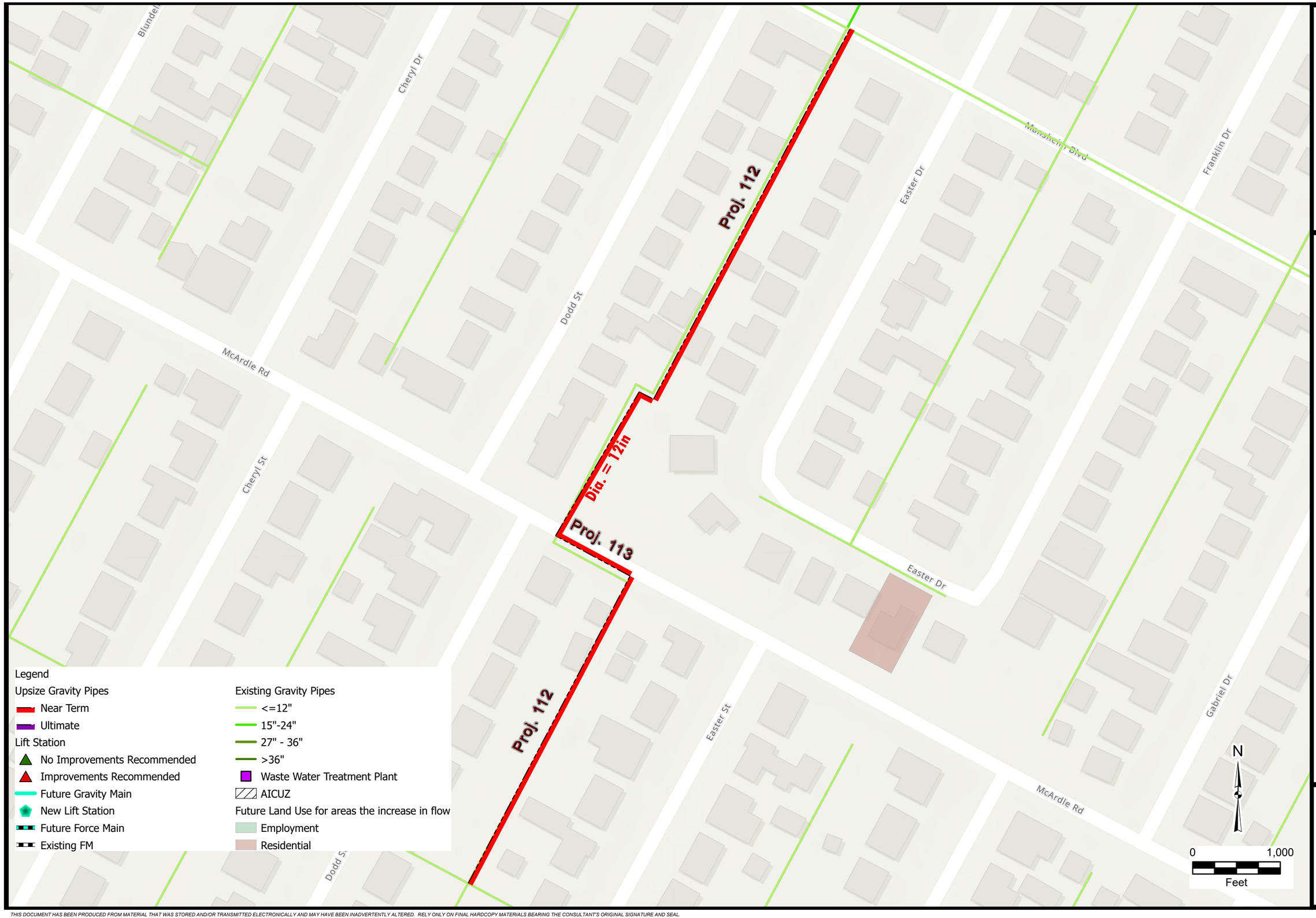
JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	111



Date: Aug 18, 2023 2:23 PM User: nwolinsky
File: P:\112\83\00\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]

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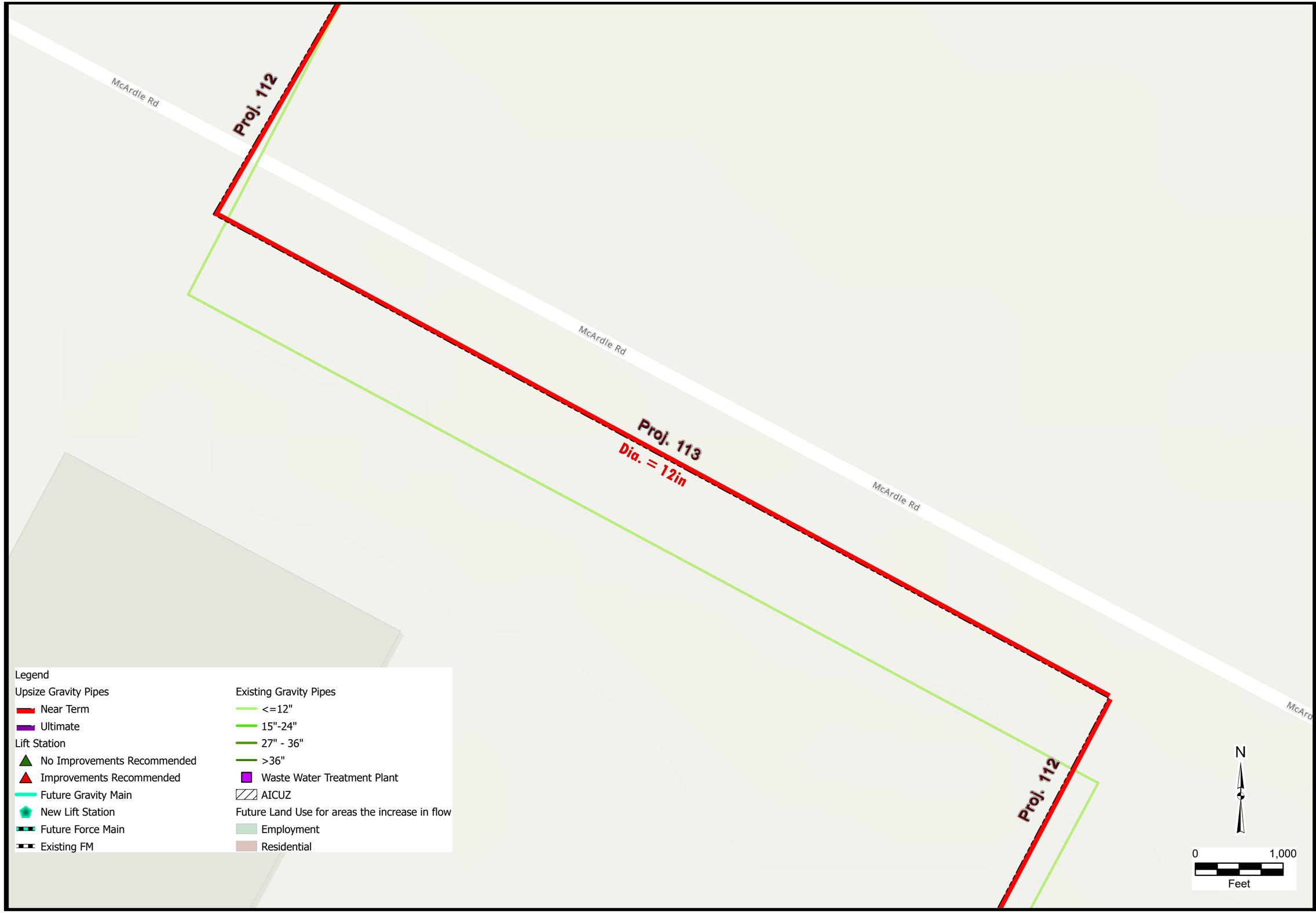
JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	112



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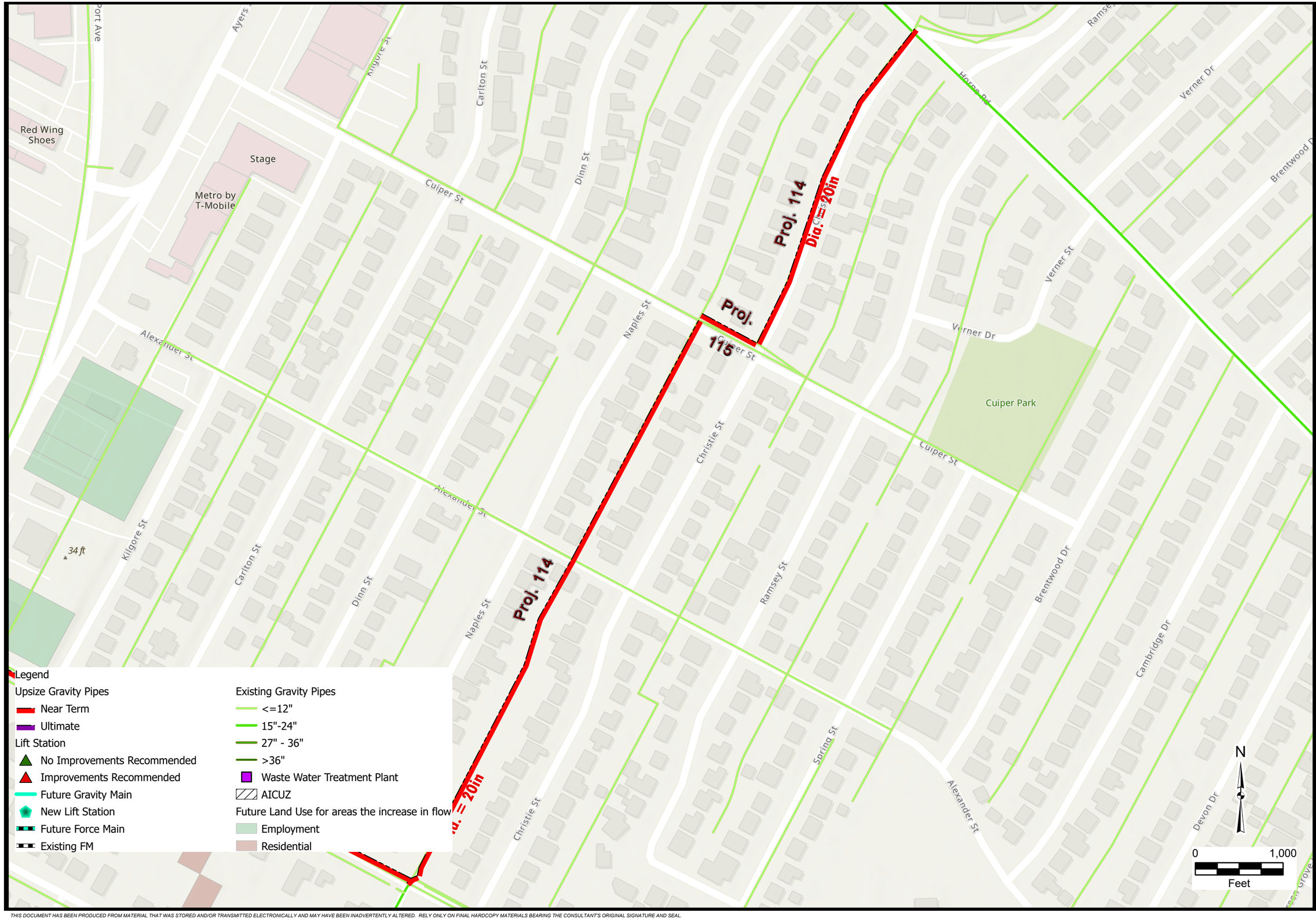
City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	113

Date: Aug 16, 2023 2:23 PM User: rwolinsky
File: P:\123\83\00\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]



Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended
- Future Gravity Main
- New Lift Station
- Future Force Main
- Existing FM

Existing Gravity Pipes
- <=12"
- 15"-24"
- 27" - 36"
- >36"
- Waste Water Treatment Plant
- AICUZ

Future Land Use for areas the increase in flow
- Employment
- Residential

Wastewater System Upgrades Project Guide

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	114

Date: Aug 18, 2023 2:23 PM User: nwolinsky
File: P:\123\83000\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Cur_Projects1 Map: [empty]

Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
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- Improvements Recommended
- Future Gravity Main
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Existing Gravity Pipes
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Future Land Use for areas the increase in flow
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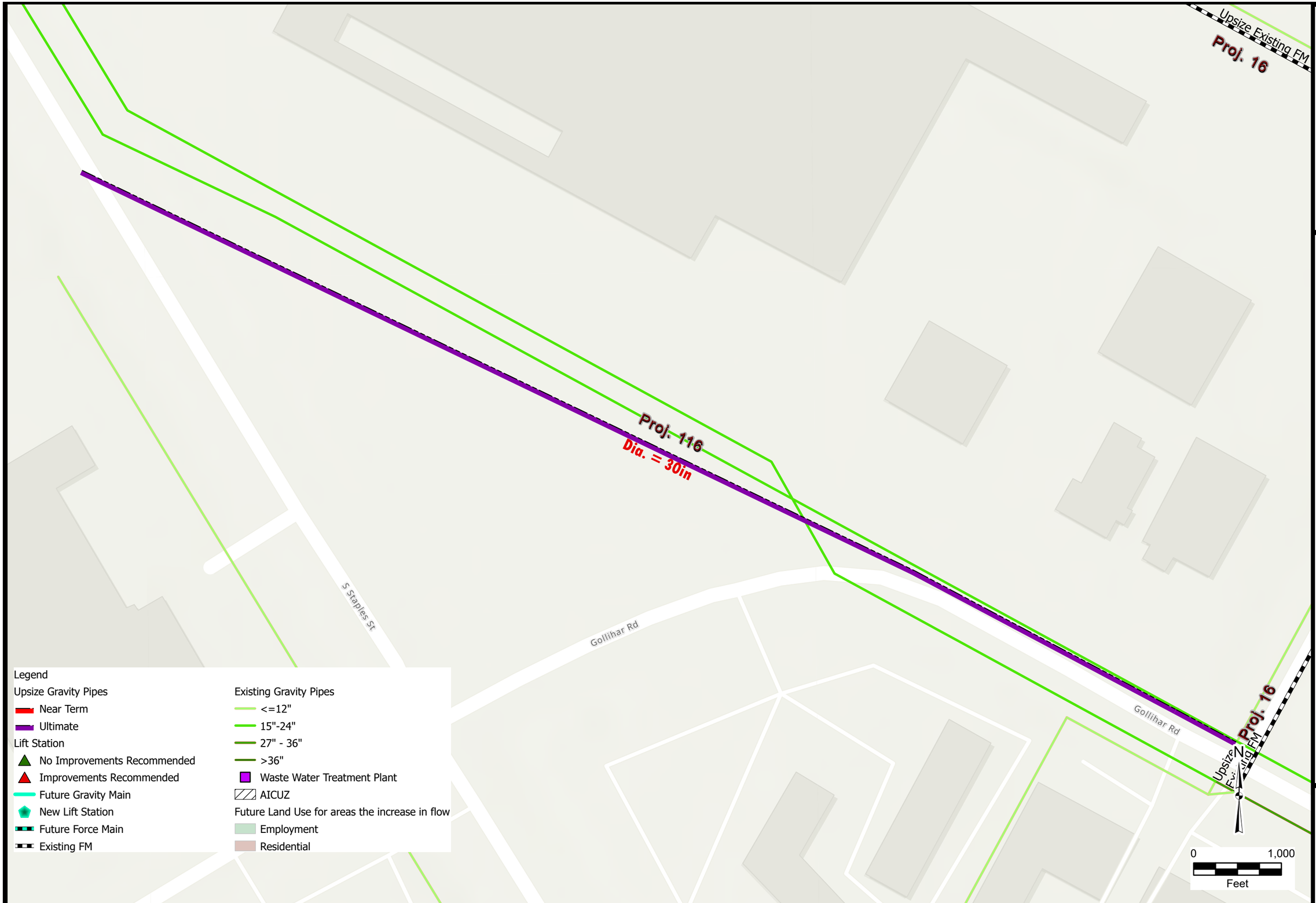
JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	115

Date: Aug 18, 2023 2:23 PM User: nvolinsky
File: P:\123\83000\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]



Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended
- Future Gravity Main
- New Lift Station
- Future Force Main
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Existing Gravity Pipes
- <=12"
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Future Land Use for areas the increase in flow
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City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	116

Date: Aug 16, 2023 2:23 PM User: rwolinsky
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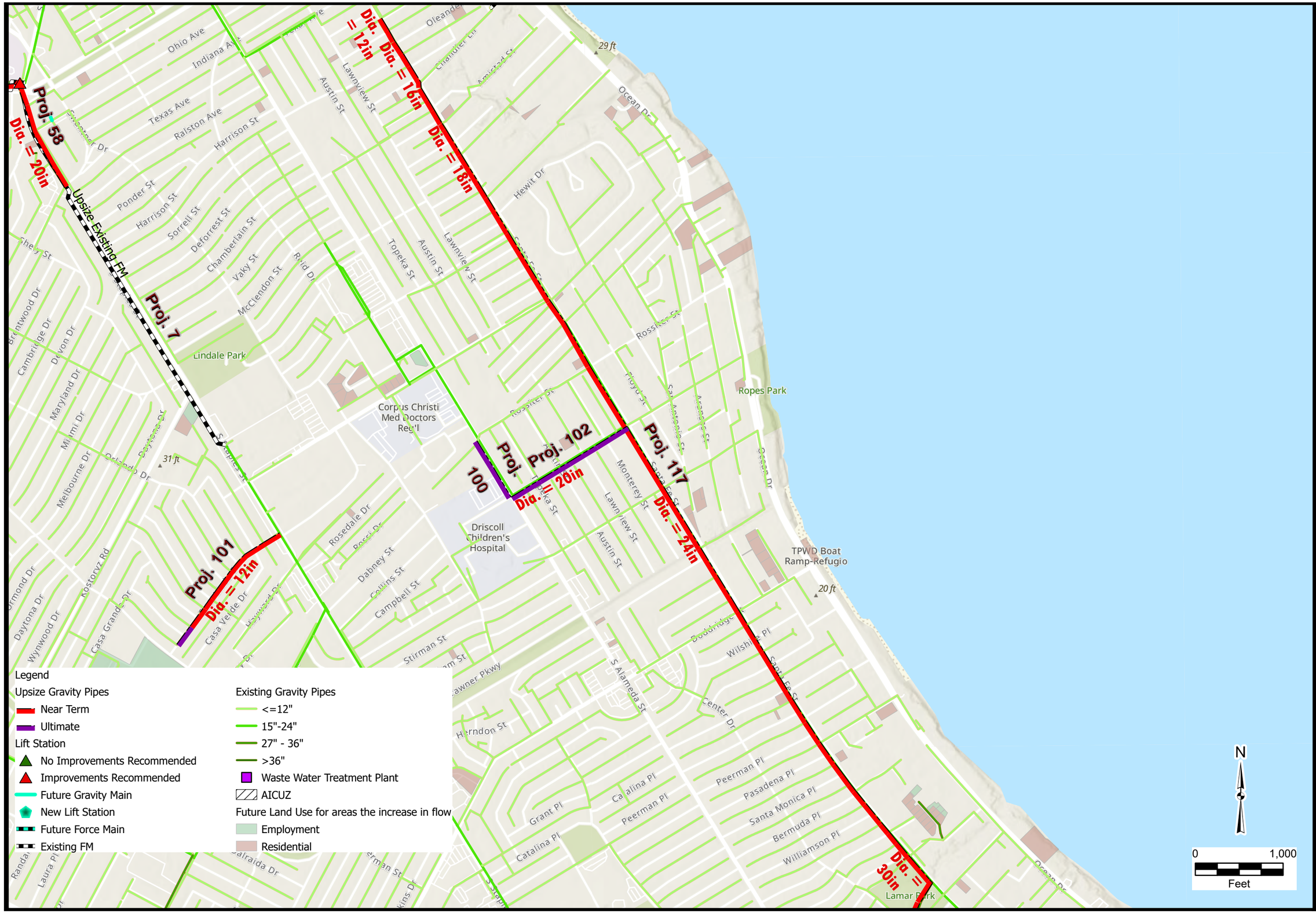

Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended
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Future Land Use for areas the increase in flow
- Employment
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N

0 1,000
Feet

Wastewater System Upgrades Project Guide

City of Corpus Christi

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	117

Date: Aug 16, 2023 2:23 PM User: rwolinsky
File: P:\123\83000\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]

Dia. = 30in

Proj. 108

Proj. 118

Dia. = 36in

Dia. = 24in

Proj. 105

Everhart/Staples

Lamar Park

South Pope Park

Seaside Memorial Park

Brookdale Park

Carmel Park

Liquid Town

Kelly's Pharmacy

Walmart Fuel

Sutherlands

Walbangers

Stage

Claremont Park

Windsor Park

H-E-B

CVS/pharmacy

21 ft

27 ft

28 ft

Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
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N

0 1,000 Feet

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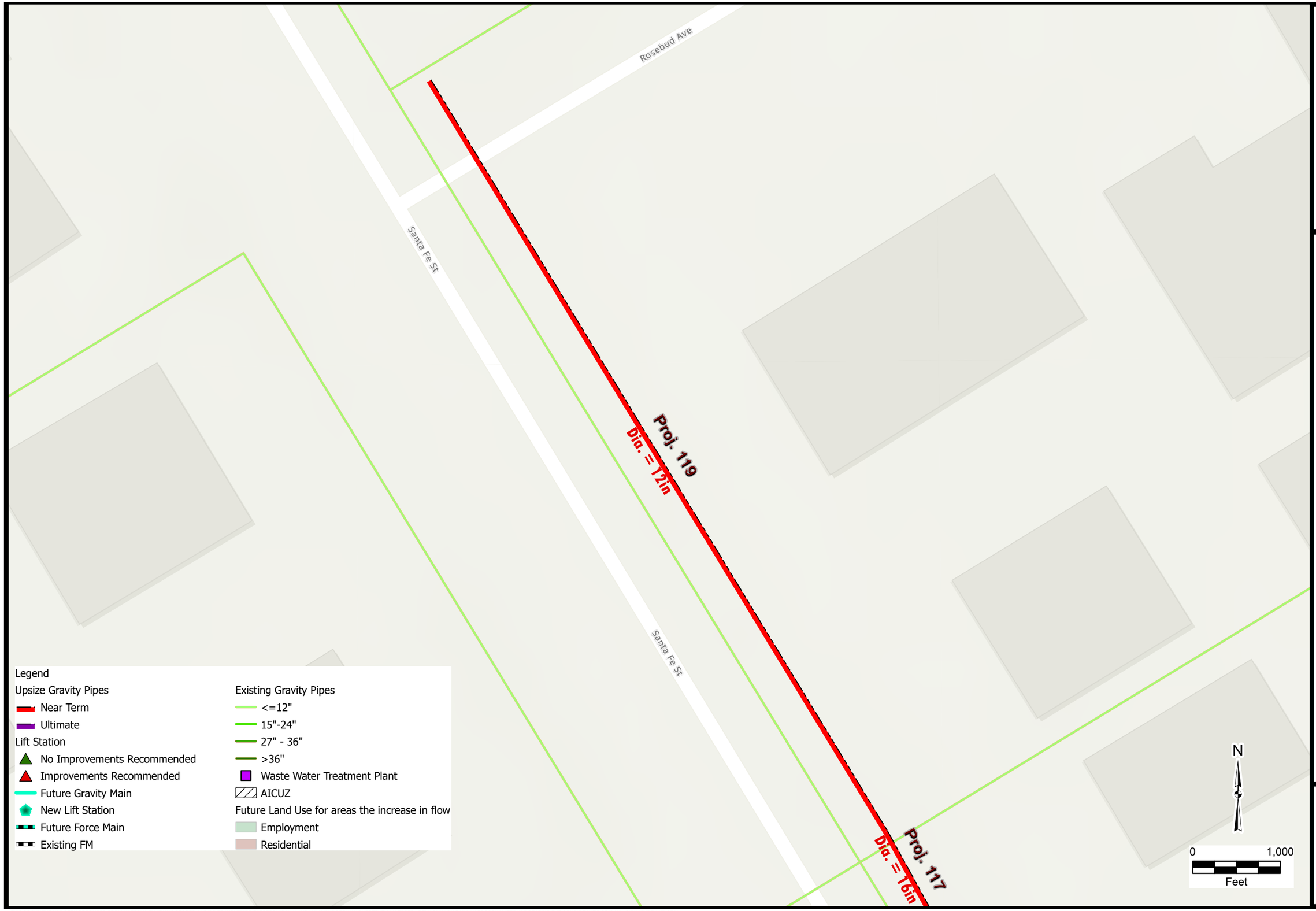
City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	118



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File: P:\123\83\00\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]

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DESIGNER	RW
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CHECKED	AA
SHEET	119

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Wastewater System Upgrades Project Guide

City of Corpus Christi

Saratoga Blvd
Greensboro Dr
Weiskopf Ln
Sanders Dr
Beard Dr
Herbert Ln
Acushnet Dr
Acushnet Park
Coody Ln
Hogan Dr
Weiskopf Cir
23 ft

Proj. 120
Dia. = 18in
Proj. 125
Proj. 120
Proj. 124
Dia. = 20in

N

0 1,000
Feet

Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended
- Future Gravity Main
- New Lift Station
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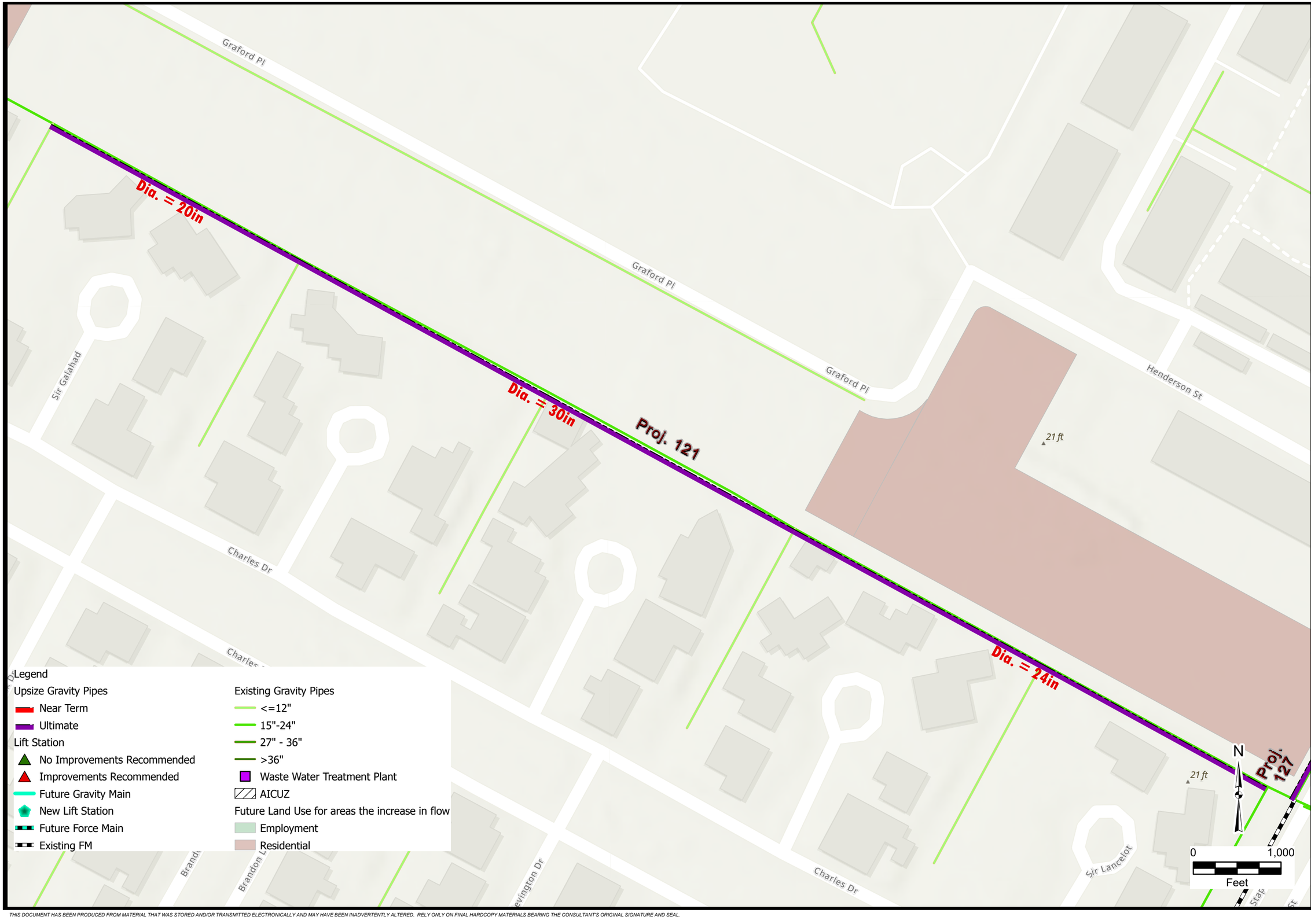
JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	120

Date: Aug 18, 2023 2:23 PM User: nwolinsky
File: P:\123\83000\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]



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City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	121

Date: Aug 18, 2023 2:23 PM User: nwolinsky
File: P:\123\83\00\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]

Sweetbriar Cir
Edgebrook Dr
Meadow Vale Cir
Meadow Vale Cir
Shadowbend Dr
Shadowbend Dr
Braesvalley Dr
Brinkwood Dr
Fern Forest Cir
Berrydale Cir
Braesvalley Dr
High Meadow Dr
High Meadow Dr

Proj. 122
dia. = 16in

Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
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- Improvements Recommended
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Existing Gravity Pipes
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N

0 1,000
Feet

Wastewater System Upgrades Project Guide

City of Corpus Christi

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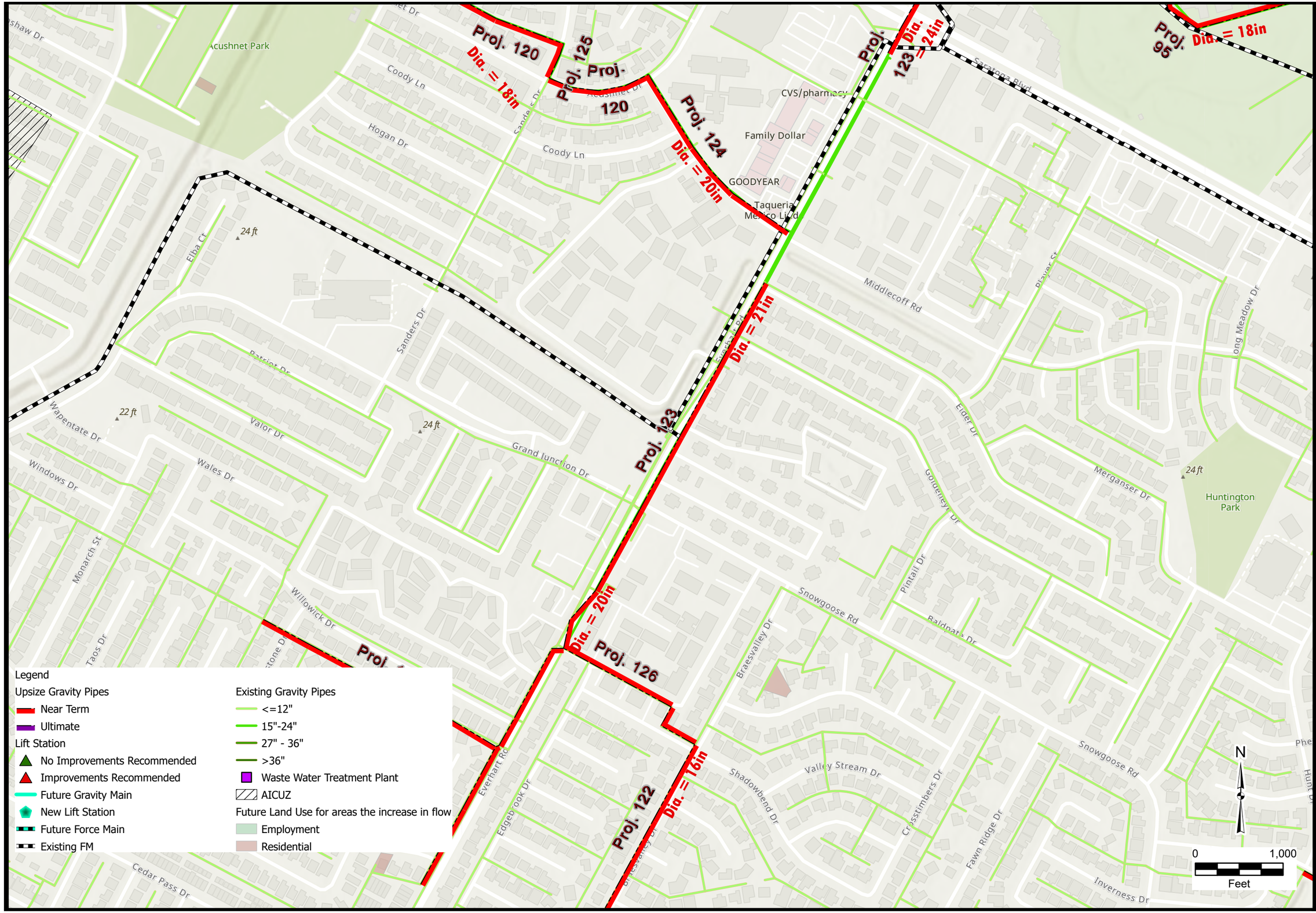
JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	122



Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended
- Future Gravity Main
- New Lift Station
- Future Force Main
- Existing FM

Existing Gravity Pipes
- <=12"
- 15"-24"
- 27" - 36"
- >36"
- Waste Water Treatment Plant
- AICUZ

Future Land Use for areas the increase in flow
- Employment
- Residential

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Wastewater System Upgrades Project Guide

City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	123

Date: Aug 18, 2023 2:23 PM User: nwolinsky
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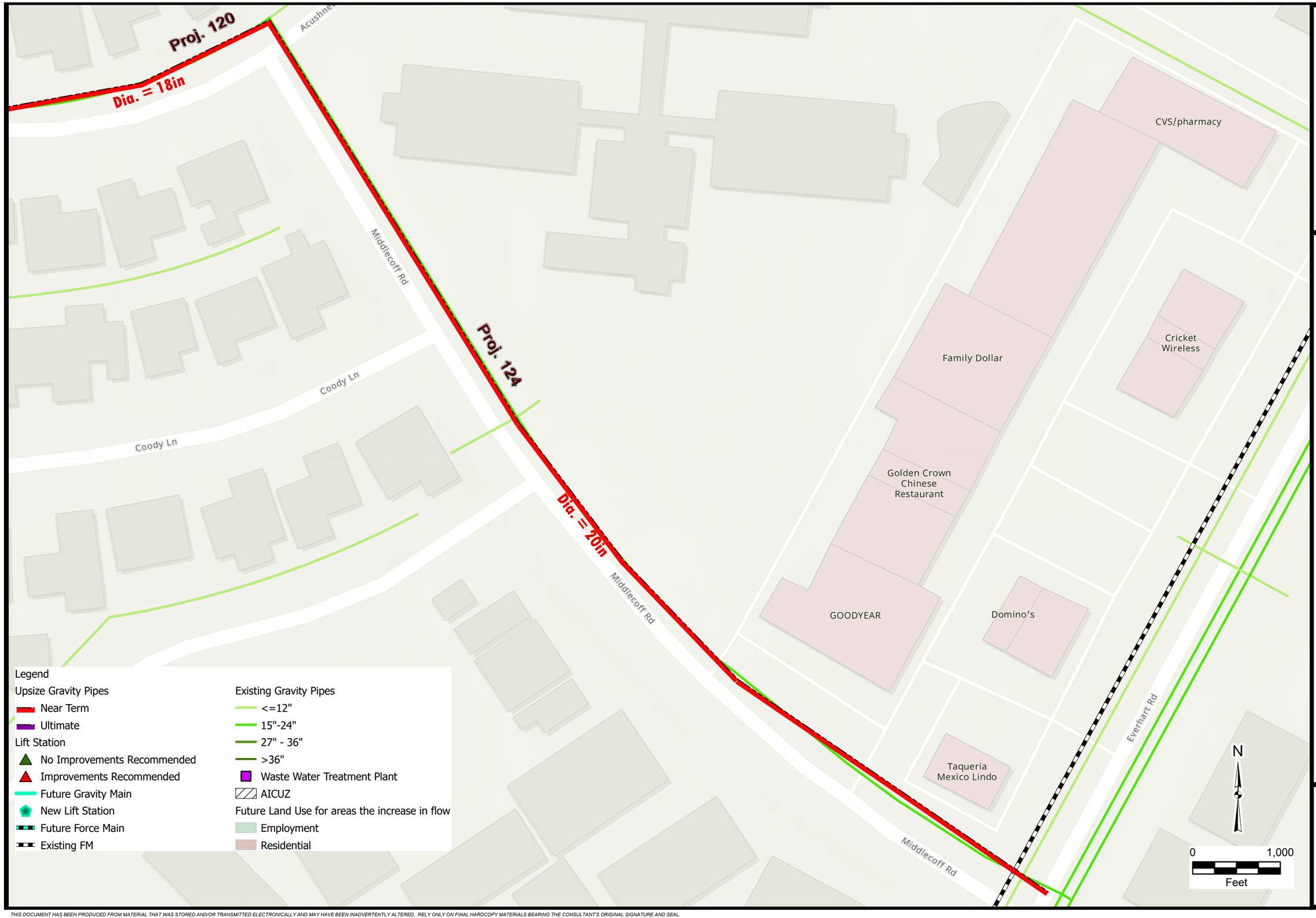

Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
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City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	124

Date: Aug 18, 2023 2:23 PM User: nwolinsky
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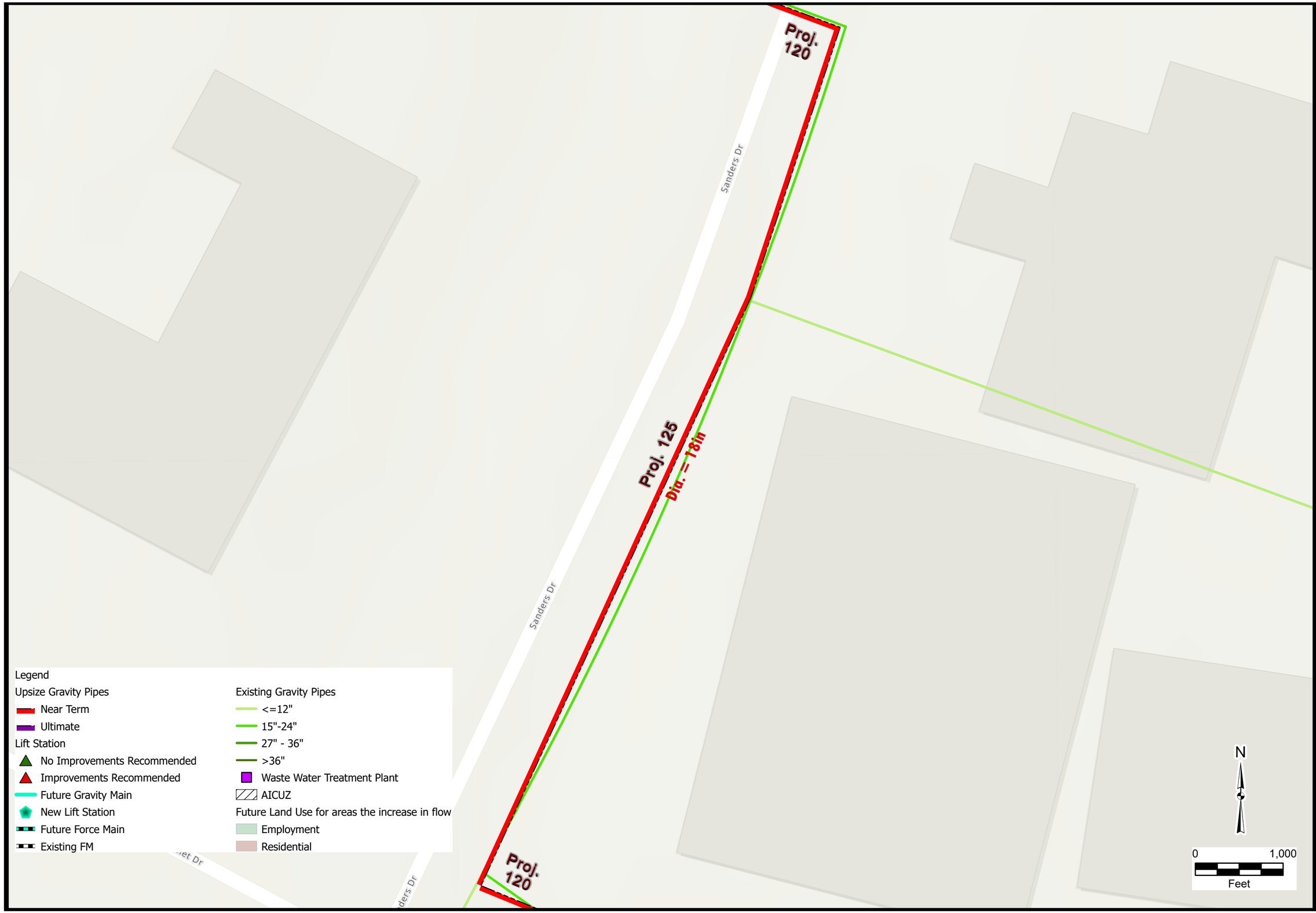

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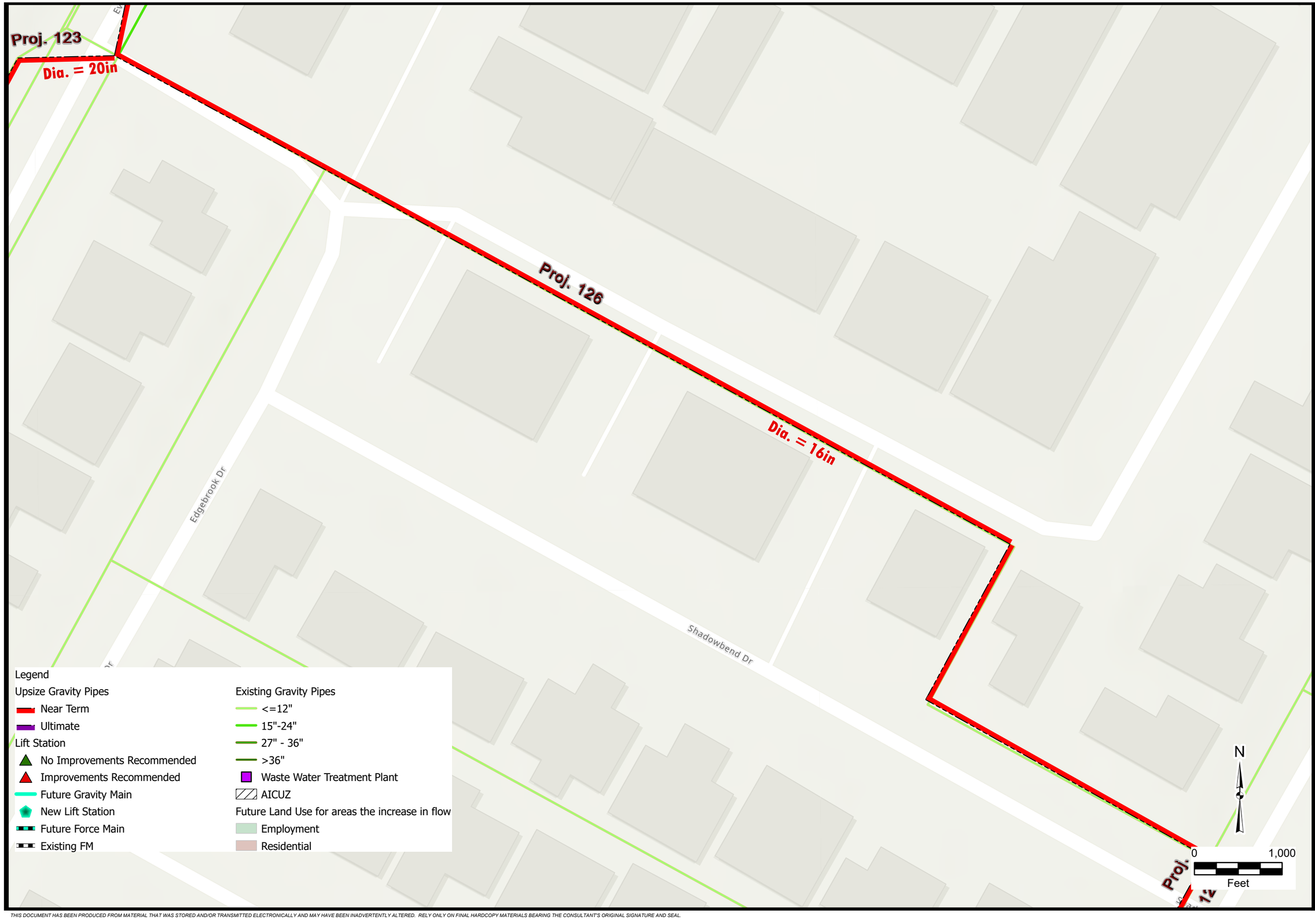
Wastewater System Upgrades Project Guide

City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	125



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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	126

Date: Aug 18, 2023 2:24 PM User: nwolinsky
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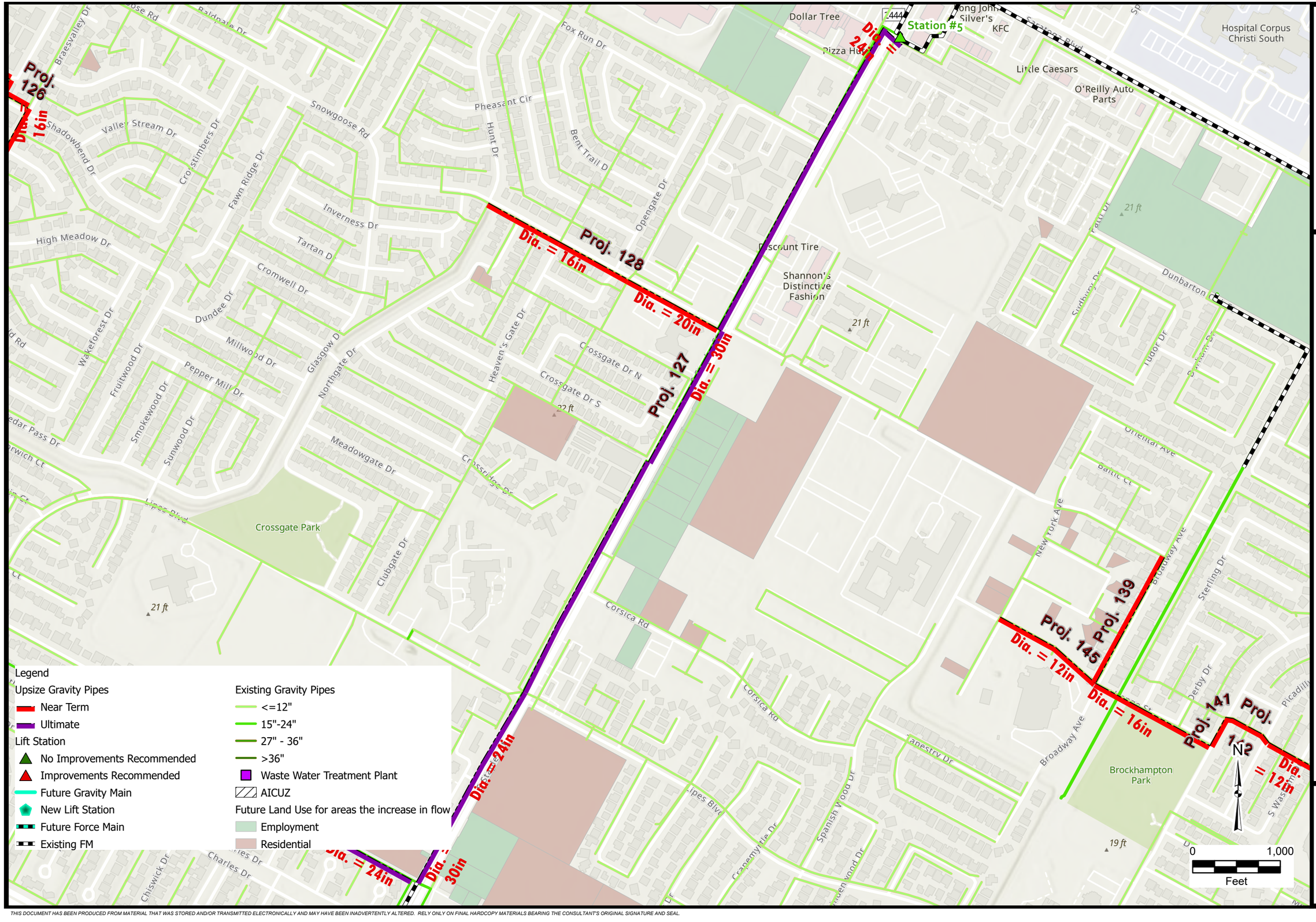

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City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	127

Date: Aug 18, 2023 2:24 PM User: nwolinsky
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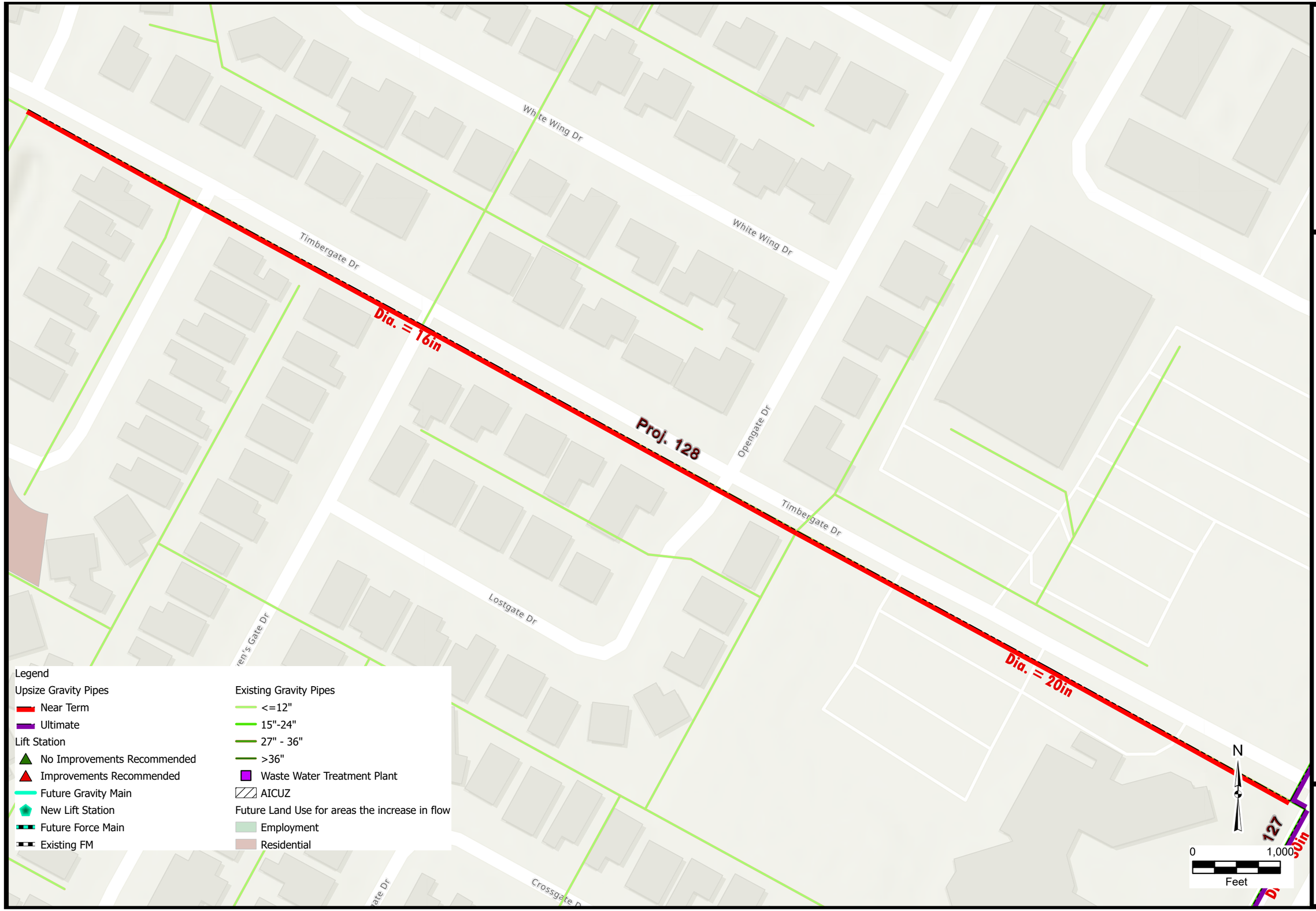

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	128

Date: Aug 18, 2023 2:24 PM User: nvolinsky
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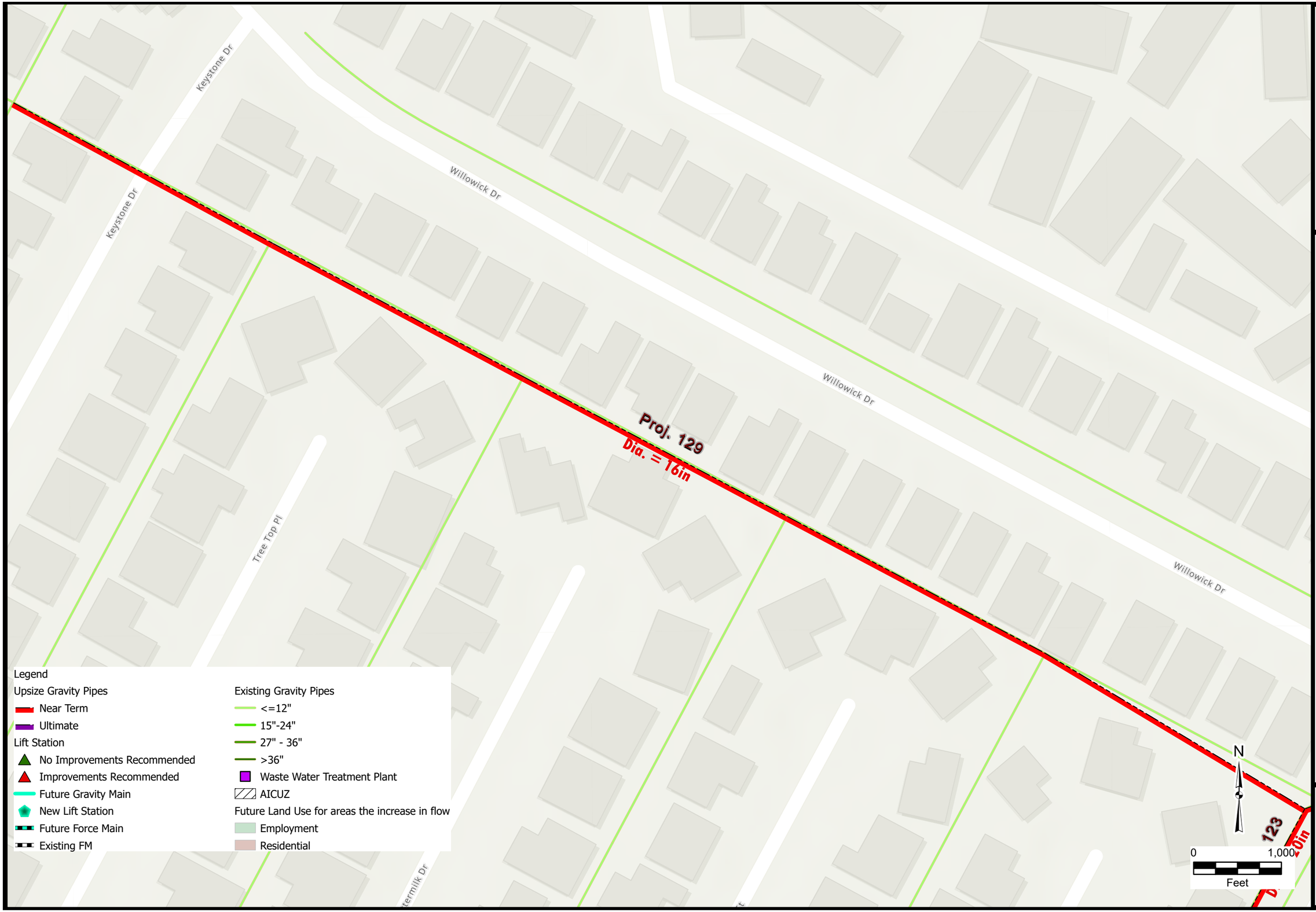

Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended
- Future Gravity Main
- New Lift Station
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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	129

Date: Aug 18, 2023 2:24 PM User: rwolinsky
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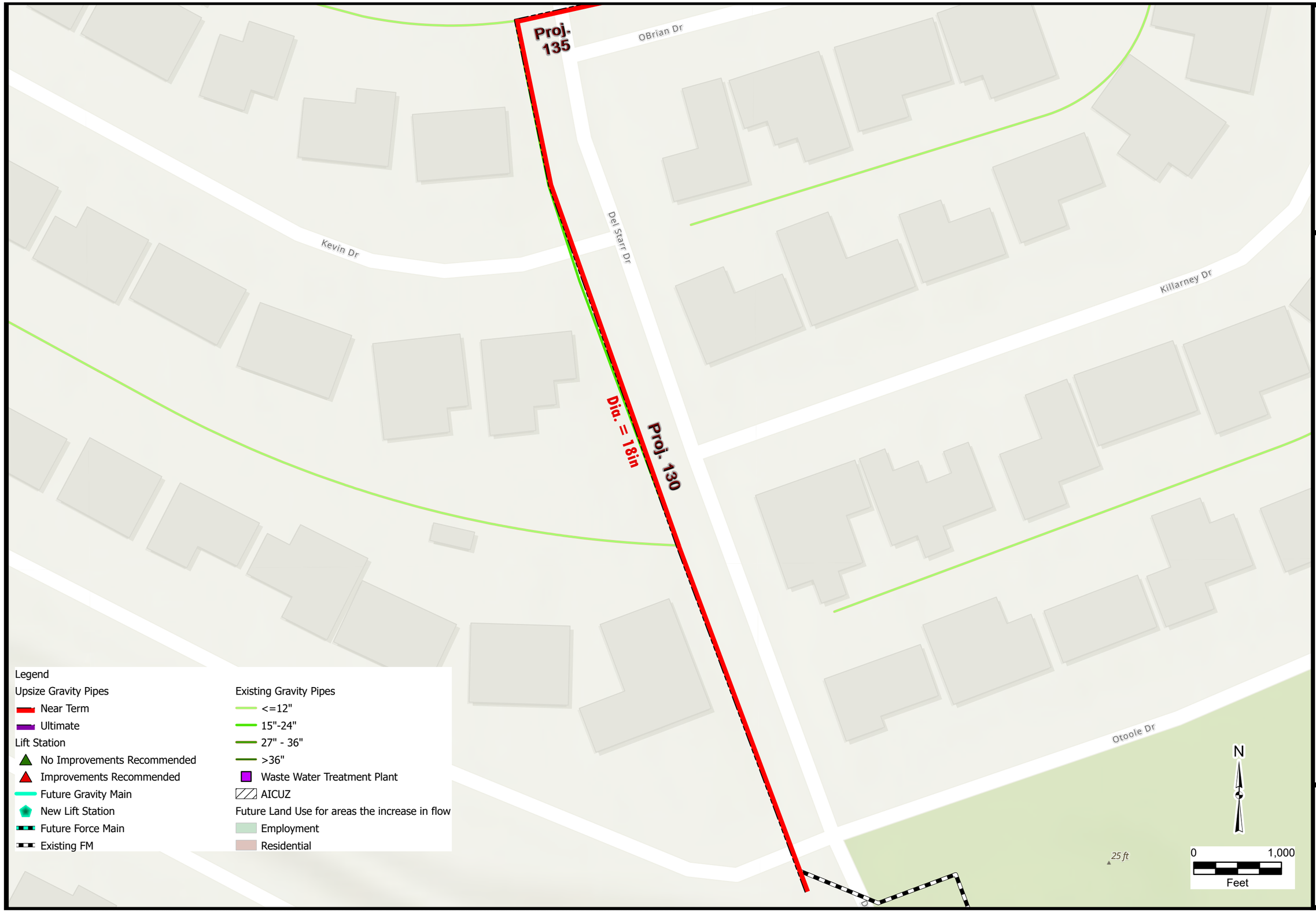

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	130

Date: Aug 18, 2023 2:24 PM User: rwolinsky
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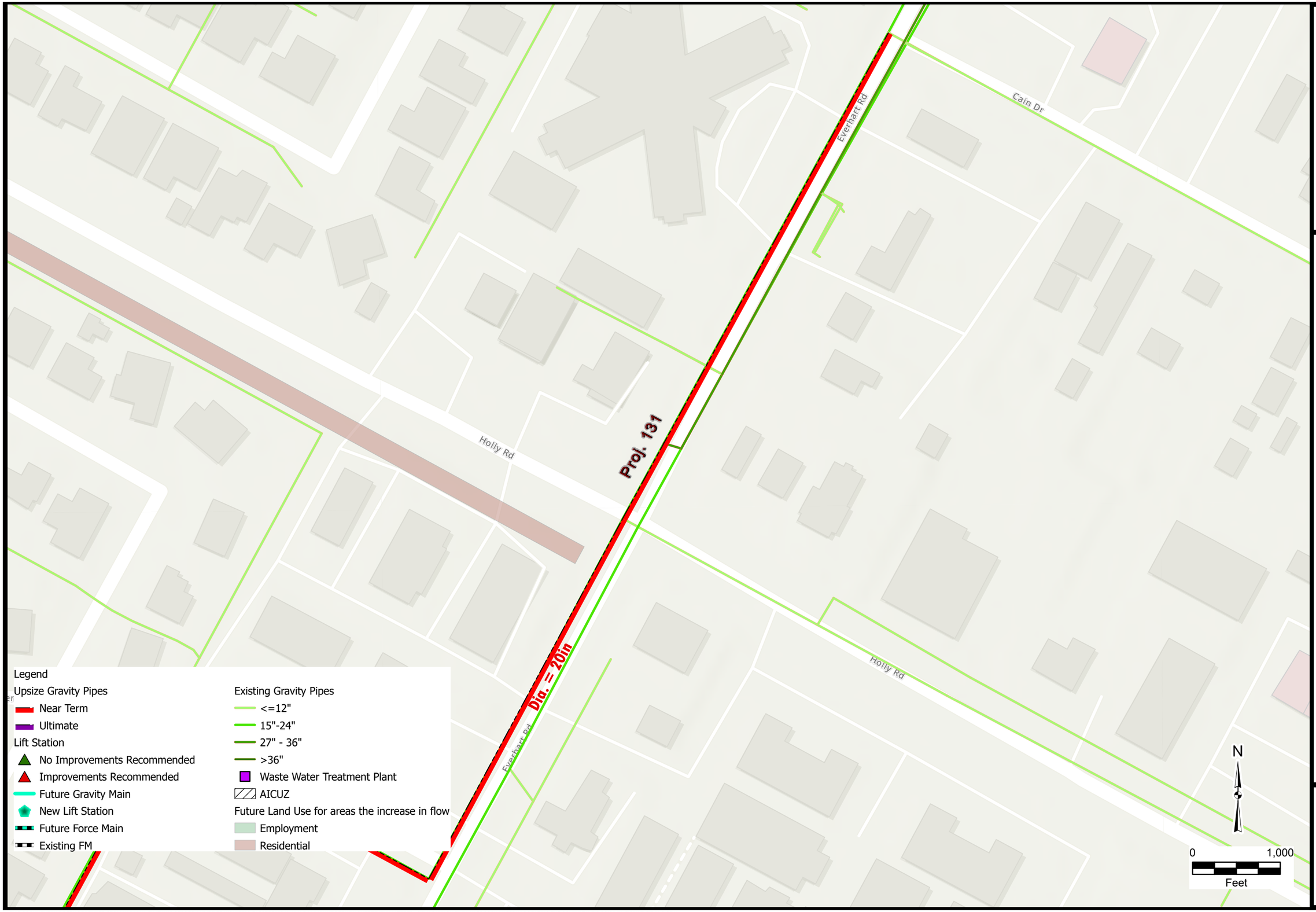

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	131

Date: Aug 18, 2023 2:24 PM User: rwolinsky
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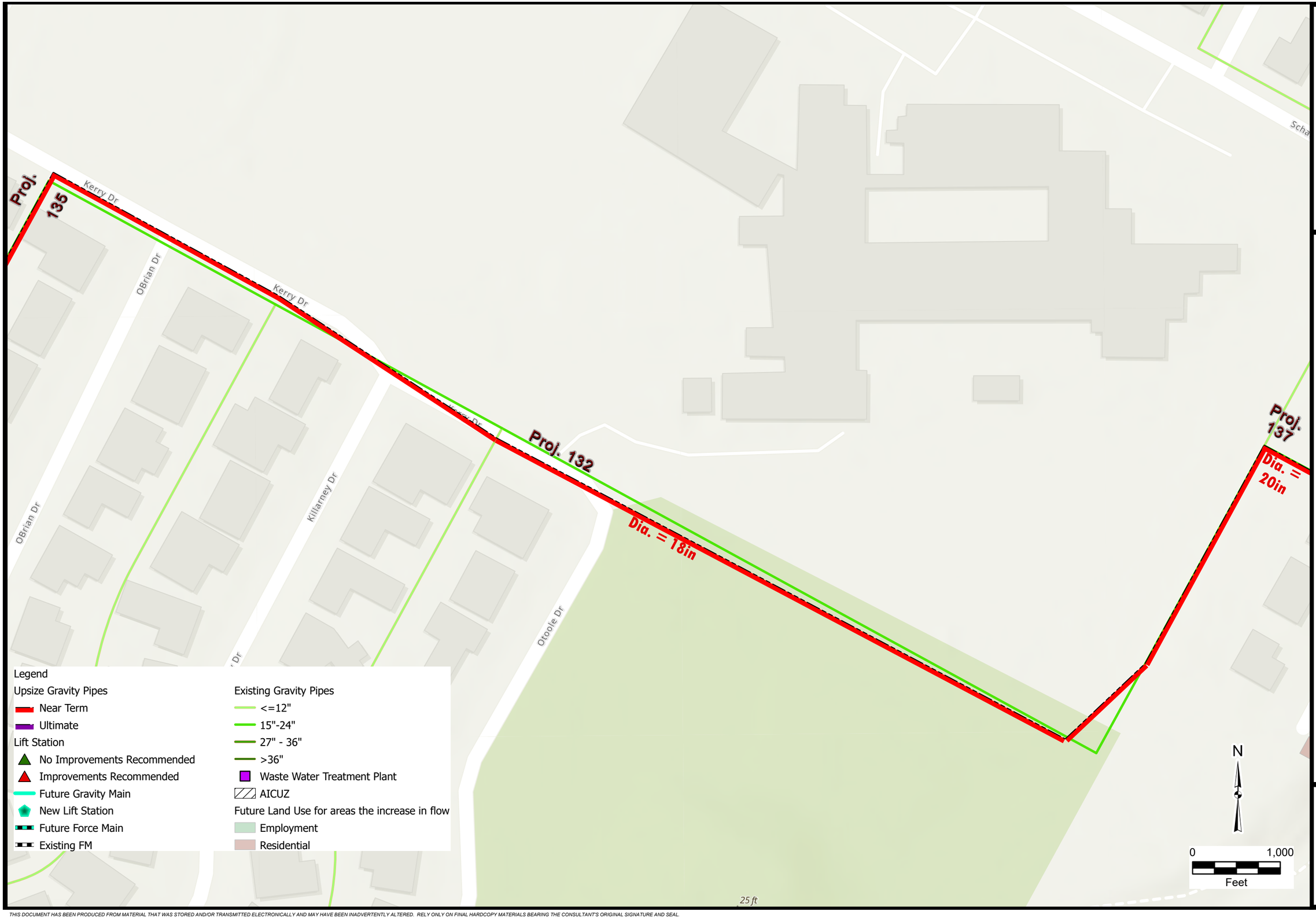

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	132

Date: Aug 18, 2023 2:24 PM User: nwolinsky
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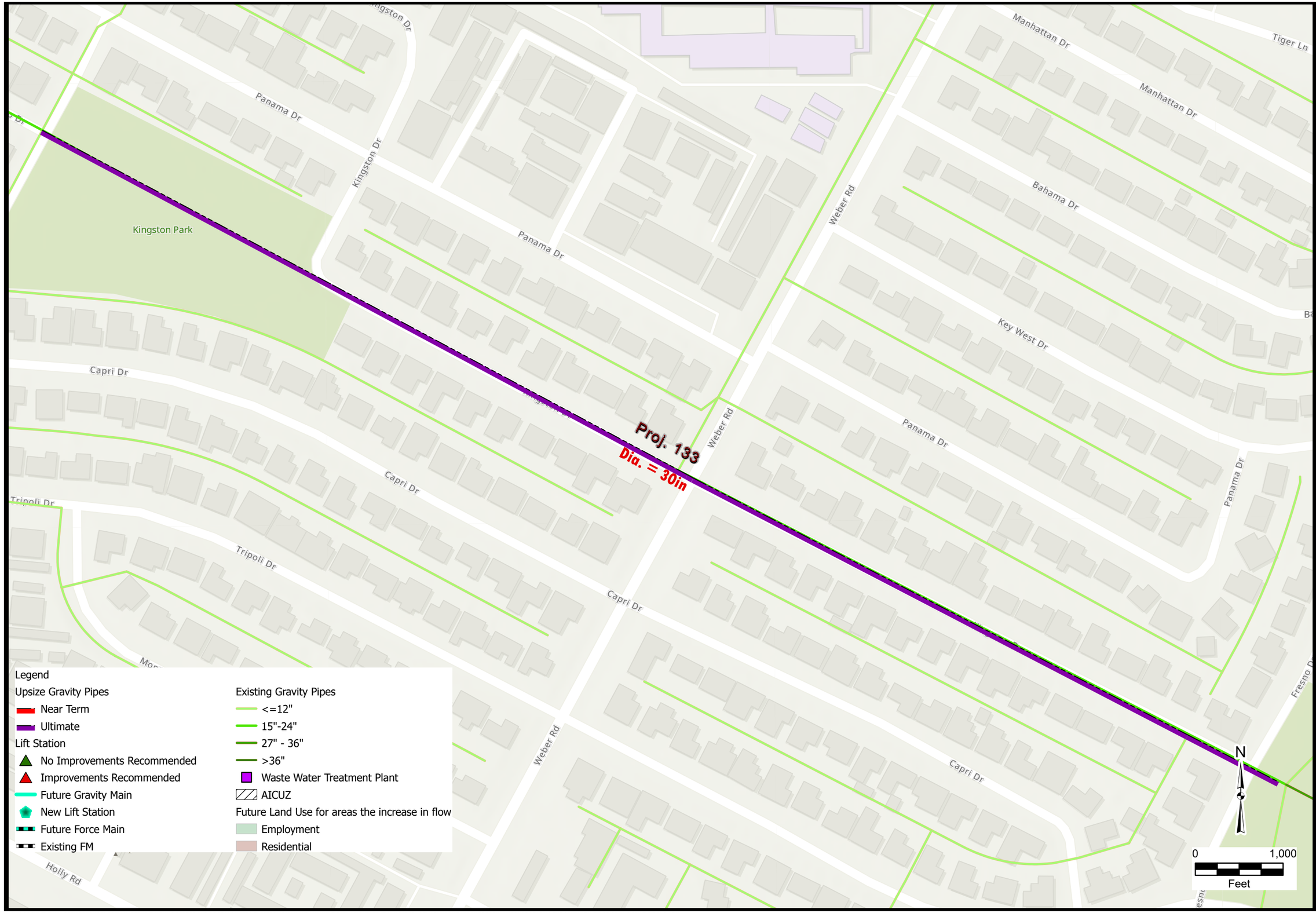

Legend

Upsize Gravity Pipes
- Near Term
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Lift Station
- No Improvements Recommended
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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	133

Date: Aug 18, 2023 2:24 PM User: rwolinsky
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Legend

Upsize Gravity Pipes
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Lift Station
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Wastewater System Upgrades Project Guide

City of Corpus Christi

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	134

Date: Aug 18, 2023 2:24 PM User: nwolinsky
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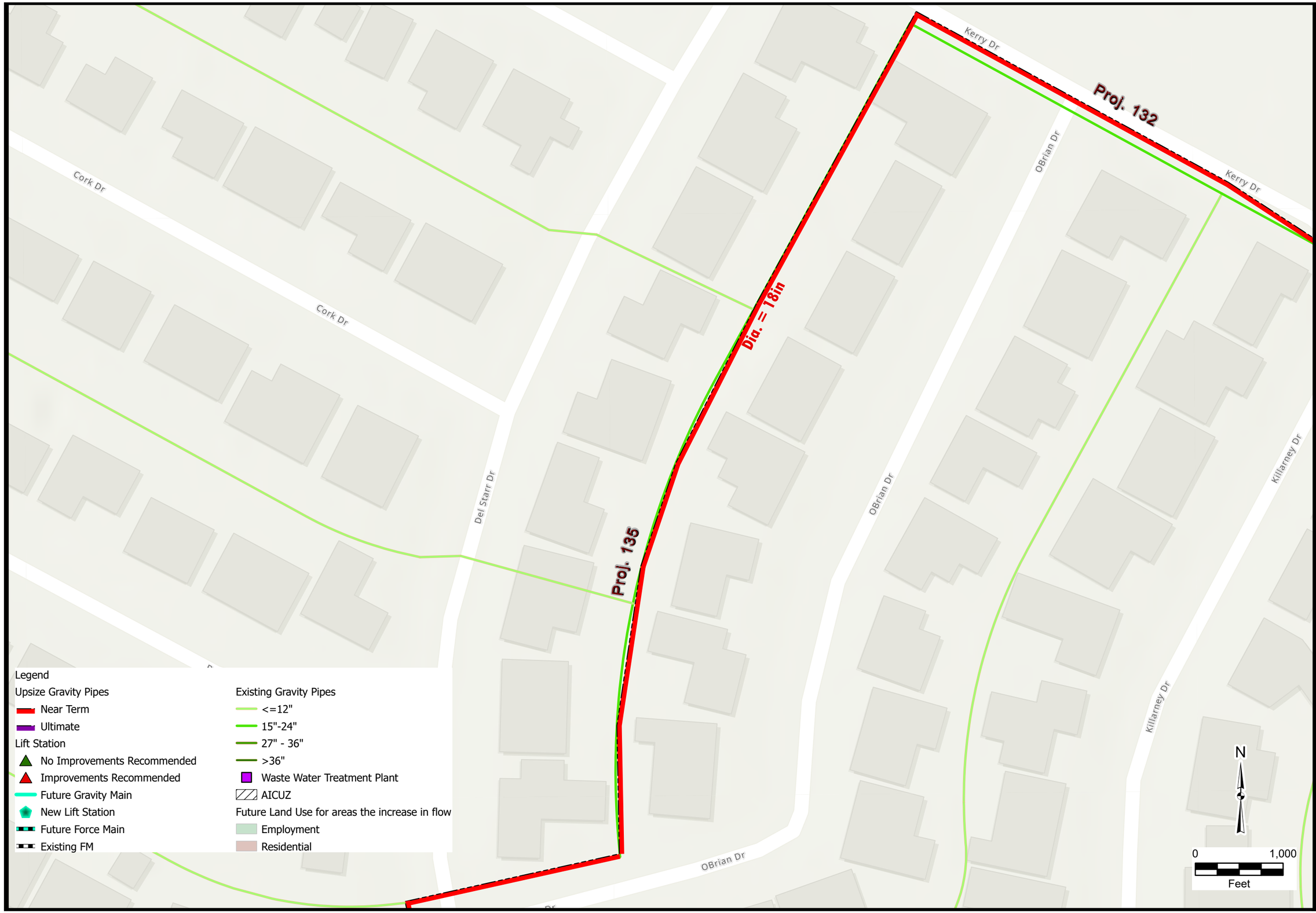

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Date: Aug 18, 2023 2:24 PM User: nwolinsky
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City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	135

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Wastewater System Upgrades Project Guide

City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	136

Date: Aug 18, 2023 2:24 PM User: rwolinsky
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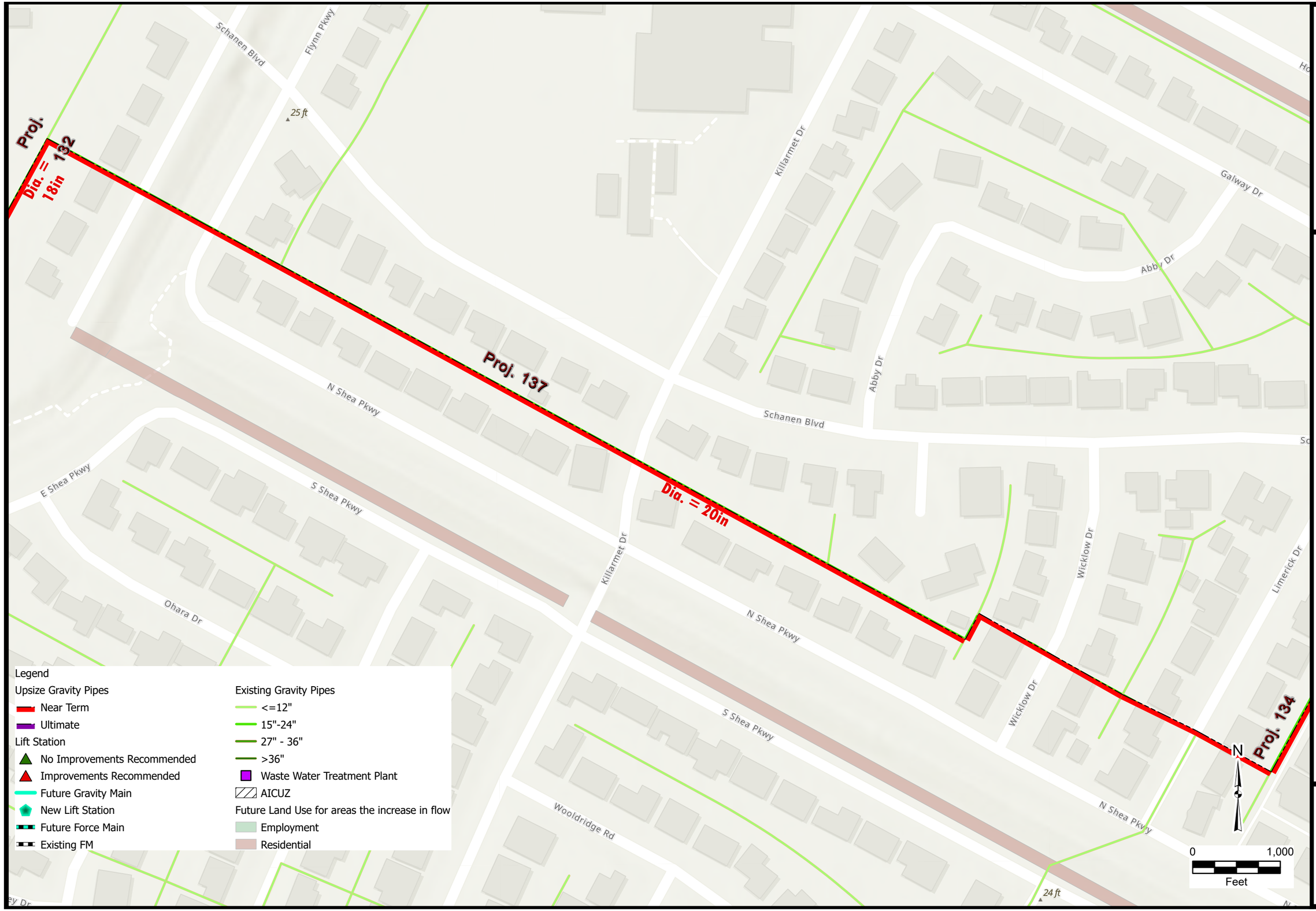

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Date: Aug 18, 2023 2:24 PM User: nwolinsky
File: P:\123\83000\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]

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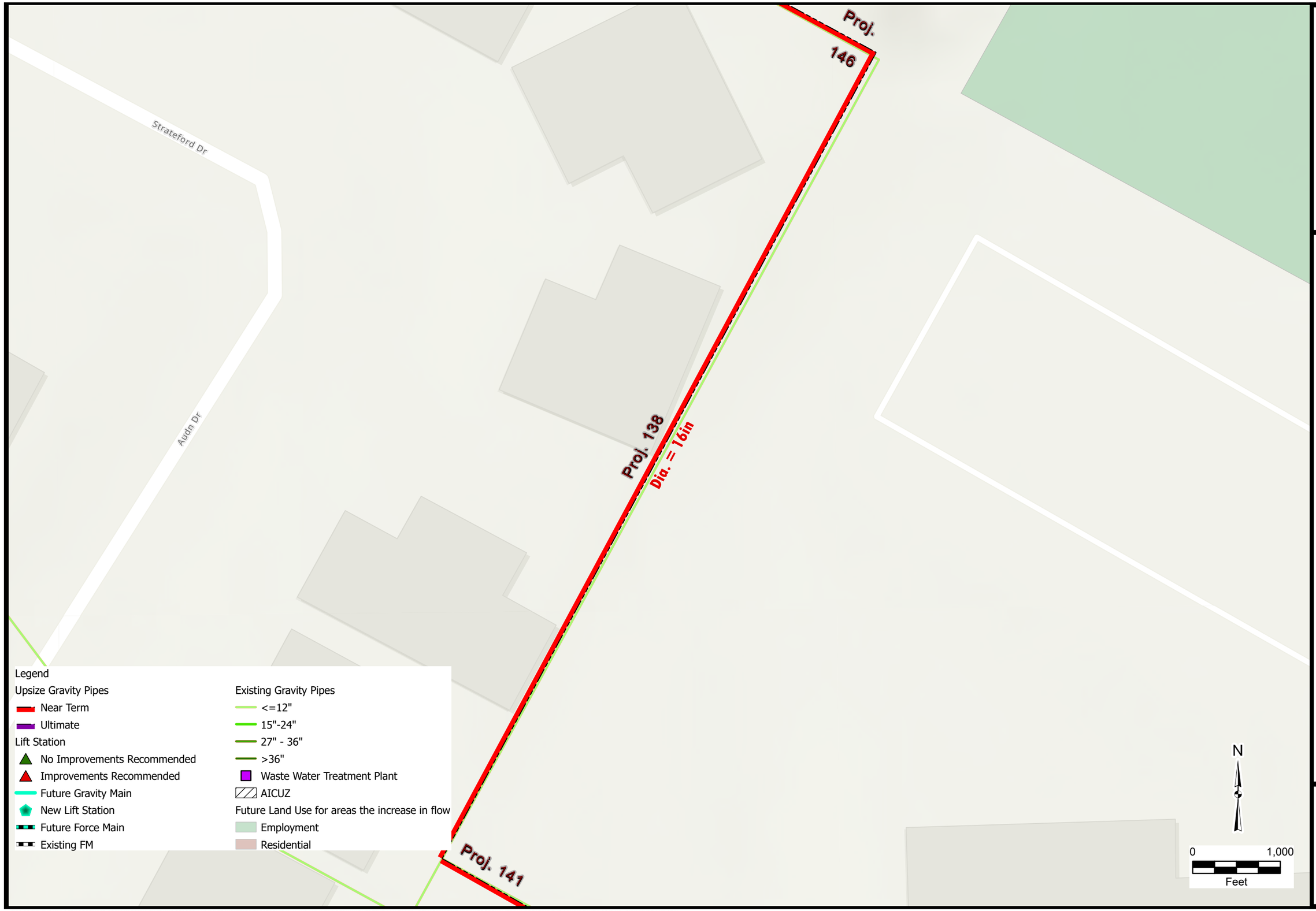
Wastewater System Upgrades Project Guide

City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	137



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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	138

Date: Aug 18, 2023 2:24 PM User: nvolinsky
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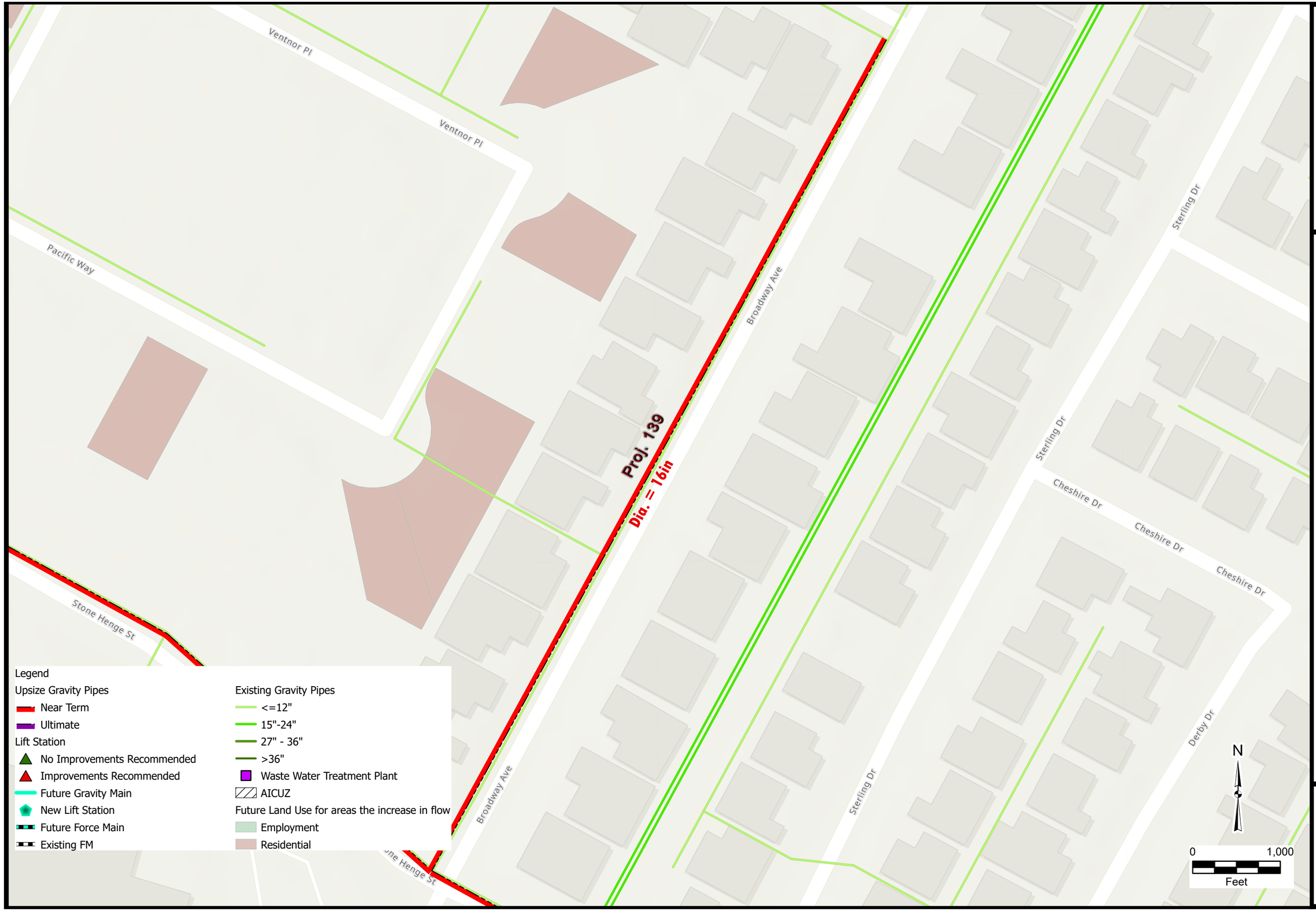

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Wastewater System Upgrades Project Guide

City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	139

Date: Aug 16, 2023 2:24 PM User: nvolinsky
File: P:\123\83\00\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]

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Date: Aug 18, 2023 2:24 PM User: rwolinsky
File: P:\123\83\00\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]

Wastewater System Upgrades Project Guide

City of Corpus Christi

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
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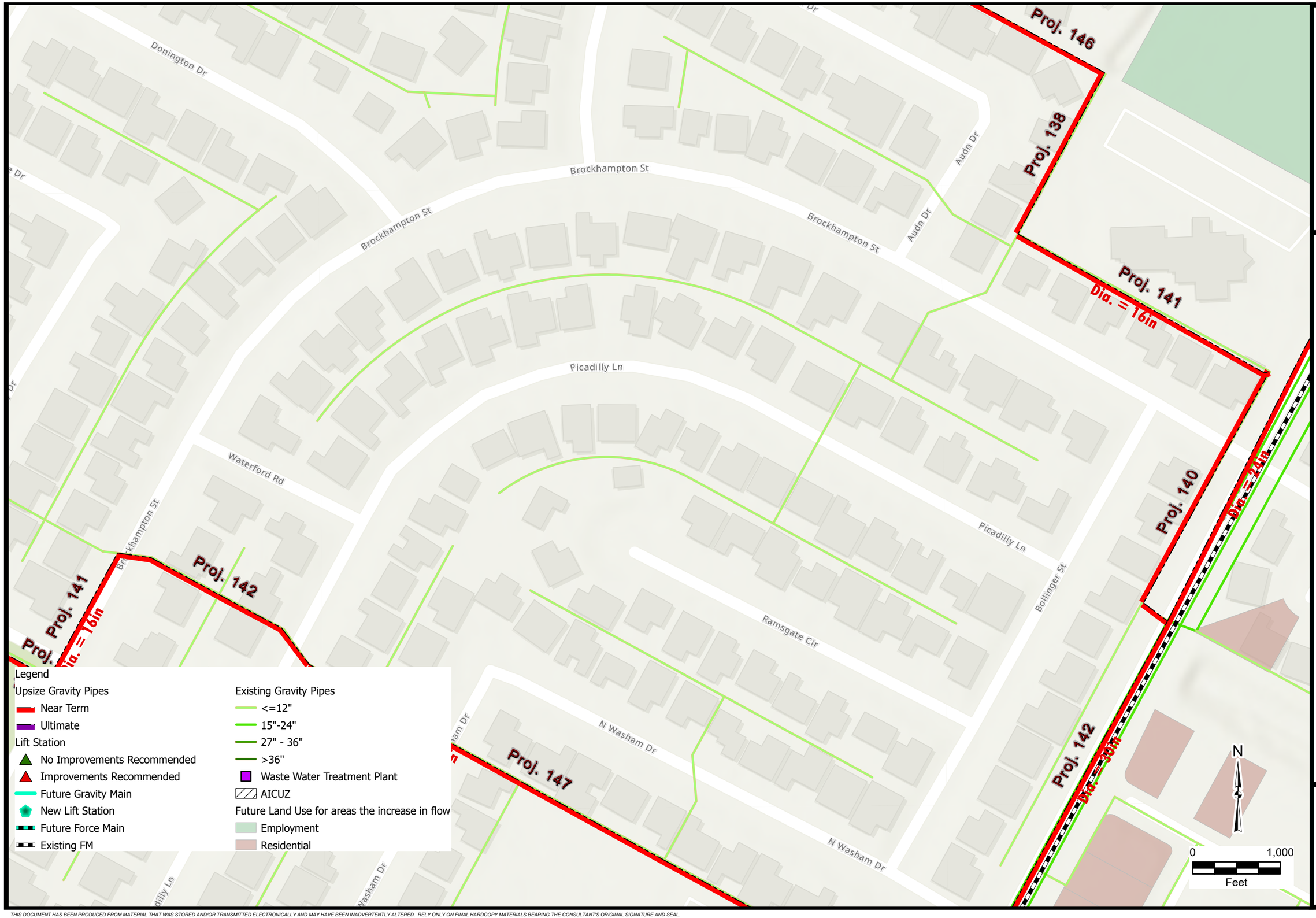

Legend

Upsize Gravity Pipes
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Lift Station
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City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	141

Date: Aug 18, 2023 2:24 PM User: nwolinsky
File: P:\12318300\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]

Proj. 127
Dia. = 30in
Proj. 139
Dia. = 12in
Proj. 145
Dia. = 16in
Proj. 141
Proj. 142
Dia. = 12in
Proj. 147
Proj. 143
Proj. 146
Dia. = 16in
Proj. 138
Proj. 140
Dia. = 24in
Dia. = 30in
Proj. 142
Dia. = 30in
Proj. 91
Dia. = 36in
Proj. 91
Dia. = 36in

Brockhampton Park
Brighton Park
Airline
Dollar General
Endless Styles Salon & Mexican Cancun

Legend

Upsize Gravity Pipes
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N

0 1,000
Feet

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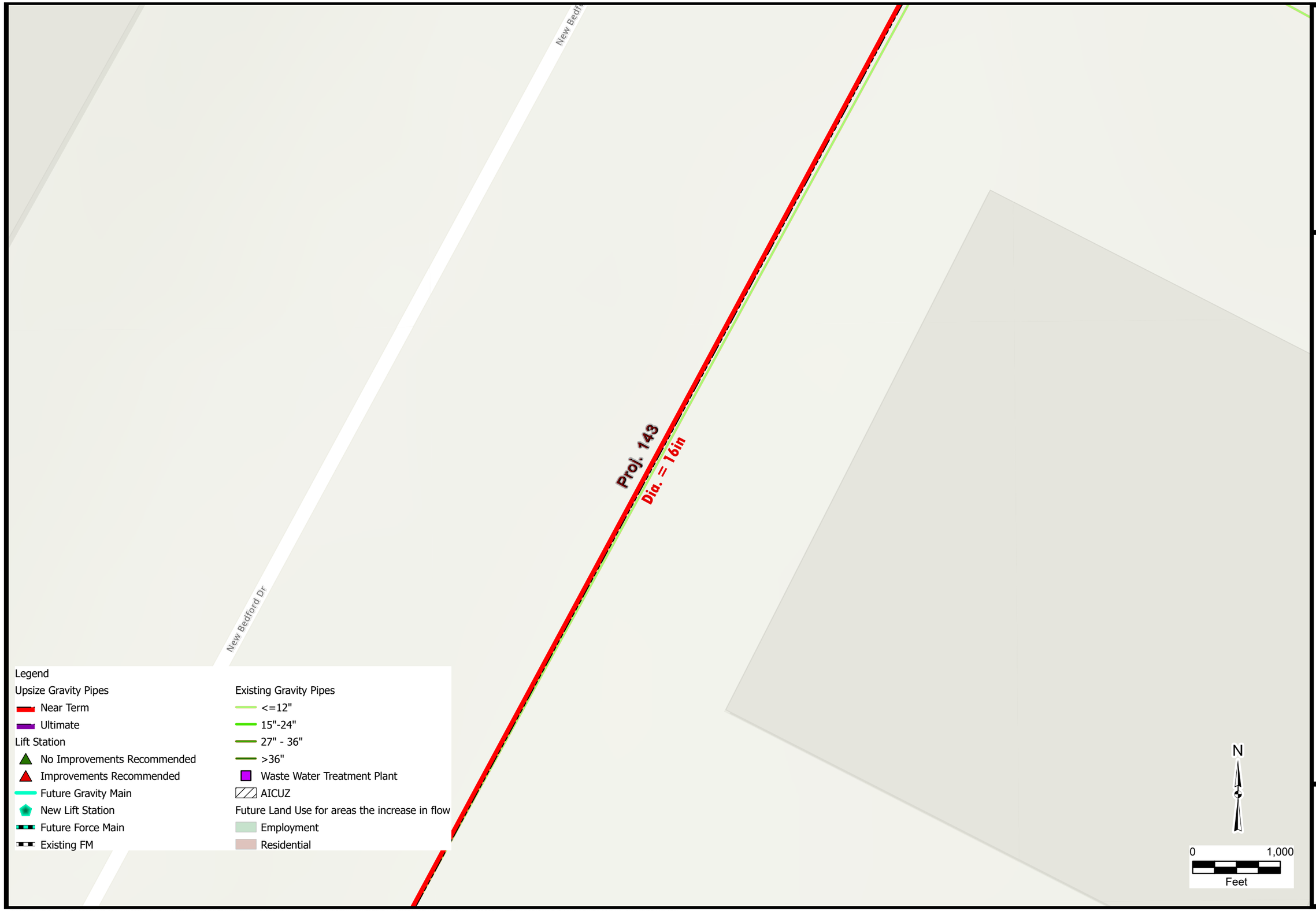
Wastewater System Upgrades Project Guide

City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	142



Wastewater System Upgrades Project Guide

City of Corpus Christi

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	143

Date: Aug 18, 2023 2:25 PM User: rwolinsky
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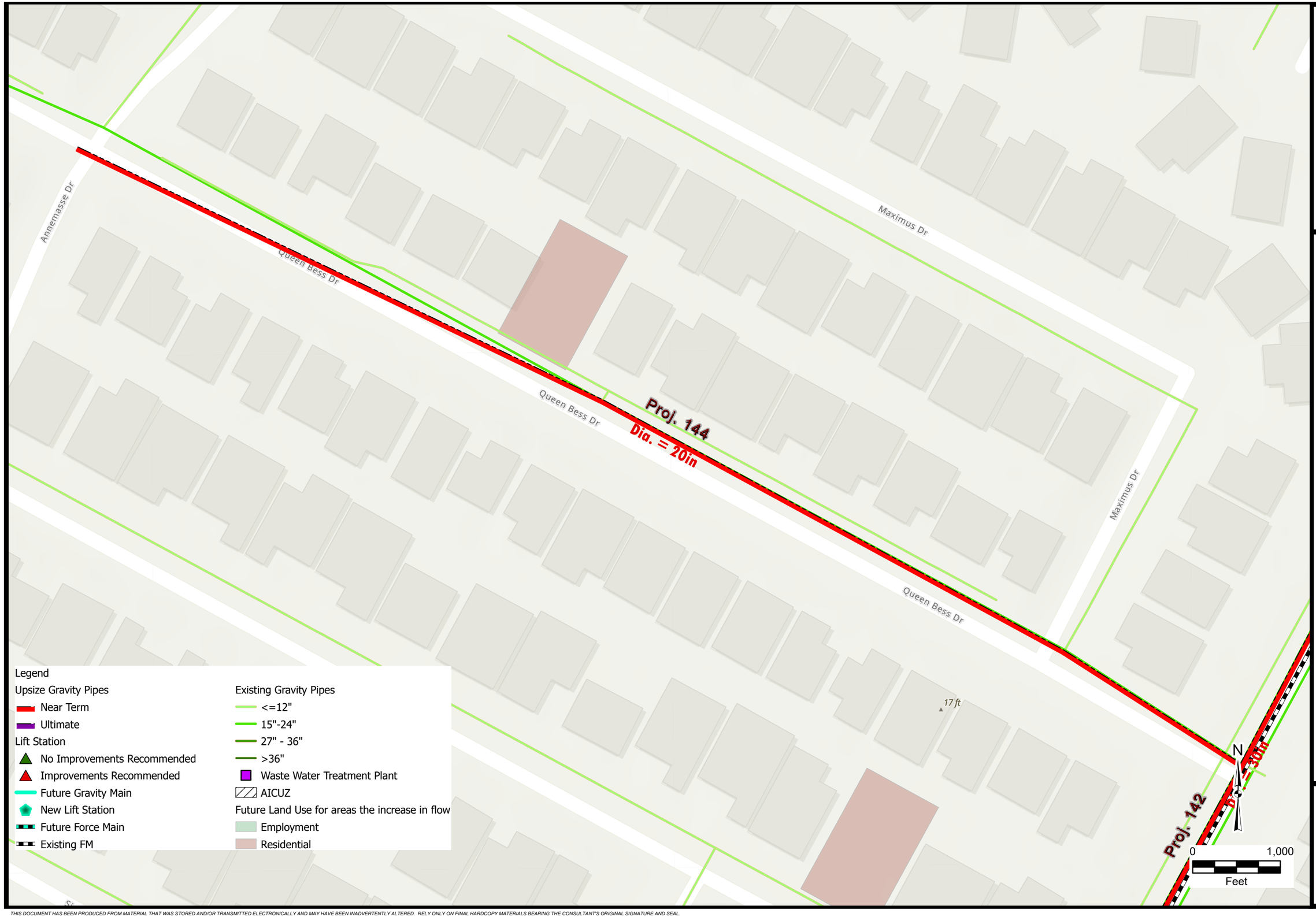

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DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	144

Date: Aug 18, 2023 2:25 PM User: nwolinsky
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City of Corpus Christi

Stone Henge St
Broadway Ave
Sterling Dr
Cheshire Dr
Derby Dr

Dia. =12in
Proj. 139
Dia. =16in
Proj. 145
Proj. 141
19 ft

Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended
- Future Gravity Main
- New Lift Station
- Future Force Main
- Existing FM

Existing Gravity Pipes
- <=12"
- 15"-24"
- 27" - 36"
- >36"
- Waste Water Treatment Plant
- AICUZ

Future Land Use for areas the increase in flow
- Employment
- Residential

N

0 1,000
Feet

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	145

Date: Aug 18, 2023 2:25 PM User: nwolinsky
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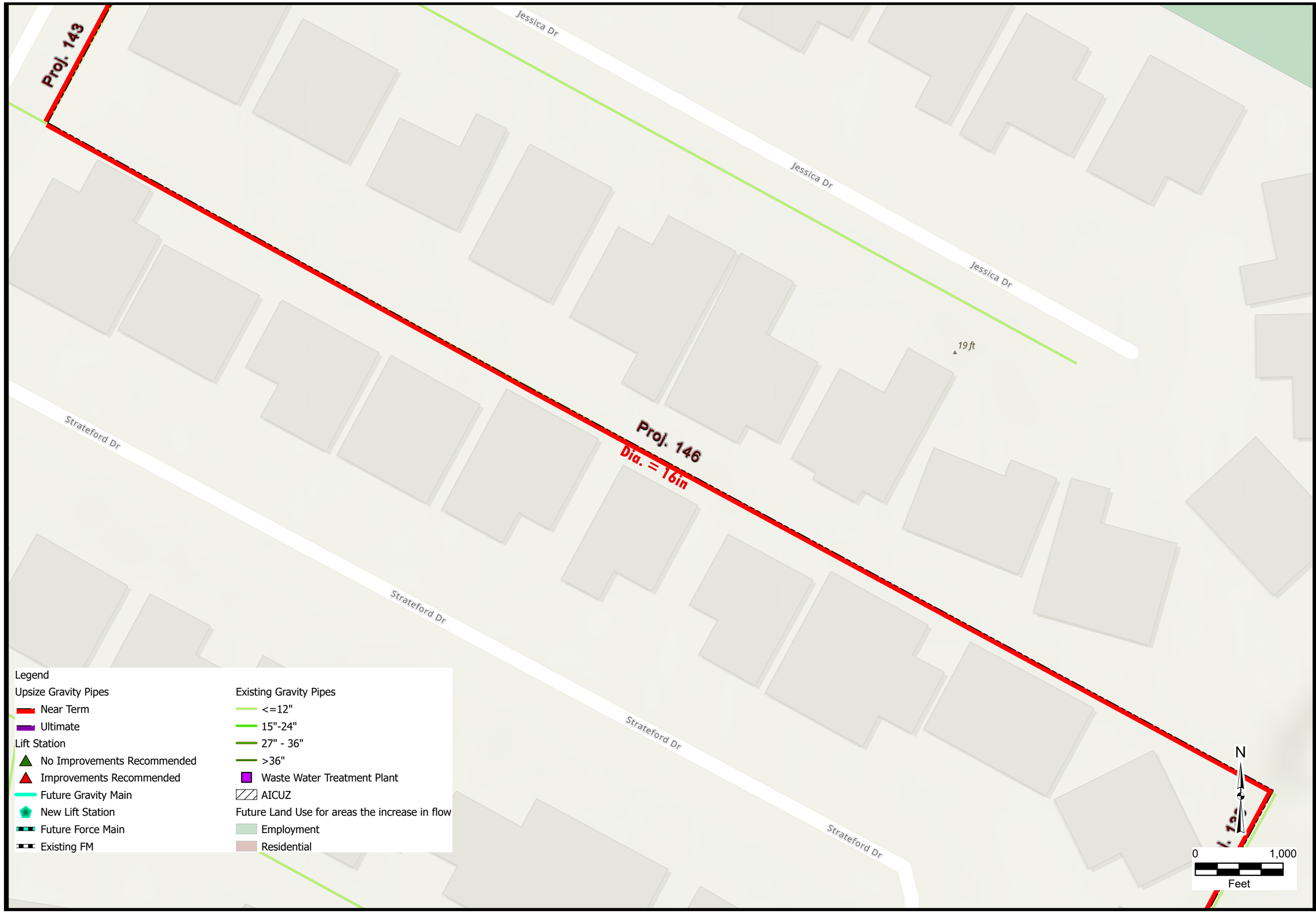

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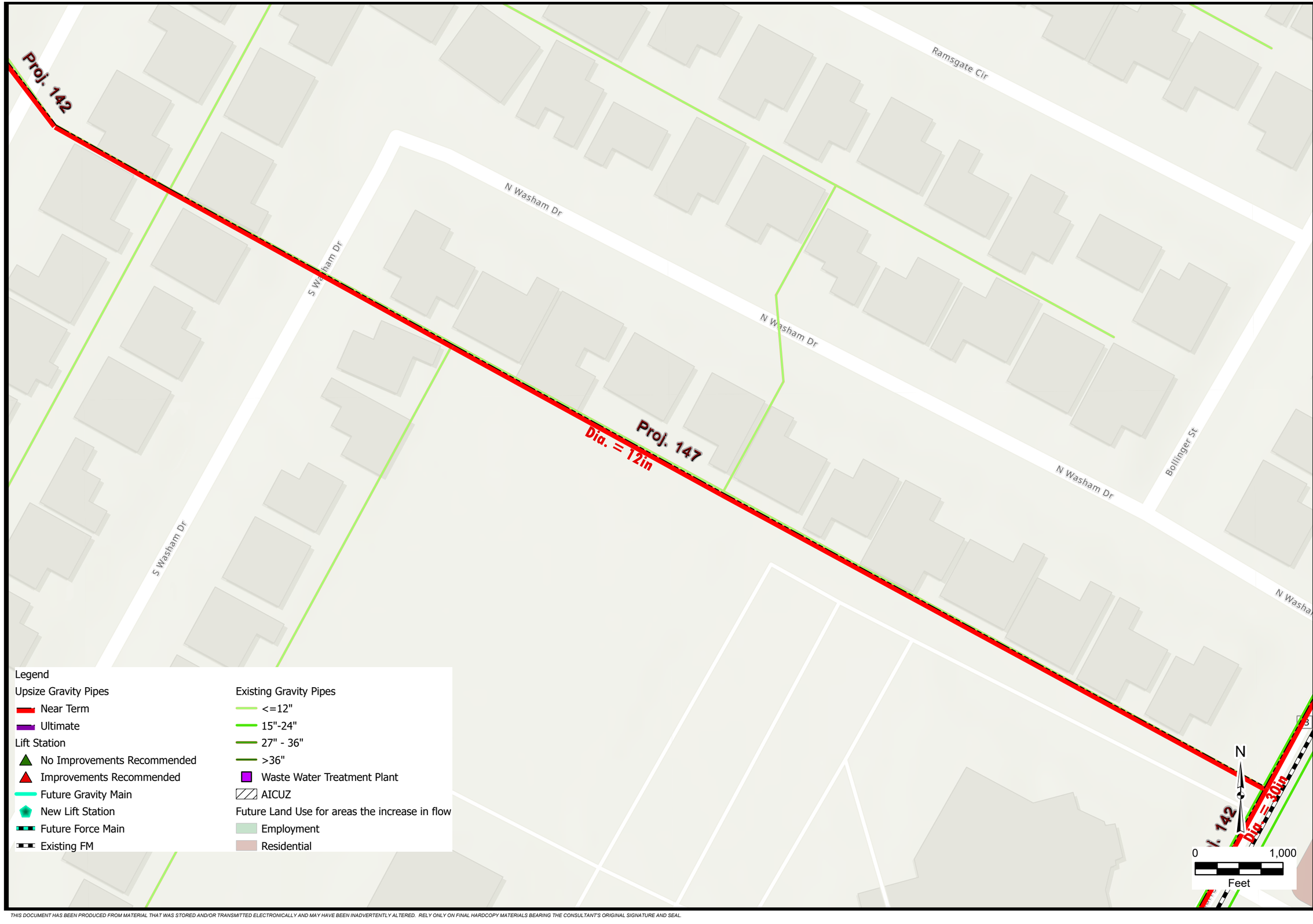
City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	146



Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended
- Future Gravity Main
- New Lift Station
- Future Force Main
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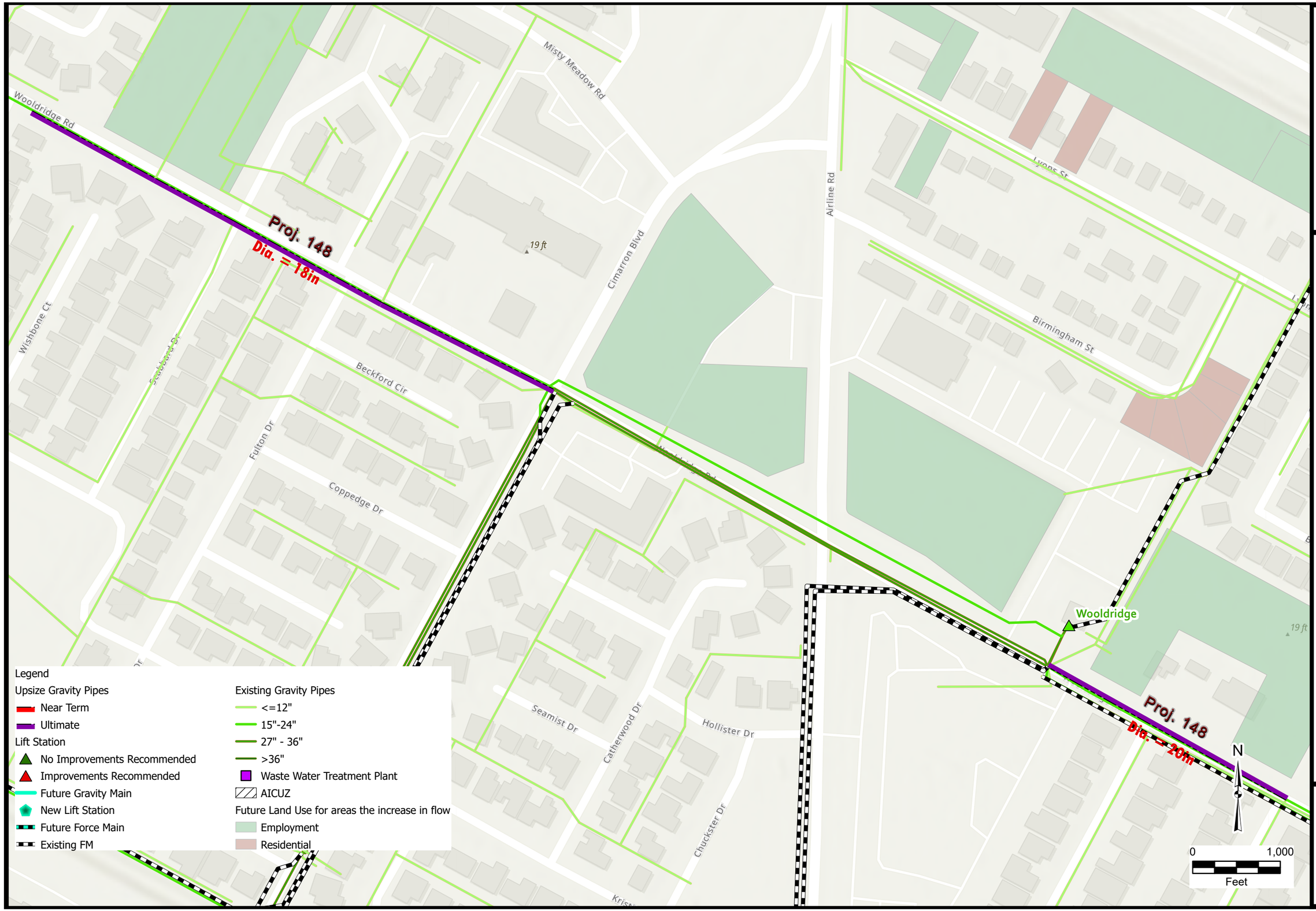

Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
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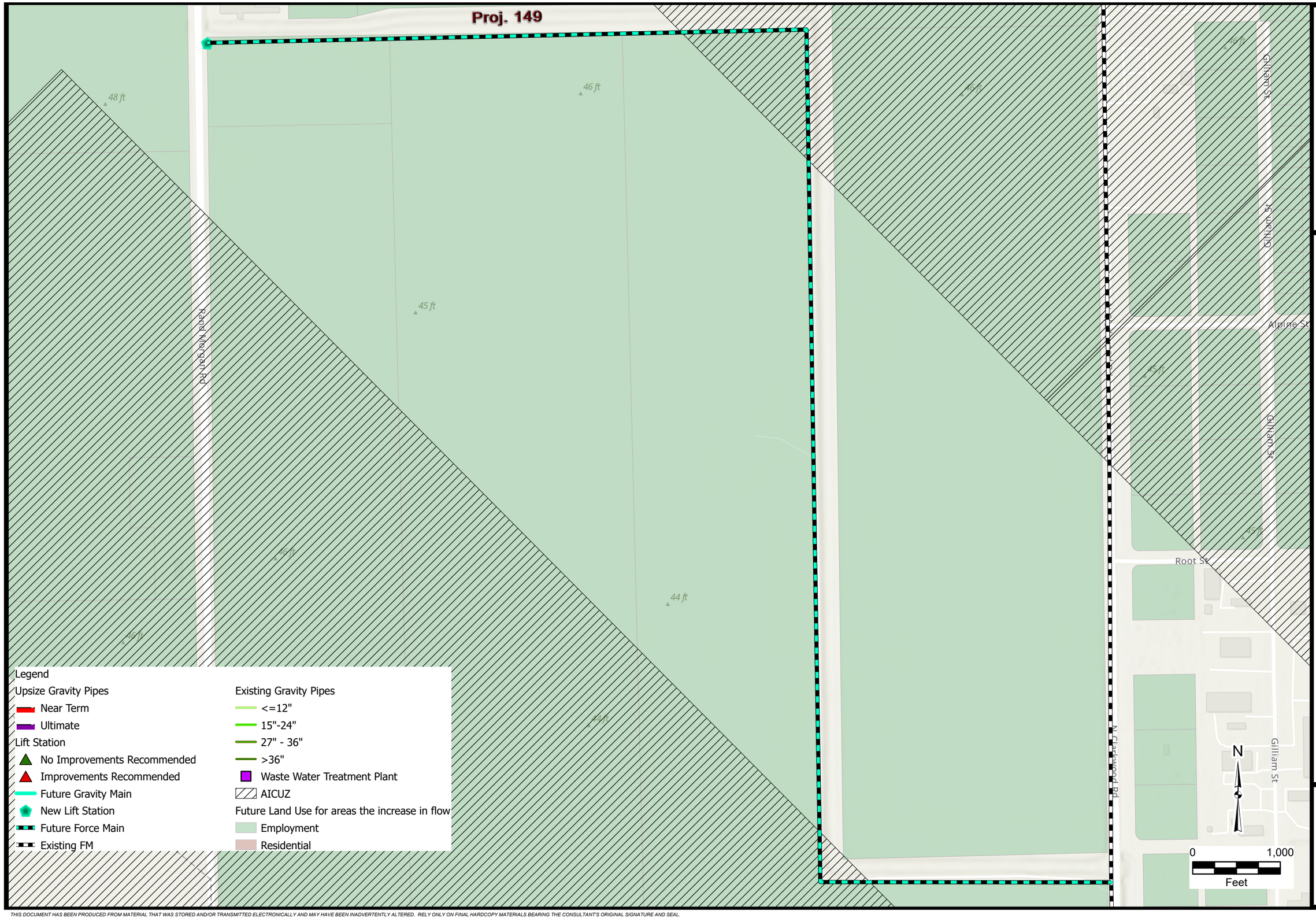
JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	148



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DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	149

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File: P:\123\83000\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]

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JOB NO.	0000-00
DATE	Aug 2023
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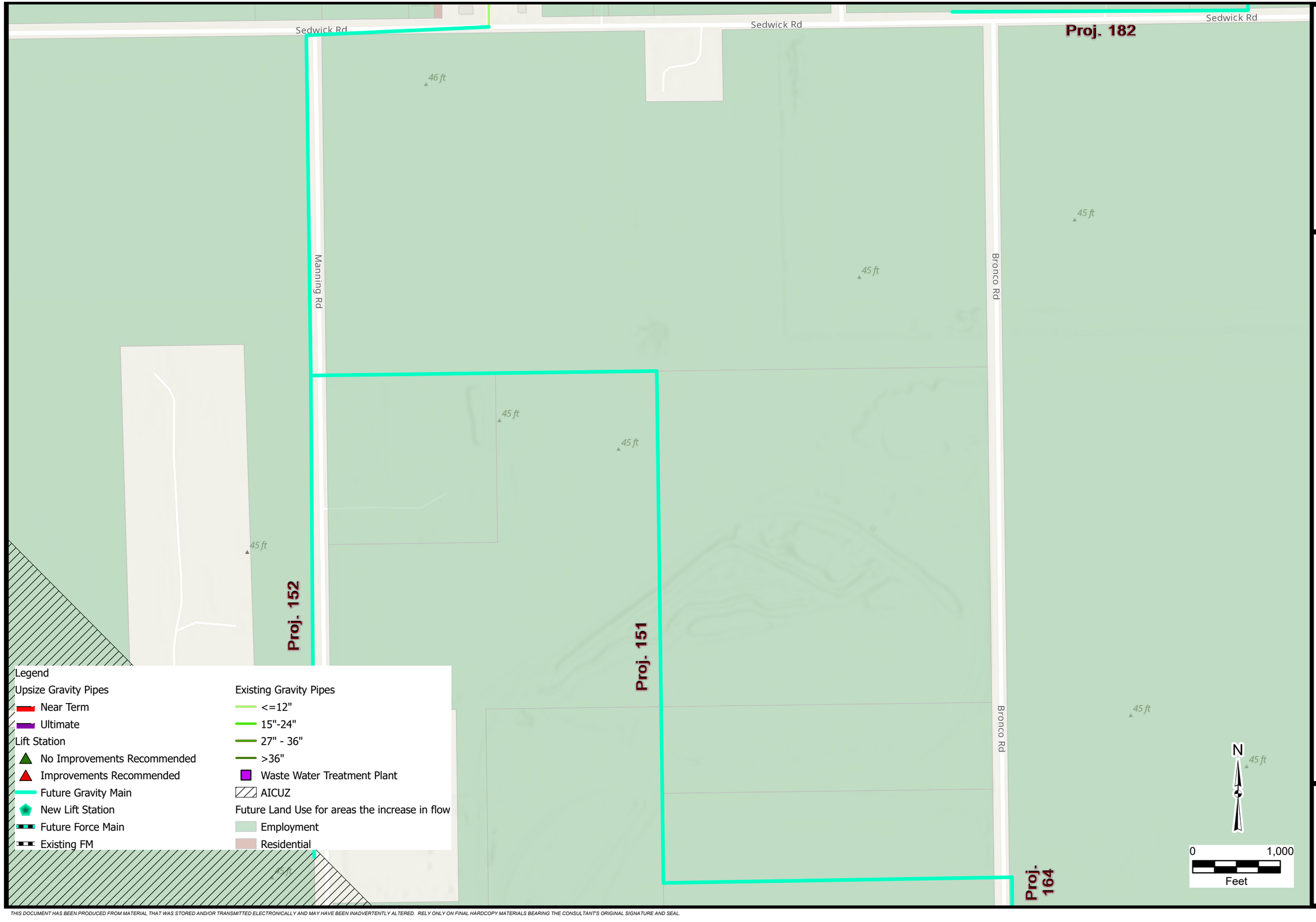
CHECKED	AA
SHEET	150



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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
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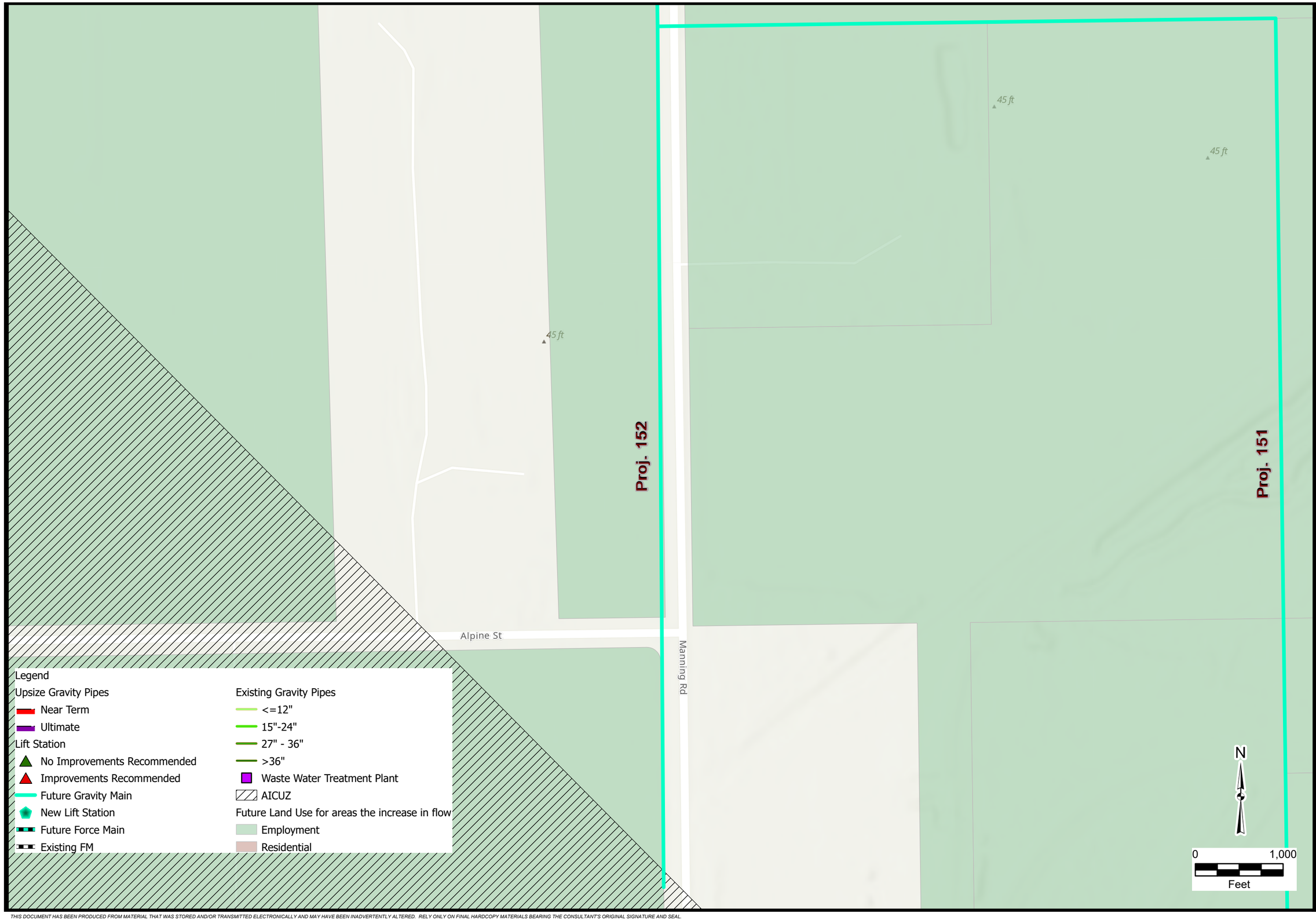

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
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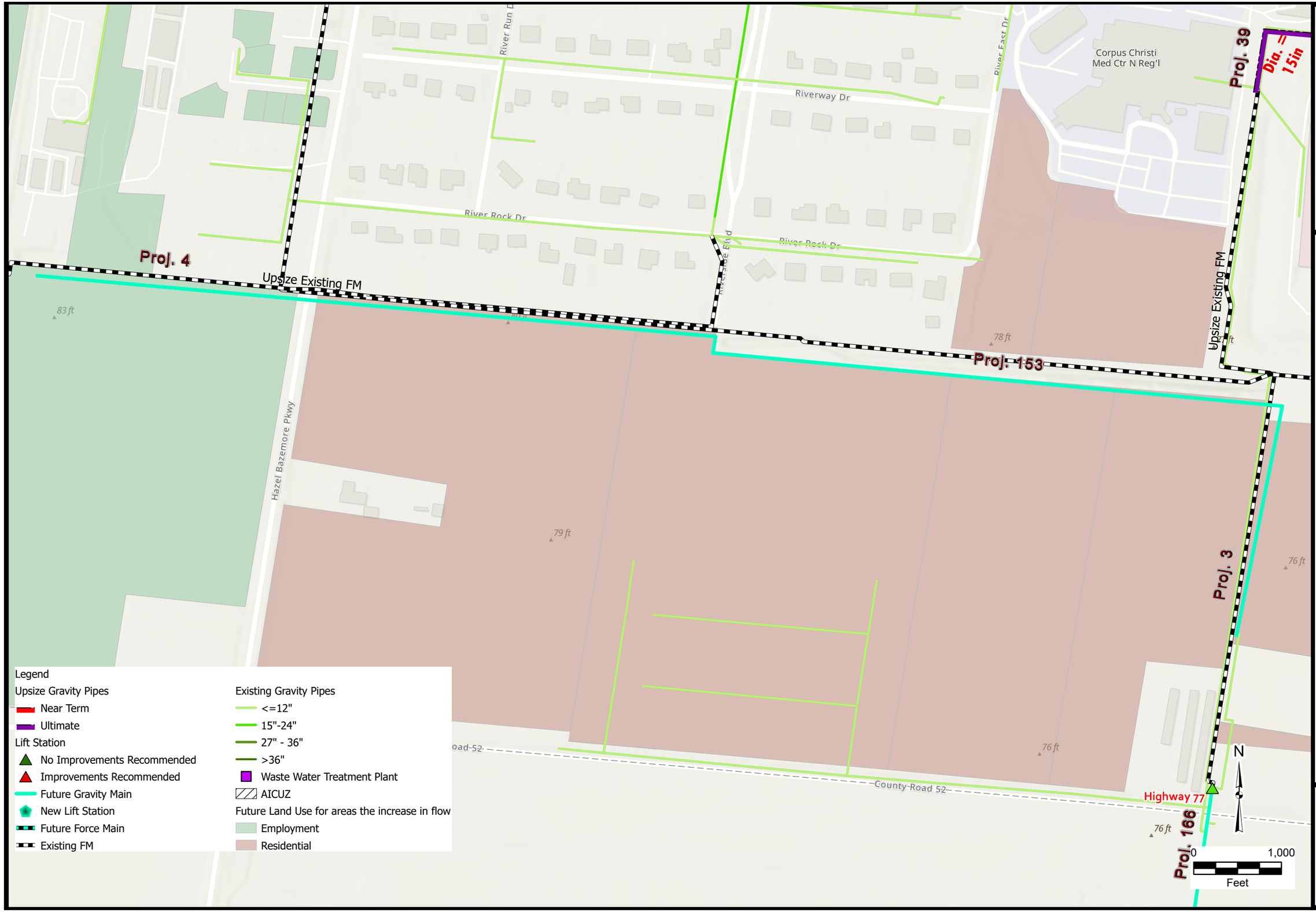

Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended
- Future Gravity Main
- New Lift Station
- Future Force Main
- Existing FM

Existing Gravity Pipes
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Future Land Use for areas the increase in flow
- Employment
- Residential

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DATE	Aug 2023
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Date: Aug 18, 2023 2:25 PM User: nwolinsky
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Legend

Upsize Gravity Pipes	Existing Gravity Pipes
Near Term	<=12"
Ultimate	15"-24"
Lift Station	27" - 36"
No Improvements Recommended	>36"
Improvements Recommended	Waste Water Treatment Plant
Future Gravity Main	AICUZ
New Lift Station	**Future Land Use for areas the increase in flow**
Future Force Main	Employment
Existing FM	Residential

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DATE	Aug 2023
DESIGNER	RW
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Date: Aug 18, 2023 2:25 PM User: nwolinsky
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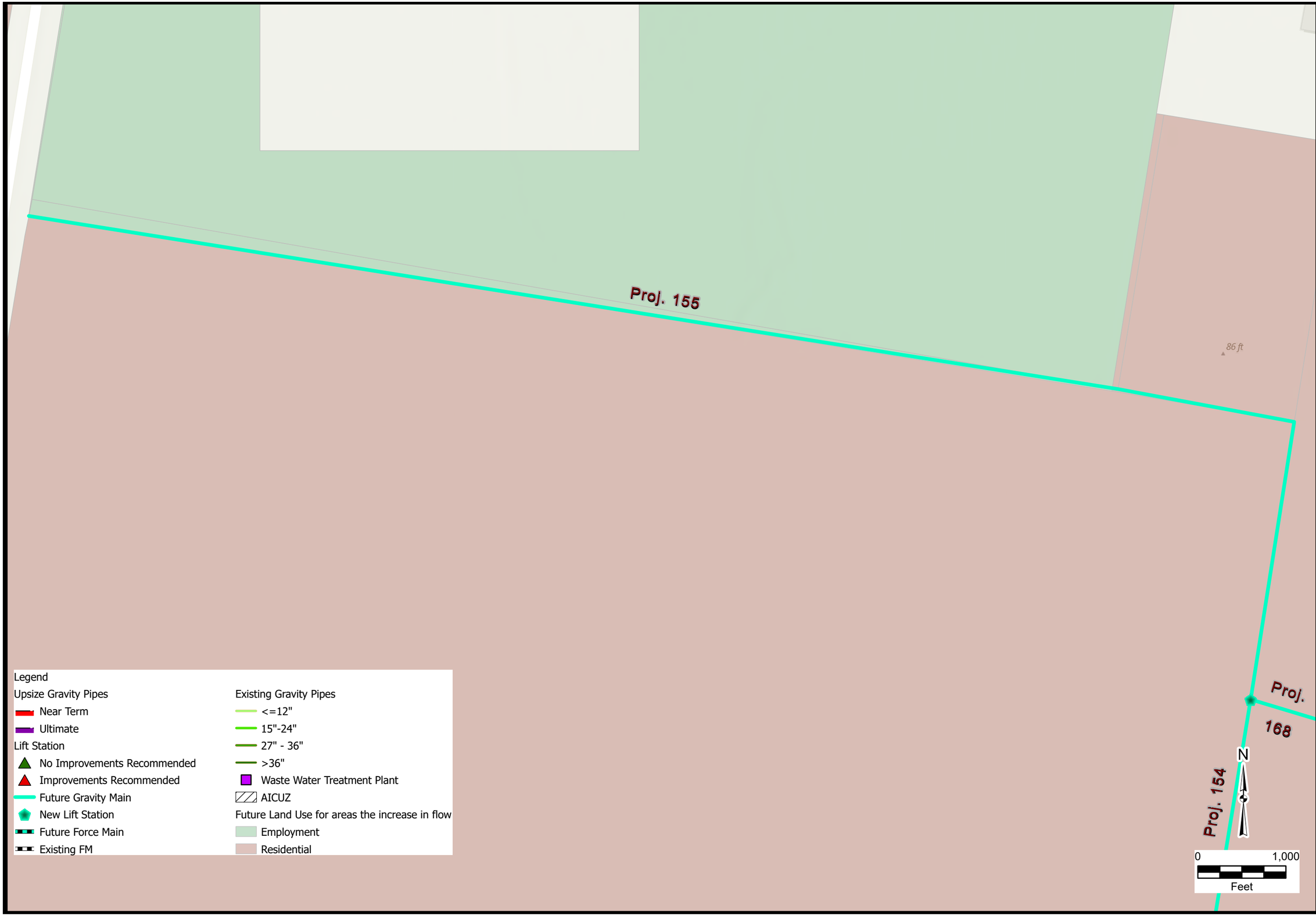

Legend

Upsize Gravity Pipes	Existing Gravity Pipes
Near Term	<=12"
Ultimate	15"-24"
Lift Station	27" - 36"
No Improvements Recommended	>36"
Improvements Recommended	Waste Water Treatment Plant
Future Gravity Main	AICUZ
New Lift Station	Future Land Use for areas the increase in flow
Future Force Main	Employment
Existing FM	Residential

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Date: Aug 18, 2023 2:25 PM User: nwolinsky
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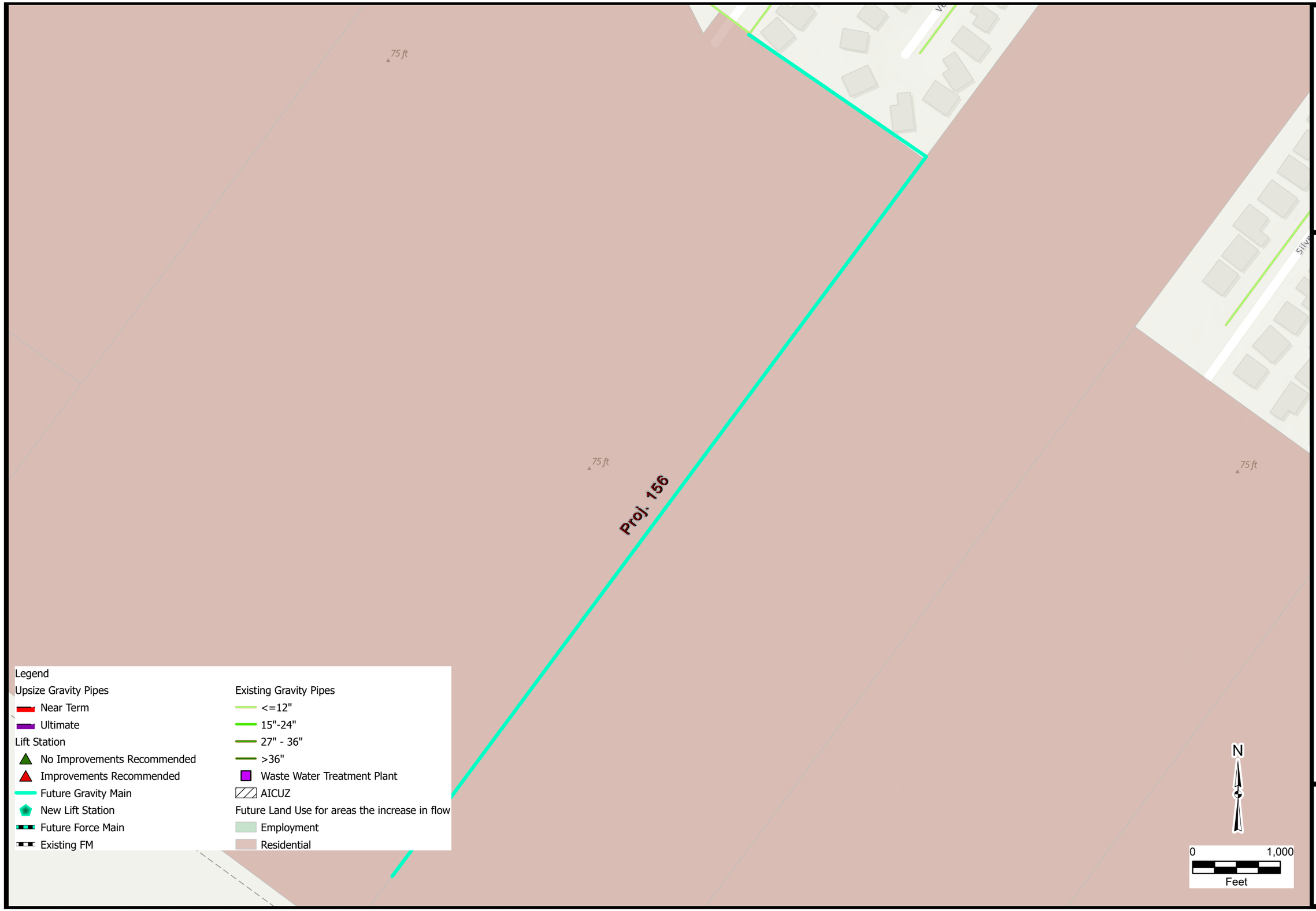

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JOB NO.	0000-00
DATE	Aug 2023
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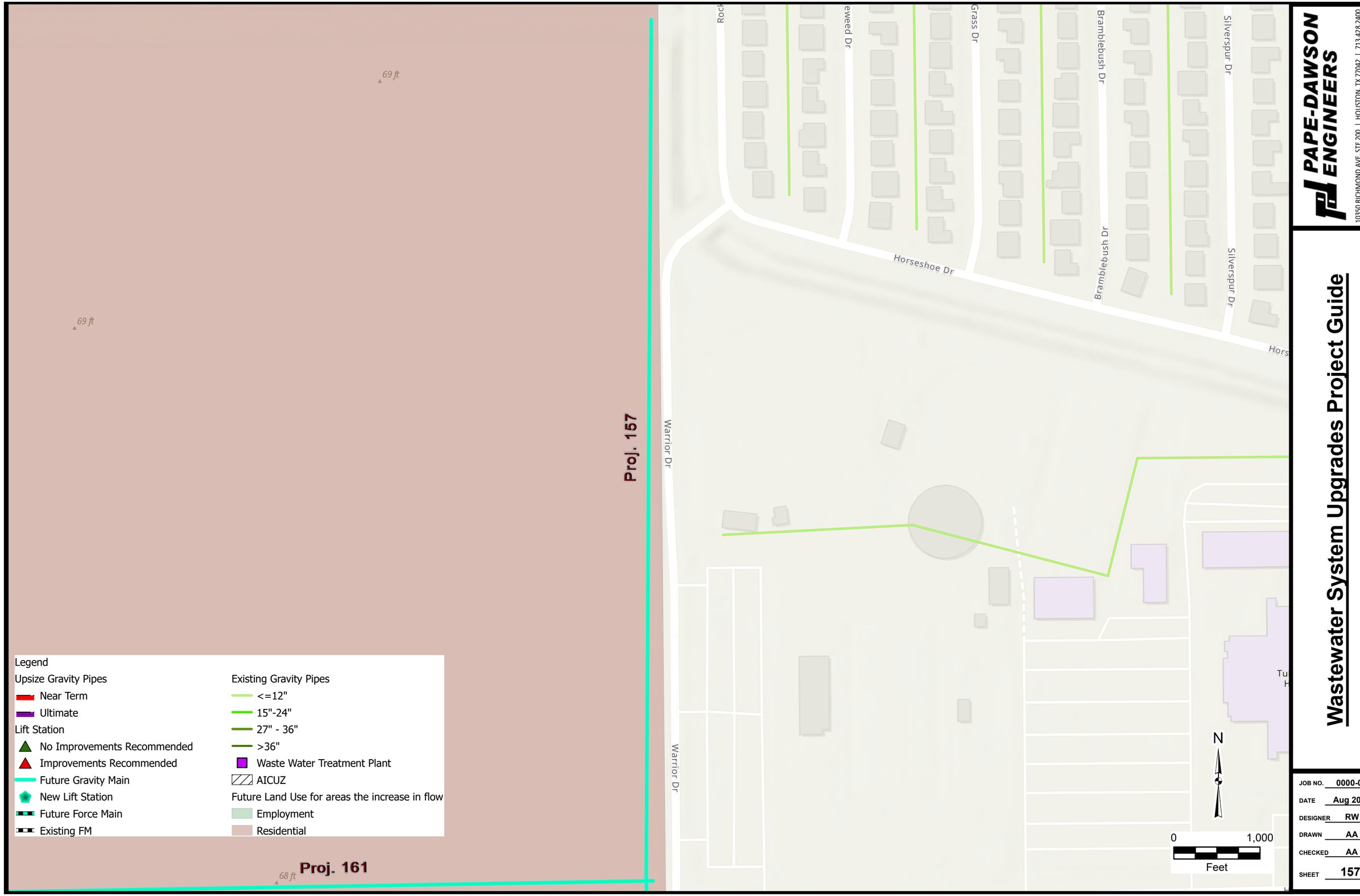

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	157

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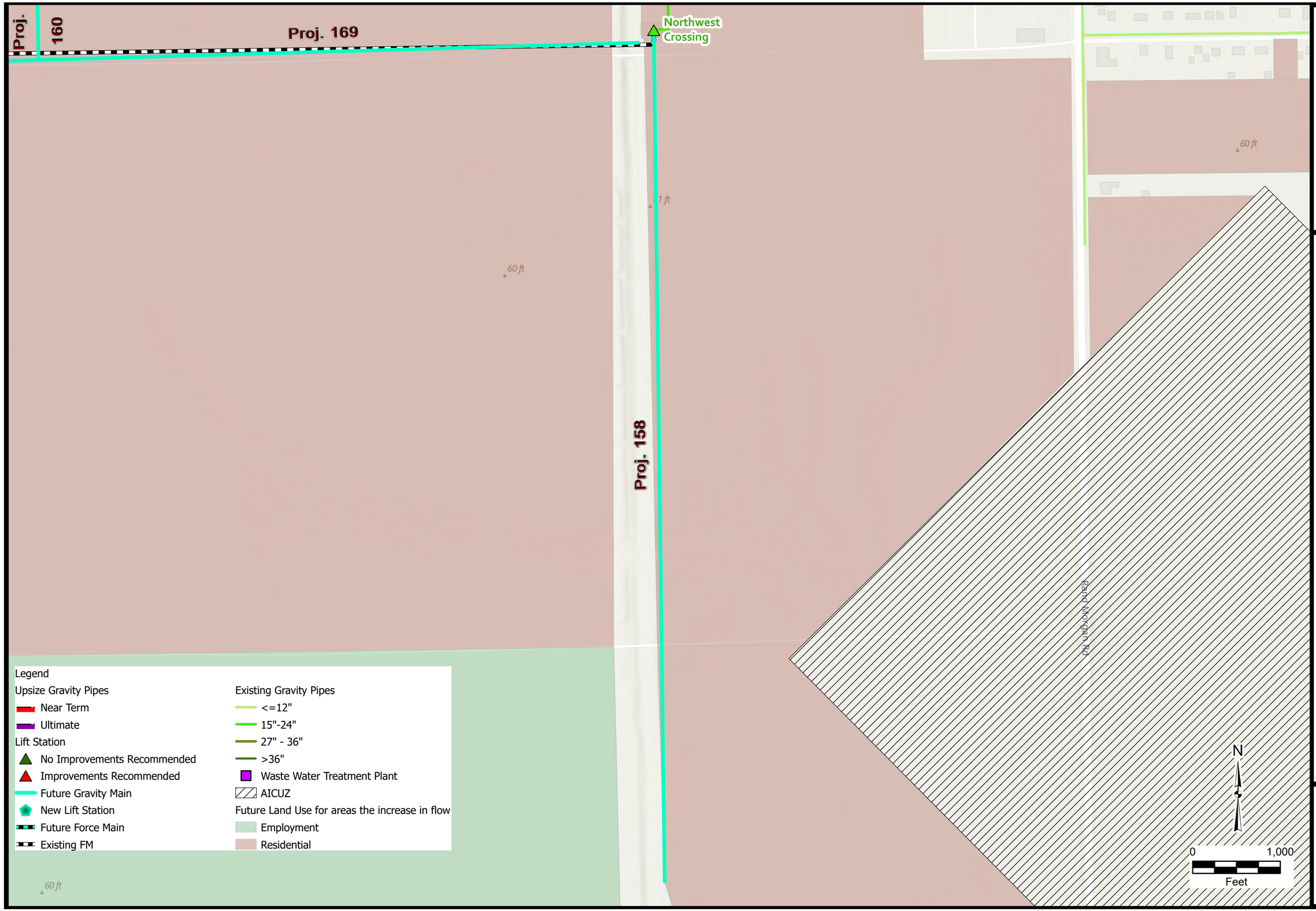

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City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
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SHEET	158

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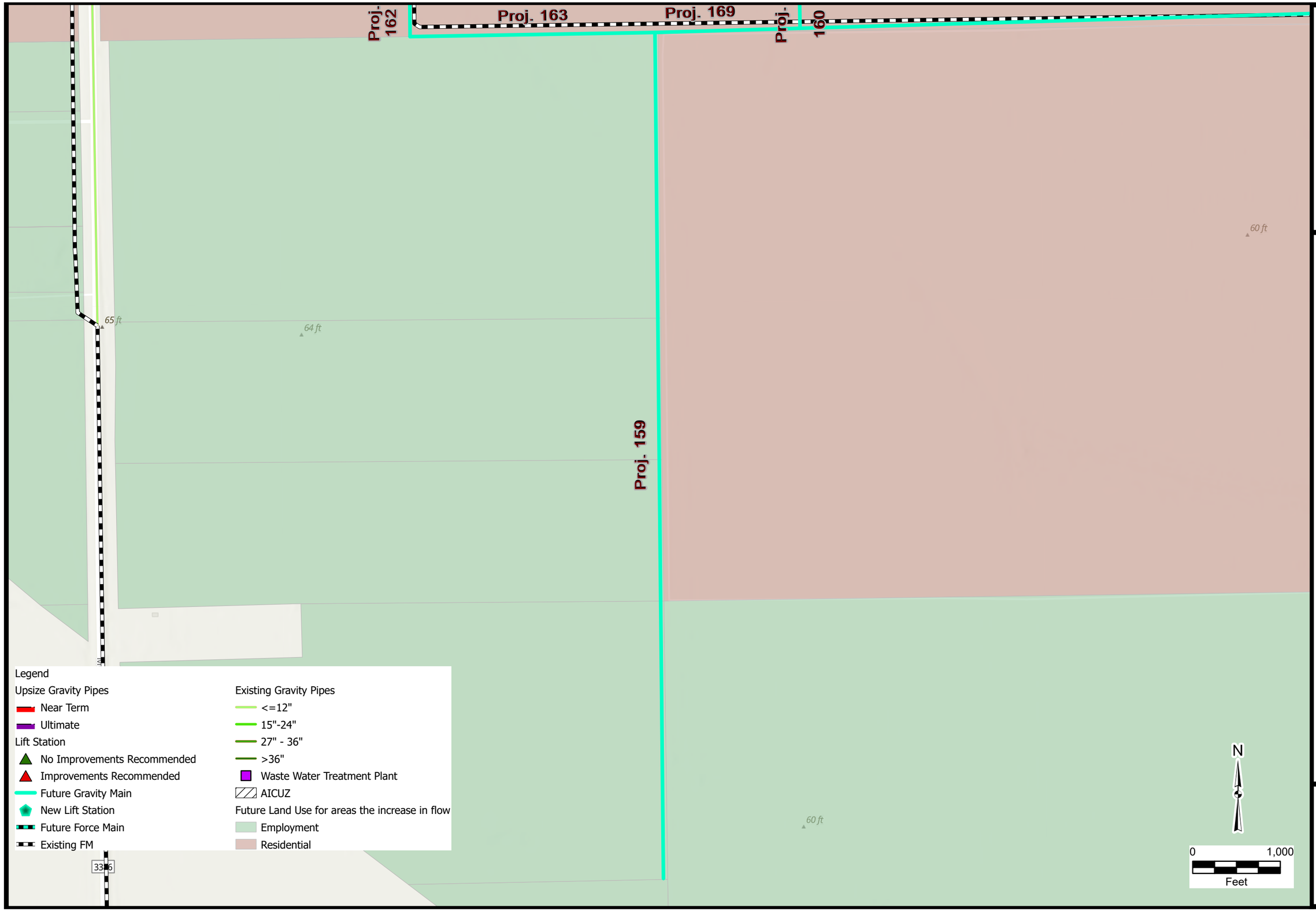

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City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
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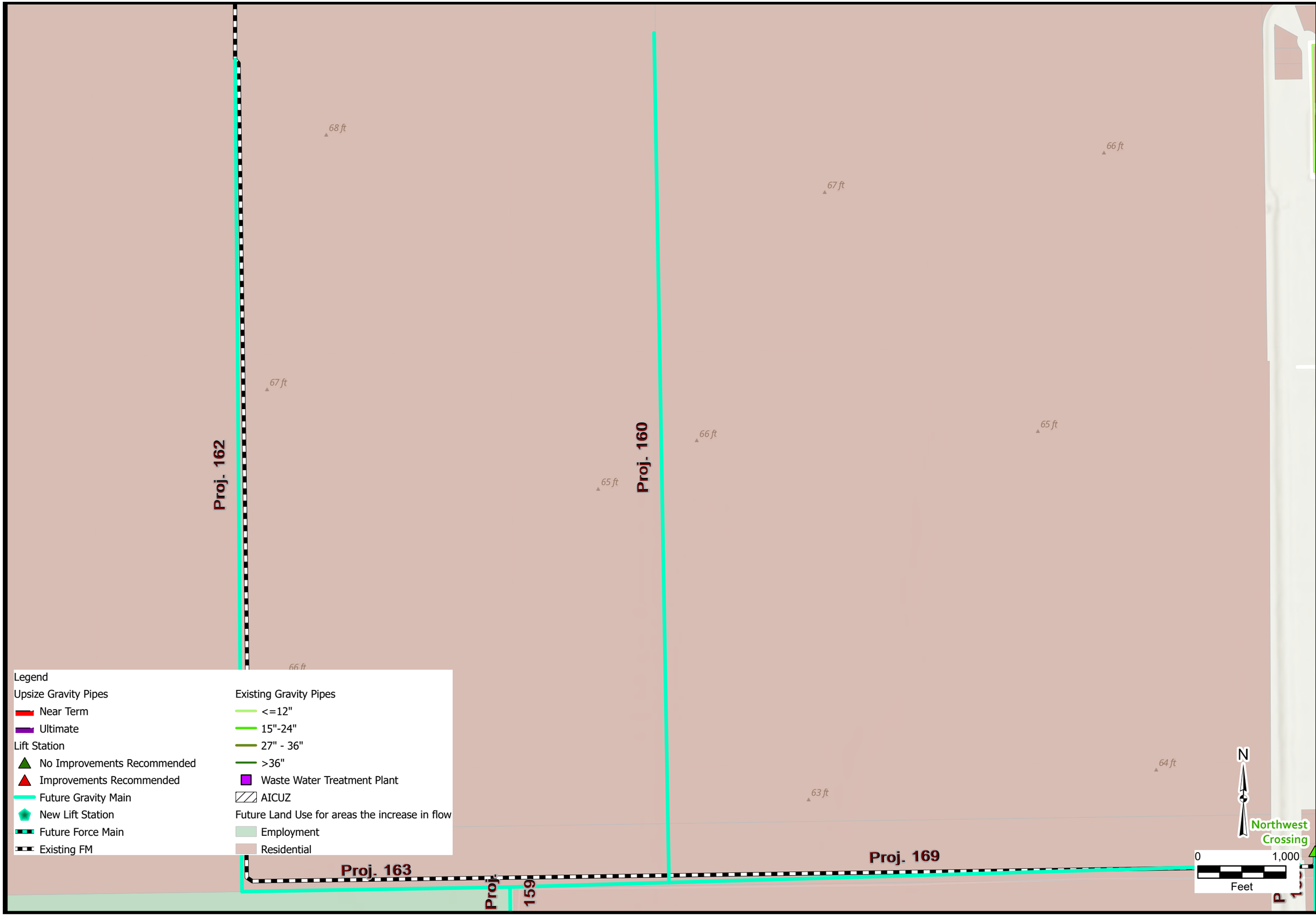
SHEET	159



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City of Corpus Christi

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JOB NO.	0000-00
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DESIGNER	RW
DRAWN	AA
CHECKED	AA
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Date: Aug 18, 2023 2:26 PM User: nwolinsky
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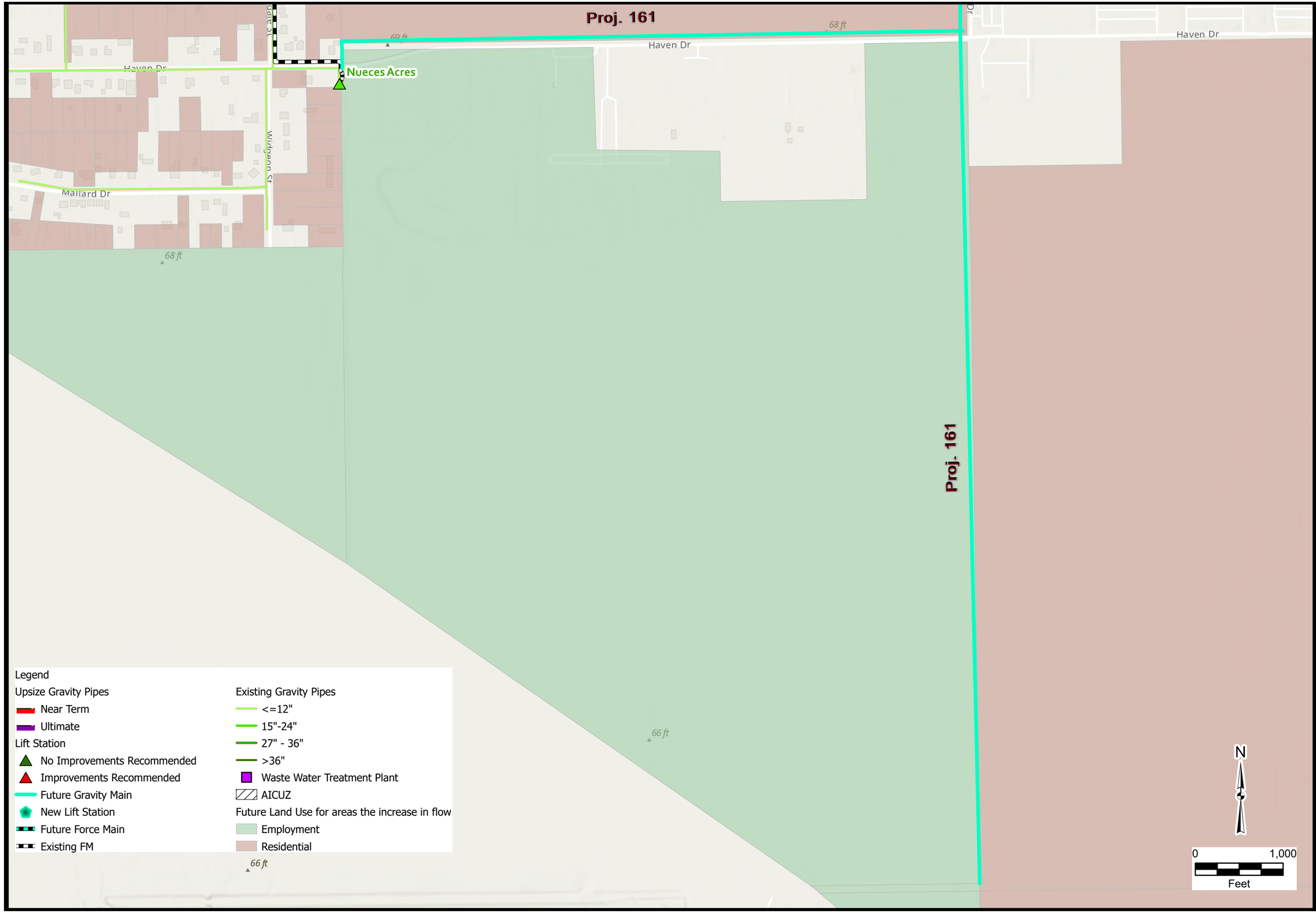

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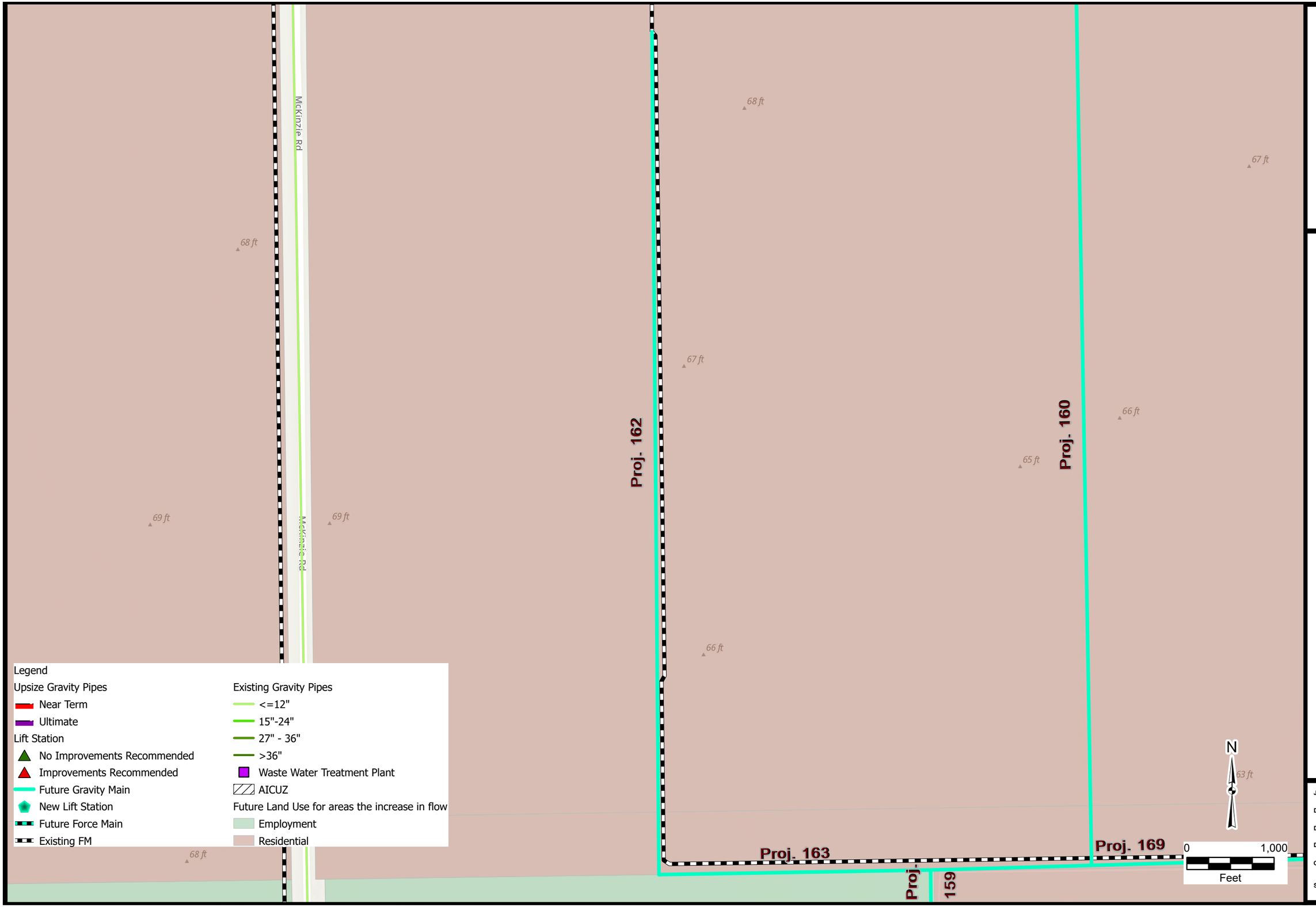
City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	161



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JOB NO.	0000-00
DATE	Aug 2023
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CHECKED	AA
SHEET	162

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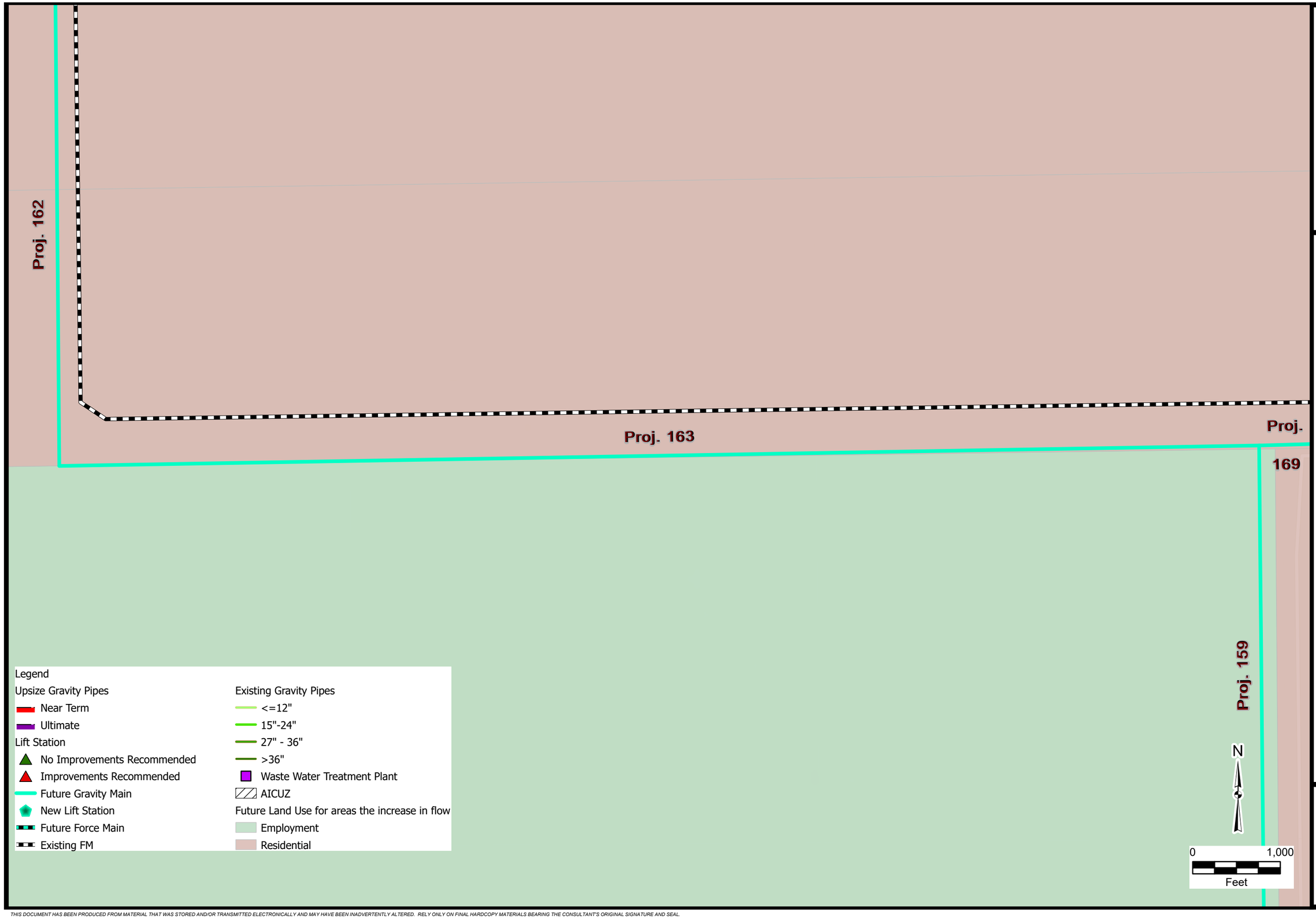

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JOB NO.	0000-00
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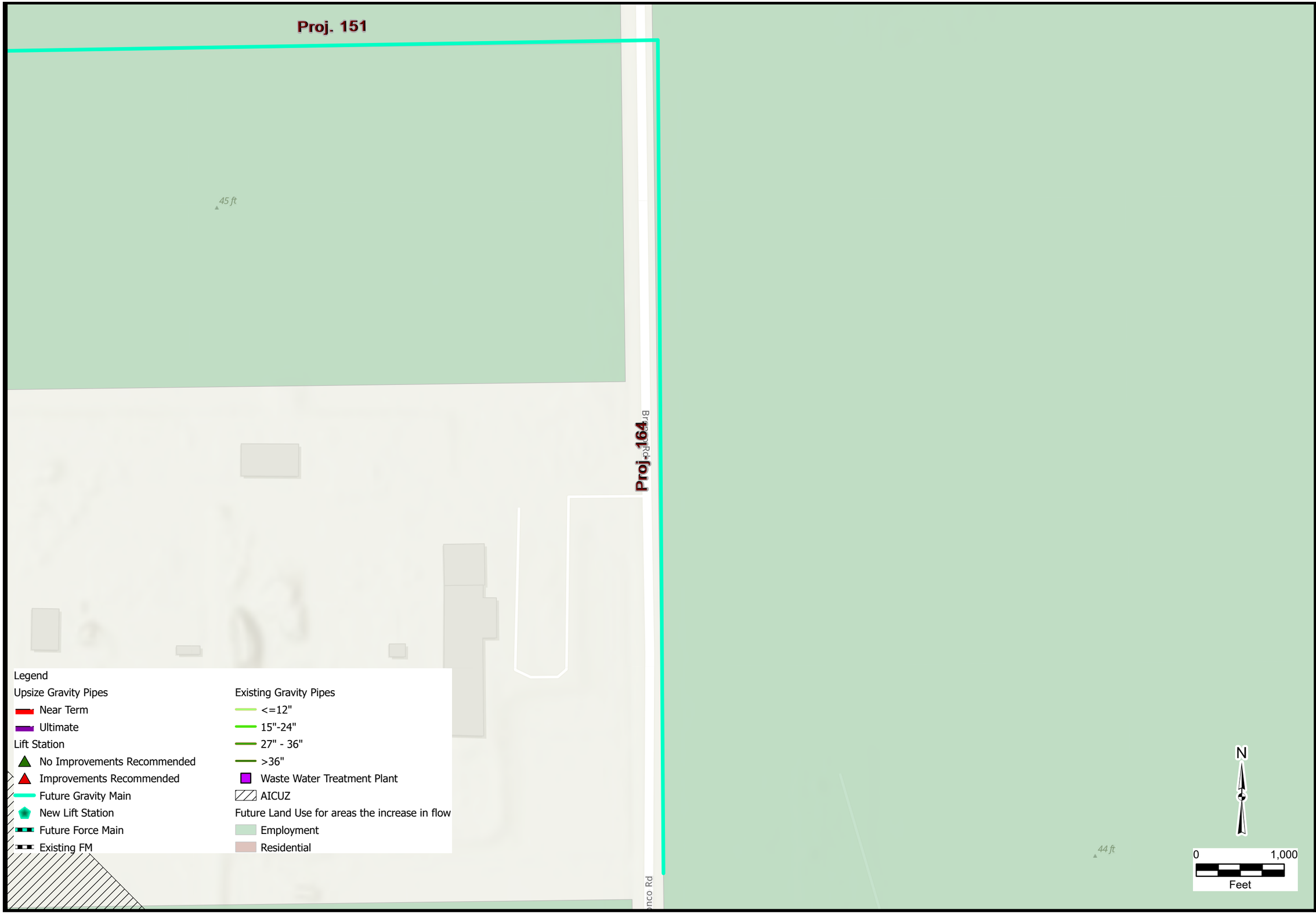

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
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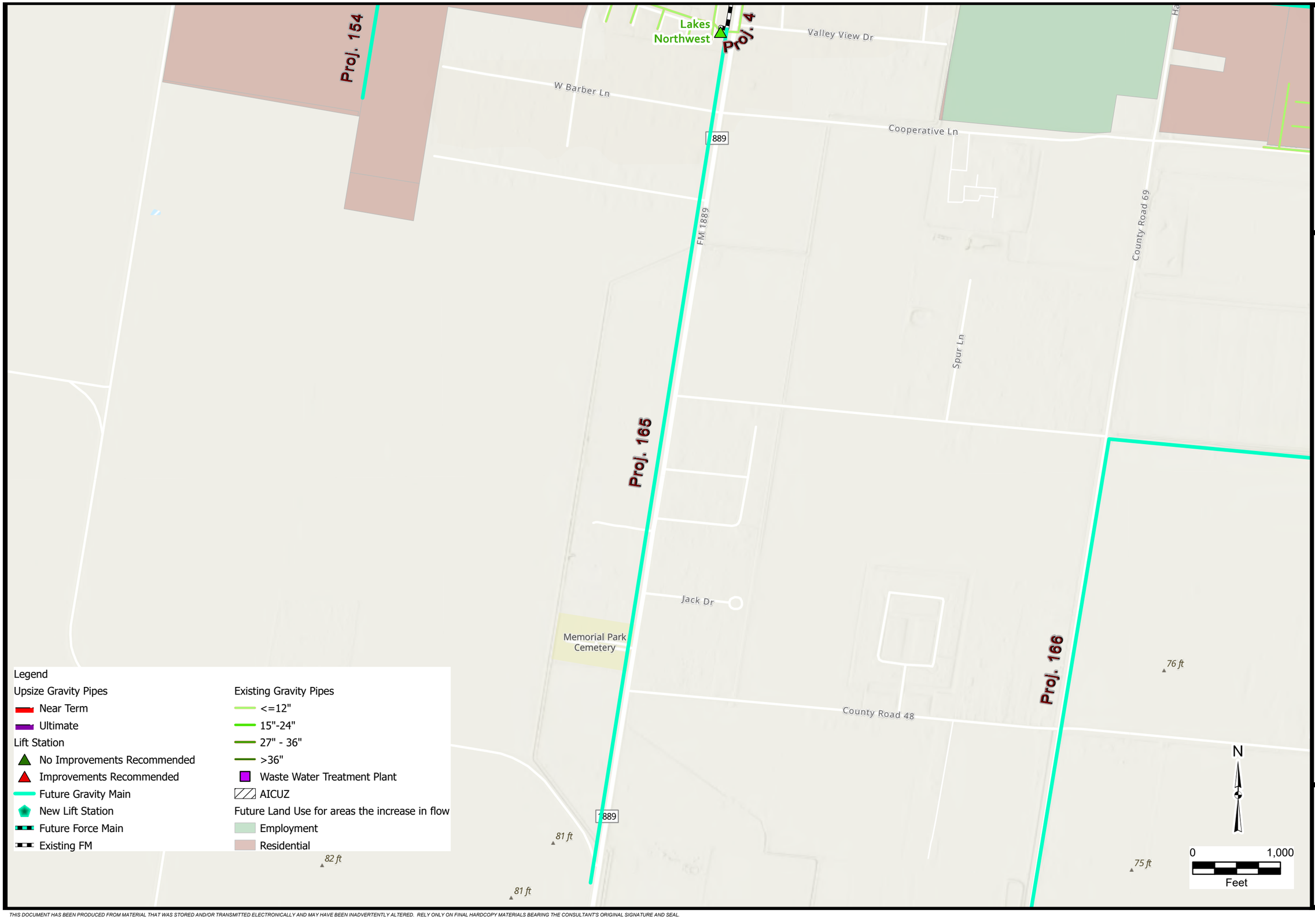

Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended
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Wastewater System Upgrades Project Guide

City of Corpus Christi

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
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Date: Aug 18, 2023 2:26 PM User: nvolinsky
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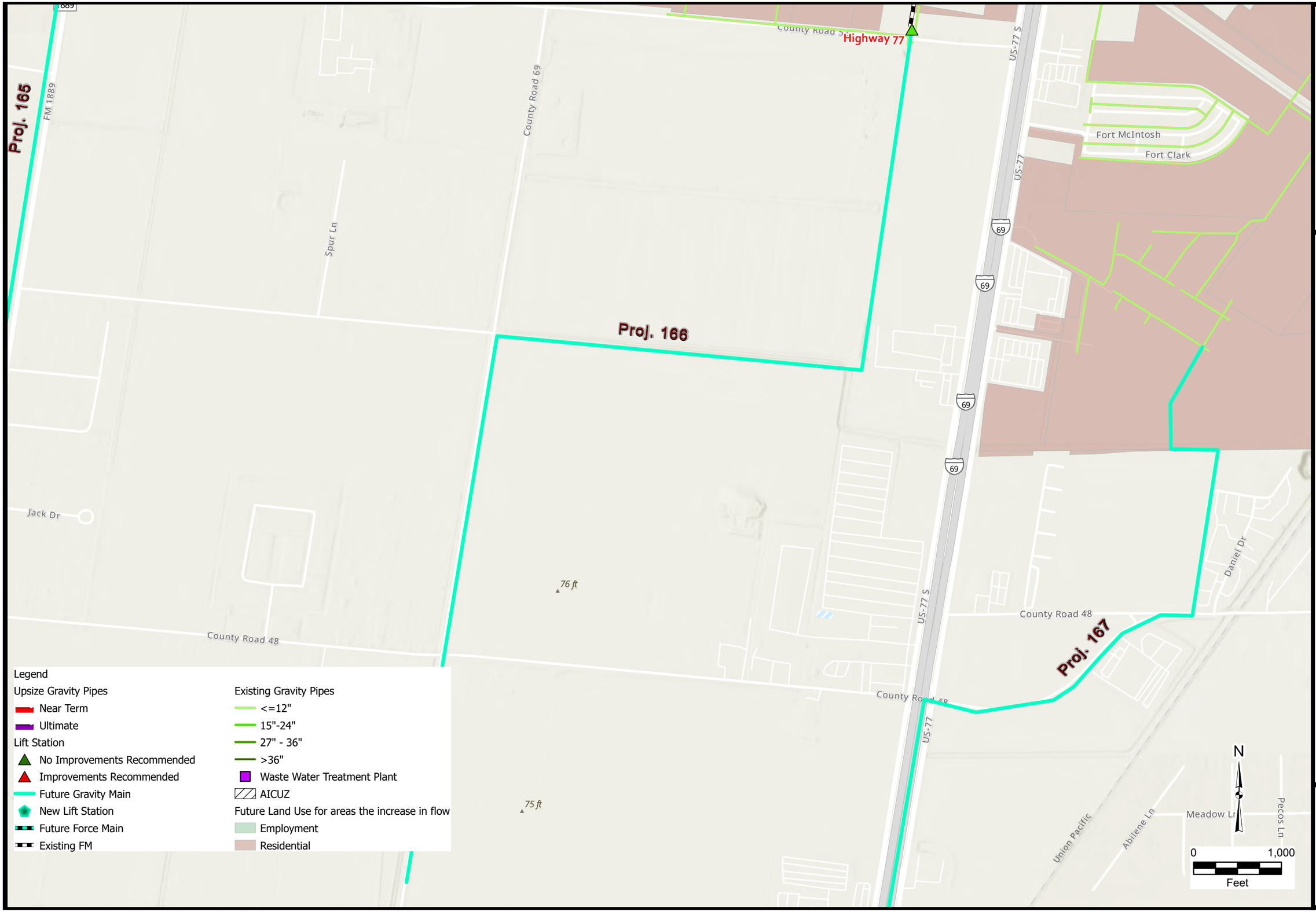

Legend

Upsize Gravity Pipes
- Near Term
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Lift Station
- No Improvements Recommended
- Improvements Recommended
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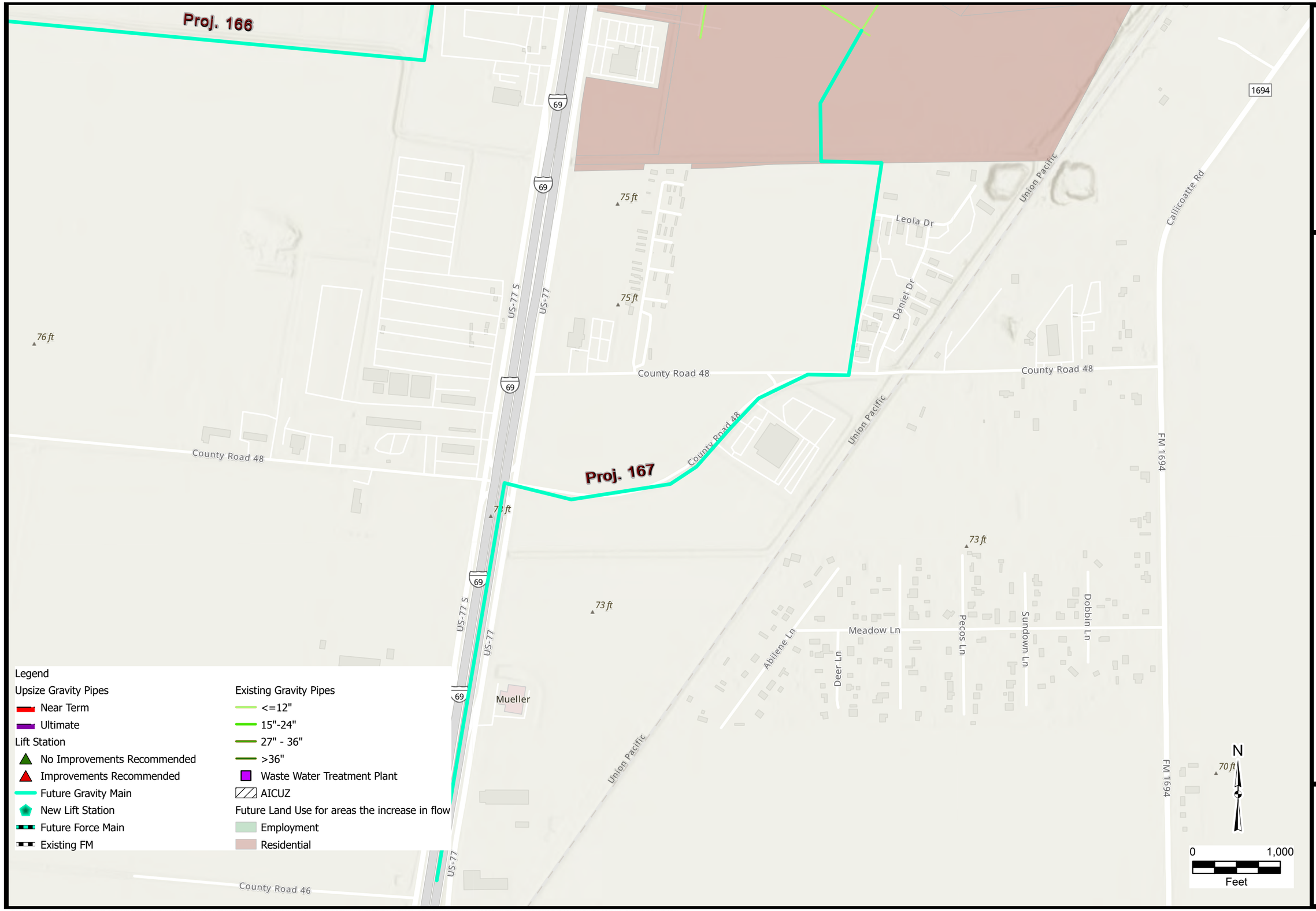

Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended
- Future Gravity Main
- New Lift Station
- Future Force Main
- Existing FM

Existing Gravity Pipes
- <=12"
- 15"-24"
- 27" - 36"
- >36"
- Waste Water Treatment Plant
- AICUZ

Future Land Use for areas the increase in flow
- Employment
- Residential

Wastewater System Upgrades Project Guide

City of Corpus Christi

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	167

Date: Aug 18, 2023 2:26 PM User: rwolinsky
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Wastewater System Upgrades Project Guide

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	168

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
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CHECKED	AA
SHEET	169

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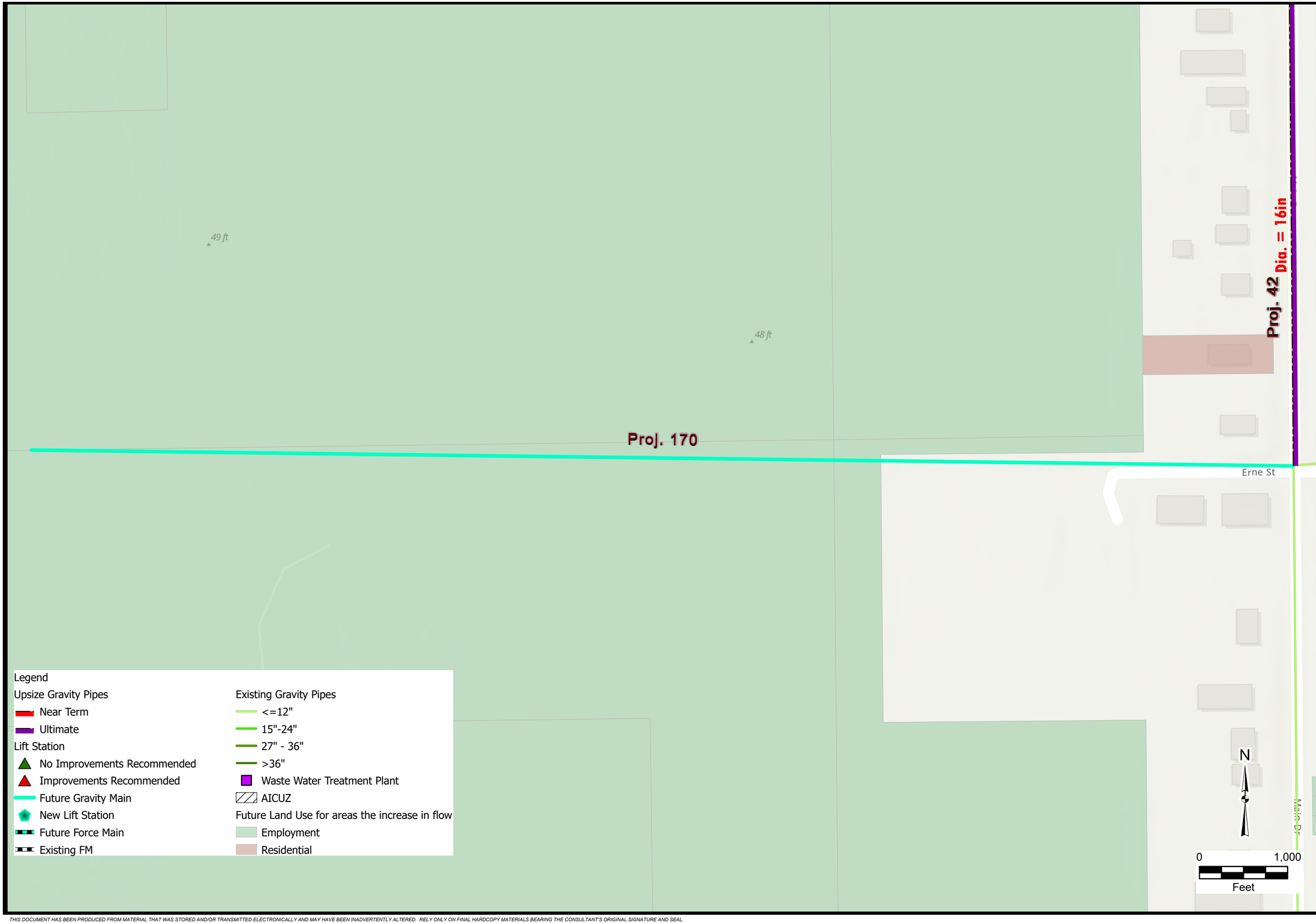

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
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CHECKED	AA
SHEET	170

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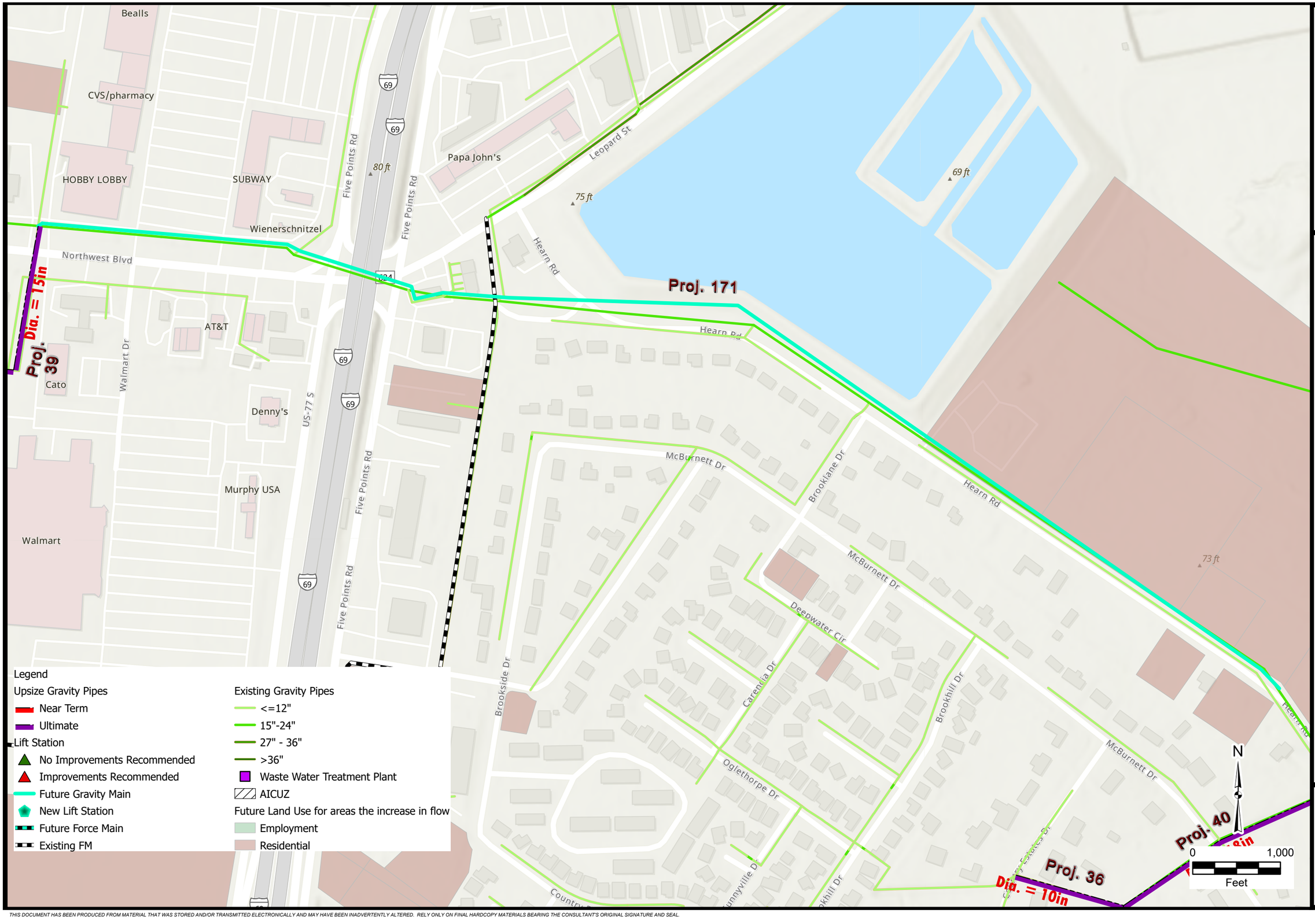

Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
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- Future Gravity Main
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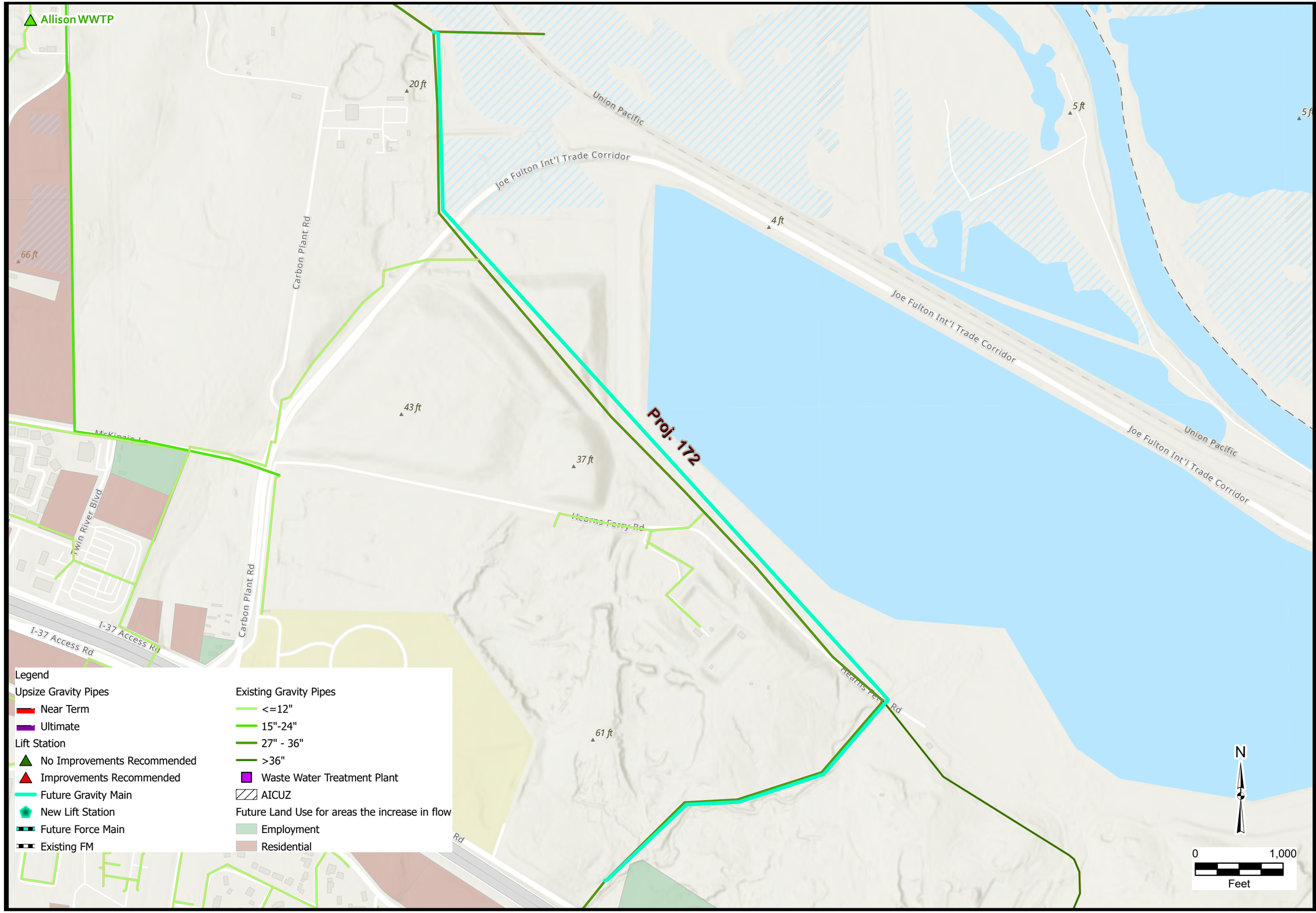

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Date: Aug 18, 2023 2:26 PM User: nvolinsky
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JOB NO.	0000-00
DATE	Aug 2023
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SHEET	173

Date: Aug 18, 2023 2:26 PM User: rwolinsky
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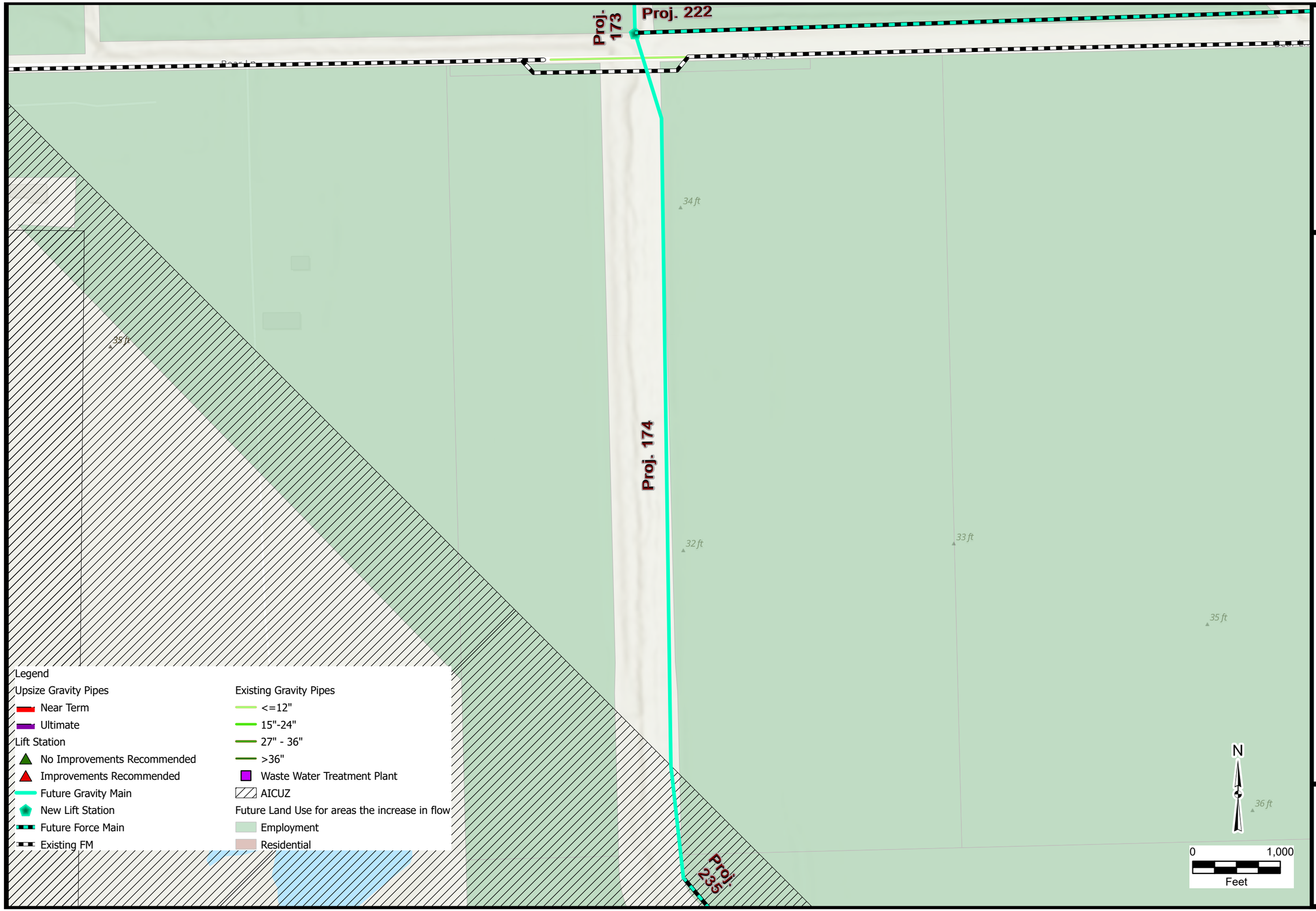

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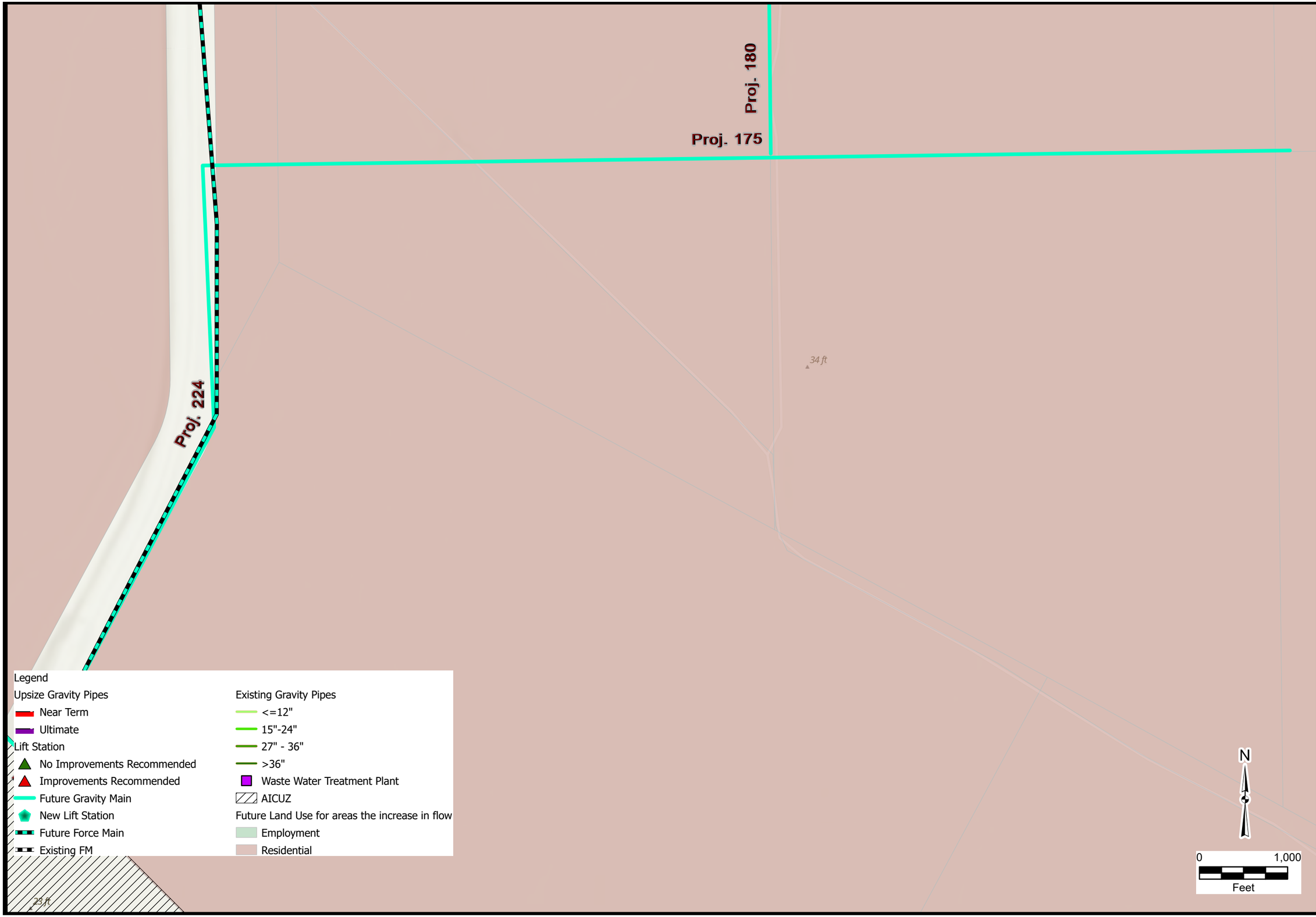

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SHEET	175

Date: Aug 18, 2023 2:26 PM User: nwolinsky
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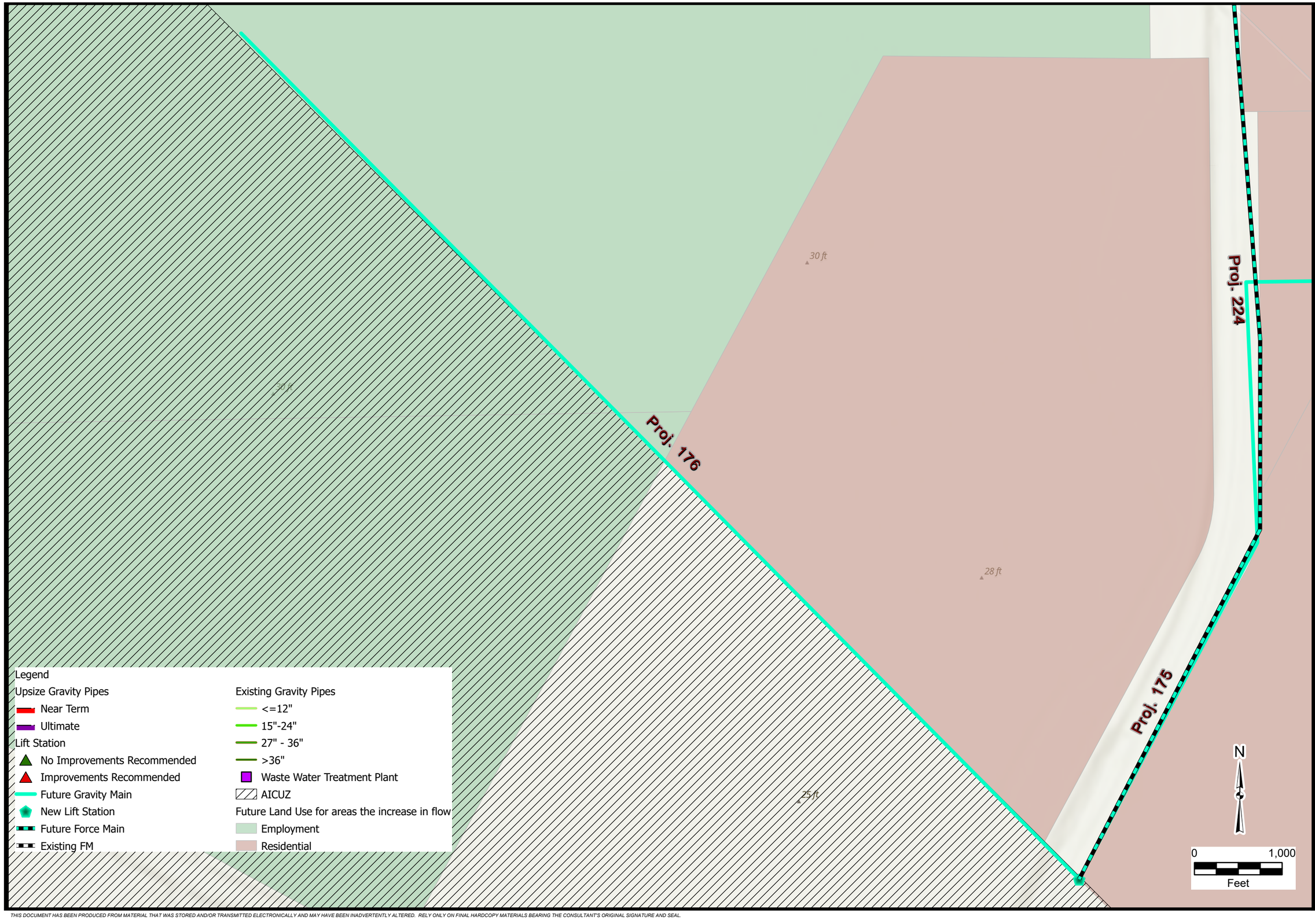

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
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SHEET	176

Date: Aug 18, 2023 2:27 PM User: nwolinsky
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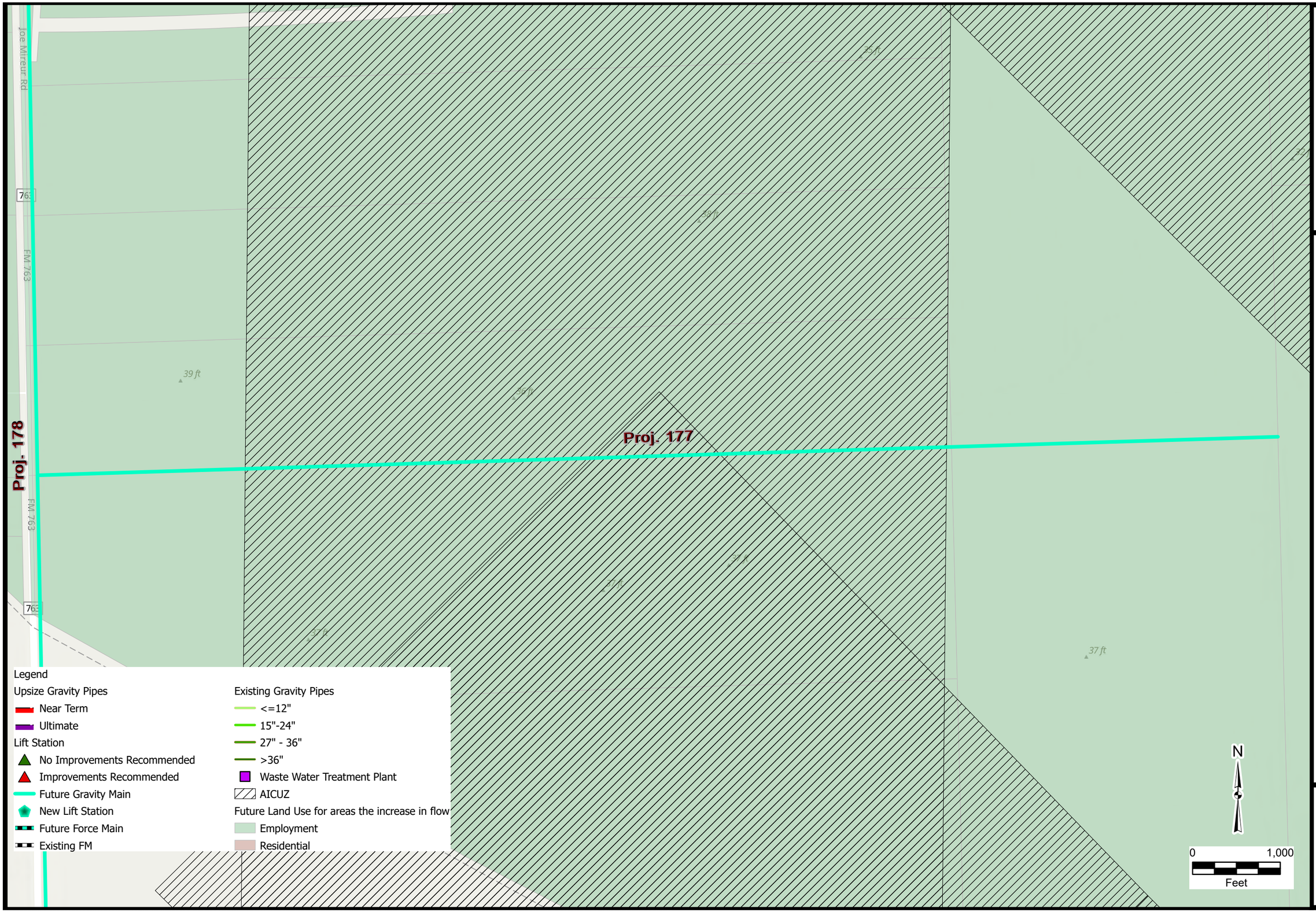

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
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SHEET	177

Date: Aug 18, 2023 2:27 PM User: nvolinsky
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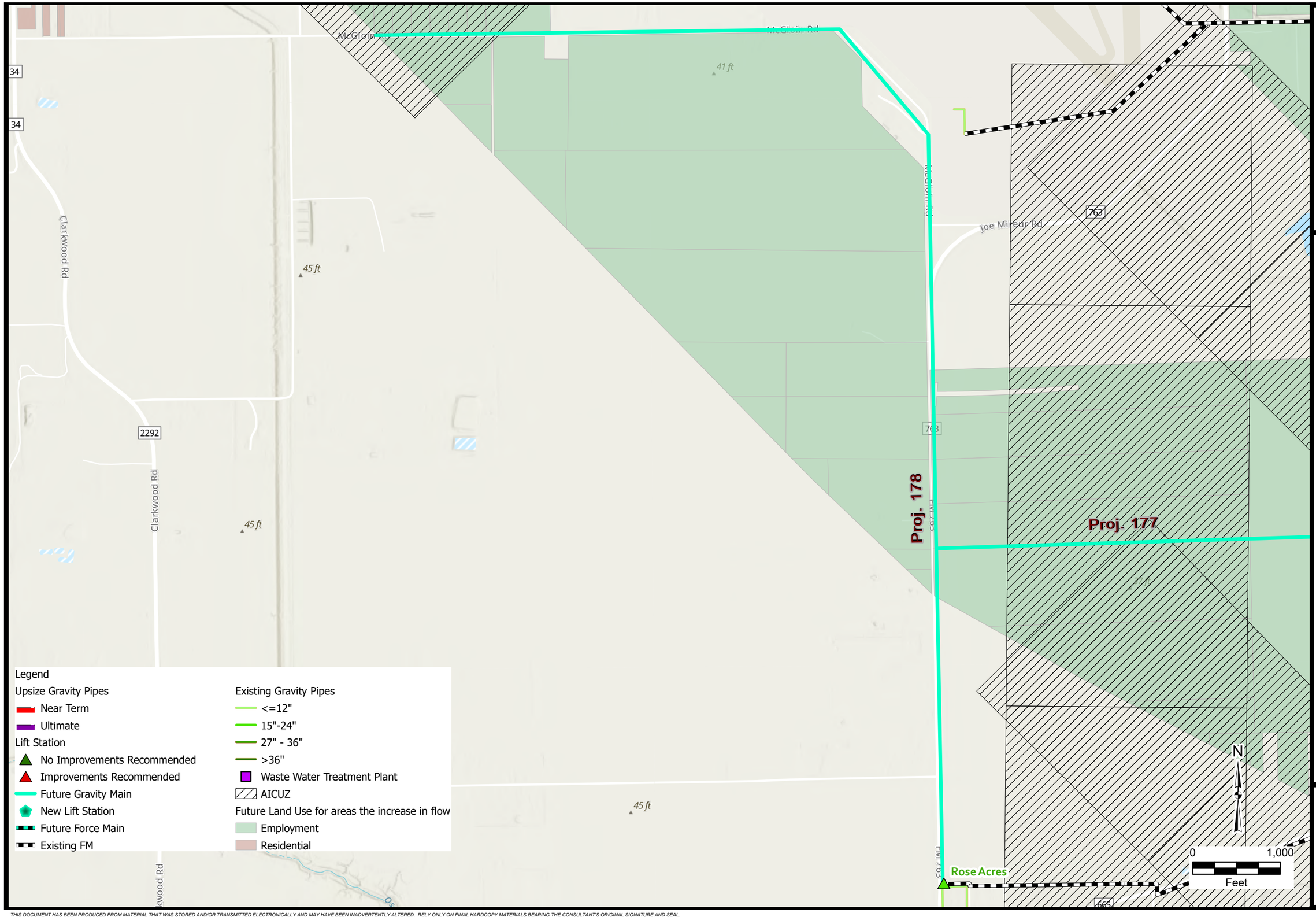

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DATE	Aug 2023
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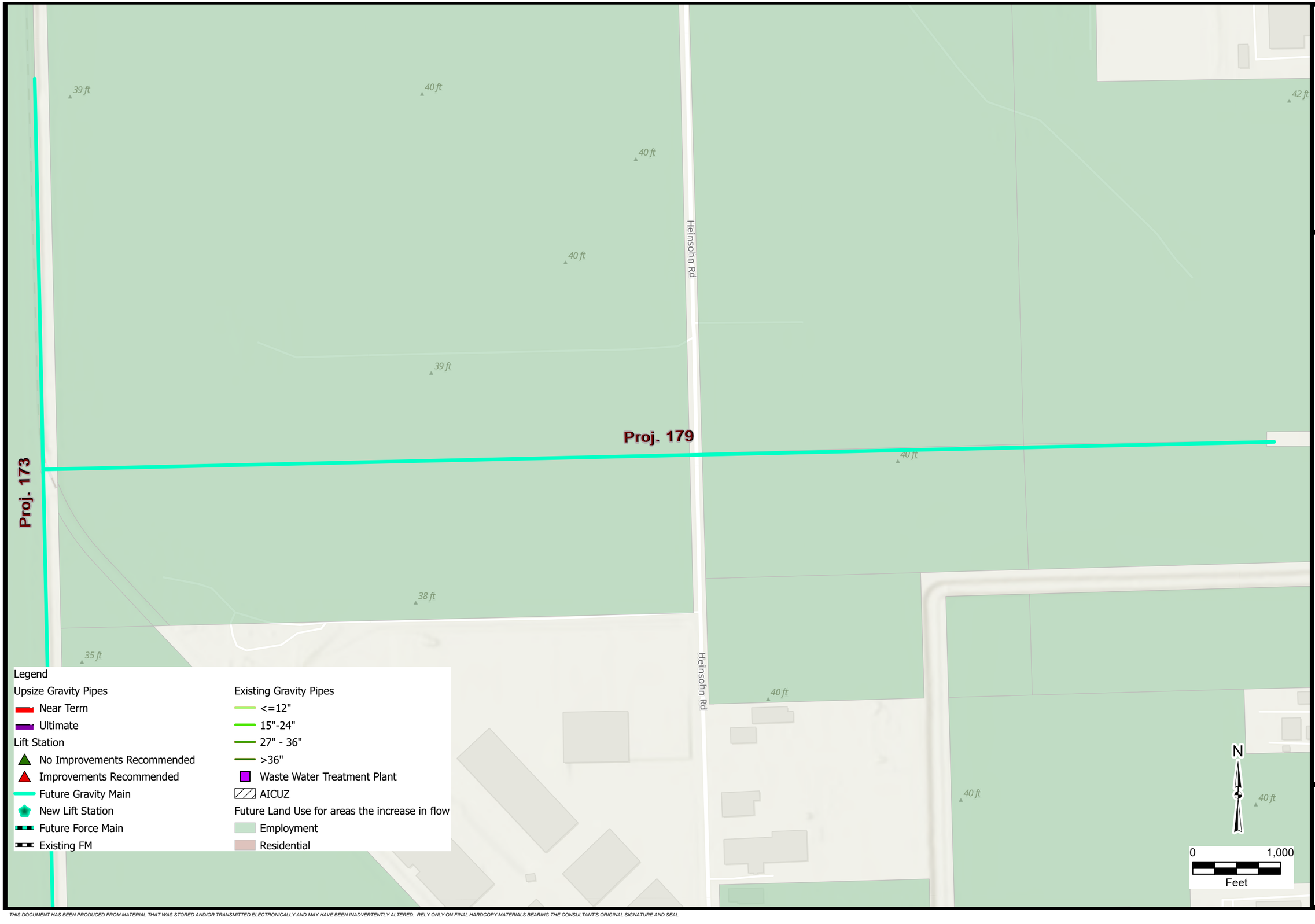

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
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DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
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SHEET	180

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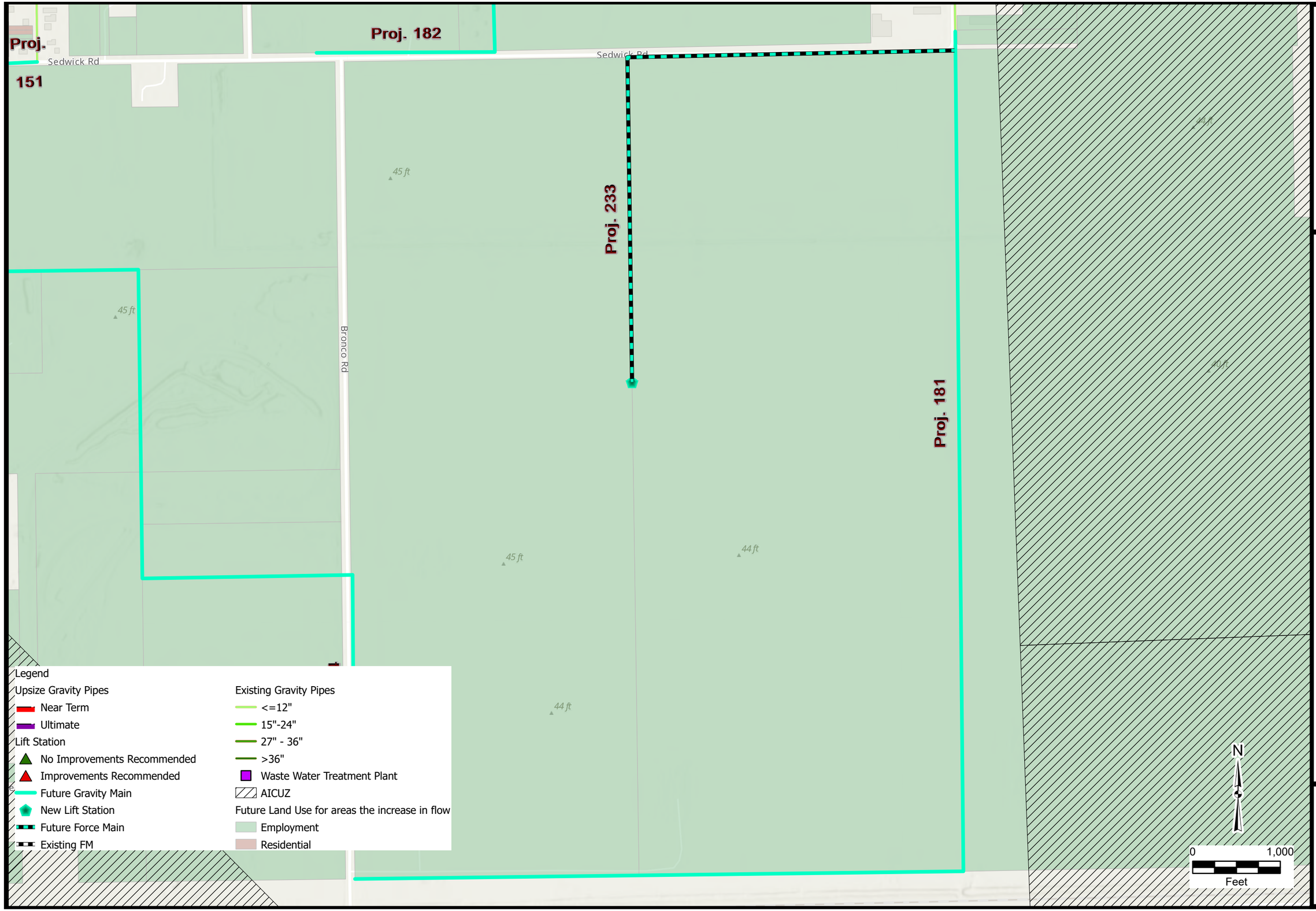

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City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
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SHEET	181

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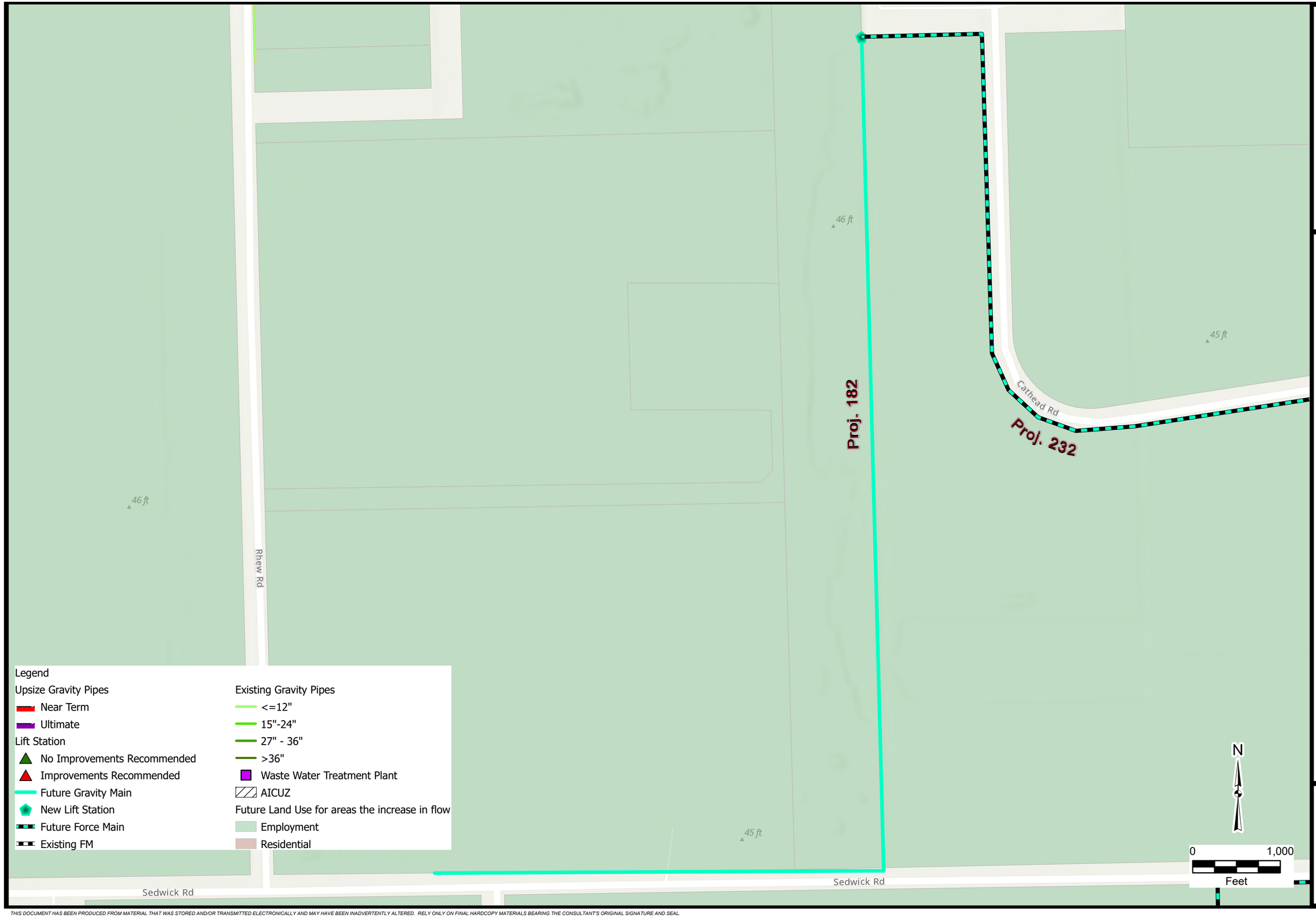

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City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
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Date: Aug 18, 2023 2:27 PM User: nwolinsky
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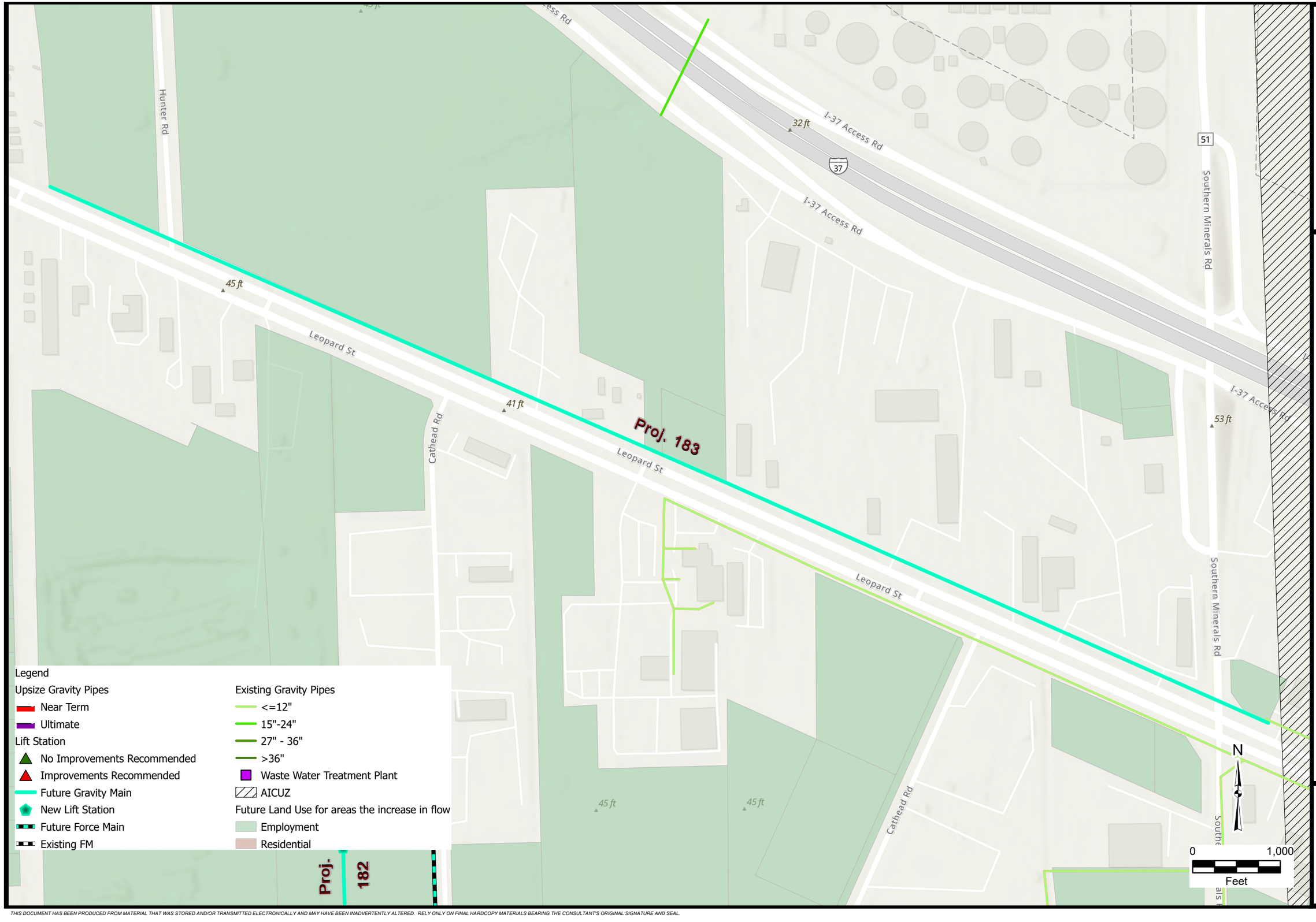

Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended
- Future Gravity Main
- New Lift Station
- Future Force Main
- Existing FM

Existing Gravity Pipes
- <=12"
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Future Land Use for areas the increase in flow
- Employment
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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
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Date: Aug 18, 2023 2:27 PM User: rwolinsky
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JOB NO.	0000-00
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DESIGNER	RW
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SHEET	184

Date: Aug 18, 2023 2:27 PM User: rwolinsky
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City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
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Date: Aug 18, 2023 2:27 PM User: nwolinsky
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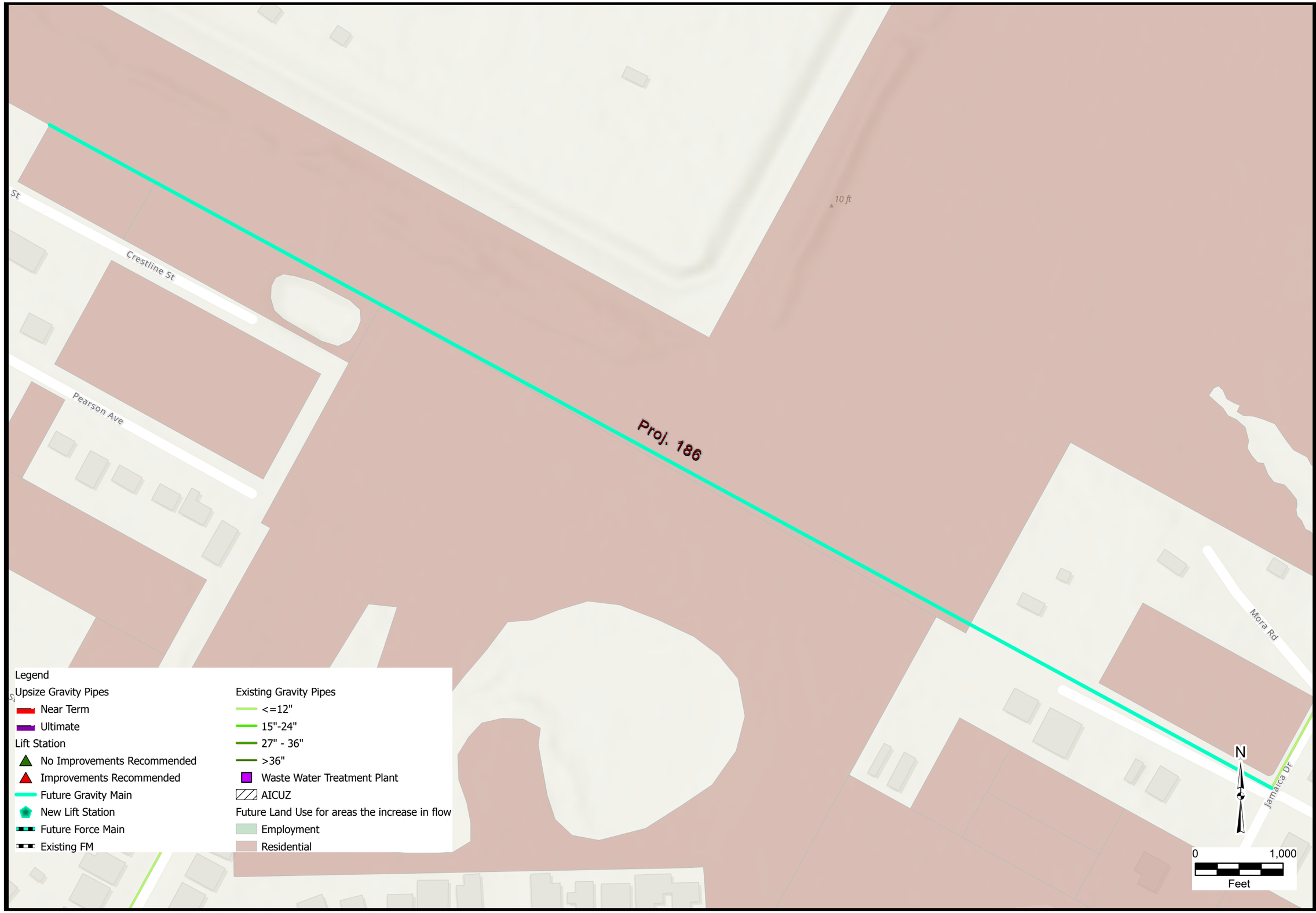

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Wastewater System Upgrades Project Guide

City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
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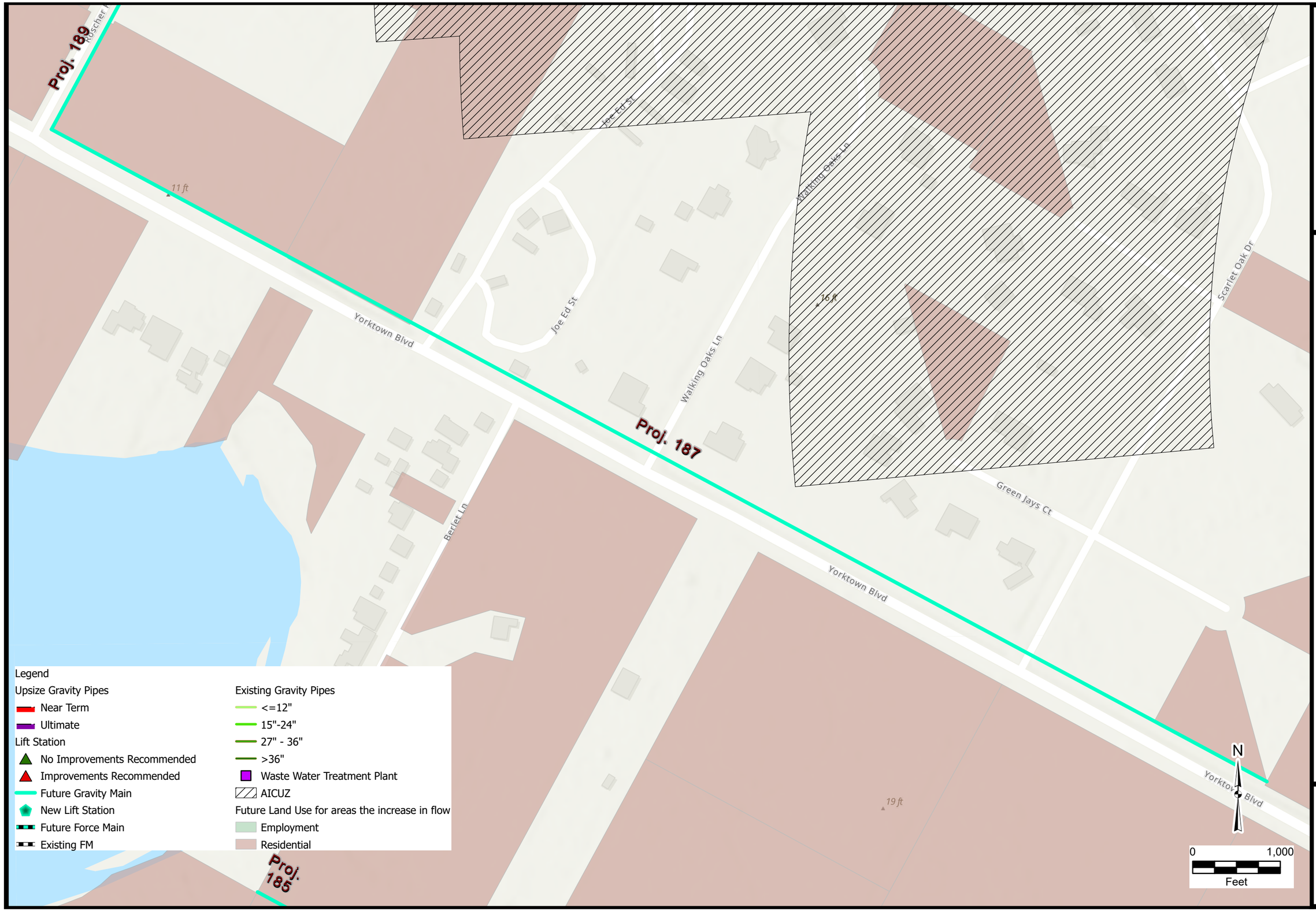
SHEET	186



Legend

Upsize Gravity Pipes
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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
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SHEET	187

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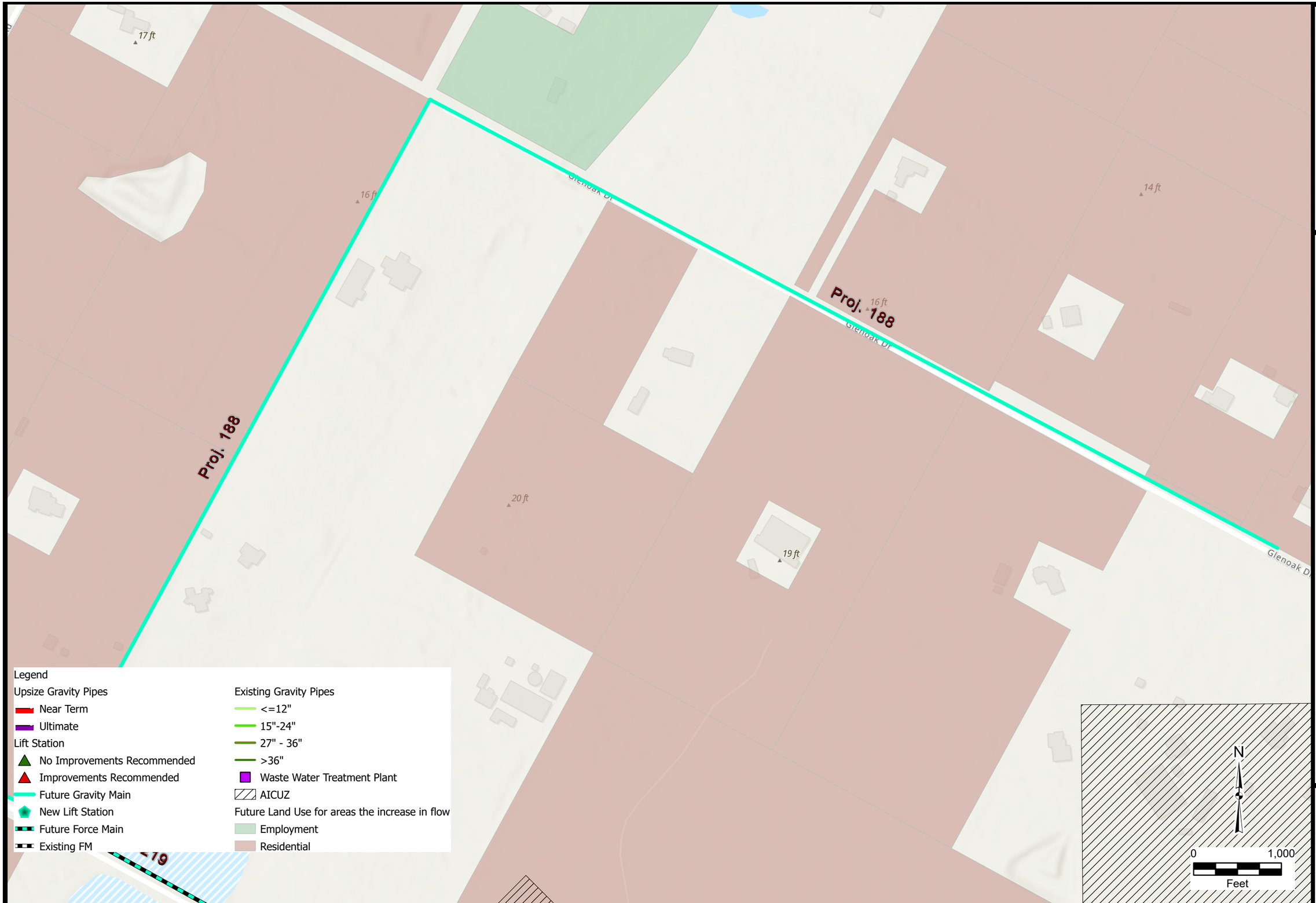

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Date: Aug 16, 2023 2:27 PM User: rwolinsky
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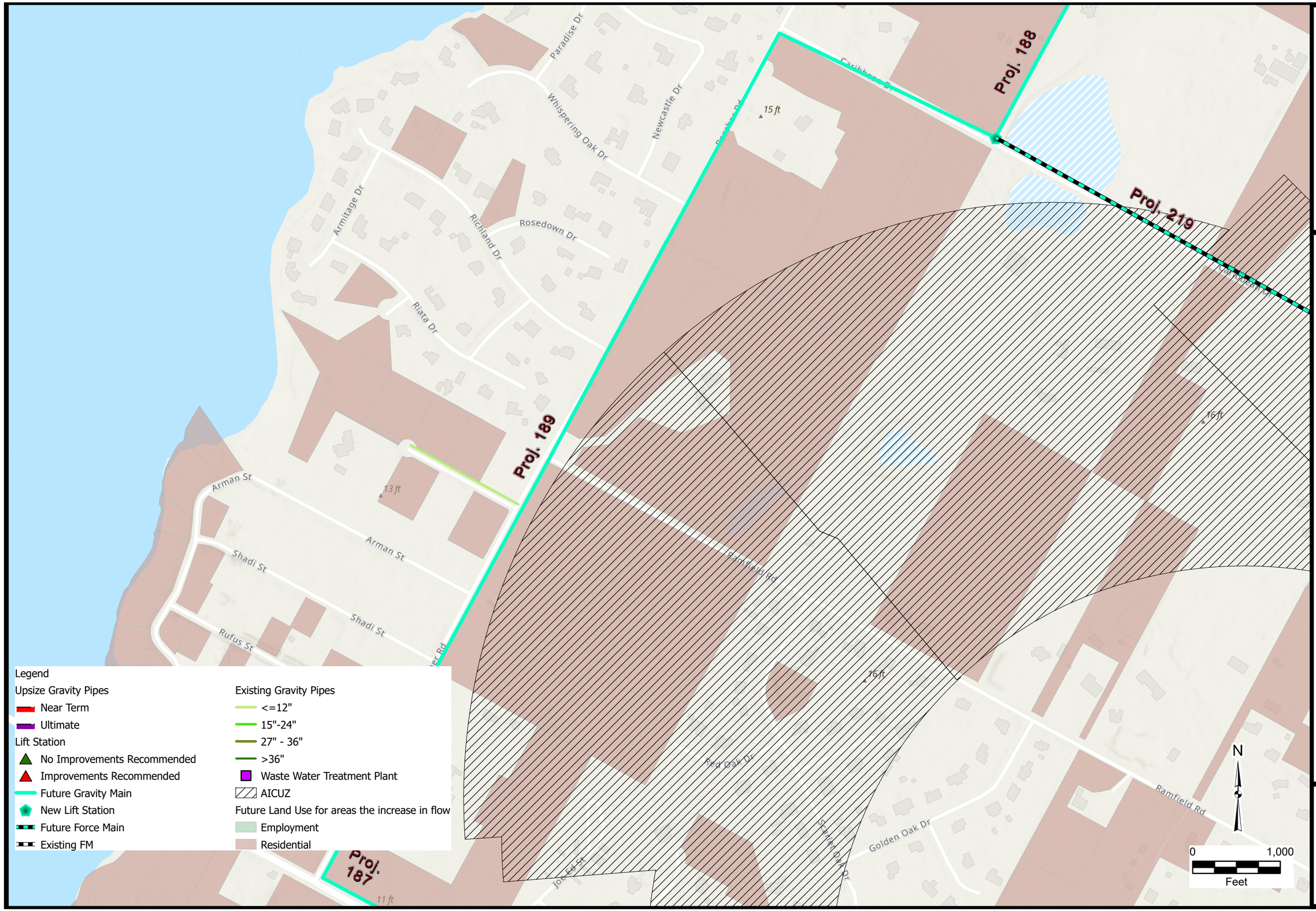

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Upsize Gravity Pipes
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Future Land Use for areas the increase in flow
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Wastewater System Upgrades

City of Corpus Christi

Projects Project Guide

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
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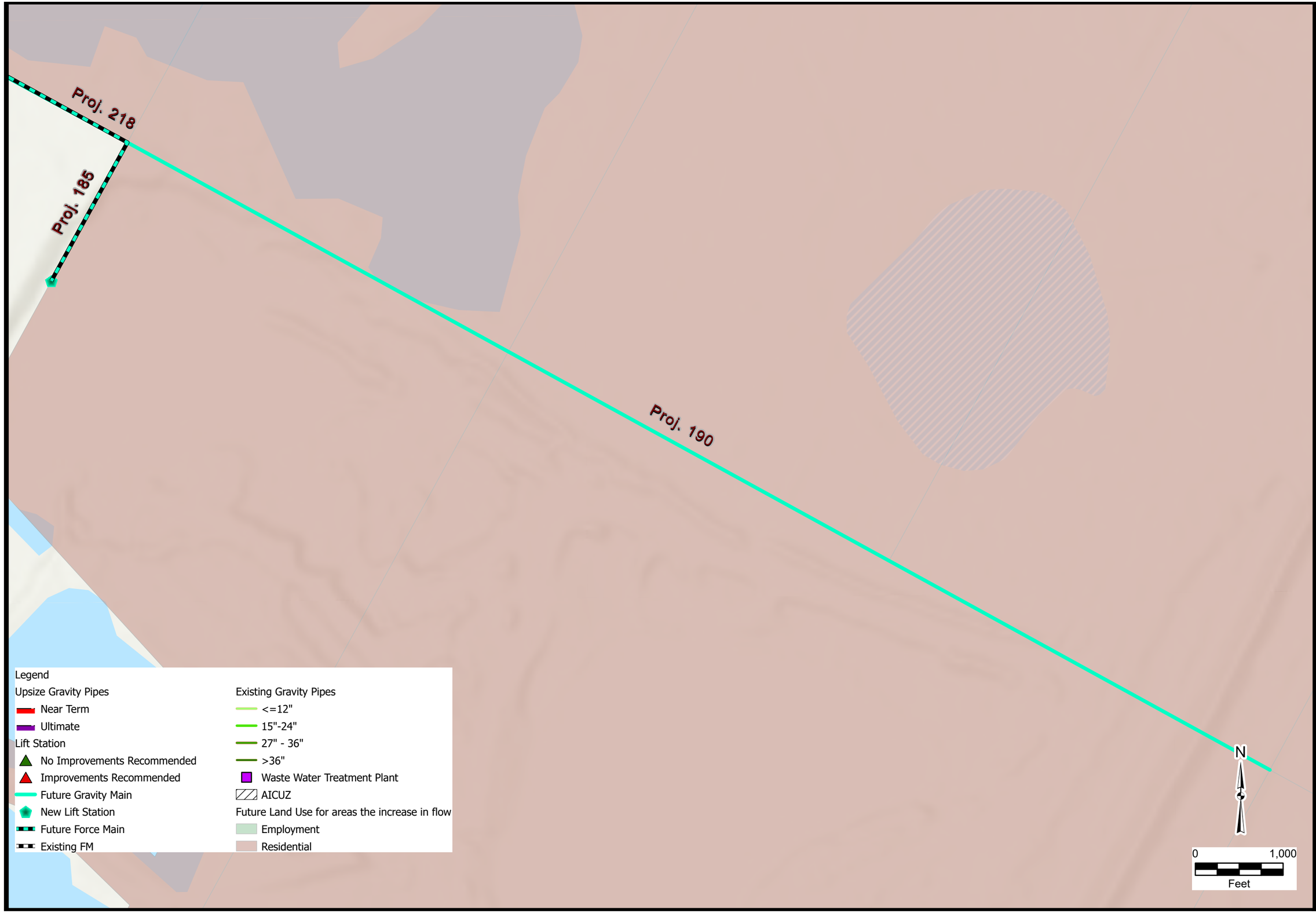

Legend

Upsize Gravity Pipes	Existing Gravity Pipes
Near Term	<=12"
Ultimate	15"-24"
Lift Station	27" - 36"
No Improvements Recommended	>36"
Improvements Recommended	Waste Water Treatment Plant
Future Gravity Main	AICUZ
New Lift Station	**Future Land Use for areas the increase in flow**
Future Force Main	Employment
Existing FM	Residential

Wastewater System Upgrades Project Guide

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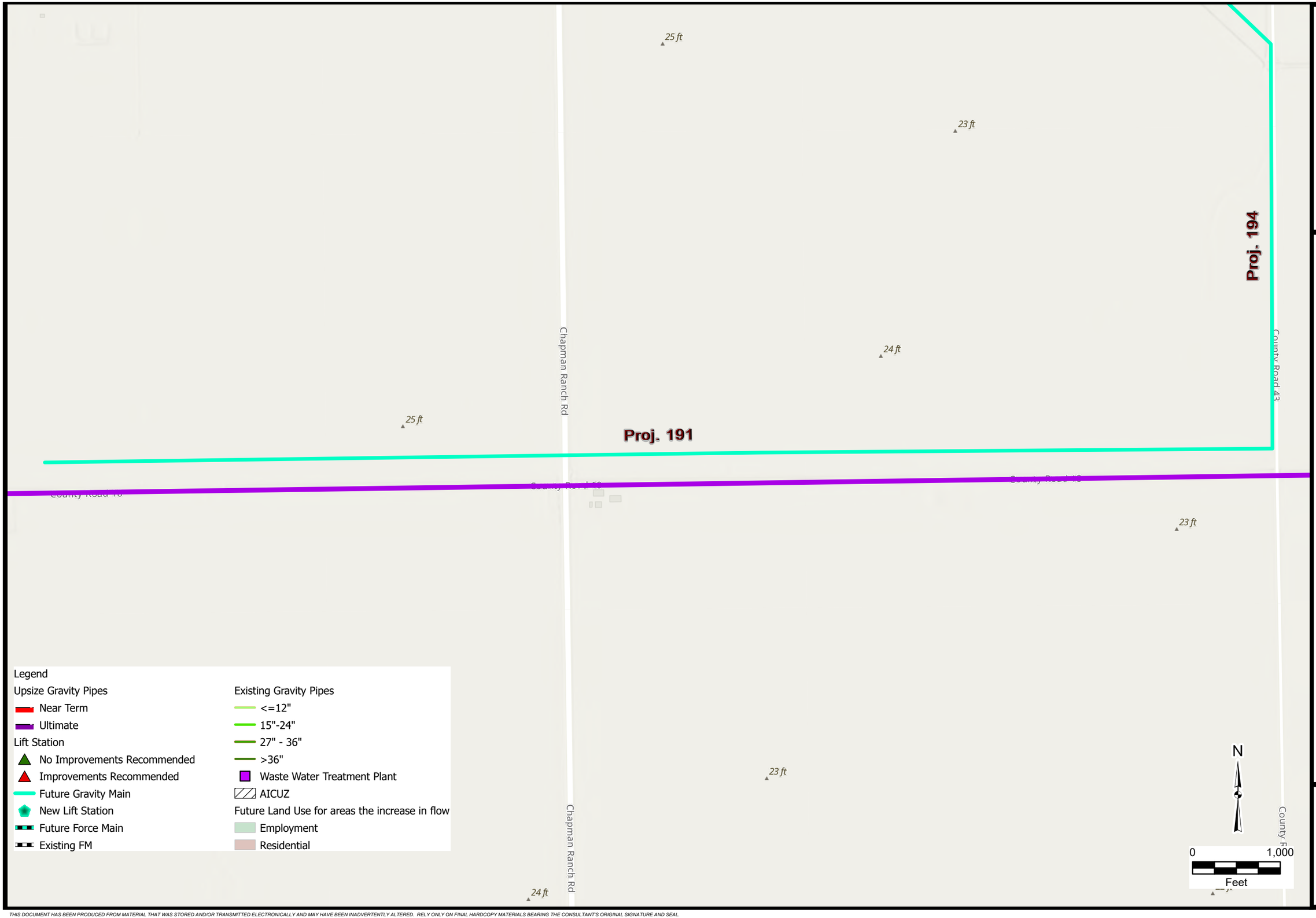

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Wastewater System Upgrades Project Guide

City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	191

Date: Aug 18, 2023 2:27 PM User: rwolinsky
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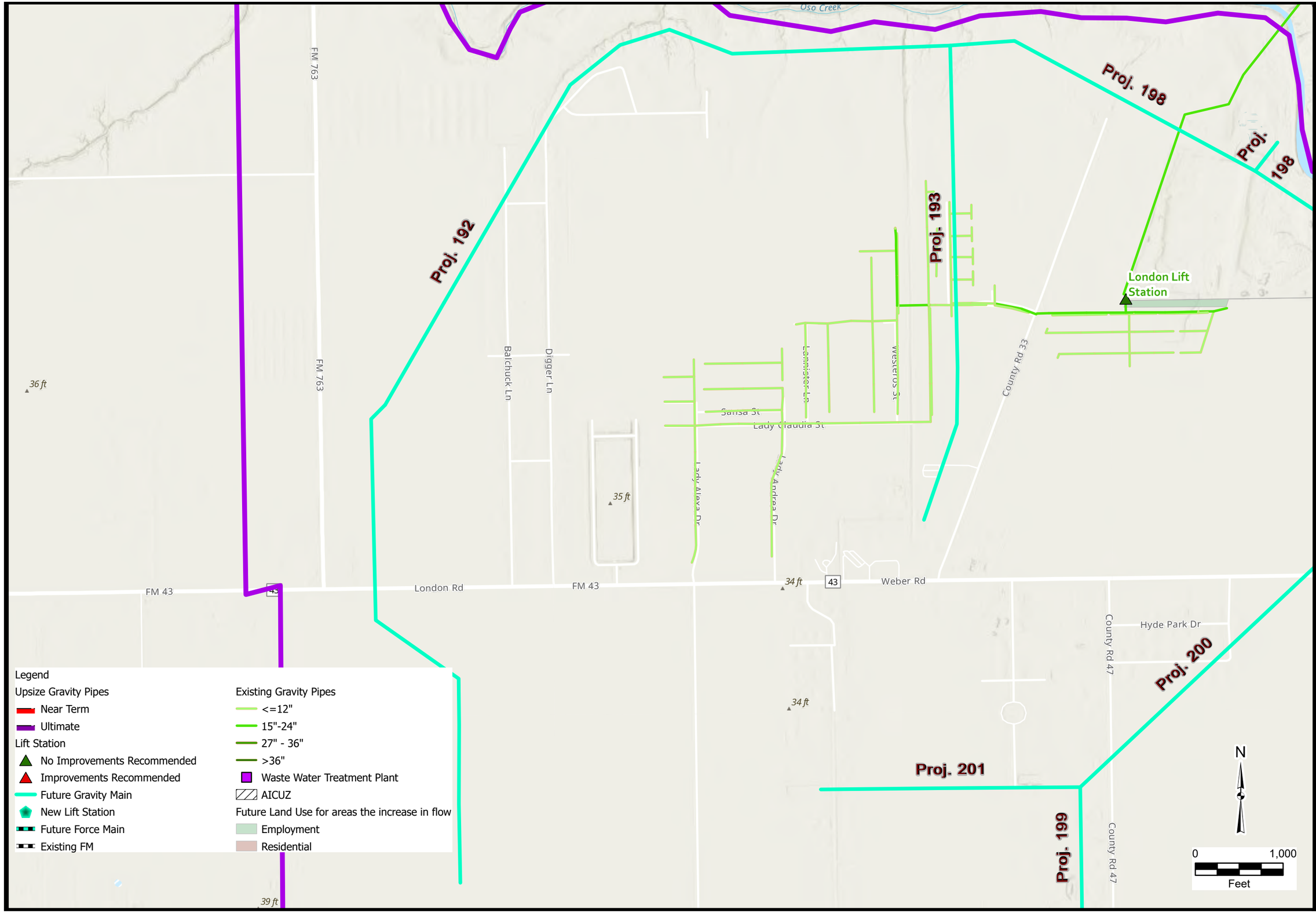

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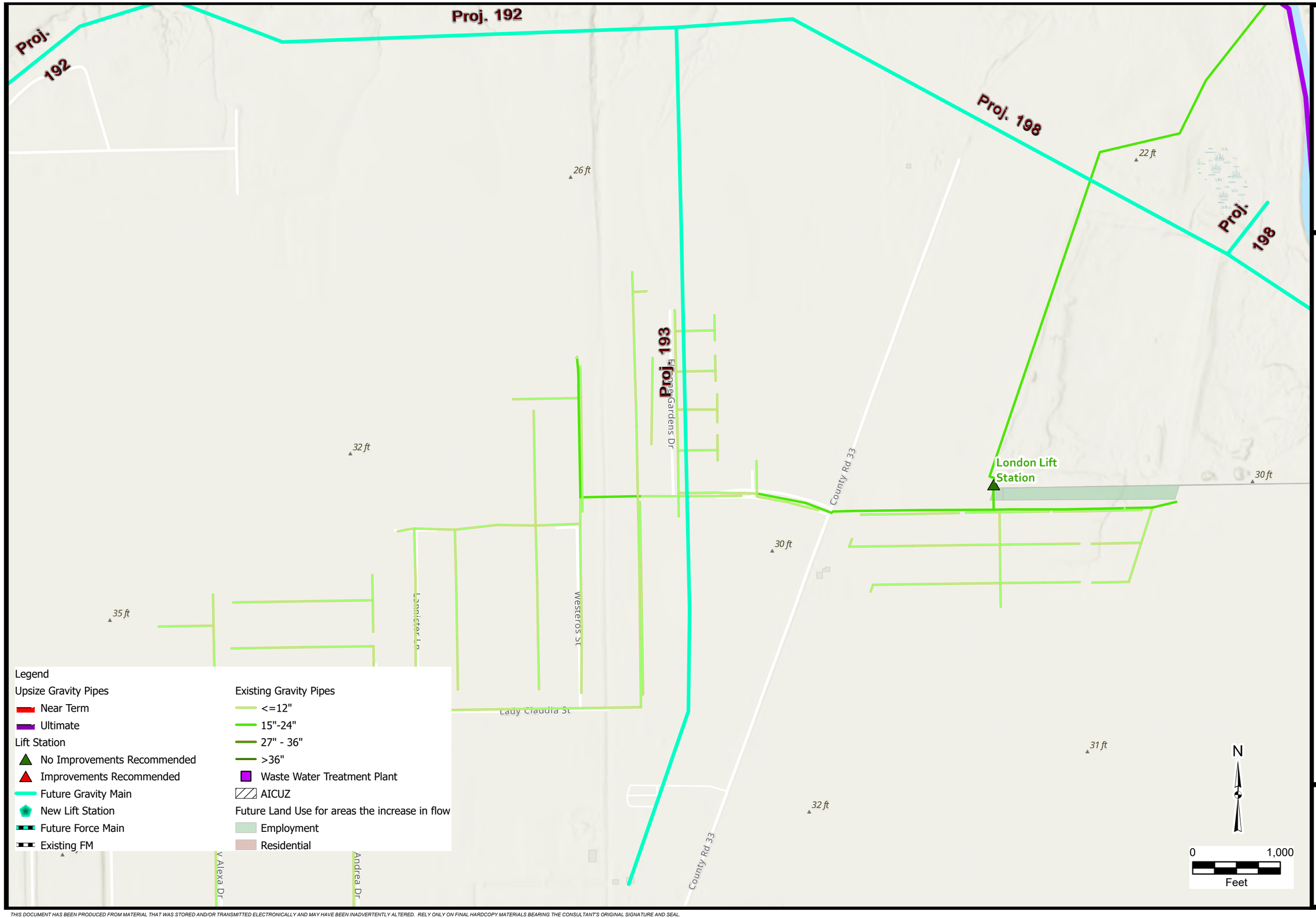
Wastewater System Upgrades Project Guide

City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	192

Date: Aug 16, 2023 2:27 PM User: rwolinsky
File: P:\123\83\00\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]



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City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	193

Date: Aug 18, 2023 2:28 PM User: nwolinsky
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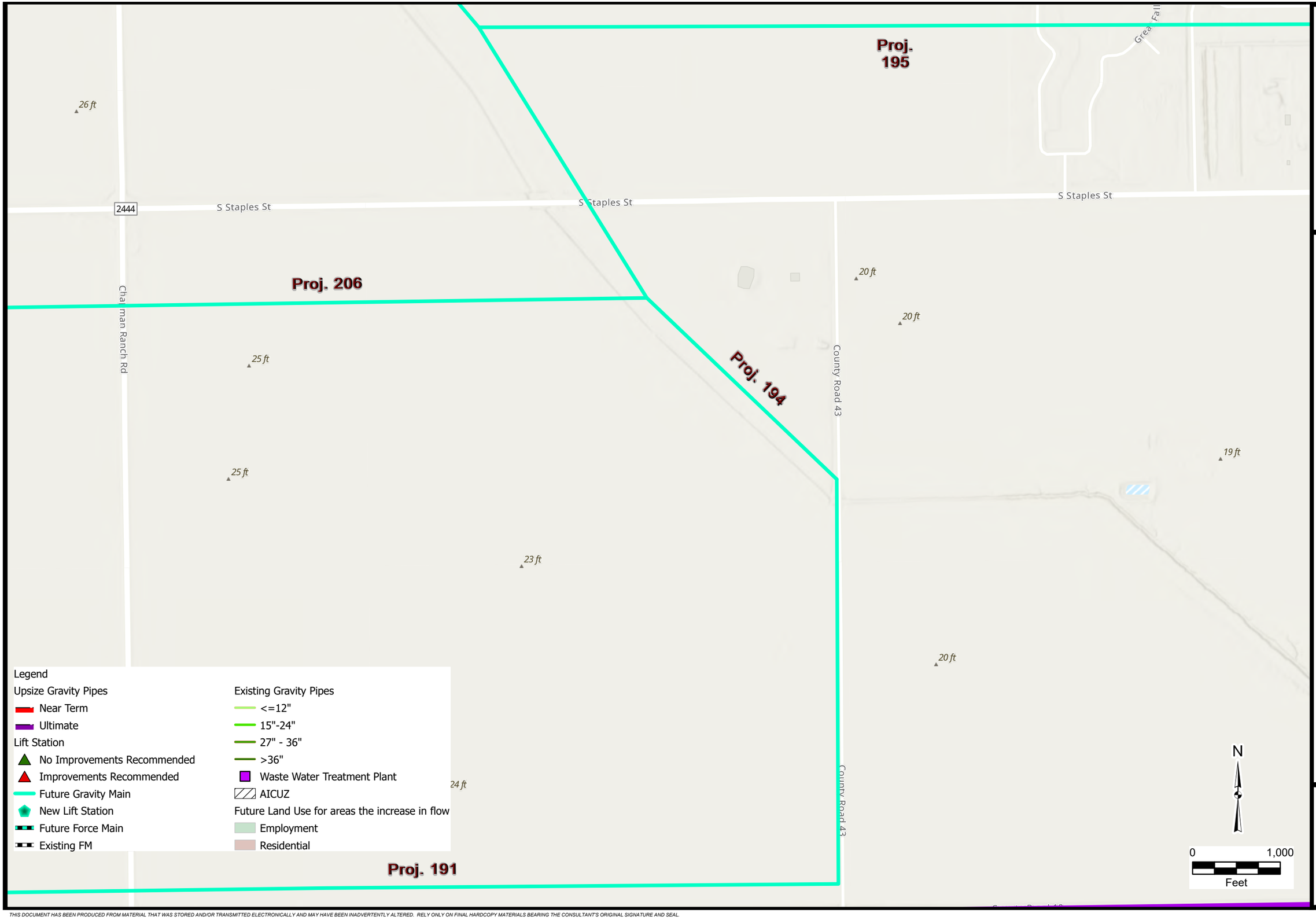

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City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	194

Date: Aug 18, 2023 2:28 PM User: nwolinsky
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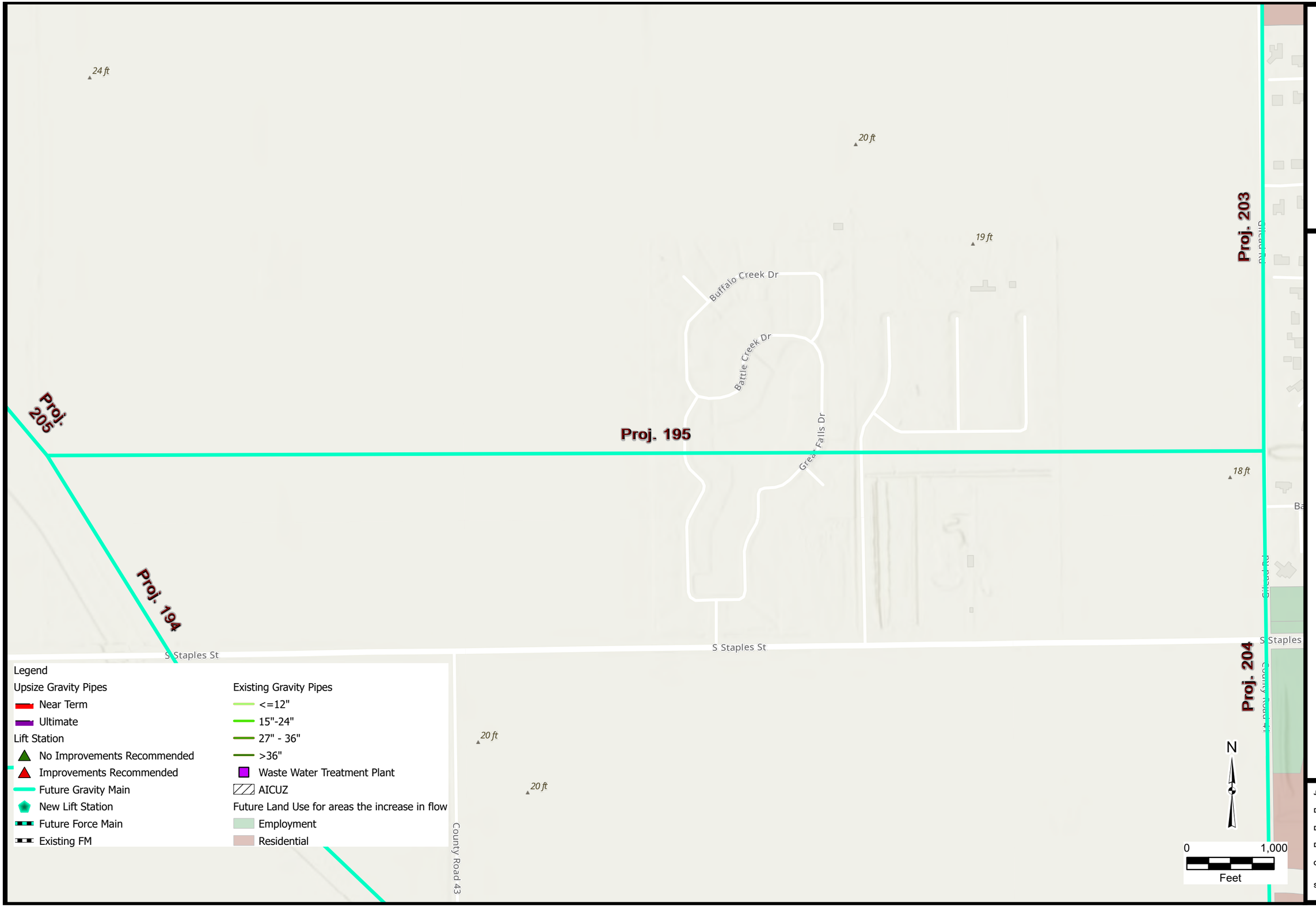

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	195

Date: Aug 18, 2023 2:28 PM User: rwolinsky
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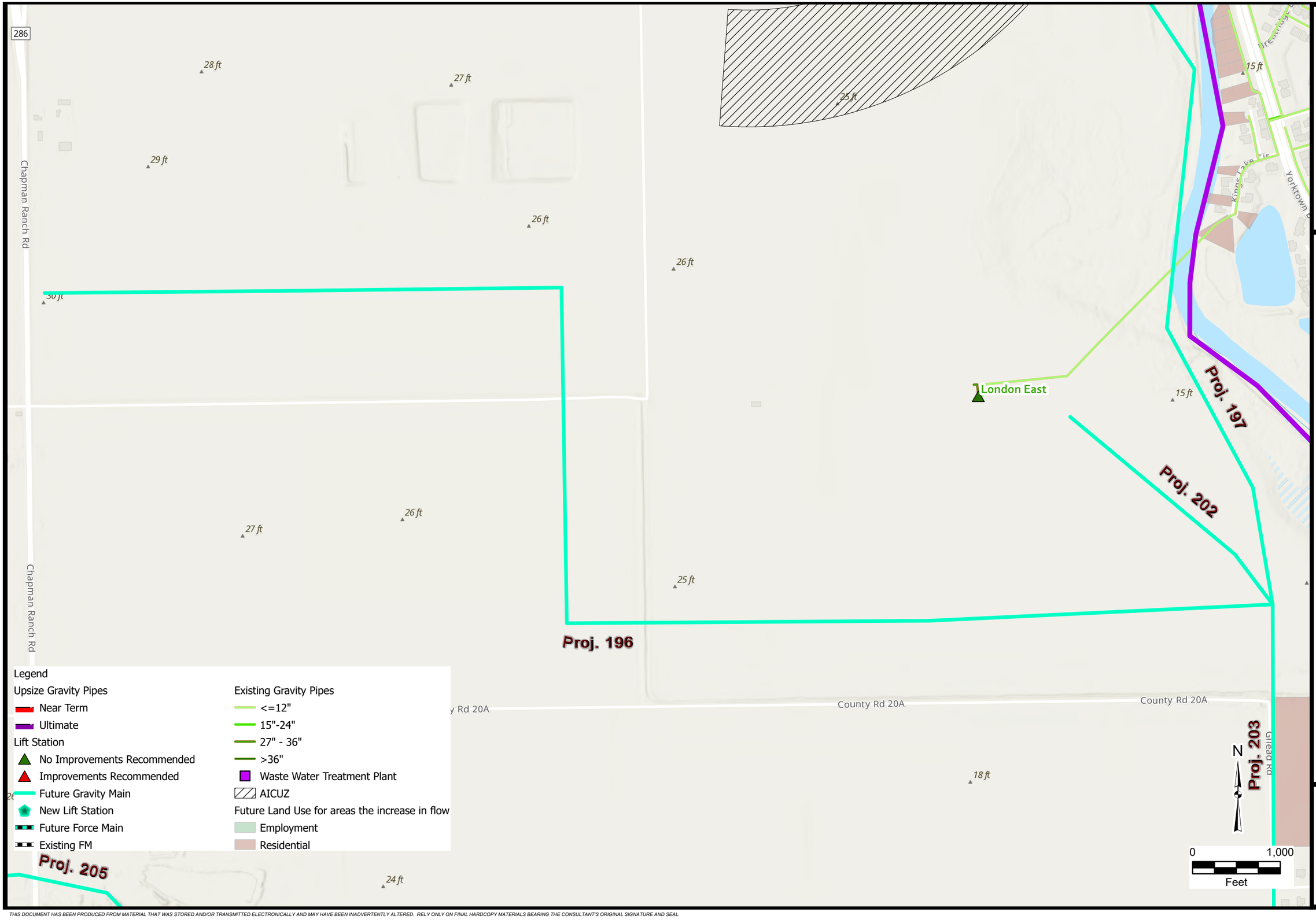

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	196

Date: Aug 18, 2023 2:28 PM User: rwolinsky
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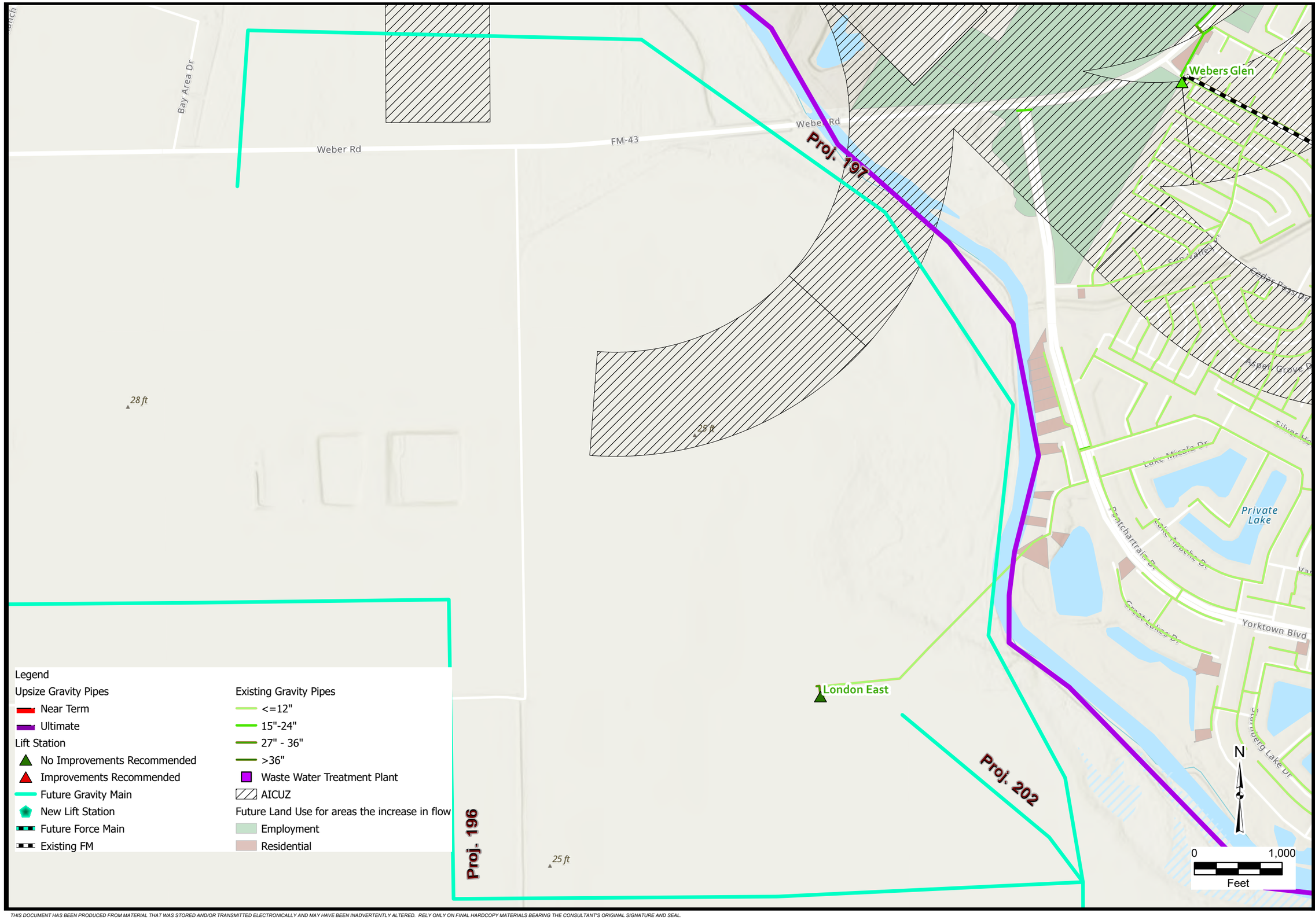

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City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	197

Date: Aug 18, 2023 2:28 PM User: nwolinsky
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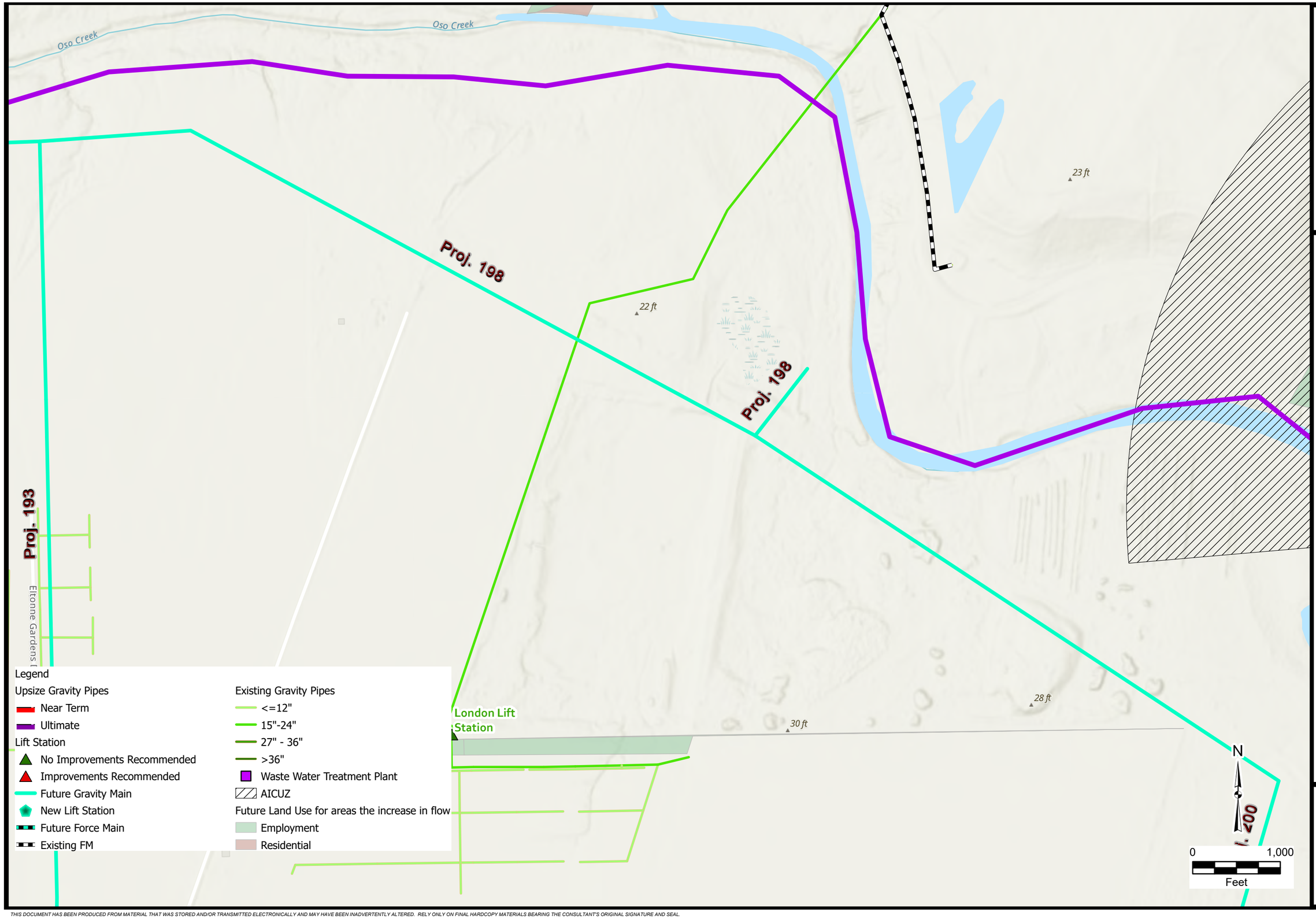

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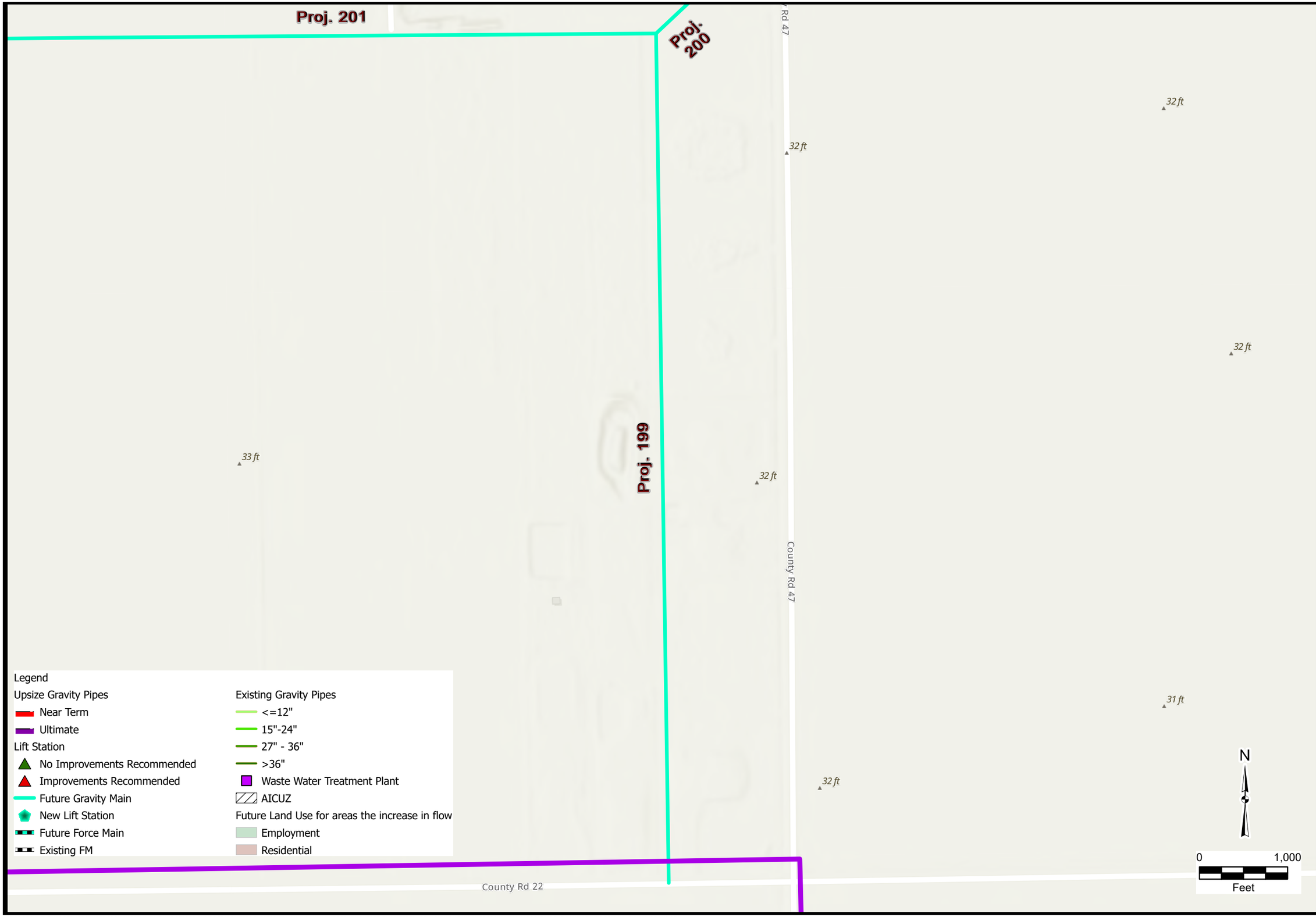
City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	198

Date: Aug 18, 2023 2:28 PM User: nwolinsky
File: P:\123\83000\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]



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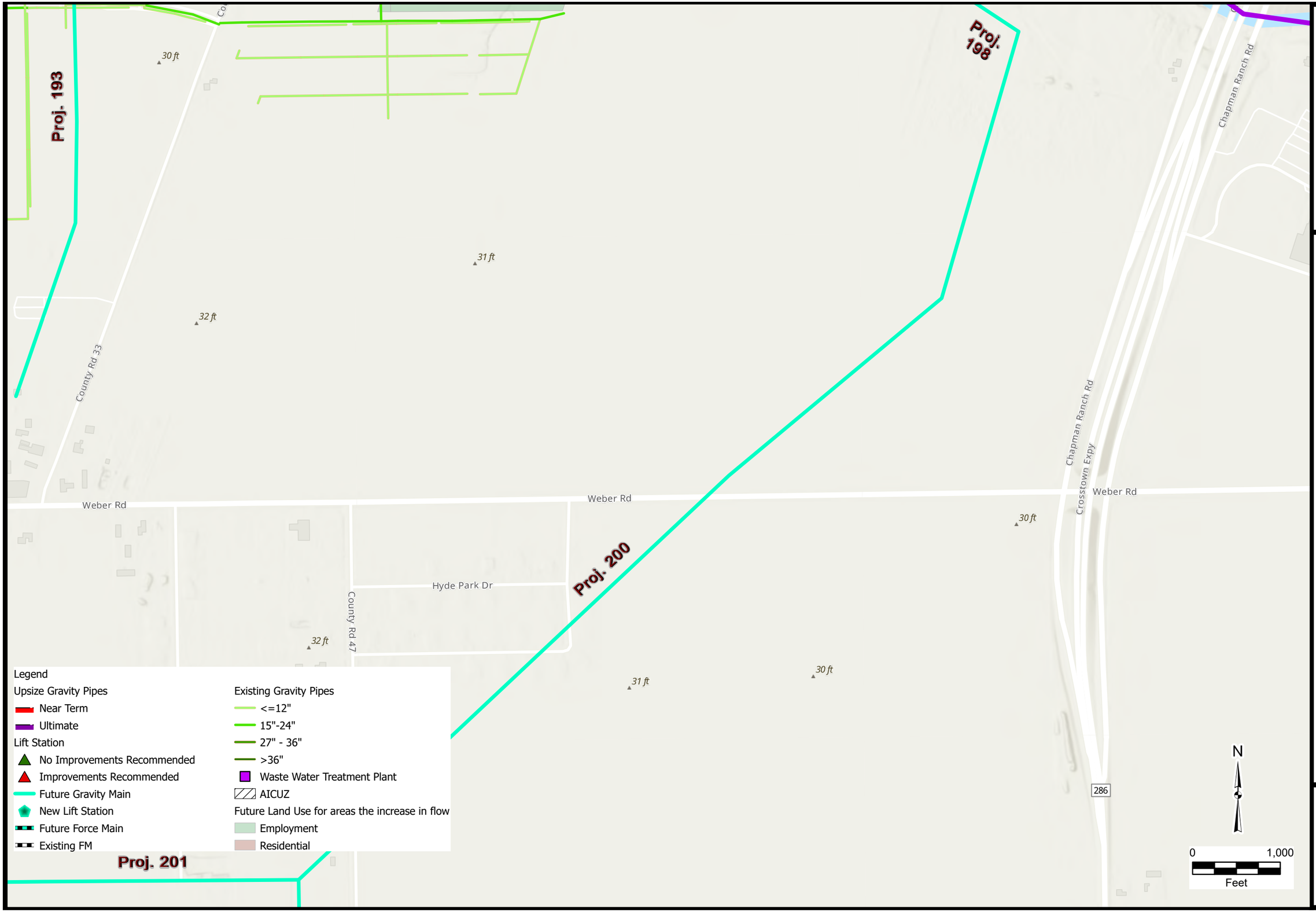
JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	199

Date: Aug 16, 2023 2:28 PM User: rwolinsky
File: P:\123\83\00\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]



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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	200

Date: Aug 18, 2023 2:28 PM User: nvolinsky
File: P:\123\83\00\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]

33 ft

33 ft

Proj. 201

Proj. 200

Proj. 199

Legend

Upsize Gravity Pipes	Existing Gravity Pipes
Near Term	<=12"
Ultimate	15"-24"
Lift Station	27" - 36"
No Improvements Recommended	>36"
Improvements Recommended	Waste Water Treatment Plant
Future Gravity Main	AICUZ
New Lift Station	Future Land Use for areas the increase in flow
Future Force Main	Employment
Existing FM	Residential

N

0 1,000

Feet

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	201

Date: Aug 18, 2023 2:28 PM User: nwolinsky
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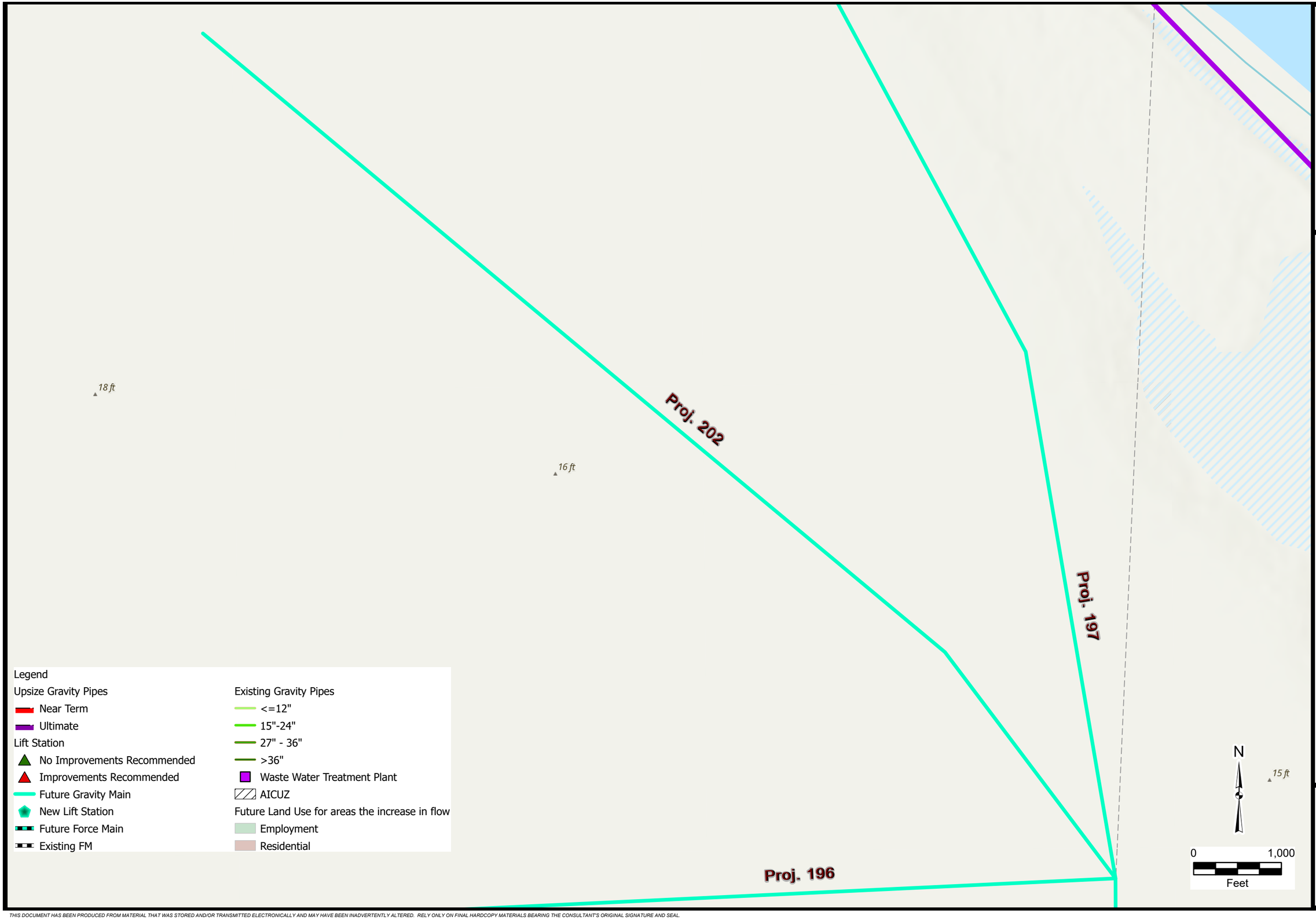

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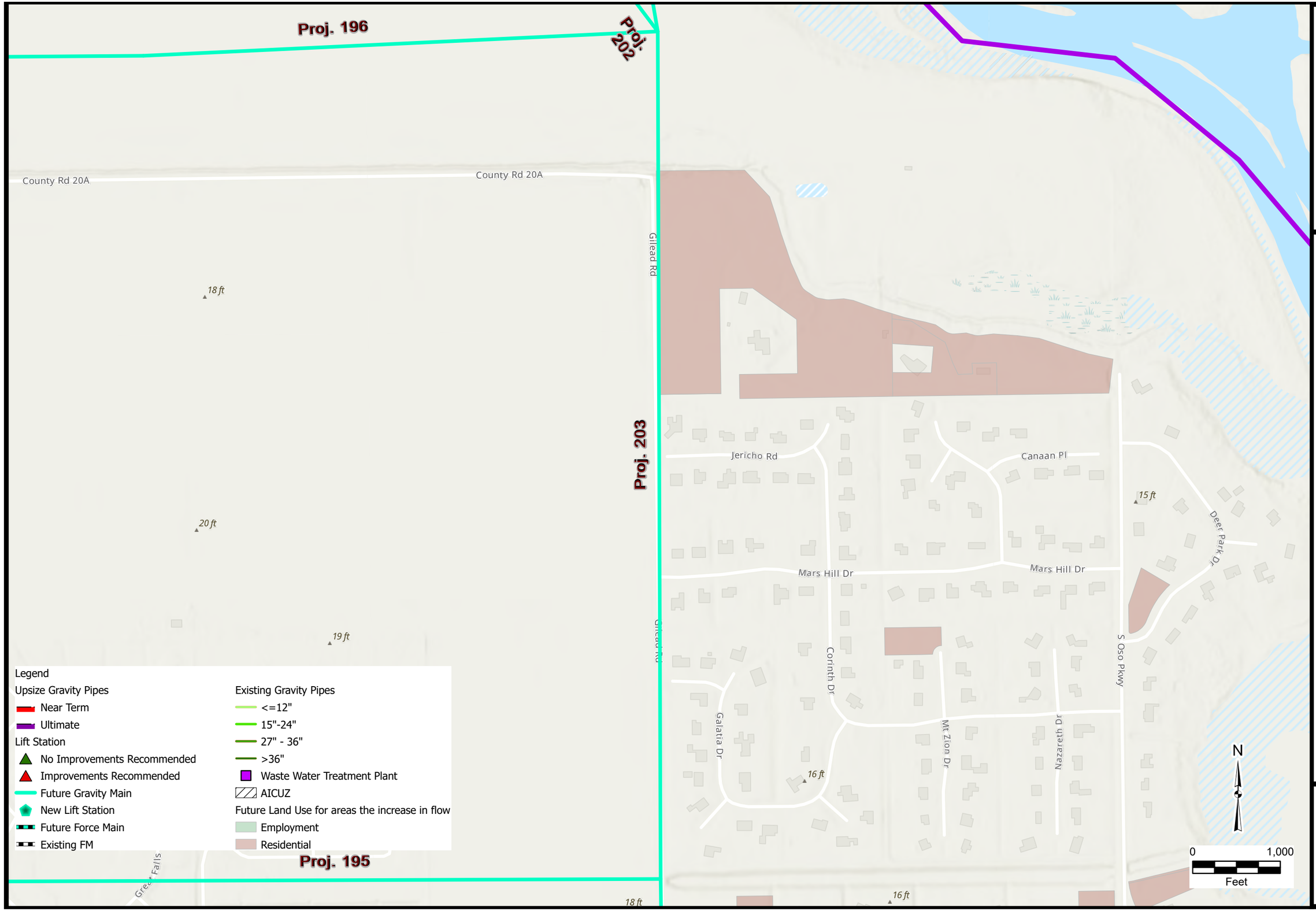
JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	202

Date: Aug 18, 2023 2:28 PM User: nwolinsky
File: P:\123\83000\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]



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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	203

Date: Aug 18, 2023 2:28 PM User: nwolinsky
File: P:\123\83000\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]

Proj. 195

Proj. 204

Great Falls

S Staples St

County Road 44

Barnard Dr

S Oso Pkwy

Kitty Hawk Dr

Nemesis Dr

Marauder Dr

King Ln

King Acres Dr

King Trl

King River Ct

King Ranch Dr

Oso Pkwy S

18 ft

16 ft

15 ft

20 ft

19 ft

Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended
- Future Gravity Main
- New Lift Station
- Future Force Main
- Existing FM

Existing Gravity Pipes
- <=12"
- 15"-24"
- 27" - 36"
- >36"
- Waste Water Treatment Plant
- AICUZ

Future Land Use for areas the increase in flow
- Employment
- Residential

N

0 1,000 Feet

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	204

Date: Aug 16, 2023 2:28 PM User: rwolinsky
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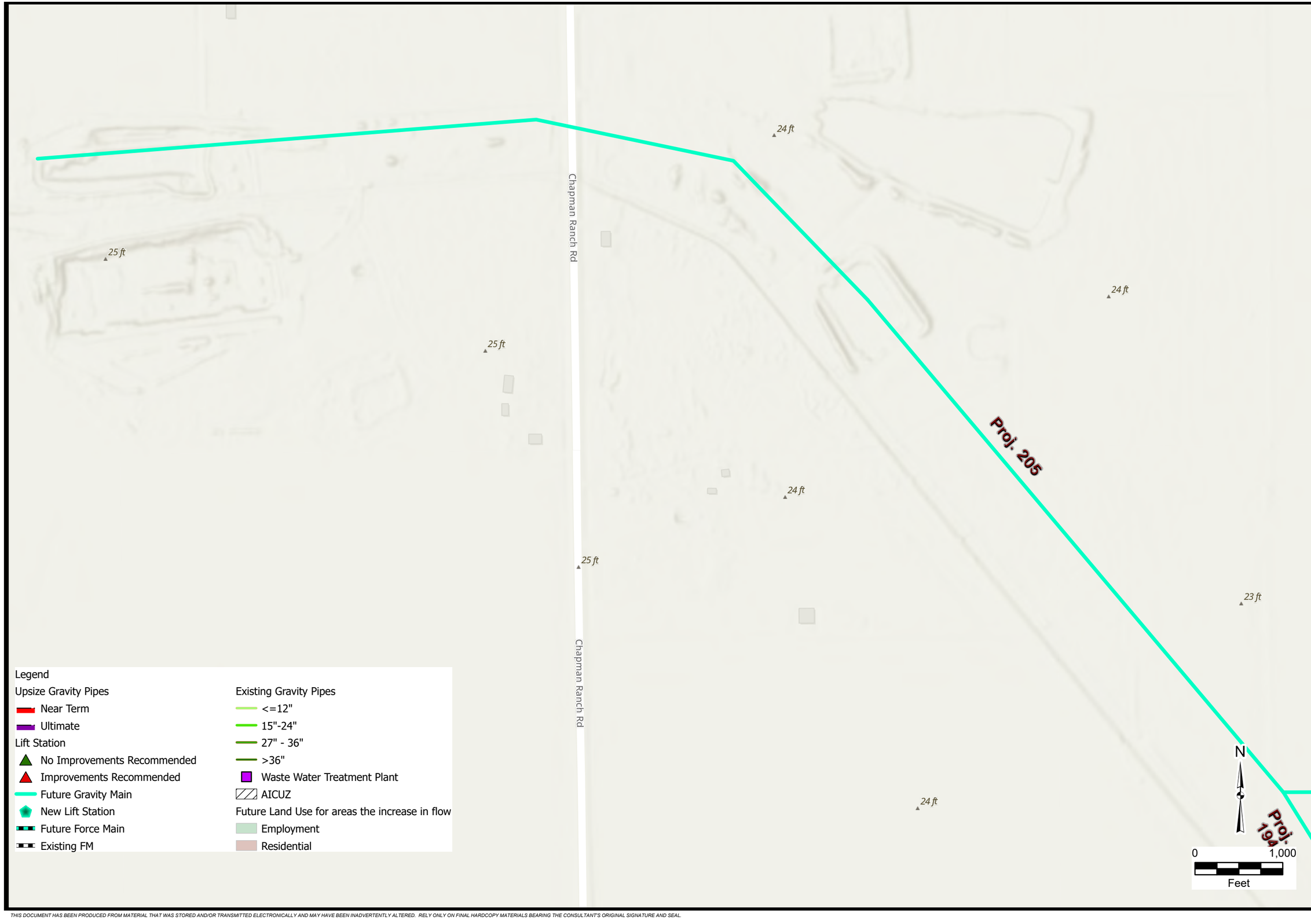

Legend

Upsize Gravity Pipes	Existing Gravity Pipes
Near Term	<=12"
Ultimate	15"-24"
Lift Station	27" - 36"
No Improvements Recommended	>36"
Improvements Recommended	Waste Water Treatment Plant
Future Gravity Main	AICUZ
New Lift Station	Future Land Use for areas the increase in flow
Future Force Main	Employment
Existing FM	Residential

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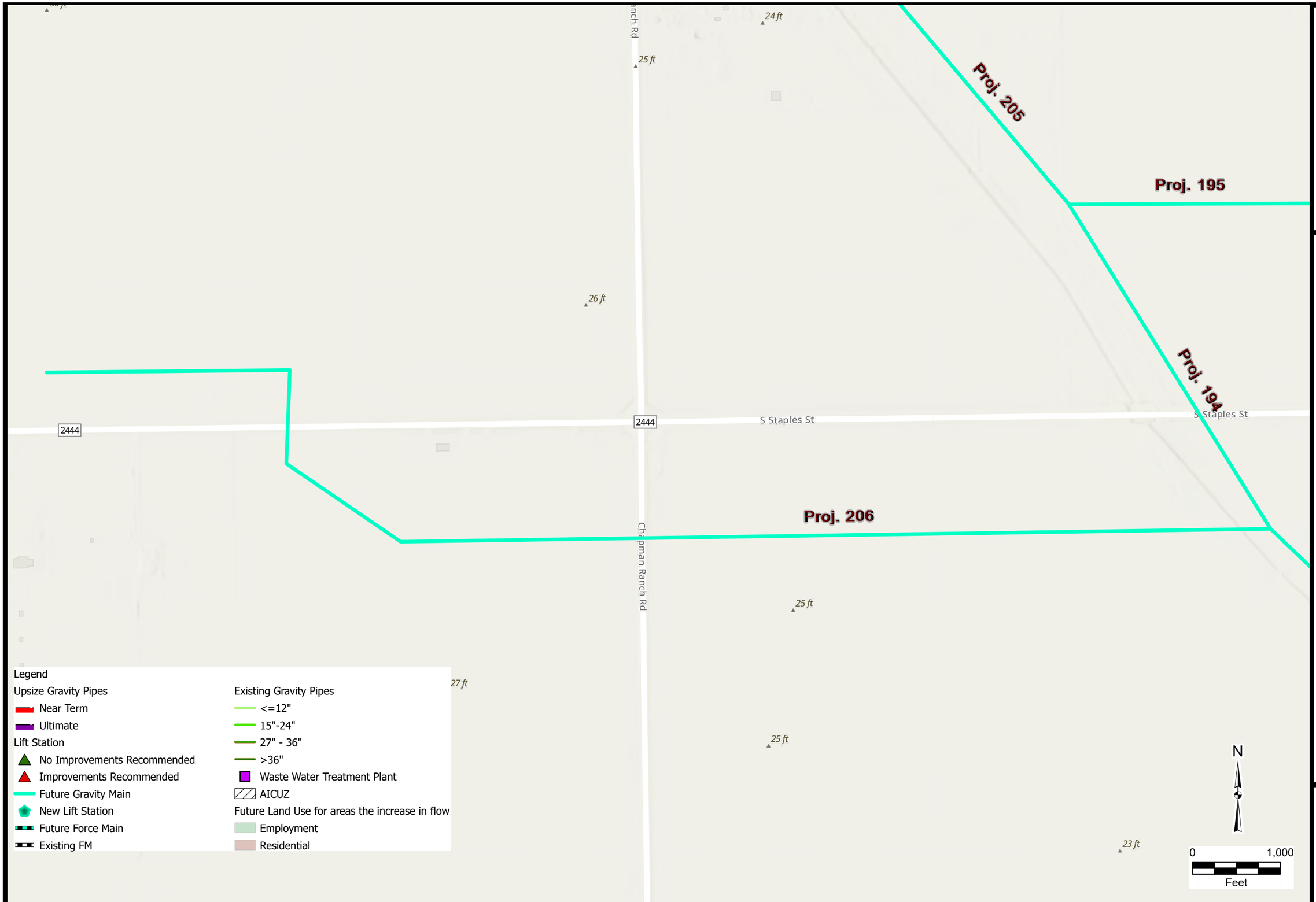
JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	205

Date: Aug 18, 2023 2:28 PM User: nwolinsky
File: P:\123\83000\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]



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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	206

Date: Aug 16, 2023 2:28 PM User: rwolinsky
File: P:\123\83\00\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]

Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended
- Future Gravity Main
- New Lift Station
- Future Force Main
- Existing FM

Existing Gravity Pipes
- <=12"
- 15"-24"
- 27" - 36"
- >36"
- Waste Water Treatment Plant
- AICUZ

Future Land Use for areas the increase in flow
- Employment
- Residential

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	207

Date: Aug 18, 2023 2:28 PM User: rwolinsky
File: P:\123\83001\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	208

Date: Aug 18, 2023 2:28 PM User: nwolinsky
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Date: Aug 18, 2023 2:28 PM User: nwolinsky
File: P:\123\83\00\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]

Wastewater System Upgrades Project Guide

City of Corpus Christi

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
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CHECKED	AA
SHEET	209

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	210

Date: Aug 18, 2023 2:28 PM User: nwolinsky
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City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
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Date: Aug 18, 2023 2:28 PM User: nwolinsky
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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	212

Date: Aug 18, 2023 2:29 PM User: nwolinsky
File: P:\123\83000\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
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Date: Aug 18, 2023 2:29 PM User: rwolinsky
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DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	214

Date: Aug 18, 2023 2:29 PM User: nwolinsky
File: P:\123\83001\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]

Legend

Upsize Gravity Pipes	Existing Gravity Pipes
Near Term	<=12"
Ultimate	15"-24"
Lift Station	27" - 36"
No Improvements Recommended	>36"
Improvements Recommended	Waste Water Treatment Plant
Future Gravity Main	AICUZ
New Lift Station	**Future Land Use for areas the increase in flow**
Future Force Main	Employment
Existing FM	Residential

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	215

Date: Aug 18, 2023 2:29 PM User: rwolinsky
File: P:\123\83000\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	216

Date: Aug 18, 2023 2:29 PM User: nwolinsky
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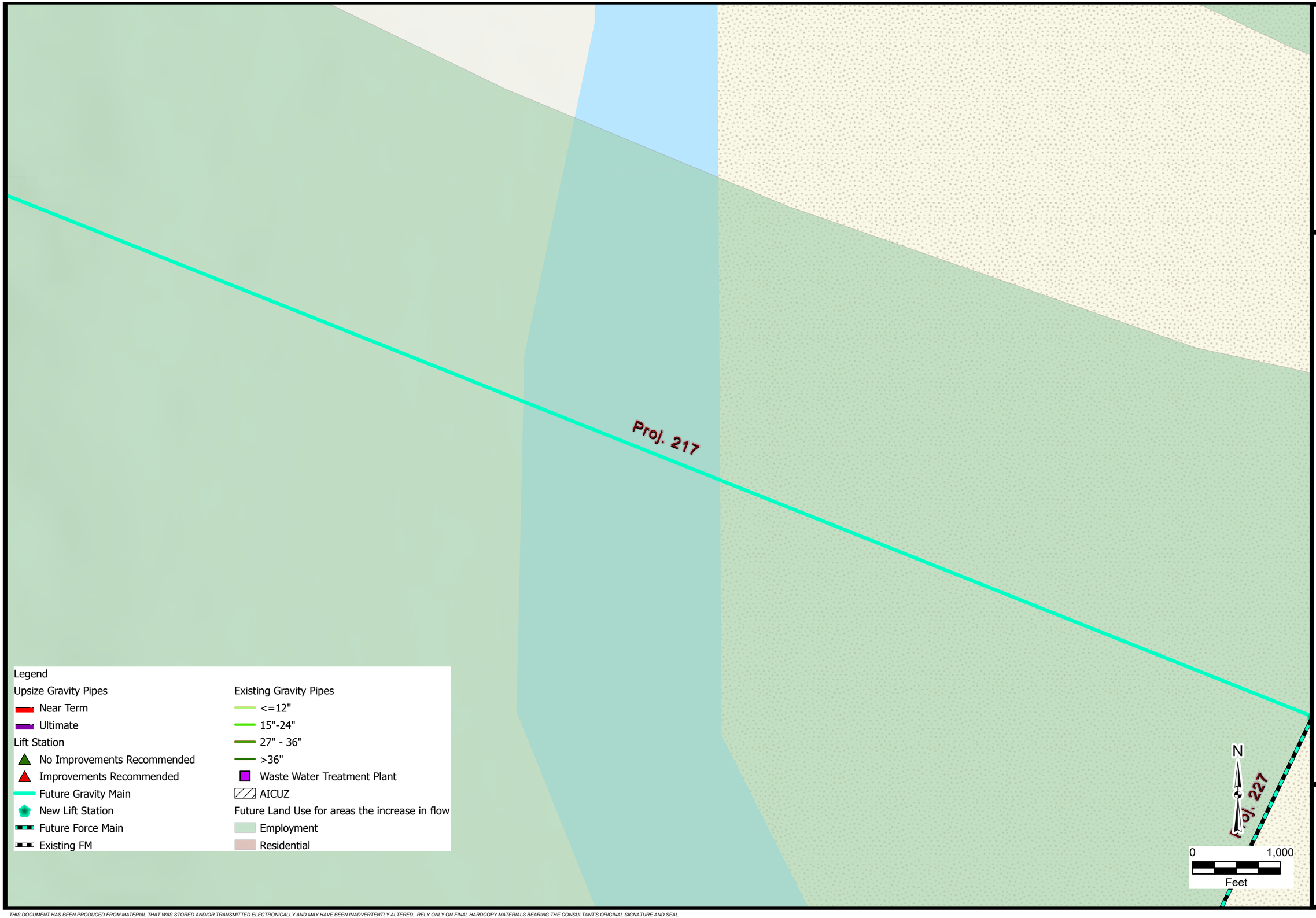

Legend

Upsize Gravity Pipes	Existing Gravity Pipes
Near Term	<=12"
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Future Gravity Main	AICUZ
New Lift Station	Future Land Use for areas the increase in flow
Future Force Main	Employment
Existing FM	Residential

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	217

Date: Aug 18, 2023 2:29 PM User: nwolinsky
File: P:\123\83000\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]

Proj. 188
Proj. 189
Proj. 219
Proj. 218
Proj. 187
Proj. 190
Proj. 90
Proj. 89
Dia. = 12in
15 ft
16 ft
25 ft
Richland Dr
Riata Dr
Arman St
Rancher rd
Rancher Rd
Rockfield Rd
Yorktown Blvd
Yorktown Blvd
Glenoak Dr
Rose St
Truk St
Maria
Held Dr
Airdome Dr
Pal Air Dr
Kaipo Dr
City of Corpus Christi Park
Waldron Rd
Waldron Field
Seafoam Dr
Meadow Ridge Dr
Meadow Park Dr

Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended
- Future Gravity Main
- New Lift Station
- Future Force Main
- Existing FM

Existing Gravity Pipes
- <=12"
- 15"-24"
- 27" - 36"
- >36"
- Waste Water Treatment Plant
- AICUZ

Future Land Use for areas the increase in flow
- Employment
- Residential

N

0 1,000
Feet

Wastewater System Upgrades Project Guide

City of Corpus Christi

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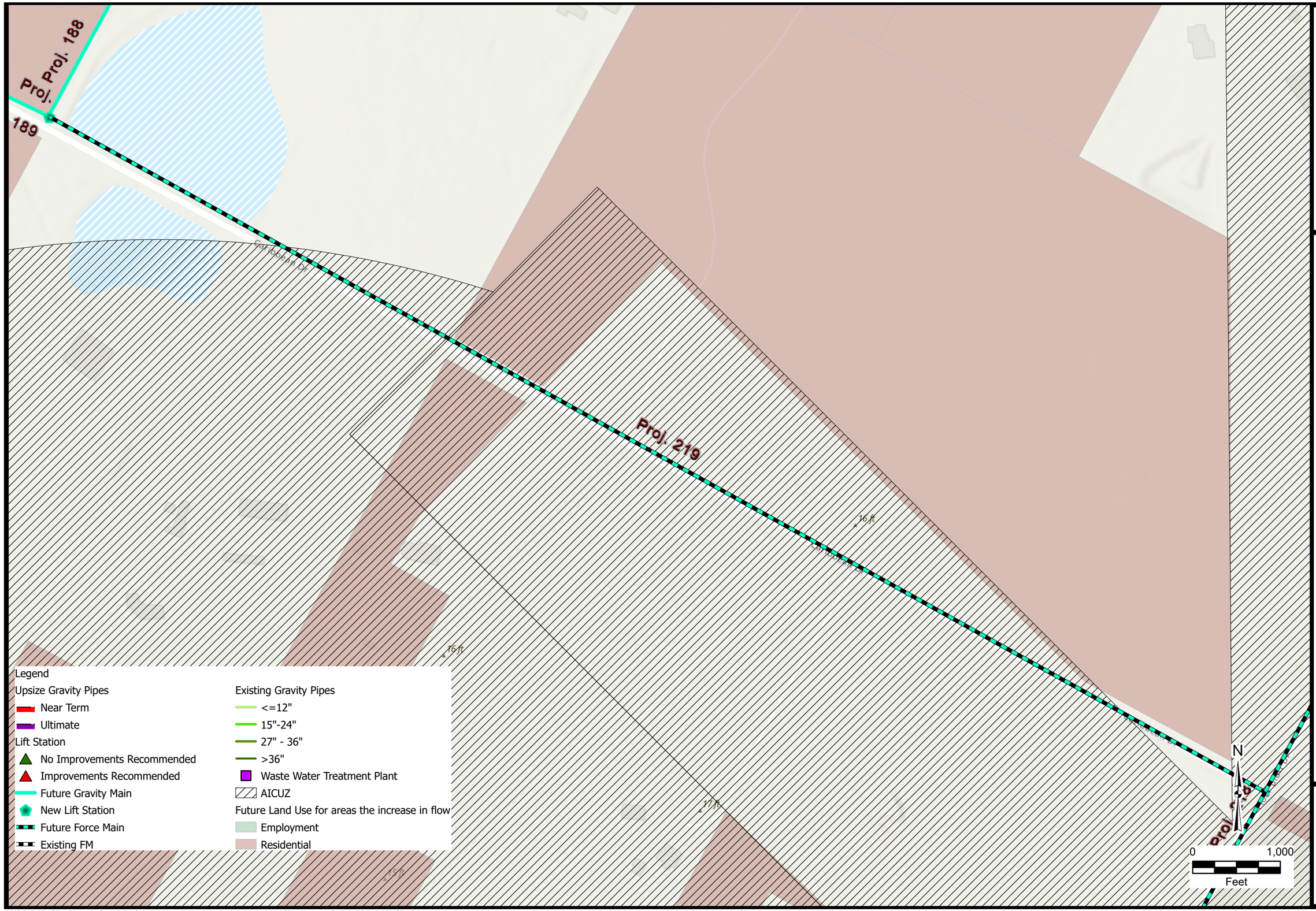
JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	218



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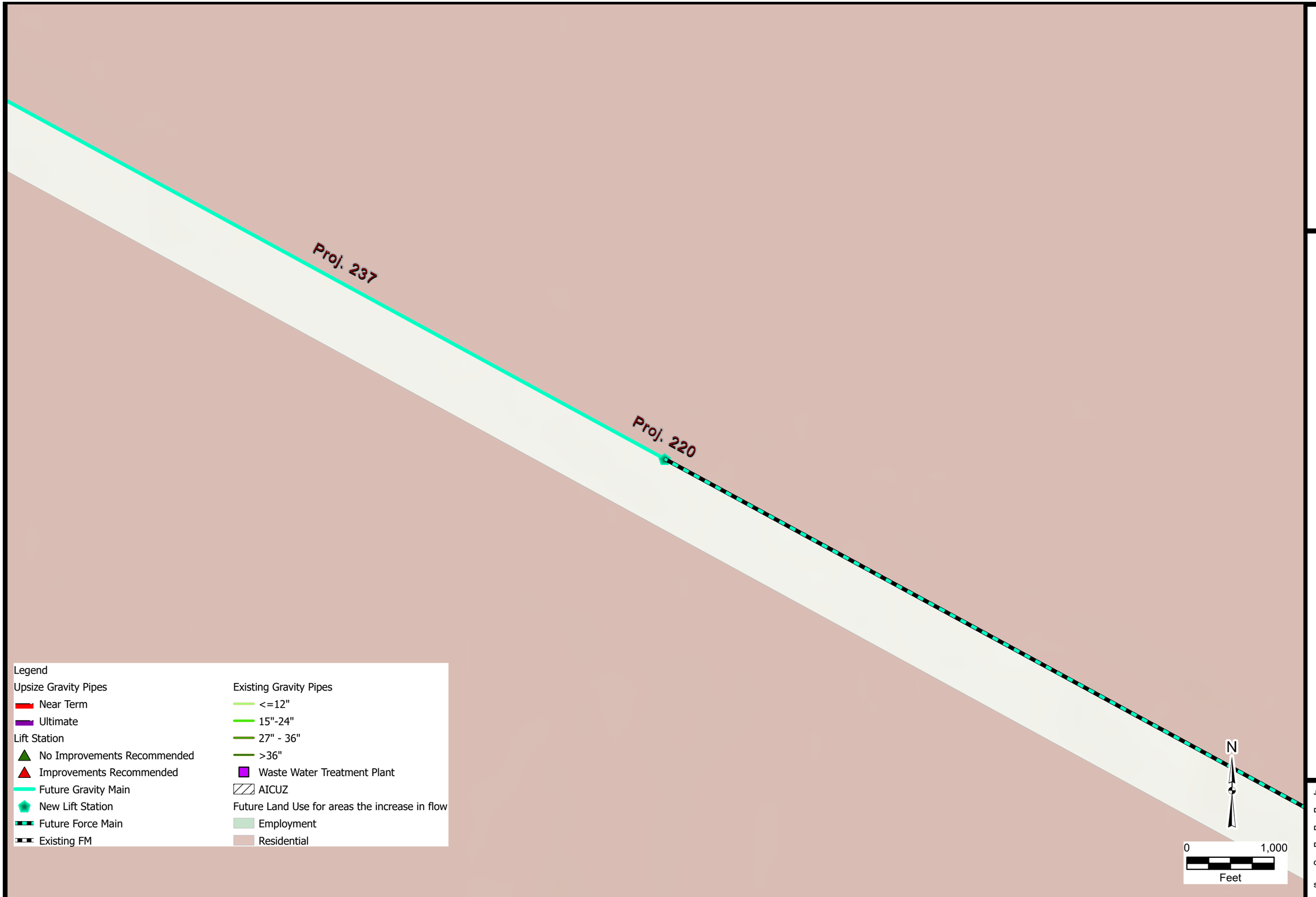
City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	219



Legend

Upsize Gravity Pipes	Existing Gravity Pipes
Near Term	<=12"
Ultimate	15"-24"
Lift Station	27" - 36"
No Improvements Recommended	>36"
Improvements Recommended	Waste Water Treatment Plant
Future Gravity Main	AICUZ
New Lift Station	Future Land Use for areas the increase in flow
Future Force Main	Employment
Existing FM	Residential

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	220

Date: Aug 16, 2023 2:29 PM User: rwolinsky
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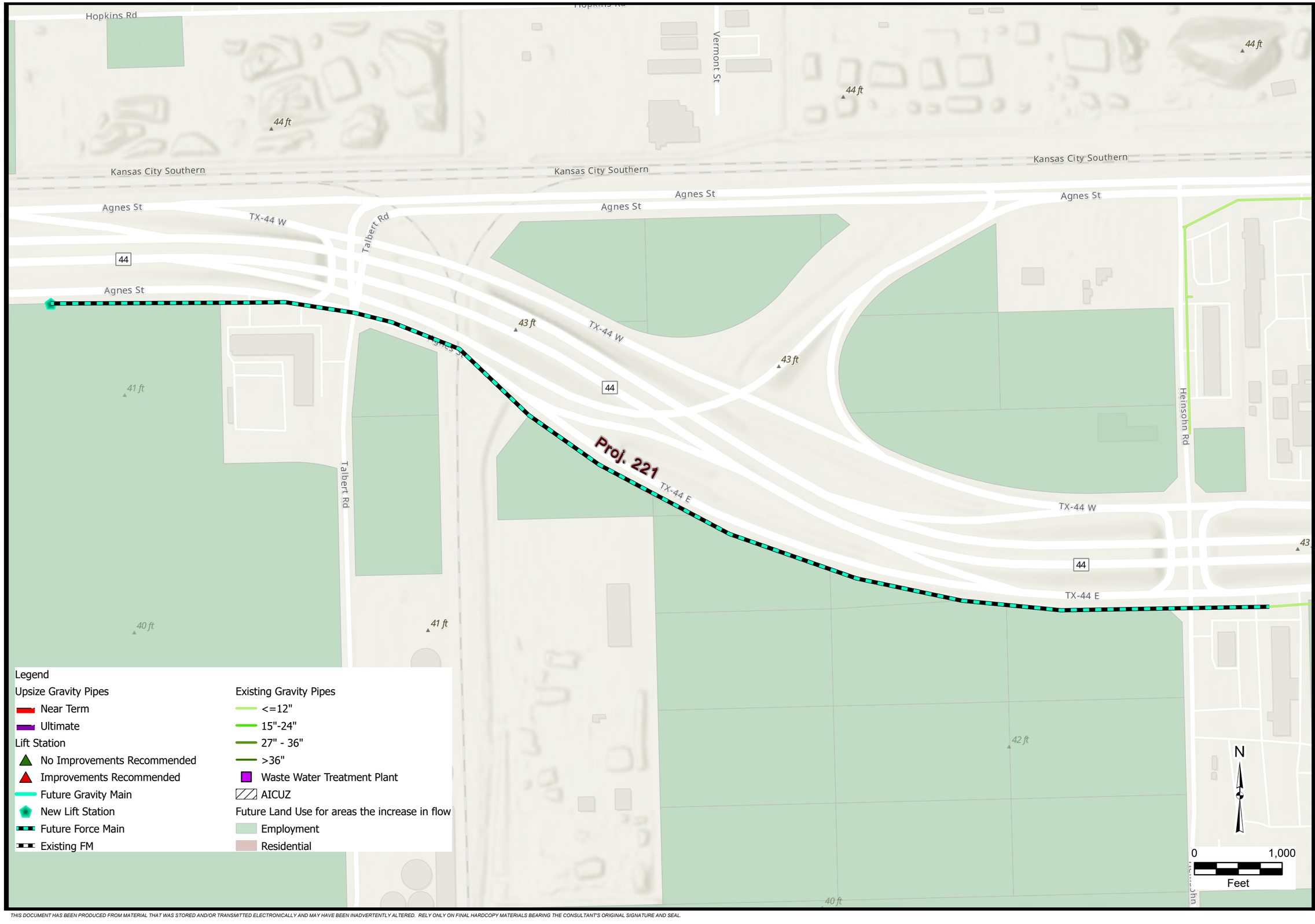

Legend

Upsize Gravity Pipes	Existing Gravity Pipes
Near Term	<=12"
Ultimate	15"-24"
Lift Station	27" - 36"
No Improvements Recommended	>36"
Improvements Recommended	Waste Water Treatment Plant
Future Gravity Main	AICUZ
New Lift Station	**Future Land Use for areas the increase in flow**
Future Force Main	Employment
Existing FM	Residential

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City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	221

Date: Aug 18, 2023 2:29 PM User: nwolinsky
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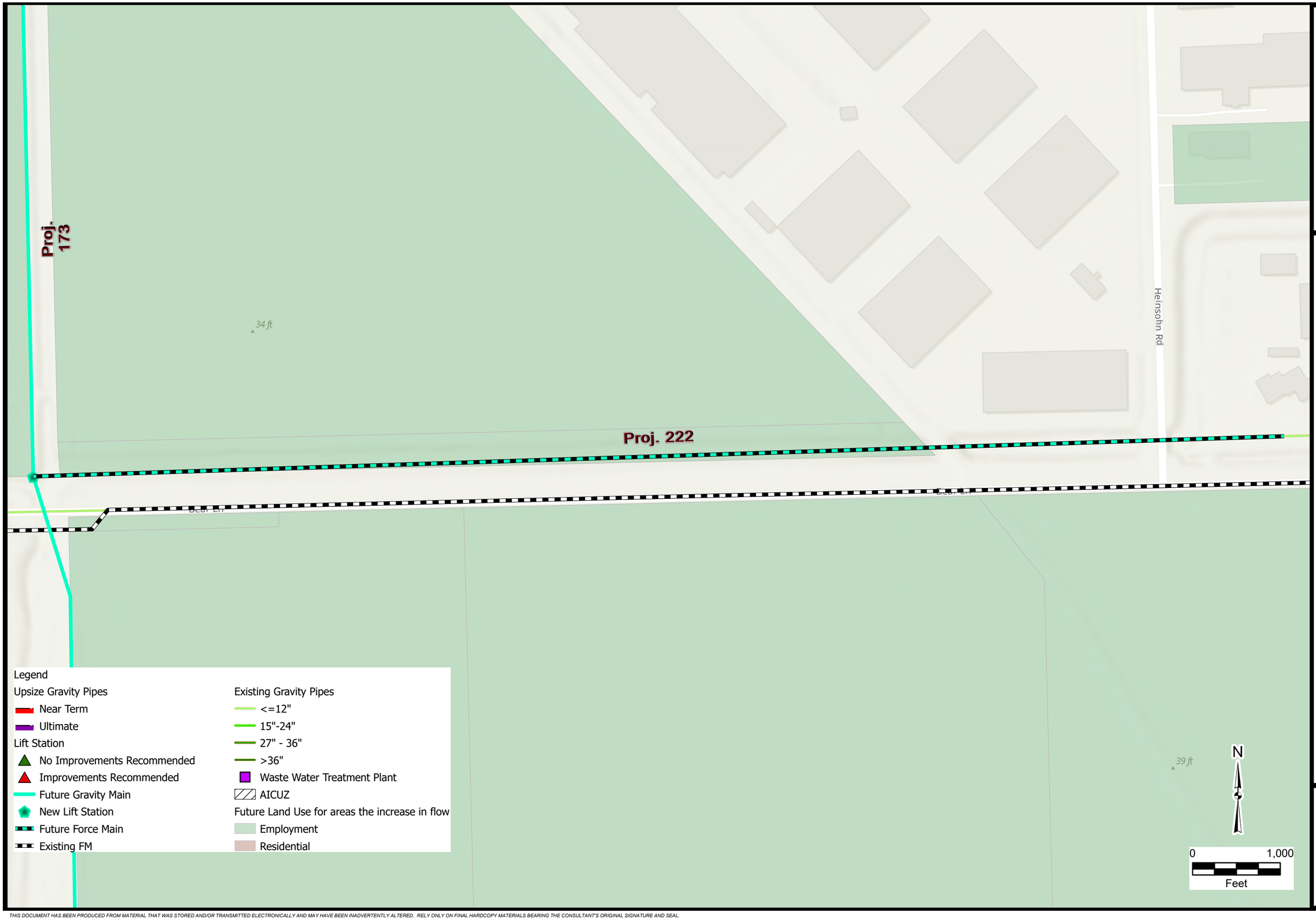

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	222

Date: Aug 18, 2023 2:29 PM User: nwolinsky
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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	223

Date: Aug 18, 2023 2:29 PM User: nwolinsky
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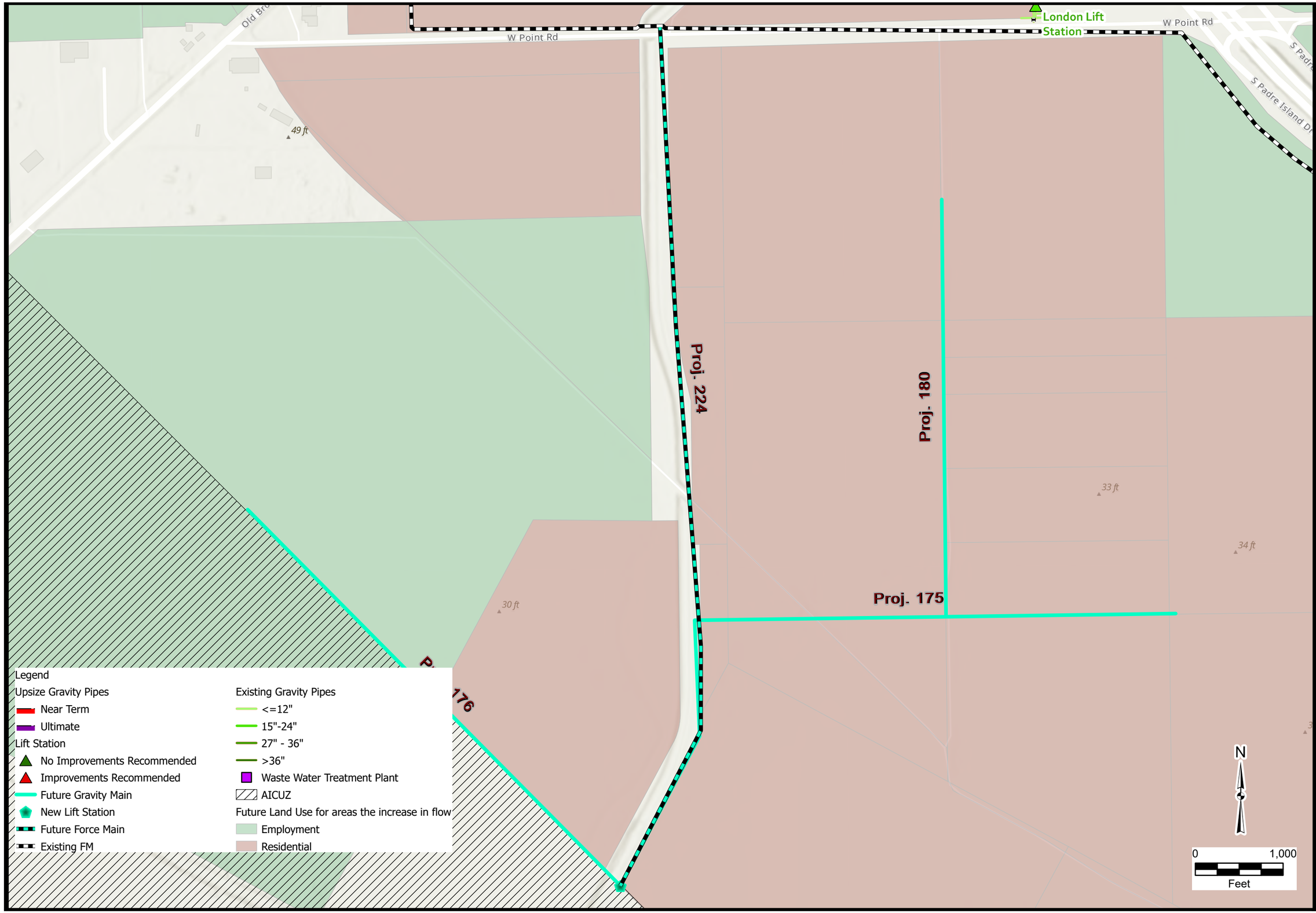

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Date: Aug 18, 2023 2:29 PM User: nvolinsky
File: P:\123\83\00\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]

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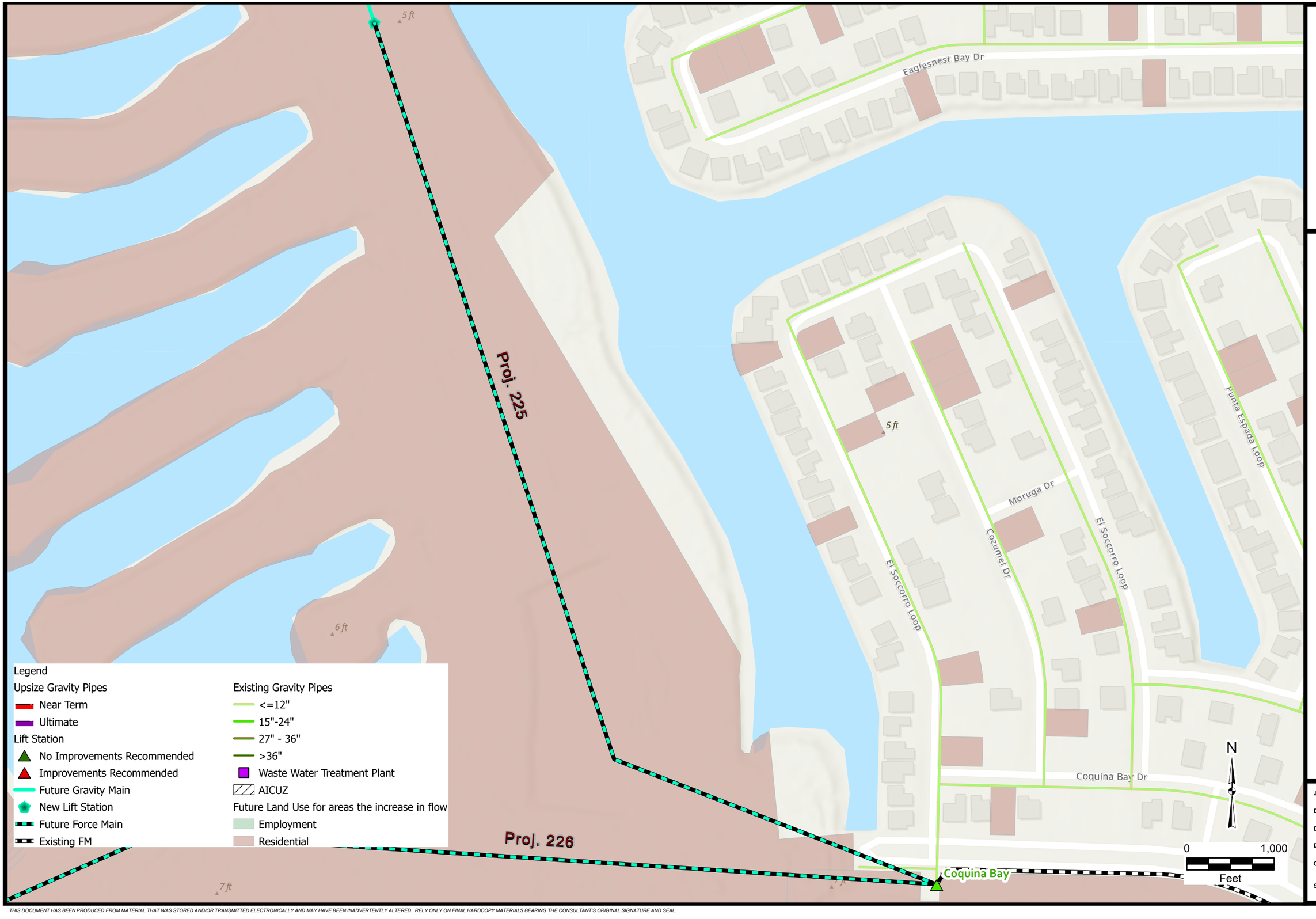
JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	224



Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended
- Future Gravity Main
- New Lift Station
- Future Force Main
- Existing FM

Existing Gravity Pipes
- <=12"
- 15"-24"
- 27" - 36"
- >36"
- Waste Water Treatment Plant
- AICUZ

Future Land Use for areas the increase in flow
- Employment
- Residential

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	225

Date: Aug 18, 2023 2:29 PM User: nwolinsky
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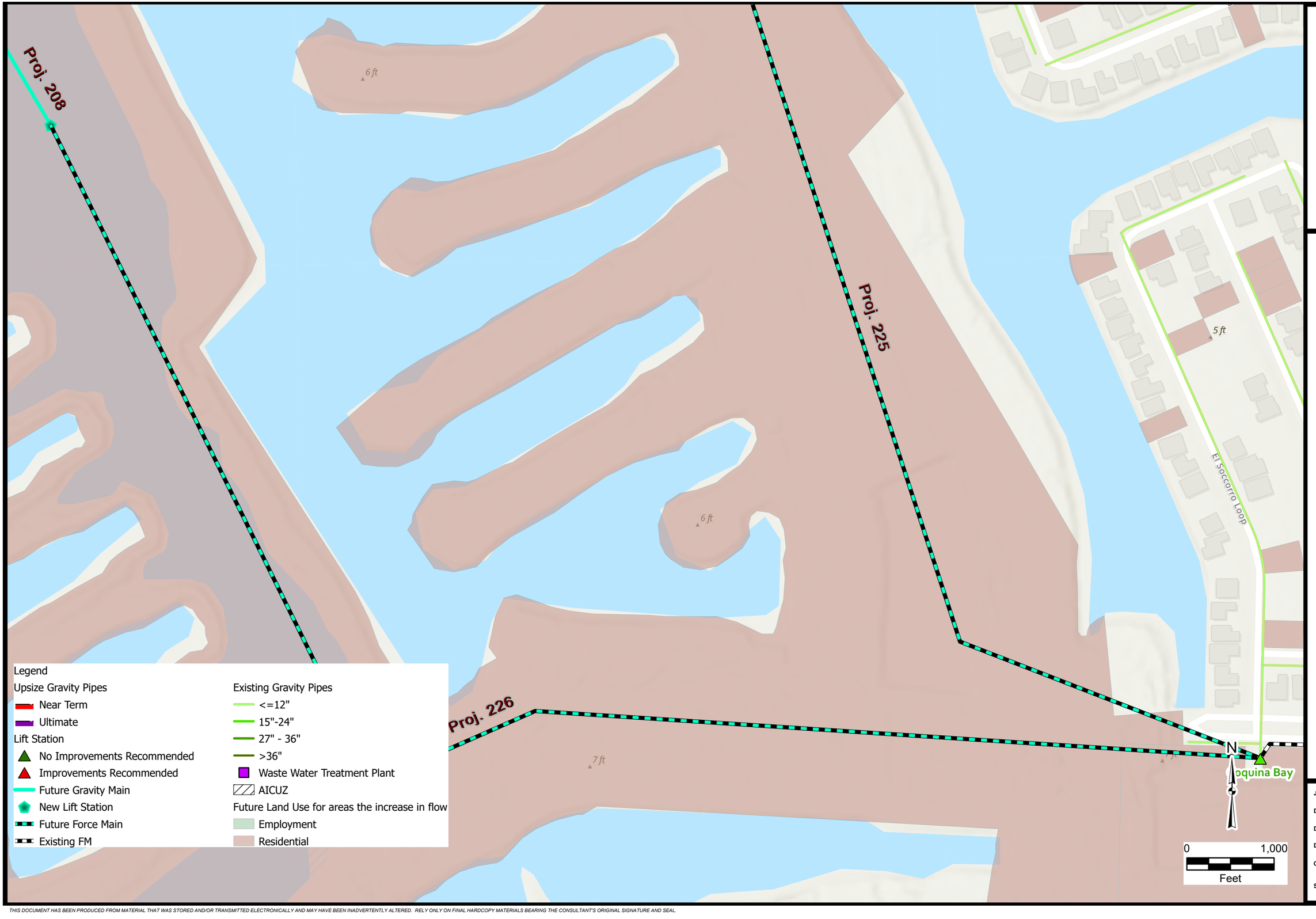

Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended
- Future Gravity Main
- New Lift Station
- Future Force Main
- Existing FM

Existing Gravity Pipes
- <=12"
- 15"-24"
- 27" - 36"
- >36"
- Waste Water Treatment Plant
- AICUZ

Future Land Use for areas the increase in flow
- Employment
- Residential

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	226

Date: Aug 18, 2023 2:29 PM User: nwolinsky
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Date: Aug 18, 2023 2:29 PM User: nwolinsky
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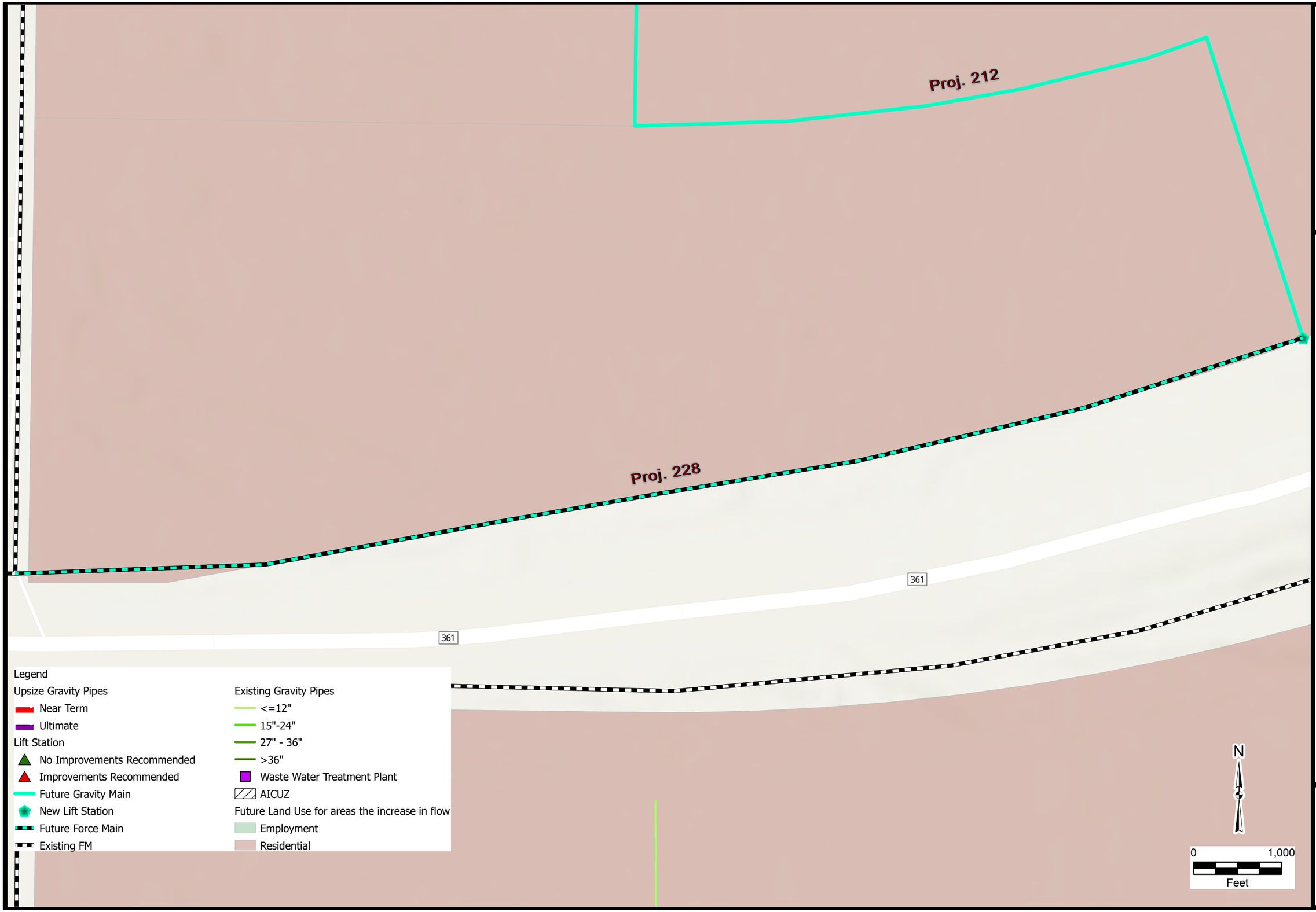
JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	227



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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	228

Date: Aug 18, 2023 2:29 PM User: nvolinsky
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City of Corpus Christi

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	229

Date: Aug 16, 2023 2:29 PM User: rwolinsky
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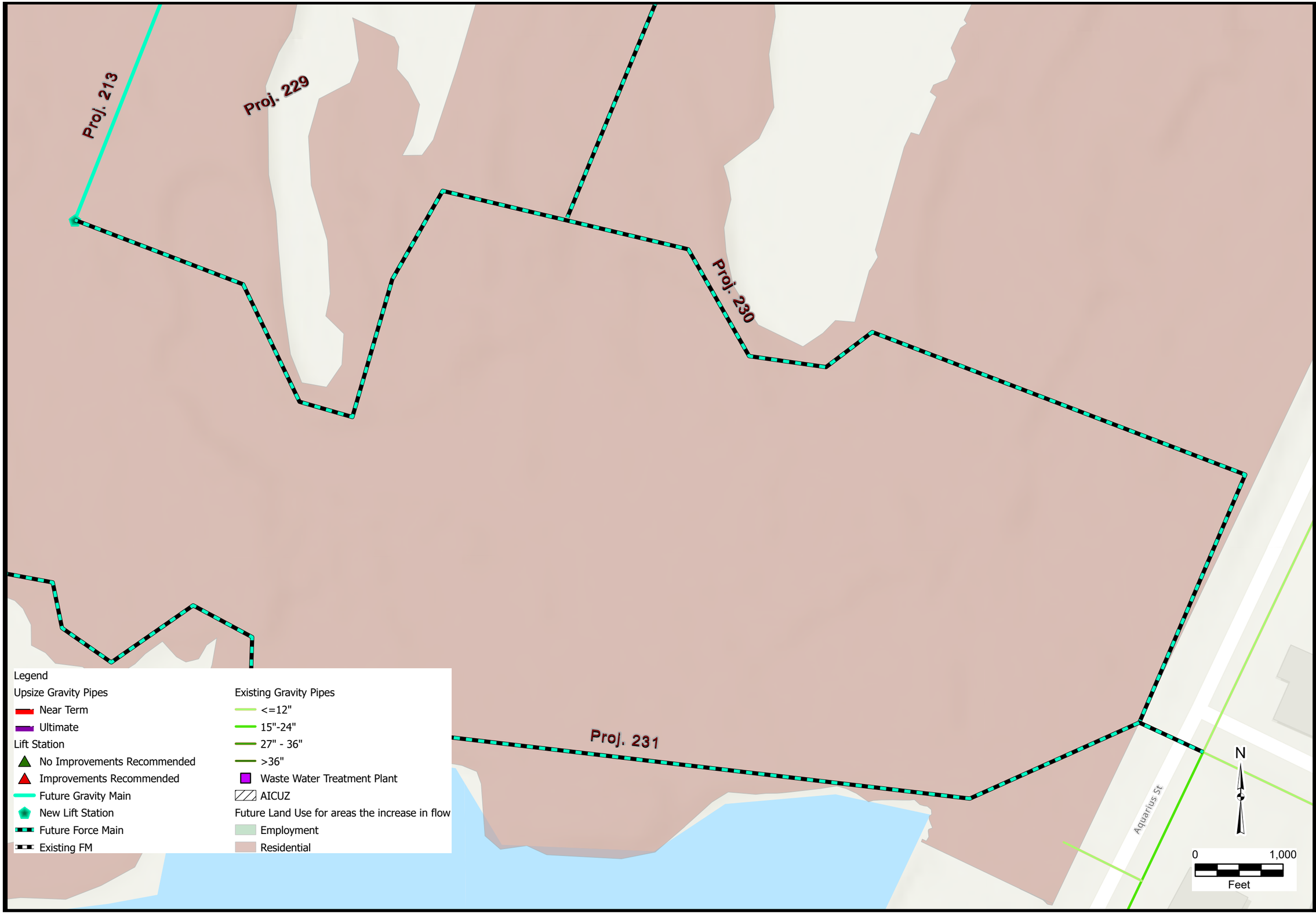

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City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	230

Date: Aug 18, 2023 2:29 PM User: nwolinsky
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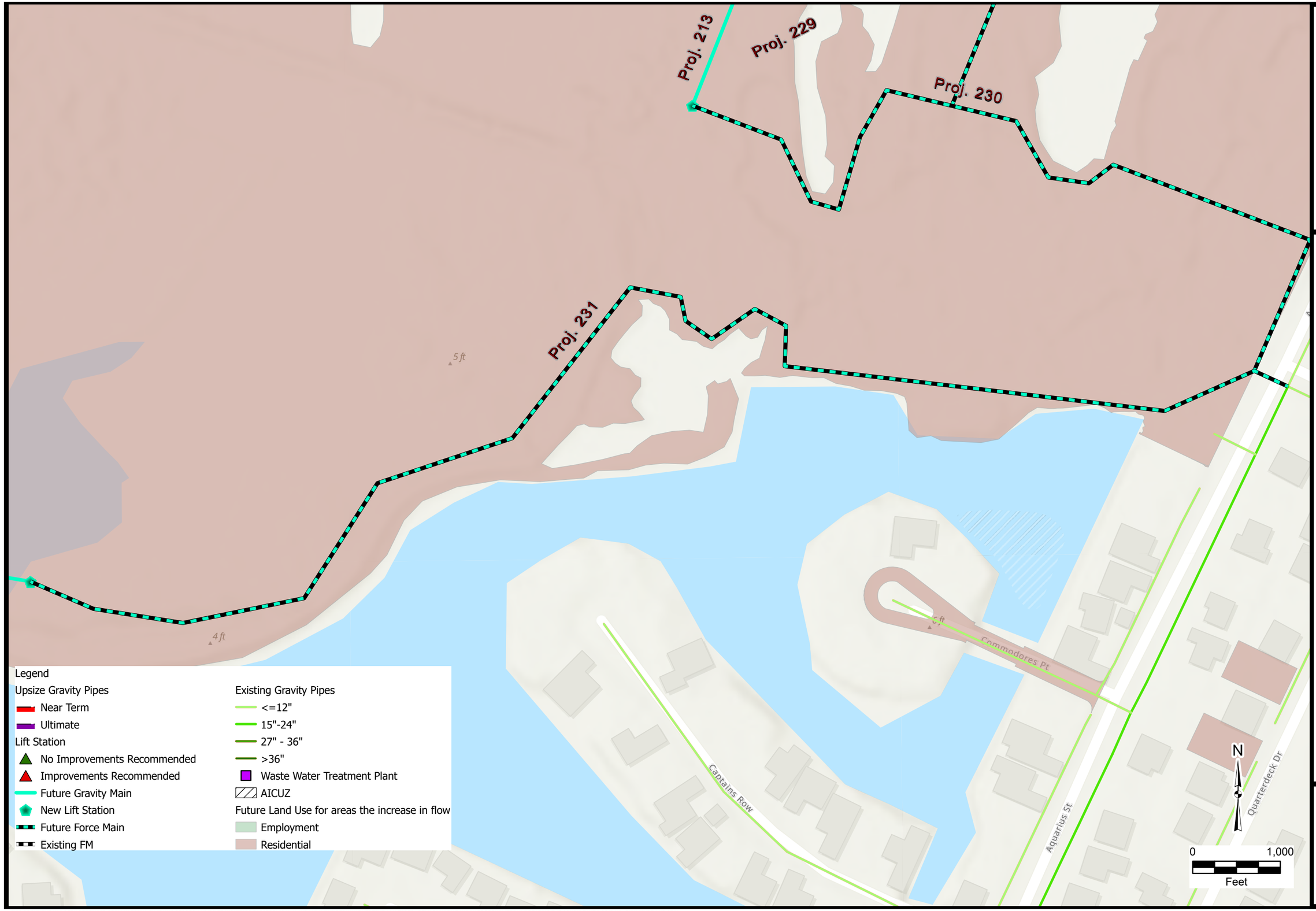

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City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	231

Date: Aug 16, 2023 2:30 PM User: rwolinsky
File: P:\123\83\00\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	232

Date: Aug 18, 2023 2:30 PM User: rwolinsky
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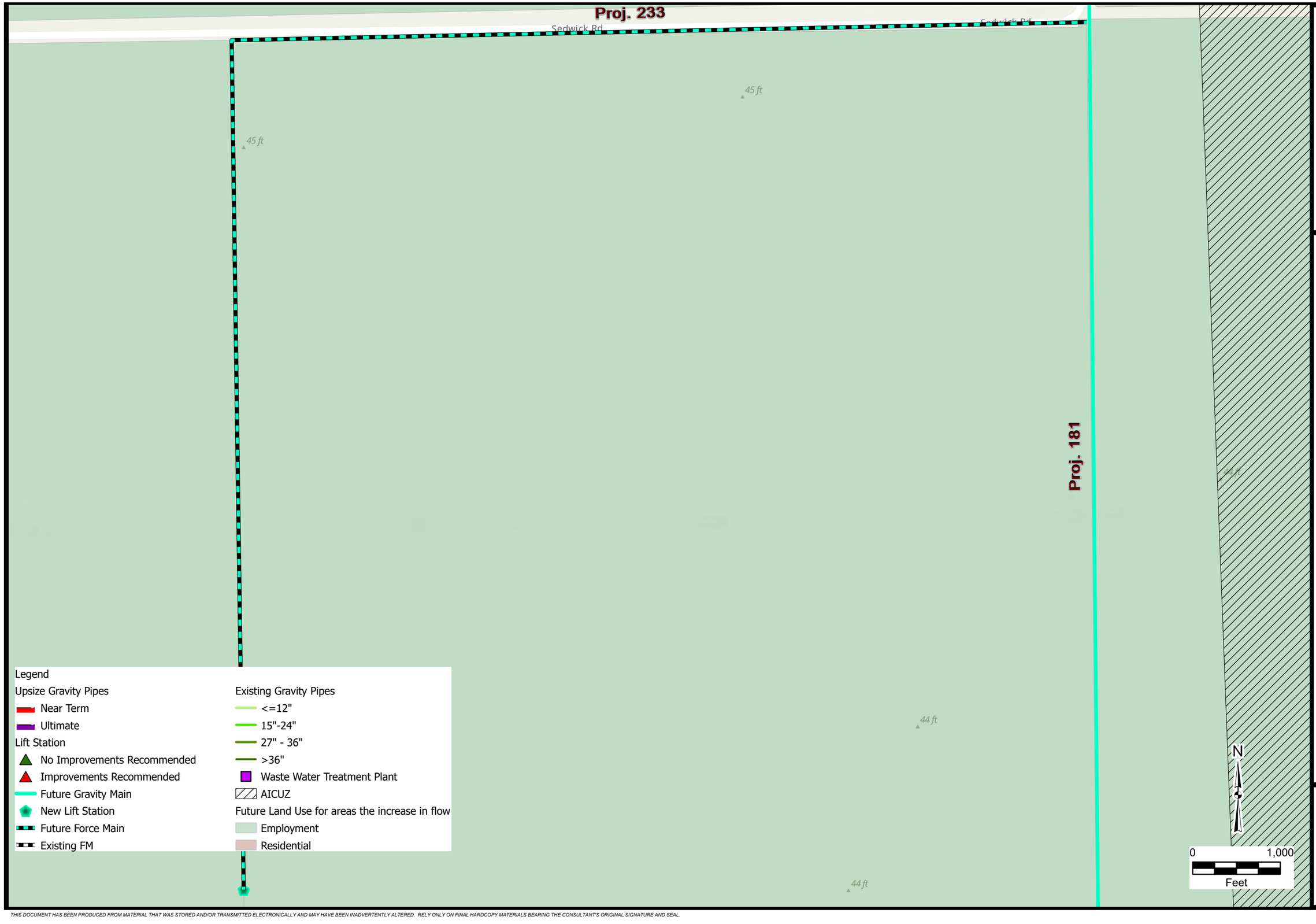

Legend

Upsize Gravity Pipes	Existing Gravity Pipes
Near Term	<=12"
Ultimate	15"-24"
Lift Station	27" - 36"
No Improvements Recommended	>36"
Improvements Recommended	Waste Water Treatment Plant
Future Gravity Main	AICUZ
New Lift Station	Future Land Use for areas the increase in flow
Future Force Main	Employment
Existing FM	Residential

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	233

Date: Aug 18, 2023 2:30 PM User: nwolinsky
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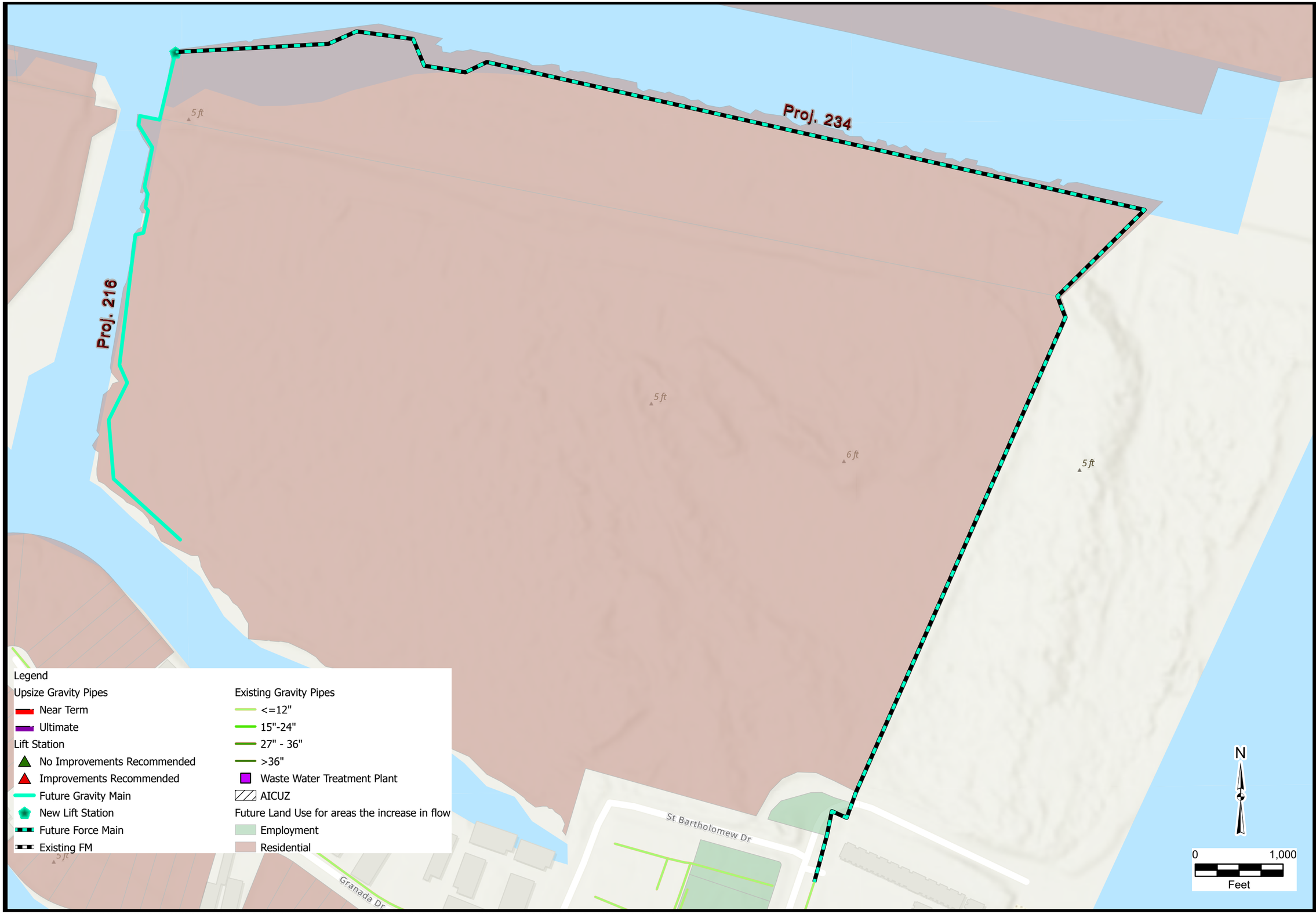

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JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	234

Date: Aug 18, 2023 2:30 PM User: nwolinsky
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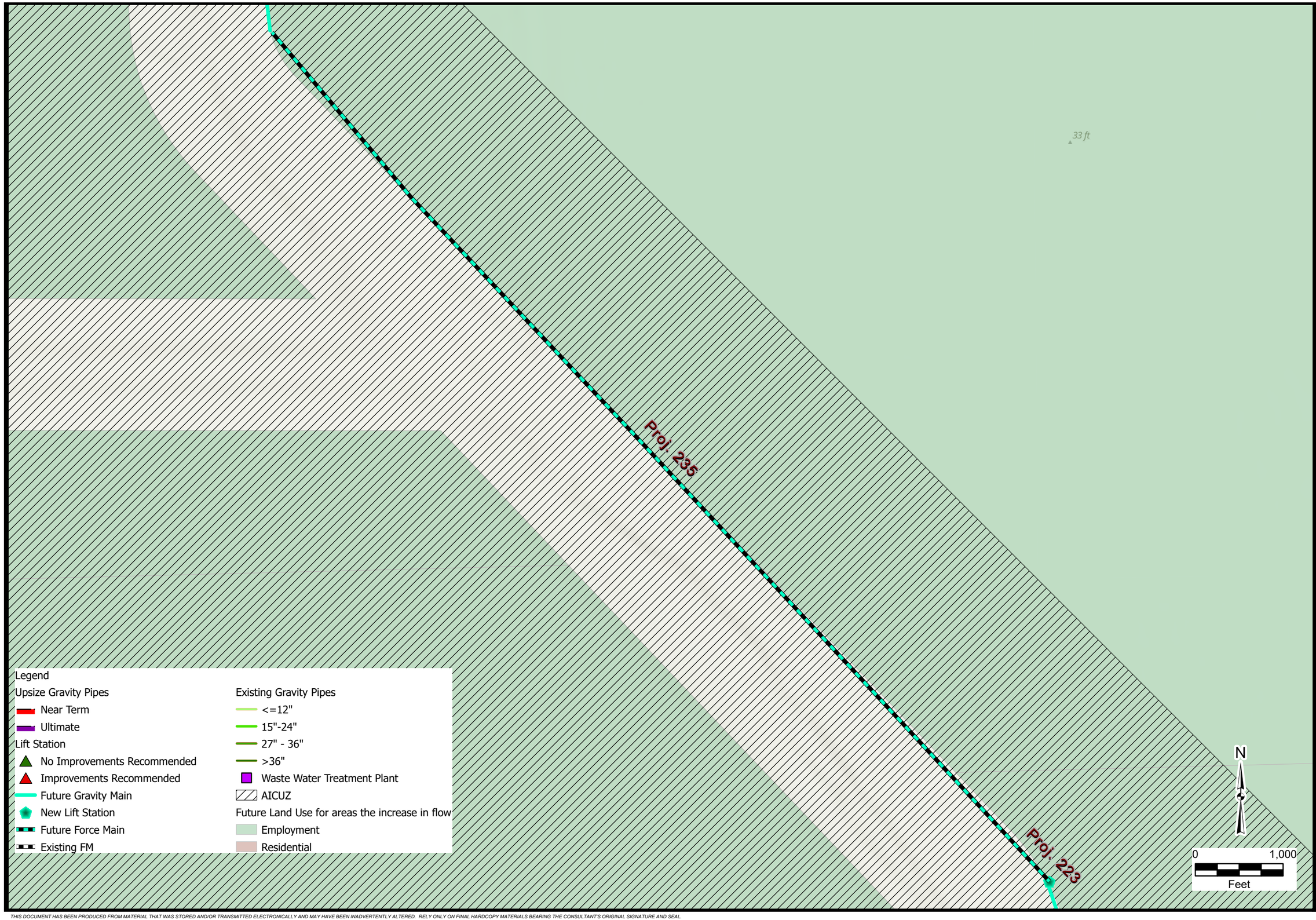

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City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	235

Date: Aug 18, 2023 2:30 PM User: nwolinsky
File: P:\12383000\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]

Legend

Upsize Gravity Pipes
- Near Term
- Ultimate

Lift Station
- No Improvements Recommended
- Improvements Recommended
- Future Gravity Main
- New Lift Station
- Future Force Main
- Existing FM

Existing Gravity Pipes
- <=12"
- 15"-24"
- 27" - 36"
- >36"
- Waste Water Treatment Plant
- AICUZ

Future Land Use for areas the increase in flow
- Employment
- Residential

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City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
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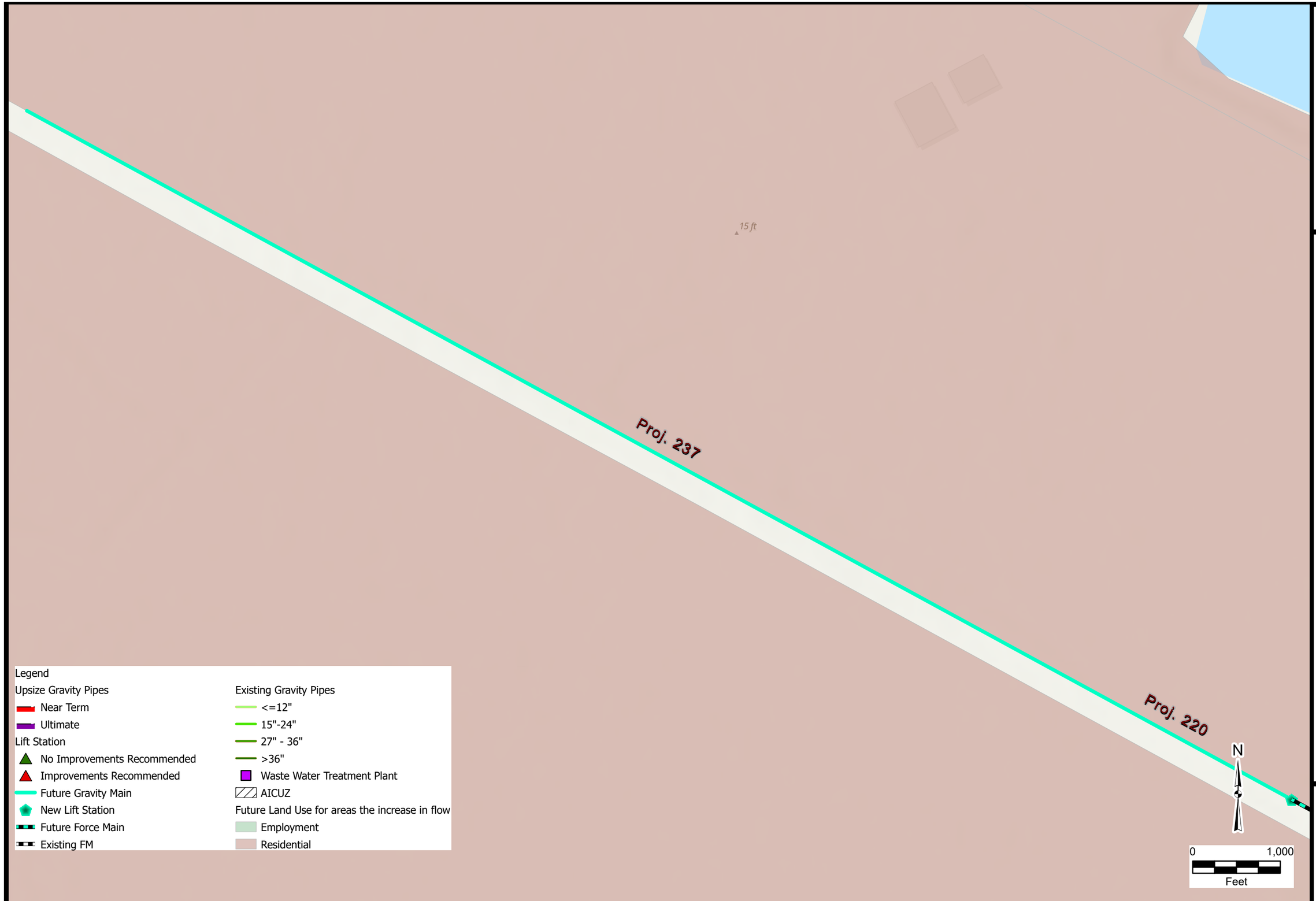

Legend

Upsize Gravity Pipes	Existing Gravity Pipes
Near Term	<=12"
Ultimate	15"-24"
Lift Station	27" - 36"
No Improvements Recommended	>36"
Improvements Recommended	Waste Water Treatment Plant
Future Gravity Main	AICUZ
New Lift Station	Future Land Use for areas the increase in flow
Future Force Main	Employment
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City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	237

Date: Aug 18, 2023 2:30 PM User: rwolinsky
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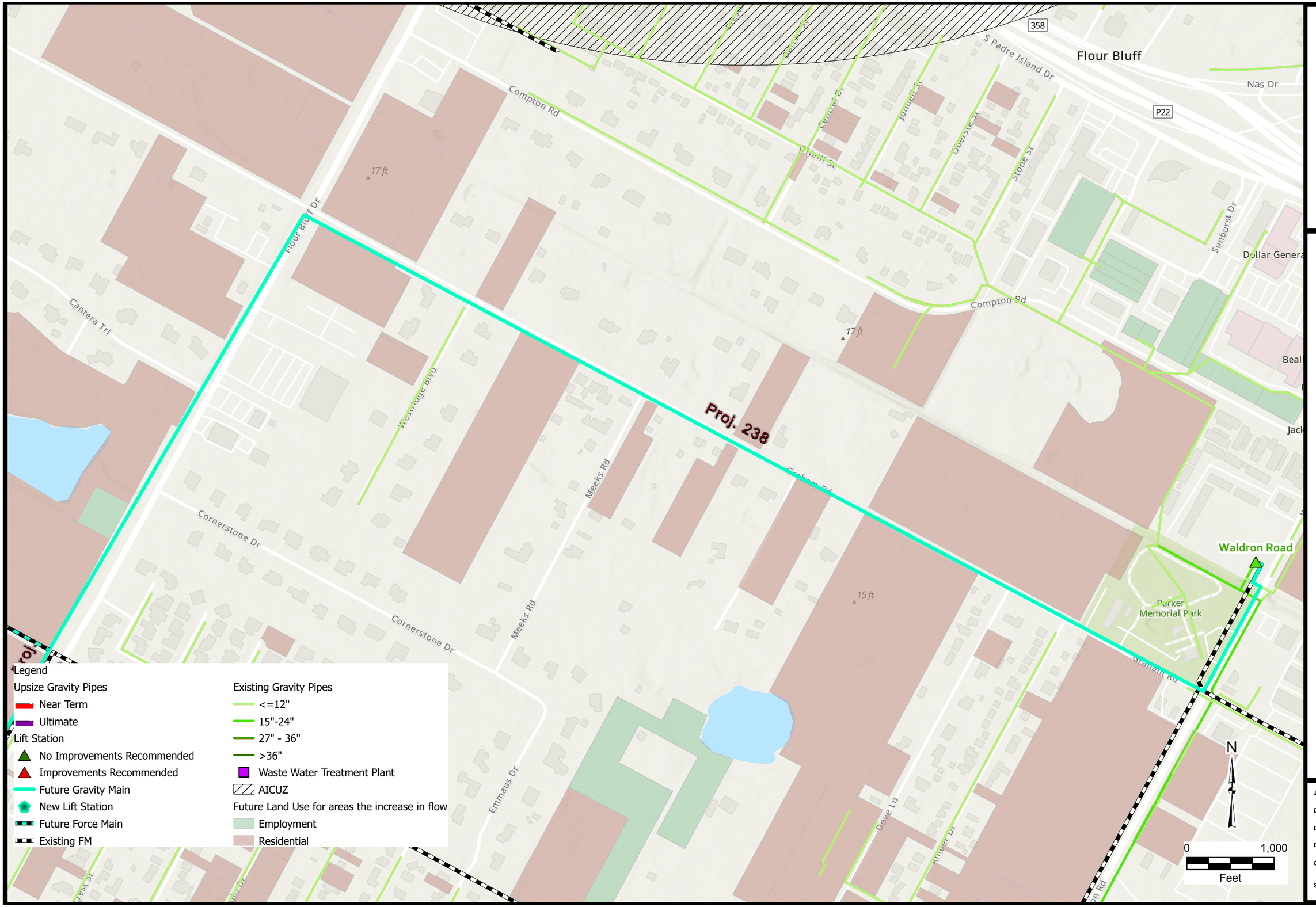

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City of Corpus Christi

JOB NO.	0000-00
DATE	Aug 2023
DESIGNER	RW
DRAWN	AA
CHECKED	AA
SHEET	238

Date: Aug 18, 2023 2:30 PM User: nwolinsky
File: P:\123\83000\City WW Models\GIS\CoCC_For_Final_Project_Exhibits_July_2023.aprx Layout: Allison_Curr_Projects1 Map: [empty]