



Long Beach Water
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CAPITAL IMPROVEMENT PROGRAM

Fiscal Year 2023



**LONG BEACH WATER DEPARTMENT
CAPITAL IMPROVEMENT PROGRAM
FISCAL YEAR 2022/23**

TABLE OF CONTENTS

Capital Improvement Program - Fiscal Year 2022/23	1
Water Pipeline System Improvements	
List of Projects and Summary	2
Project Maps.....	4
Reservoir/Treatment Plant System Improvements	
List of Projects and Summary	26
Project Maps.....	27
Water Supply Projects	
List of Projects and Summary	39
Project Maps.....	40
Water Facility Improvements	
List of Projects Summary	52
Project Maps.....	53
Water Developer Projects	
List of Projects Summary	55
Project Maps.....	56
Sewer Pipeline System Improvements	
List of Projects and Summary	57
Project Maps.....	58
Sewer Lift Station Rehabilitations	
List of Projects and Summary	61
Project Maps.....	62
Sewer Developer Projects	
List of Projects Summary	65
Project Maps.....	66

**LONG BEACH WATER DEPARTMENT
CAPITAL IMPROVEMENT PROGRAM
FISCAL YEAR 2022/23**

WATER FUND PROJECT BUDGETS (thousands)

Fiscal Year	2022/23
Water Pipeline System Improvements	14,326
Reservoir/Treatment Plant System Improvements	9,992
Water Supply	15,646
Water Facility Improvements	621
Water Developer Projects	542
TOTAL FOR WATER FUND PROJECTS	41,126

SEWER FUND PROJECT BUDGETS (thousands)

Fiscal Year	2022/23
Sewer Pipeline System Improvements	371
Sewer Lift Station Rehabilitations	4,247
Sewer Developer Projects	561
TOTAL FOR SEWER FUND PROJECTS	5,179

TOTAL CIP PROJECTS **46,305**

**LONG BEACH WATER DEPARTMENT
CAPITAL IMPROVEMENT PROGRAM
FY 2022/23 WATER FUND PROJECTS**

PROJECT CATEGORY: WATER PIPELINE SYSTEM IMPROVEMENTS

Project Description	Cost Estimate
Large Valve Replacement FY23/24	\$150,000
Large Valve Replacement FY24/25	\$13,100
Port of Long Beach Water System Improvement Study	\$1,473,900
Cathodic Protection - Phase 5	\$620,000
Cathodic Protection - Phase 6	\$620,000
Cathodic Protection - Phase 7	\$100,000
Water Main Improvement Project 2-D and POF-4	\$2,193,174
Water Main Improvement Project 2-C	\$372,500
Water Main Improvement Project 3-B	\$58,000
Water Main Improvement Project 3-A	\$857,280
Water Main Improvement Project 5B	\$50,400
Water Main Improvement Project POF-01	\$140,600
Water Main Bridge Crossing Master Plan	\$212,122
Water Main Bridge Repair FY21/22	\$600,000
Water Main Bridge Repair FY23/24	\$40,435
Water Main Lining Pilot Project	\$20,018
Alley Water Main Conversion - Pacific Ave	\$85,272
Water Main Replacement - Lakewood Boulevard	\$499,310
Golden Avenue Main Replacement	\$1,600,000
Water Main Replacement - Spinnaker Bay, Phase 1	\$4,121,397
Colorado Lagoon Open Channel - Potable Water Main Relocation	\$312,800
Colorado Lagoon Open Channel - Reclaimed Water Main Relocation	\$185,700
TOTAL	\$14,326,008

SUMMARY:

The Long Beach Water Department (LBWD) potable water system consists of over 910 miles of transmission and distribution pipeline, and over 93,000 service connections. Additionally, LBWD owns and maintains over 35 miles of recycled water pipeline. LBWD has developed several programs to assess and develop improvements plans for our pipelines and appurtenances. These programs include: water main improvement, large valve replacement, cathodic protection, and water main bridge crossing improvement. The large valve replacement program improves water system reliability and restores operational functionality. LBWD is conducting a study on Port's water system to determine required improvements in preparation for transfer of ownership and maintenance to LBWD. LBWD's cathodic protection program will prevent corrosion and ensure prolonged dependability of the water system. LBWD's bridge crossing improvement program ensures the integrity, dependability, and prolonged life of

**LONG BEACH WATER DEPARTMENT
CAPITAL IMPROVEMENT PROGRAM
FY 2022/23 WATER FUND PROJECTS**

the water system, and the Water Main Bridge Master Plan identifies future projects for LBWD. LBWD's Water Main Lining Pilot Project explores trenchless methods and technologies for pipe rehabilitation and improvements. LBWD's water improvement program enhances water flow and quality, as well as ensuring sufficient fire flow capacity. As part of the LBWD's alley main conversion program, old mains in alleys are replaced with new mains in City streets, and the existing service laterals are relocated as part of the conversion. The Colorado Lagoon Open Channel – Potable and Reclaimed Main Relocations are pipeline relocation projects in conjunction with the City's Colorado Lagoon improvements.





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: COLORADO LAGOON OPEN CHANNEL - RECLAIMED WATER MAIN RELOCATION

Fund: Water

Project Category: Water Pipeline System Improvements

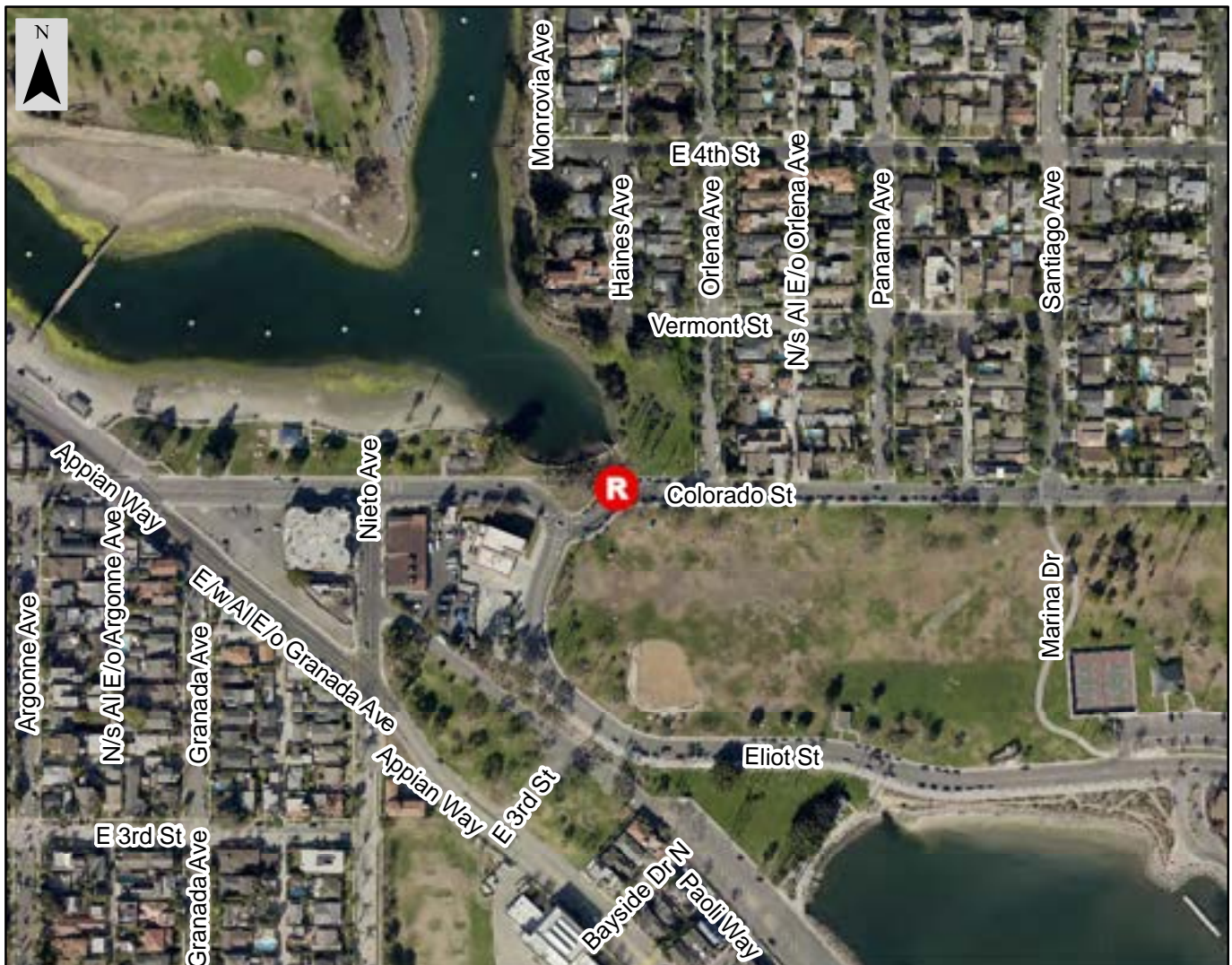
Project Description: Project is part of larger Public Works Colorado St Utility Crossing, remove and replace approximately 442 LF of existing 6" AC recycled main at Colorado St and Eliot St

Purpose: Public Works Colorado St Utility Crossing, remove and replace existing 6" AC recycled main.

Location: Colorado Lagoon

Council District: 3

FY 2022/23 Budget: \$185,700





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: WATER MAIN IMPROVEMENT PROJECT 5B

Fund: Water

Project Category: Water Pipeline System Improvements

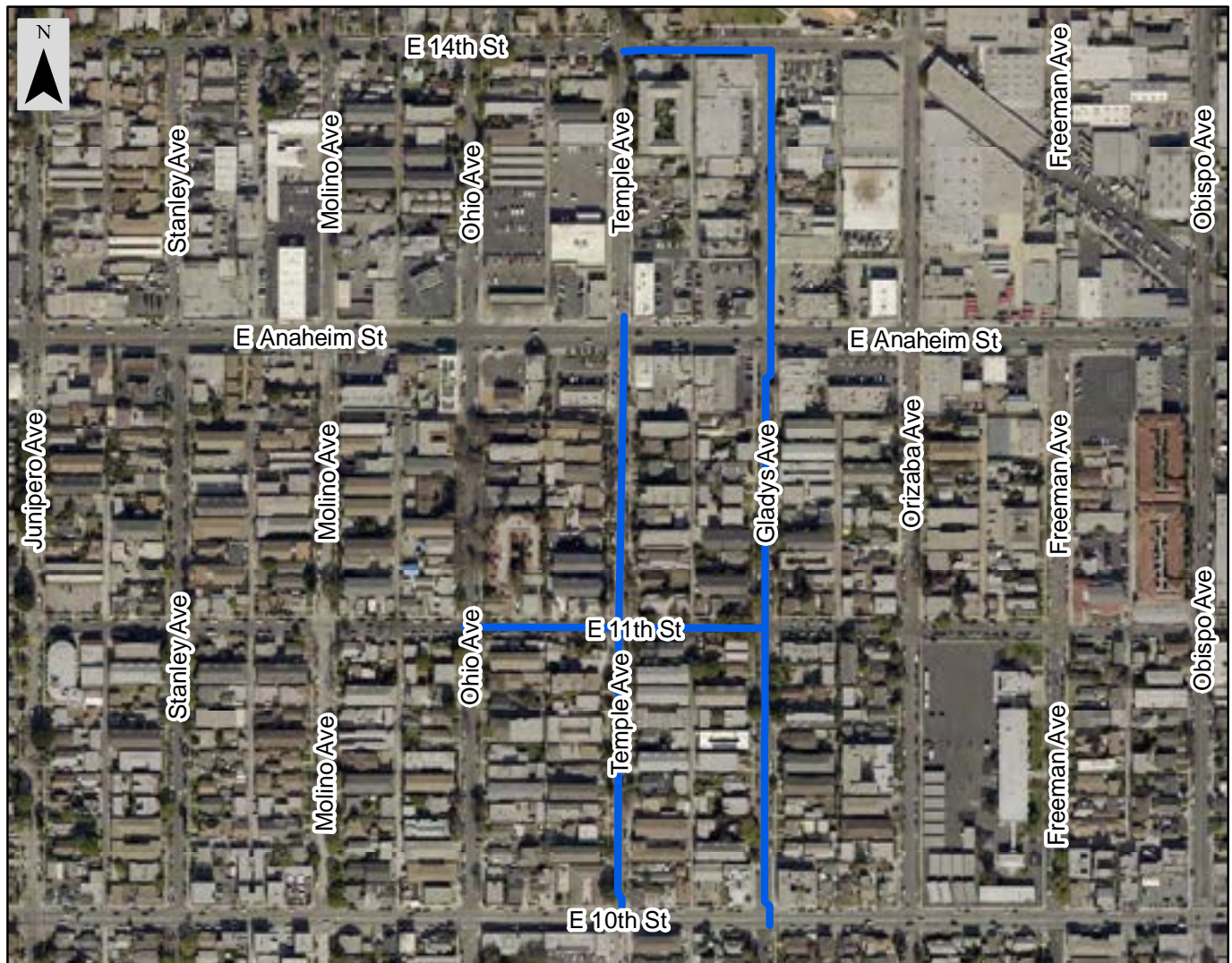
Project Description: This project includes 4,640 linear feet of 8-inch and 12-inch DIP, including associated services, valves, and fire hydrants.

Purpose: Improve fire flow protection and preserve water quality to the area.

Location: Bounded by 14th St to the north, Orizaba Ave to the east, 10th St to the south, and Ohio Ave to the west

Council District: 2

FY 2022/23 Budget: \$50,400





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: WATER MAIN BRIDGE REPAIR FY 21/22

Fund: Water

Project Category: Water Pipeline System Improvements

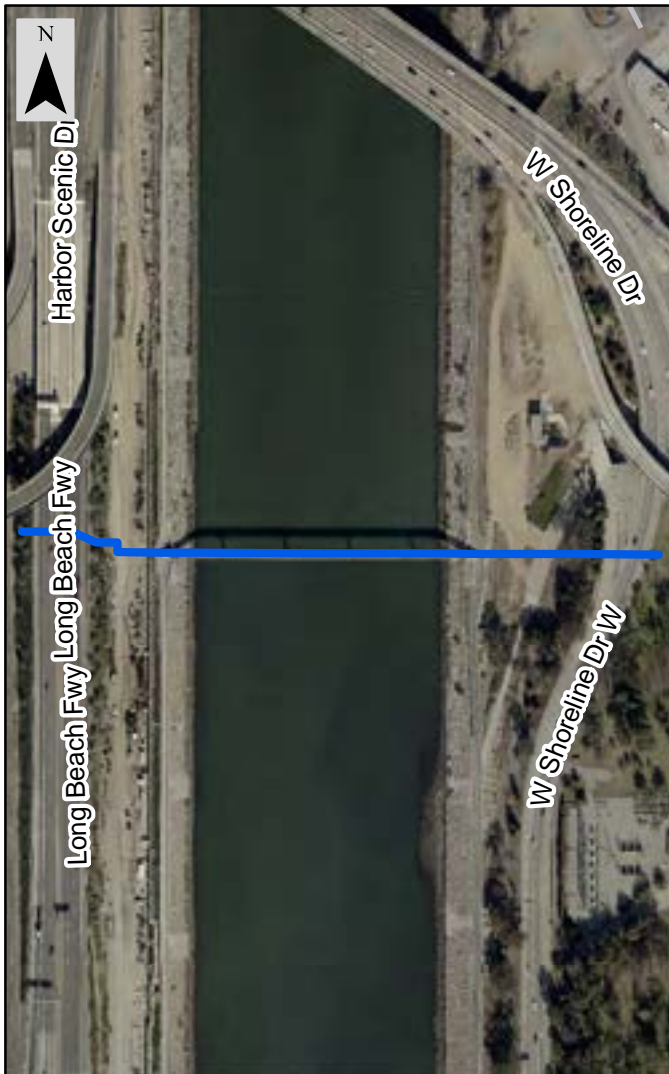
Project Description: This project will include remove and replace coating of water line at bridge crossing

Purpose: Improve corrosion protection of the water main

Location: 6th Street and Los Angeles River, and Anaheim Road and Los Cerritos Channel

Council District: 1 & 7

FY 2022/23 Budget: \$600,000





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: POLB WATER SYSTEM IMPROVEMENT STUDY

Fund: Water

Project Category: Water Pipeline System Improvements

Project Description: This project will assess necessary improvements to the POLB water distribution system in preparation for the transfer of operations from POLB to LBWD.

Purpose: Determine which portions of the POLB's water distribution system will be transferred to LBWD by performing a condition assessment of the Port's transferrable assets.

Location: POLB area

Council District: 1 & 7

FY 2022/23 Budget: \$1,473,900





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: CATHODIC PROTECTION PHASE 6

Fund: Water

Project Category: Water Pipeline System Improvements

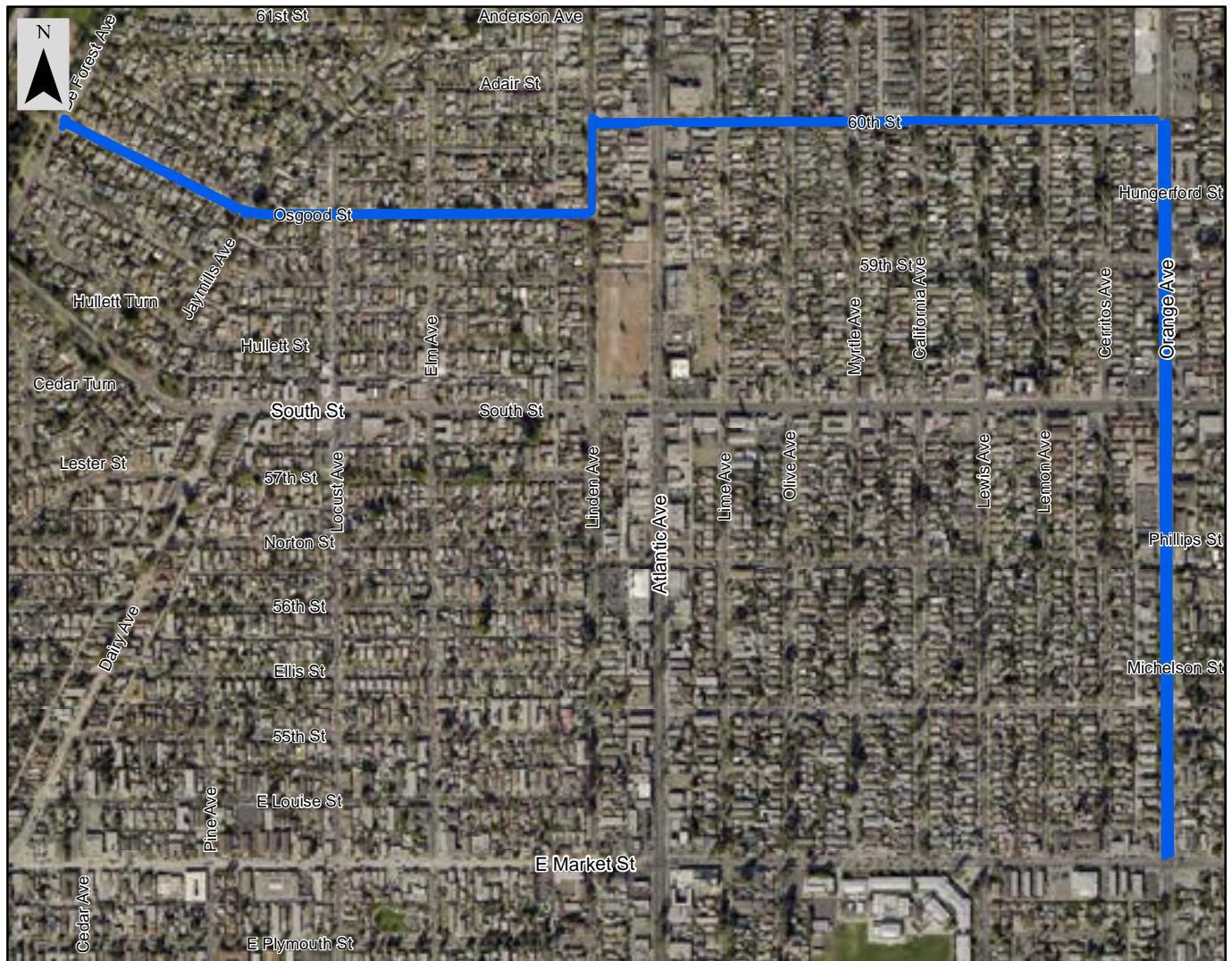
Project Description: This project will include installation of cathodic test stations for corrosion protection.

Purpose: Ensure the integrity, dependability, and prolonged life of the water system.

Location: Orange Ave from the intersection of E Market St to 60th St. And turns westerly on 60th St and then south onto Linden Ave, continuing west on Osgood St until the intersection of De Forest Ave.

Council District: 6, 8 and 9

FY 2022/23 Budget: \$620,000





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: WATER MAIN IMPROVEMENT PROJECT 2-D & POF-4

Fund: Water

Project Category: Water Pipeline System Improvements

Project Description: This project will construct a new 12-inch main and replace existing 6-inch 8-inch and 12-inch within LB Airport property and on Spring St.

Purpose: Improve fire flow protection and preserve water quality to the area.

Location: Southerly area of LB Airport and Spring St.

Council District: 5

FY 2022/23 Budget: \$2,193,174





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: WATER MAIN BRIDGE CROSSING MASTER PLAN

Fund: Water

Project Category: Water Pipeline System Improvements

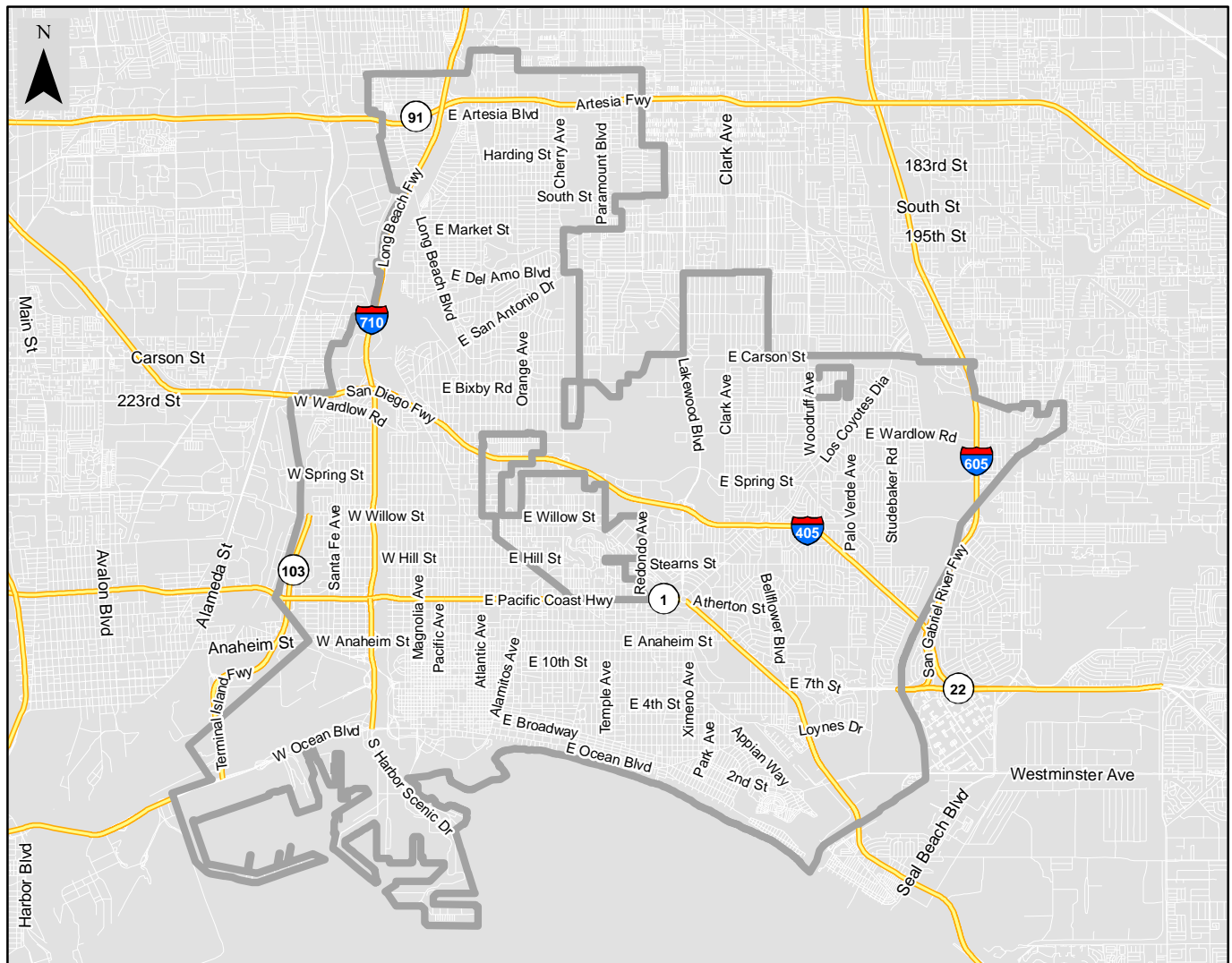
Project Description: Review all water main bridge crossings, perform inspection, testing and analysis, and make recommendations for continuous inspections and improvements.

Purpose: Ensure the integrity, dependability, and prolonged life of the water system.

Location: Various locations of City of Long Beach

Council District: Various

FY 2022/23 Budget: \$212,122





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: WATER MAIN IMPROVEMENT PROJECT 3-A

Fund: Water

Project Category: Water Pipeline System Improvements

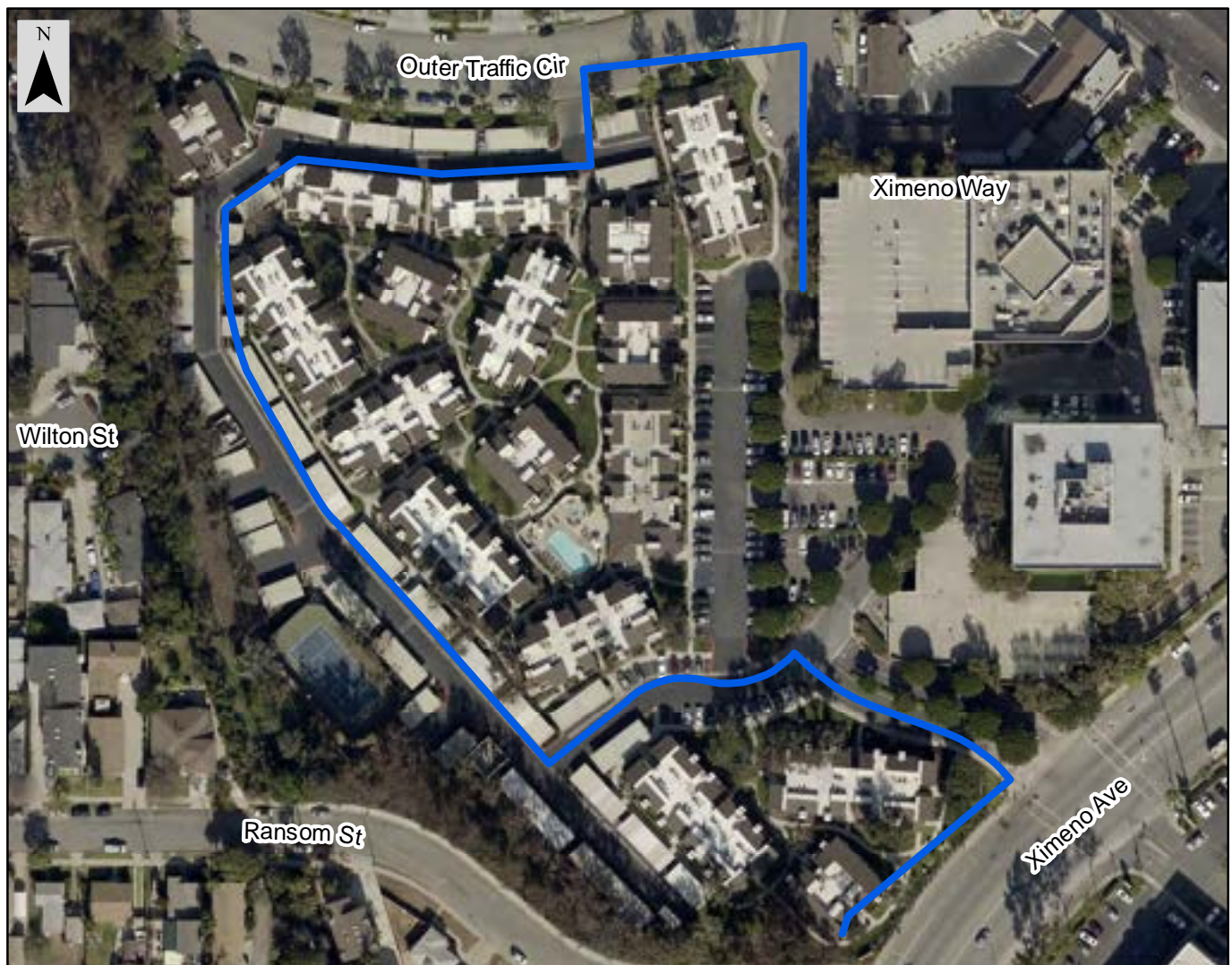
Project Description: Project will upsize approximately 1,786 LF of existing 6" potable main to 8" in addition to necessary fire hydrant and appurtenances. Existing main to be replaced mainly serves 1613 Ximeno Avenue, as well as 3 other developments.

Purpose: Improve fire flow protection and preserve water quality to the area.

Location: Outer Traffic Circle, Ximeno Way to Ximeno Ave

Council District: 3

FY 2022/23 Budget: \$857,280





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: WATER MAIN IMPROVEMENT PROJECT 2-C: LB AIRPORT

Fund: Water

Project Category: Water Pipeline System Improvements

Project Description: This project will upsize the existing 8-inch with a 12-inch (Approximately 6,800-ft) within the LB Airport property.

Purpose: Improve fire flow protection and preserve water quality to the area.

Location: LB Airport (along tarmac from Spring St to Wardlow Rd).

Council District: 5

FY 2022/23 Budget: \$372,500





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: WATER MAIN REPLACEMENT - LAKEWOOD BLVD

Fund: Water

Project Category: Water Pipeline System Improvements

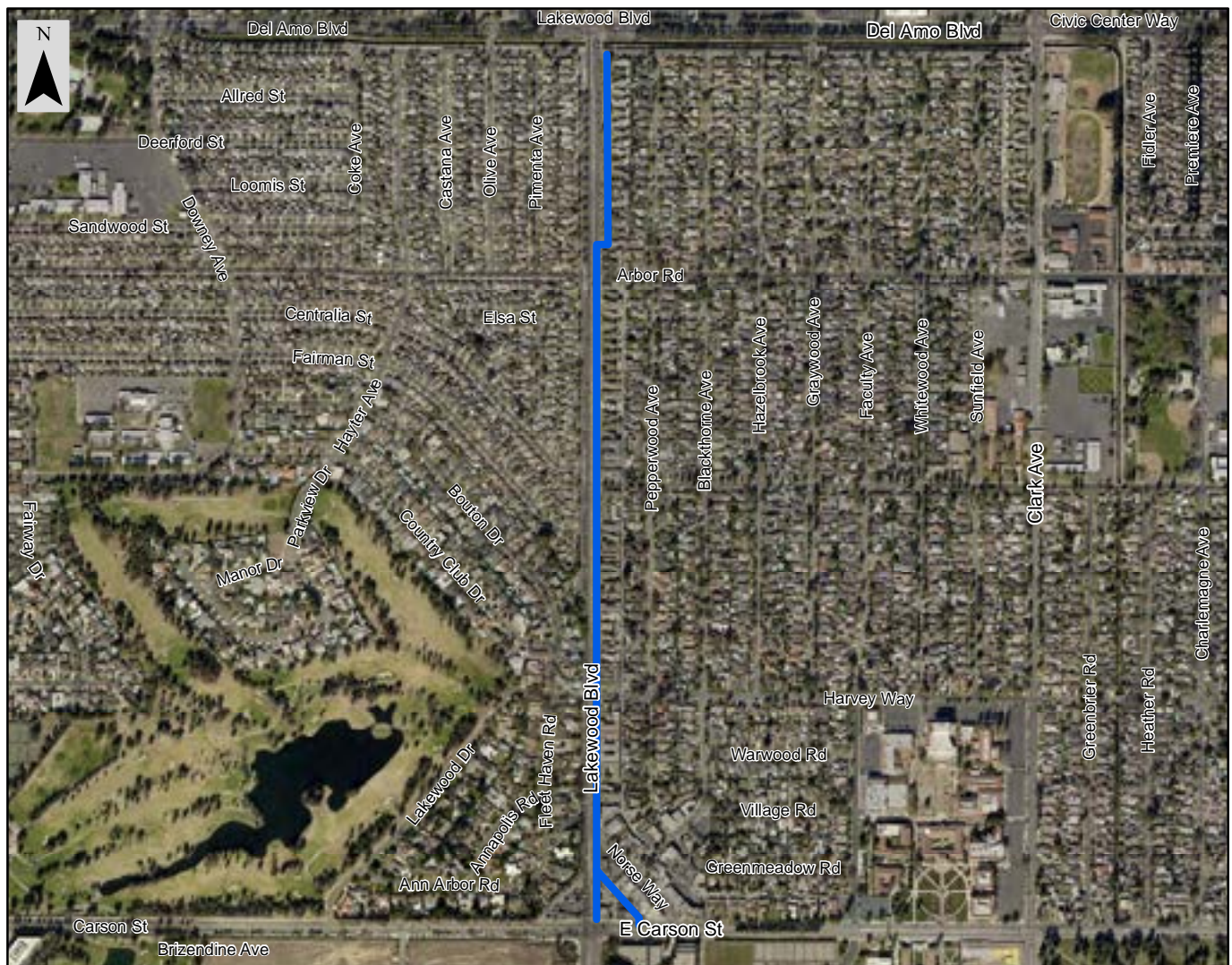
Project Description: This project will include replacing cast iron mains with ductile iron pipes, and replacing water service laterals to the new water mains moved from the old main.

Purpose: Improve fire flow protection and preserve water quality to the area.

Location: Lakewood Blvd - Carson Blvd to Del Amo Blvd

Council District: 5

FY 2022/23 Budget: \$499,310





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: WATER MAIN LINING PILOT PROJECT

Fund: Water

Project Category: Water Pipeline System Improvements

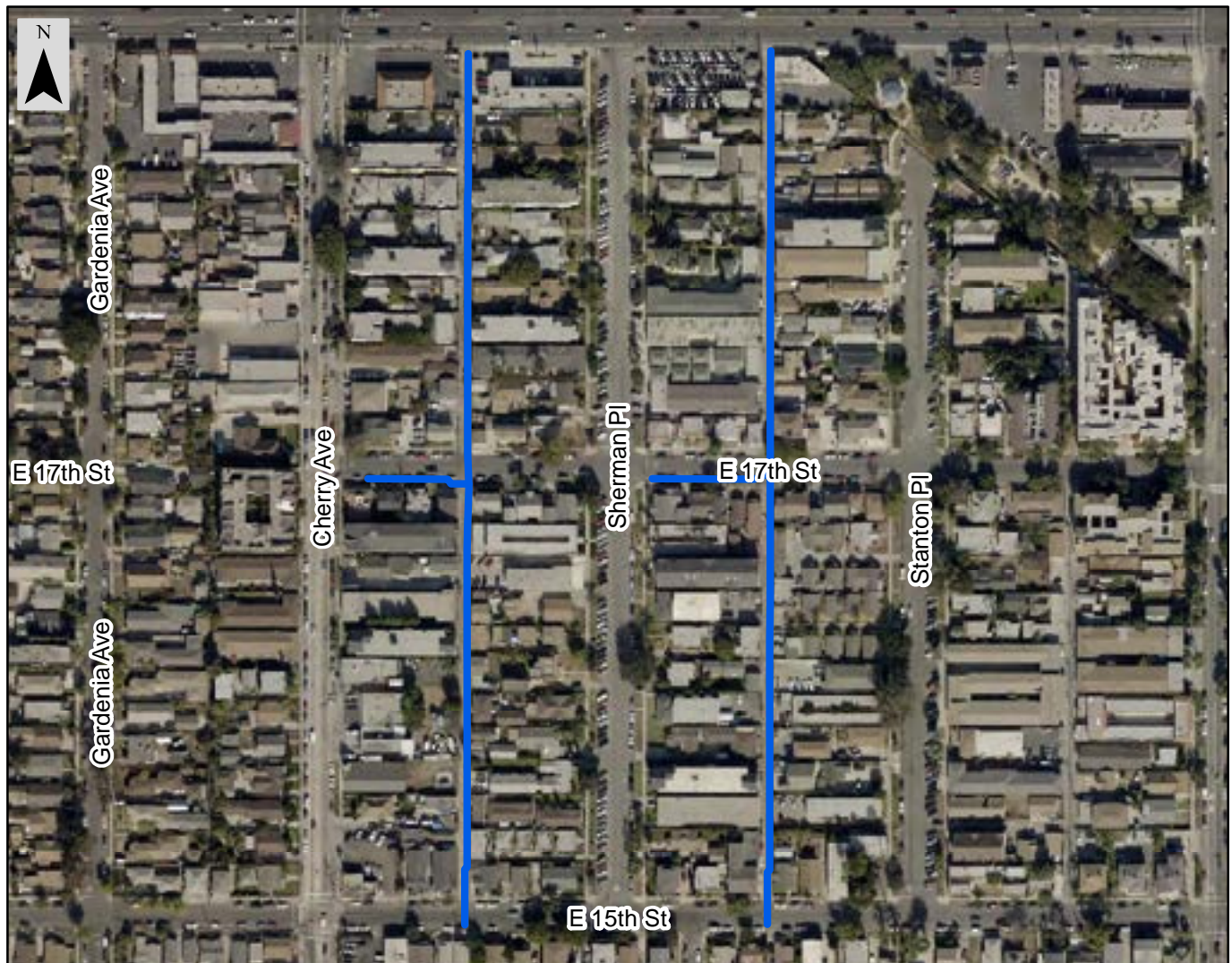
Project Description: This project will include installing a cured-in-place NSF61 approved pressure pipe liner in an existing 6-inch cast iron water main along the alleys east of Cherry Avenue and Sherman Place between 15th street and Pacific Coast Highway

Purpose: Improve fire flow protection and preserve water quality to the area.

Location: Alley east of Cherry Avenue and Sherman Place between 15th street and Pacific Coast Highway, Including 17th St. between Cherry Ave and alley and Sherman Pl and Alley

Council District: 6

FY 2022/23 Budget: \$20,018





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: WATER MAIN REPLACEMENT - SPINNAKER BAY, PHASE 1

Fund: Water

Project Category: Water Pipeline System Improvements

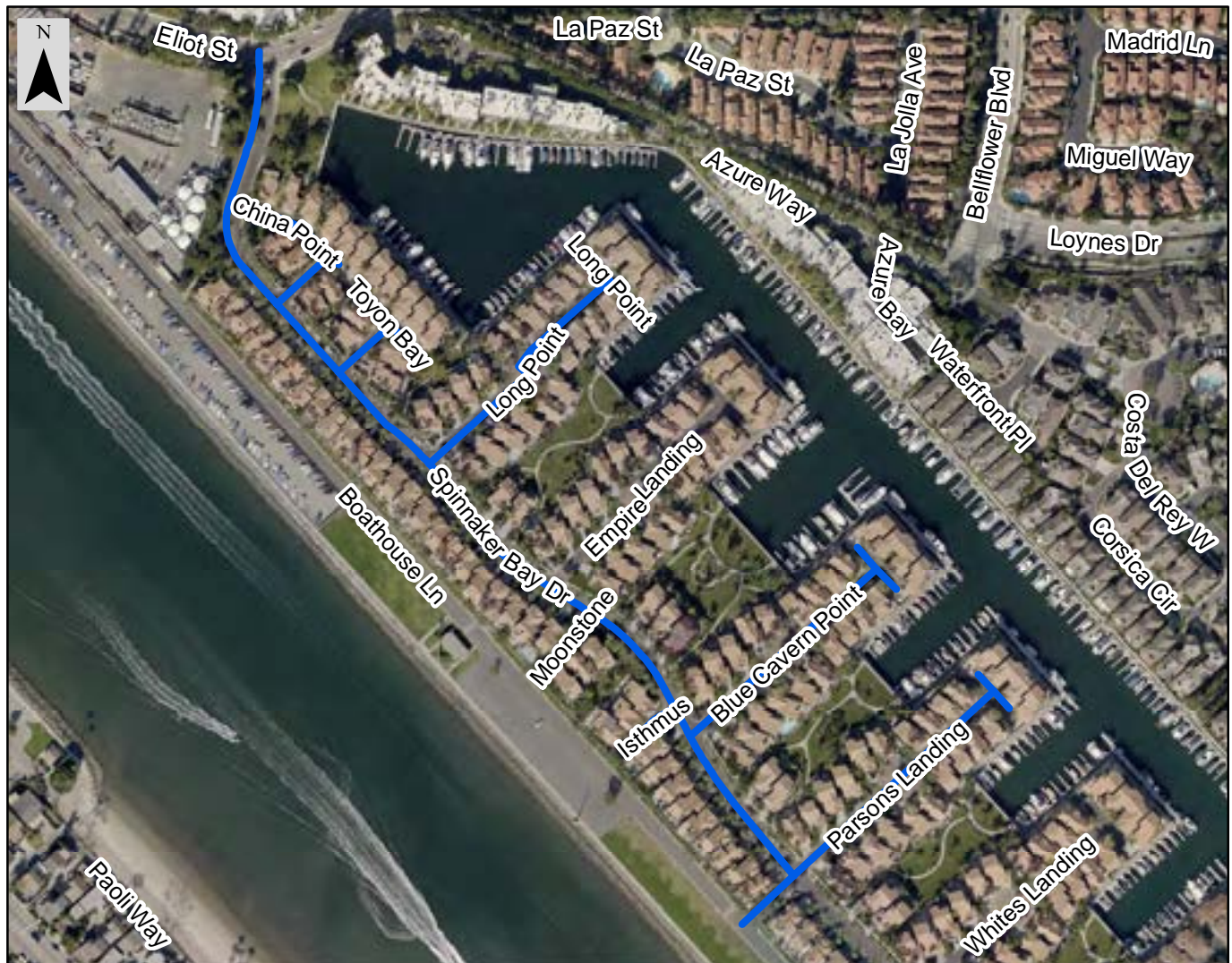
Project Description: This project will include replacing approximately 4,000 LF of 6, 8 and 12-inch ductive iron pipe with C900 PVC pipe

Purpose: Improve fire flow protection and preserve water quality to the area.

Location: Spinnaker Bay Drive from Casino Point to Parsons Landing, Casino Point, China Point, Descanso Bay, Long Point, Blue Cavern Point, Parsons Landing

Council District: 3

FY 2022/23 Budget: \$4,121,397





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: COLORADO LAGOON OPEN CHANNEL - POTABLE WATER MAIN RELOCATION

Fund: Water

Project Category: Water Pipeline System Improvements

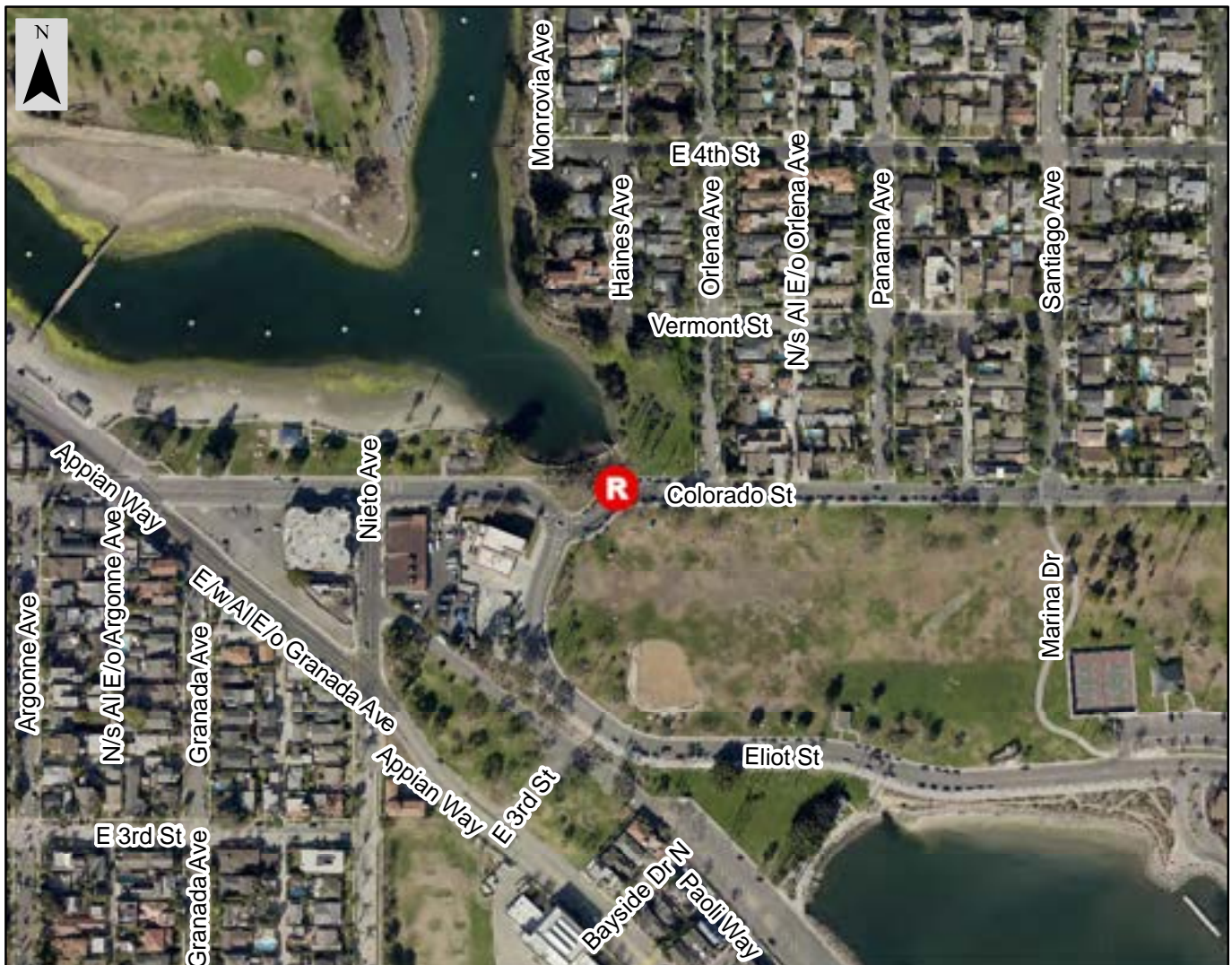
Project Description: Project is part of larger Public Works Colorado St Utility Crossing, remove and replace 570 LF of existing AC Potable main at Colorado St, btwn Eliot St and Orlena Ave.

Purpose: Public Works Colorado St Utility Crossing, remove and replace existing 12" AC potable main.

Location: Colorado St & E Eliot St

Council District: 3

FY 2022/23 Budget: \$312,800





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: GOLDEN AVENUE WATER MAIN REPLACEMENT

Fund: Water

Project Category: Water Pipeline System Improvements

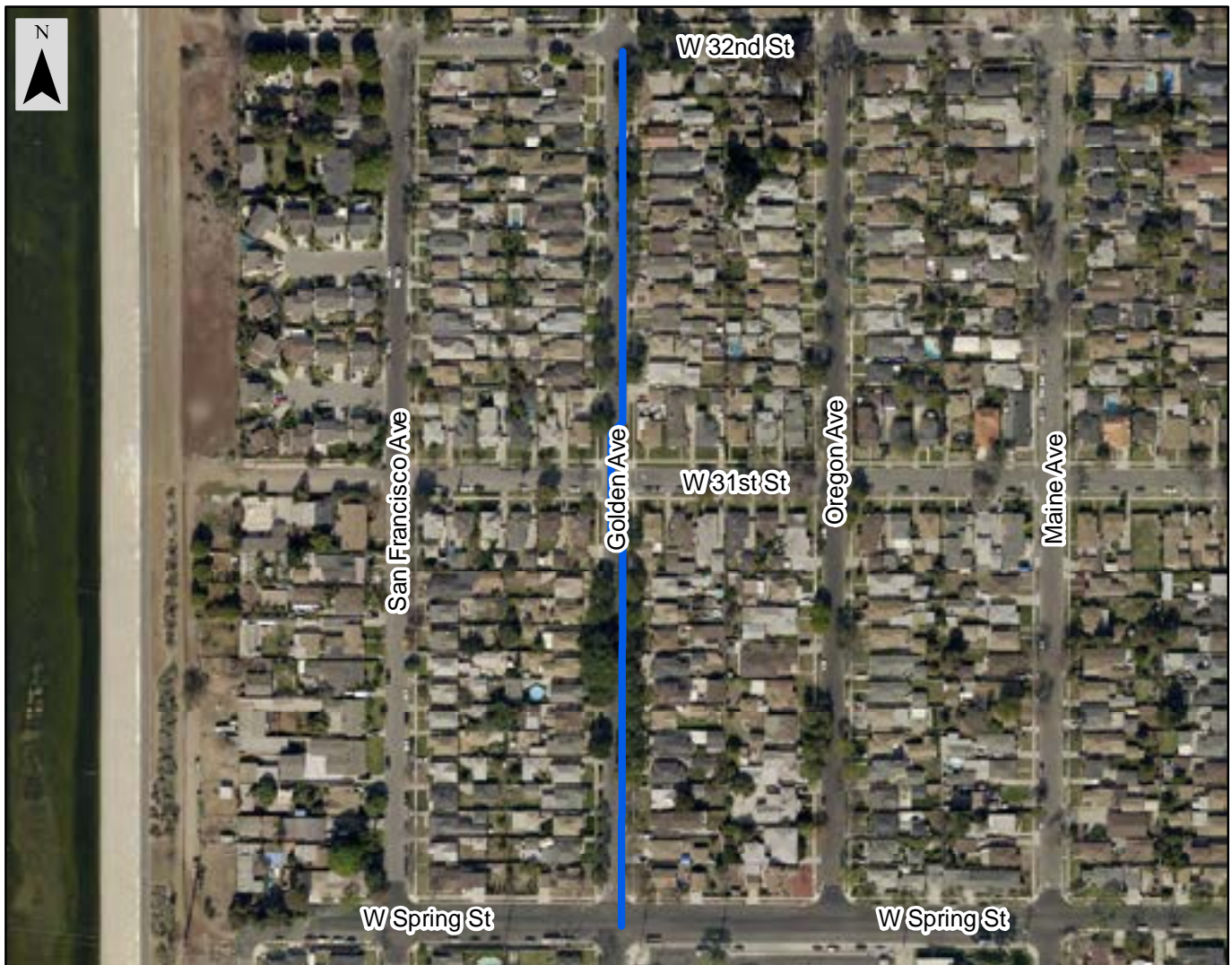
Project Description: This project will include replacing existing ductile iron mains with PVC C-900 pipes and constructing nonmetallic water service laterals to the new water mains moved from the old main.

Purpose: Improve fire flow protection and preserve water quality to the area.

Location: Golden Ave - Spring St to 32nd St

Council District: 7

FY 2022/23 Budget: \$1,600,000





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: CATHODIC PROTECTION PHASE 5

Fund: Water

Project Category: Water Pipeline System Improvements

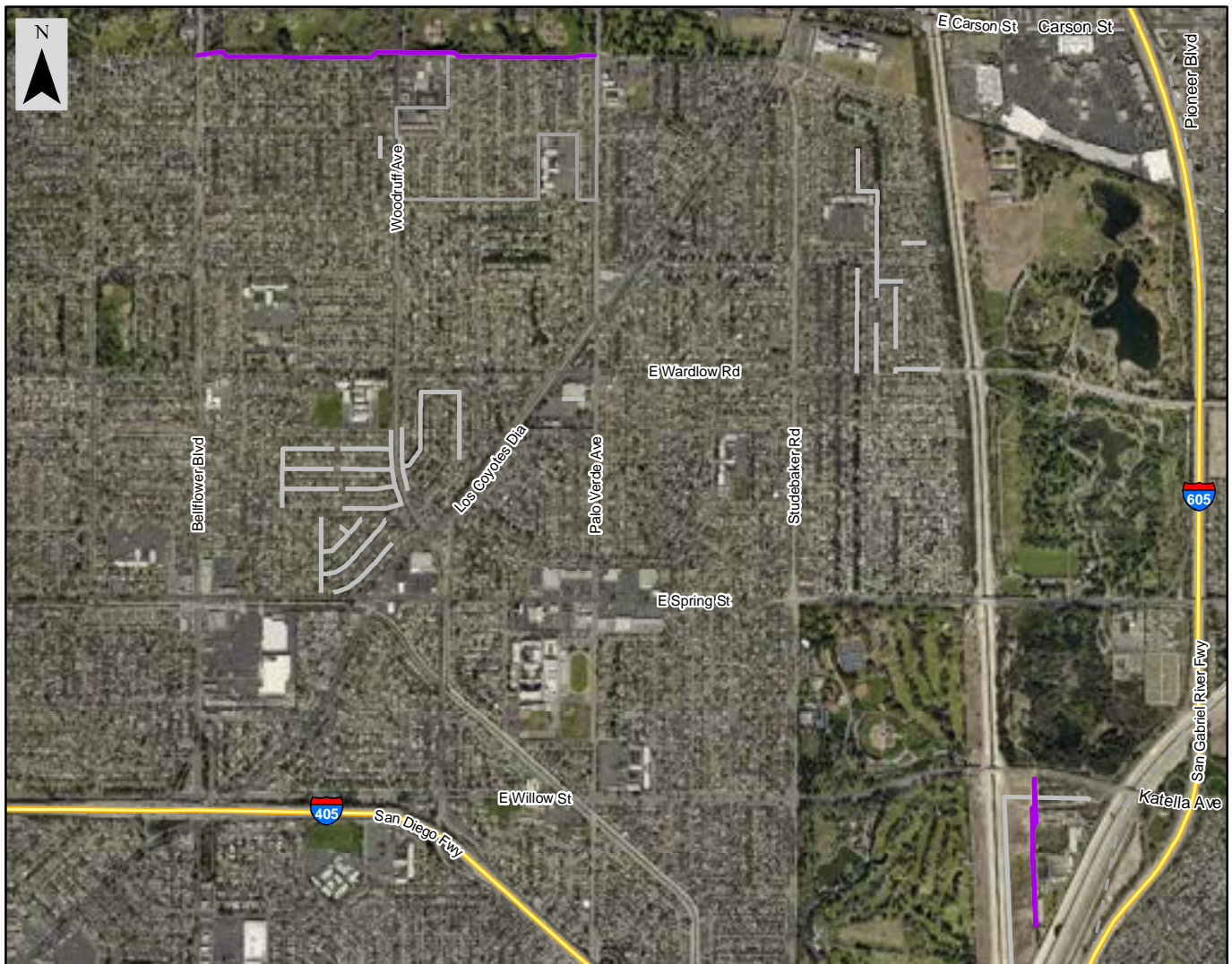
Project Description: This project will include repairing and replacing missing cathodic protection test stations.

Purpose: Ensure the integrity, dependability, and prolonged life of the water system.

Location: Heartwell Park, between Bellflower St and Palo Verde, and between Willow St and Leo Vander Lans Advanced Treatment Plant

Council District: 4 & 5

FY 2022/23 Budget: \$620,000





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: WATER MAIN IMPROVEMENET PROJECT 3-B

Fund: Water

Project Category: Water Pipeline System Improvements

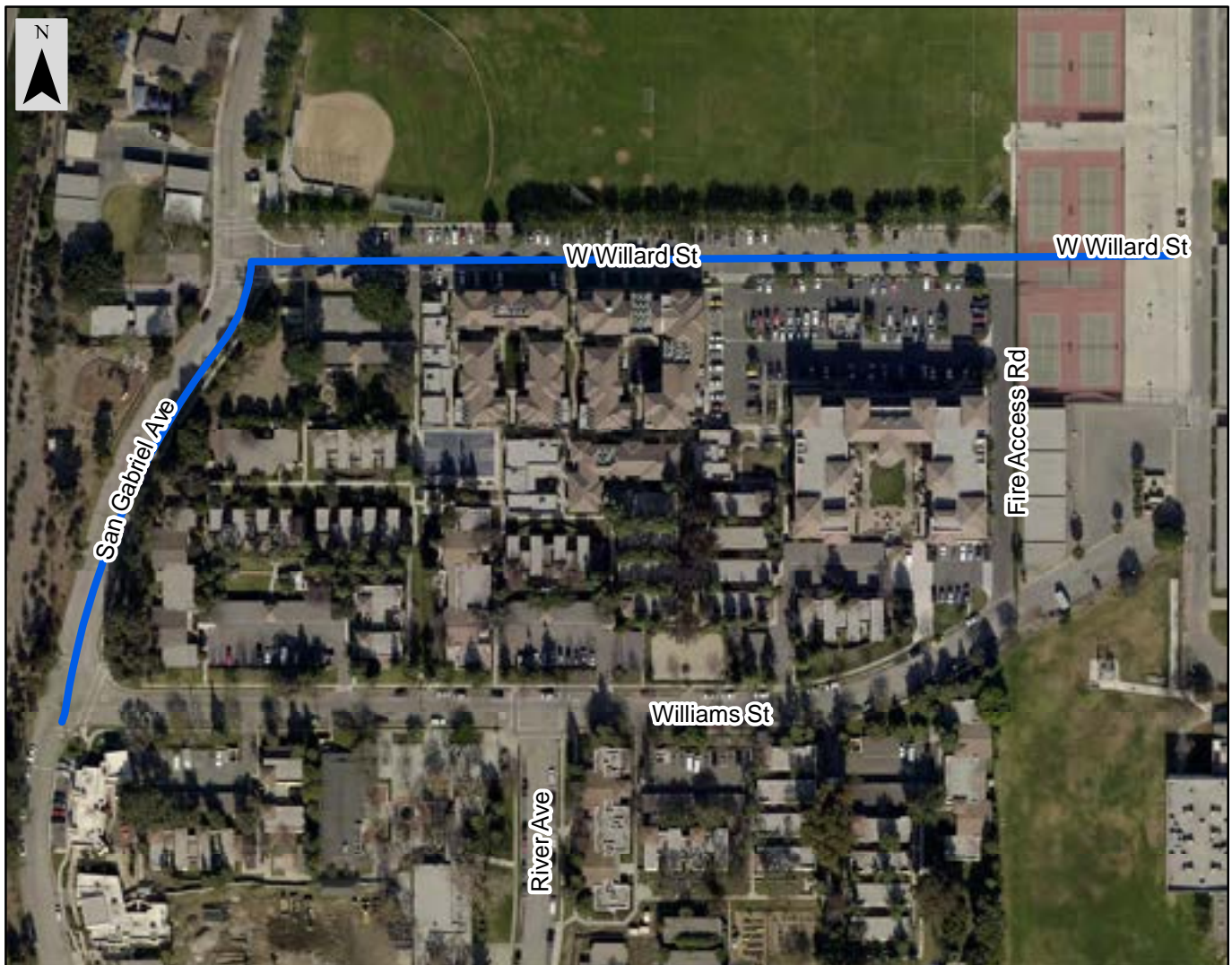
Project Description: This project will include upsizing existing 6-inch to 8-inch main. (Approximately 1,590-ft) along San Gabriel Ave. and Willard St.

Purpose: Improve fire flow protection and preserve water quality to the area.

Location: San Gabriel Ave and Willard St.

Council District: 7

FY 2022/23 Budget: \$58,000





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: WATER MAIN IMPROVEMENT PROJECT POF-01

Fund: Water

Project Category: Water Pipeline System Improvements

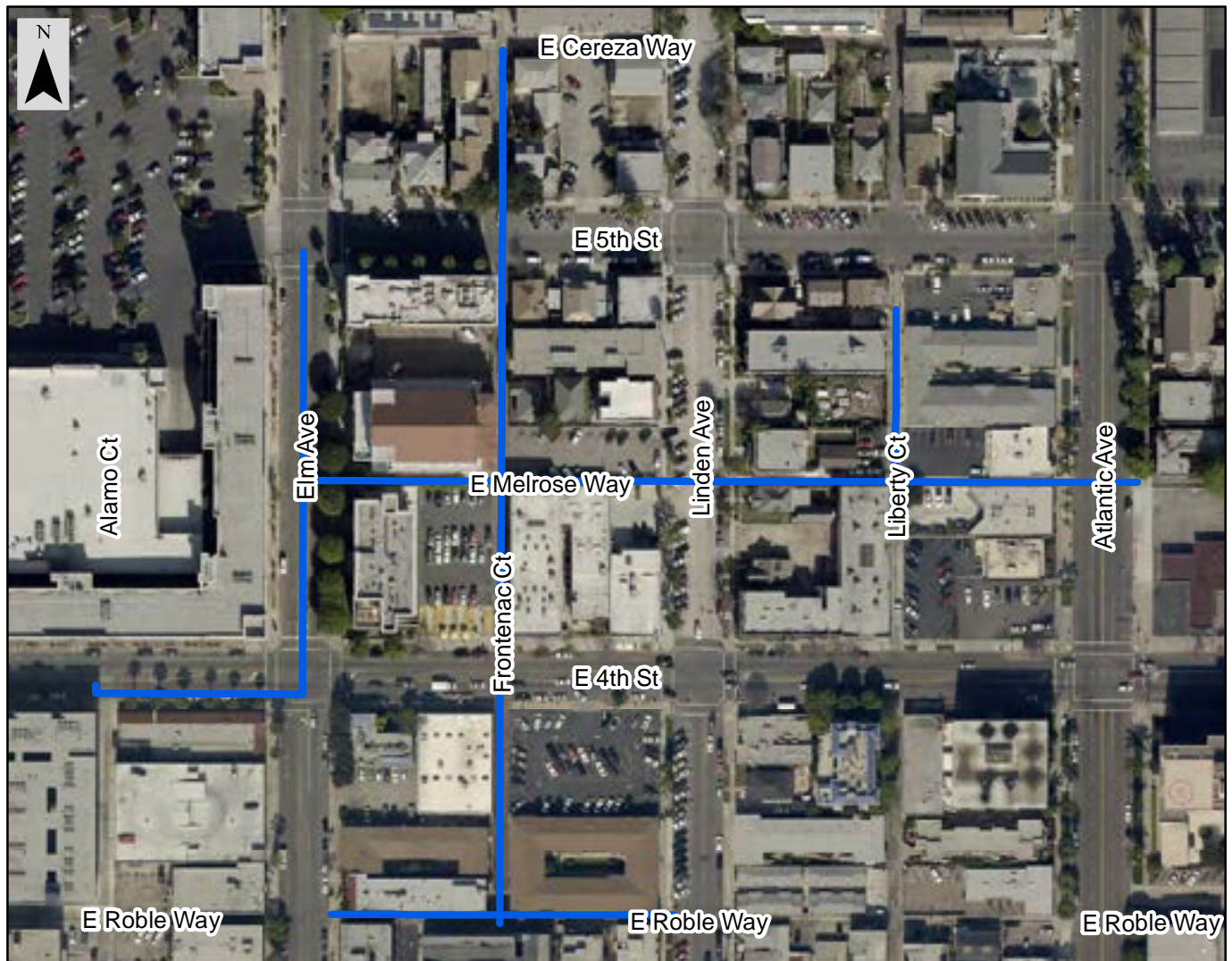
Project Description: This project will include replacing cast iron and AC mains with ductile iron pipes, and constructing water service laterals to the new water mains moved from the old mains.

Purpose: Improve fire flow protection and preserve water quality to the area.

Location: E Melrose Way between Broadway Ct and Elm Ave, Liberty Ct between 4th St and 5th St. Frontena Ct, between Cereza Way and Roble Way. Elm Ave, E 5th St and 4th St, between Elm Ave and Alamo Ct.

Council District: 1

FY 2022/23 Budget: \$140,600





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: CATHODIC PROTECTION PHASE 7 - BUDGET

Fund: Water

Project Category: Water Pipeline System Improvements

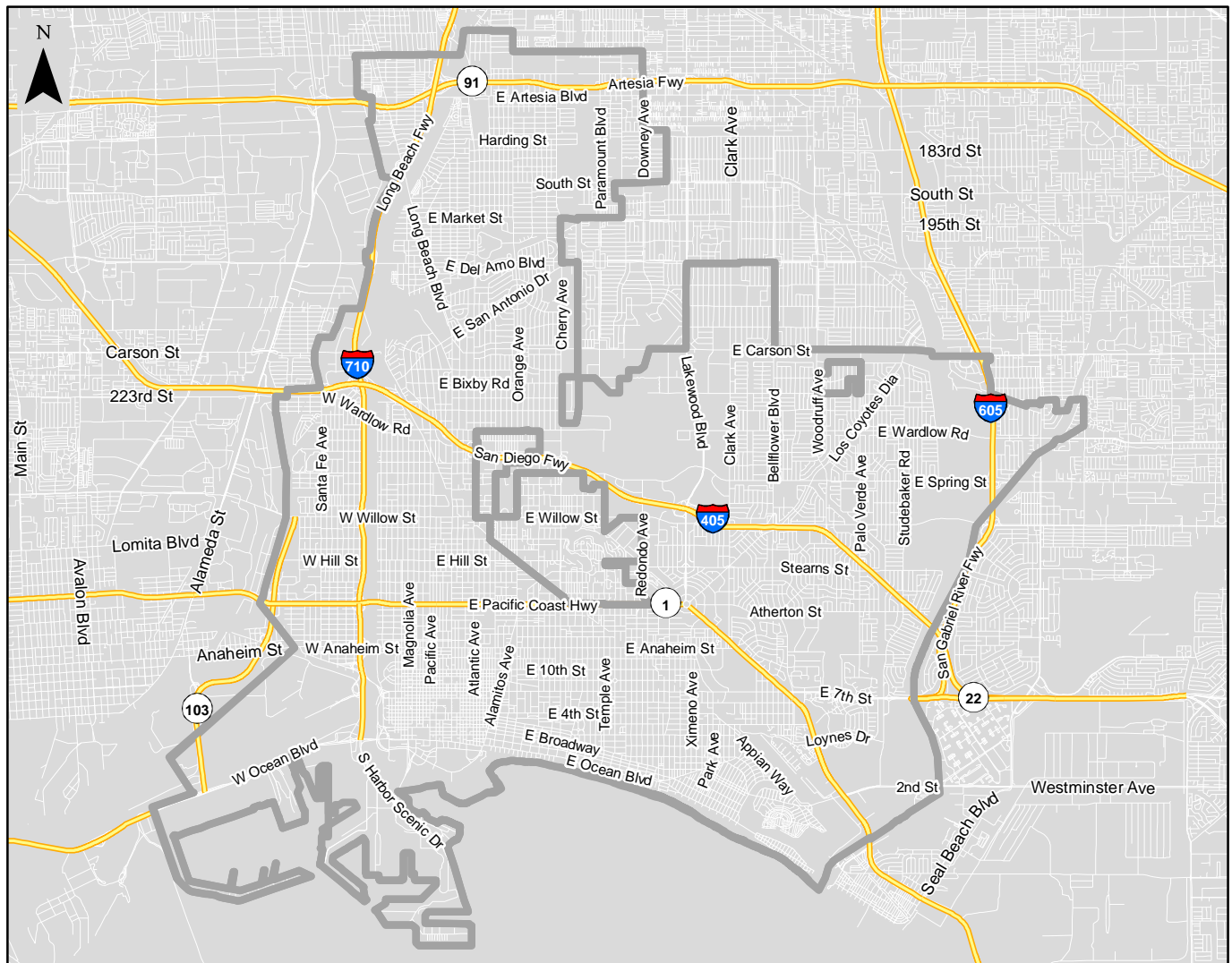
Project Description: This project will include cathodic protection test stations for corrosion protection.

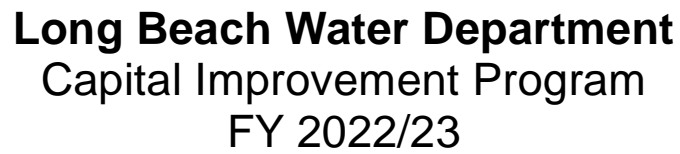
Purpose: Ensure the integrity, dependability, and prolonged life of the water system.

Location:TBD

Council District: TBD

FY 2022/23 Budget: \$100,000





Project Description: TBD

Location: TBD

FY 2022/23 Budget: \$40,435





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: Large Valve Replacement FY23/24

Fund: Water

Project Category: Water Pipeline System Improvements

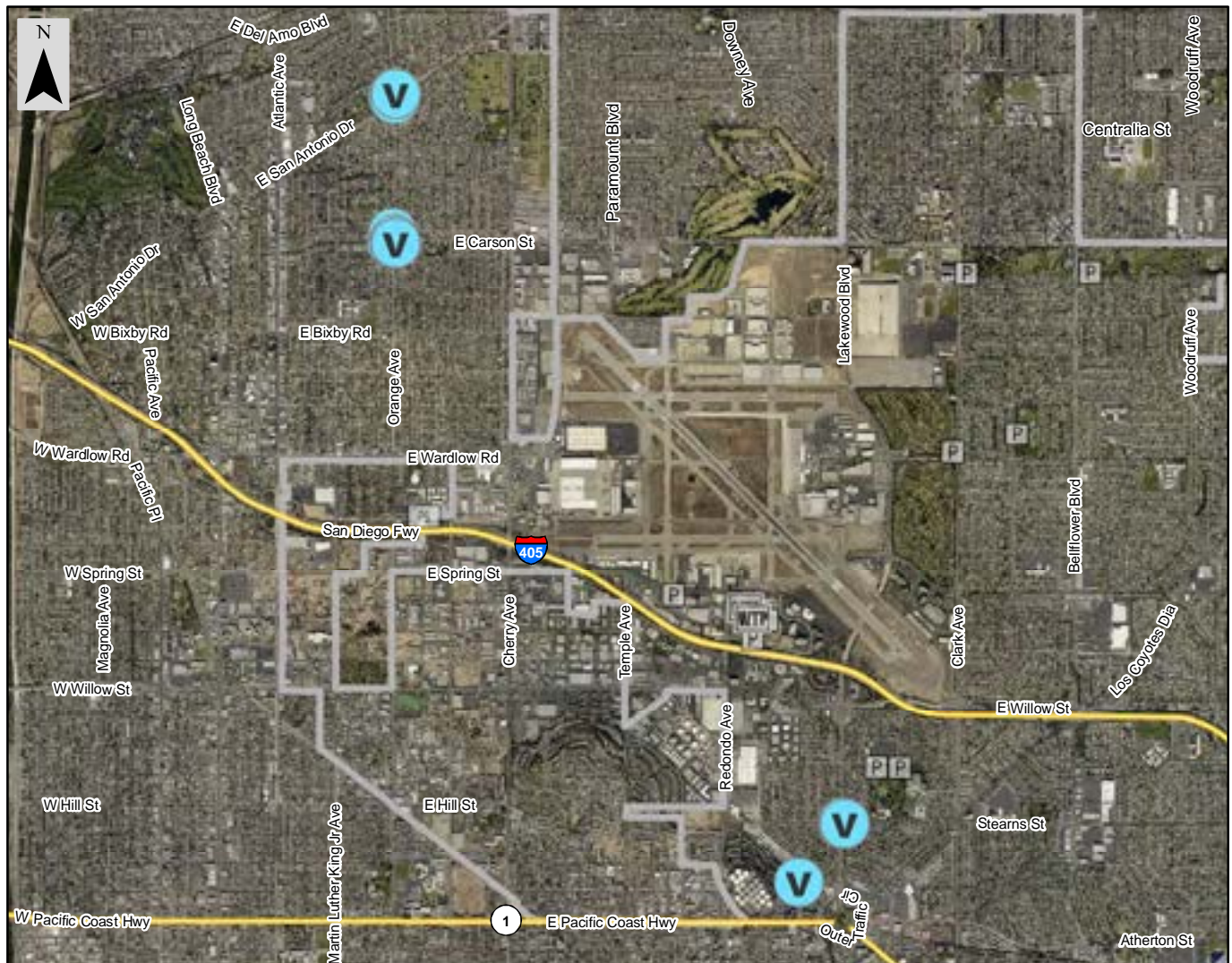
Project Description: Assess condition and repair/replace large valves at multiple locations in Long Beach.

Purpose: Ensure the integrity, dependability, and prolonged life of the water system.

Location: Orange & Carson, Orange & San Antonio Dr, Lakewood Blvd & Stearns, Hathaway & Termino

Council District: 4,5 and 8

FY 2022/23 Budget: \$150,000





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: LARGE VALVE REPLACEMENT FY24/25

Fund: Water

Project Category: Water Pipeline System Improvements

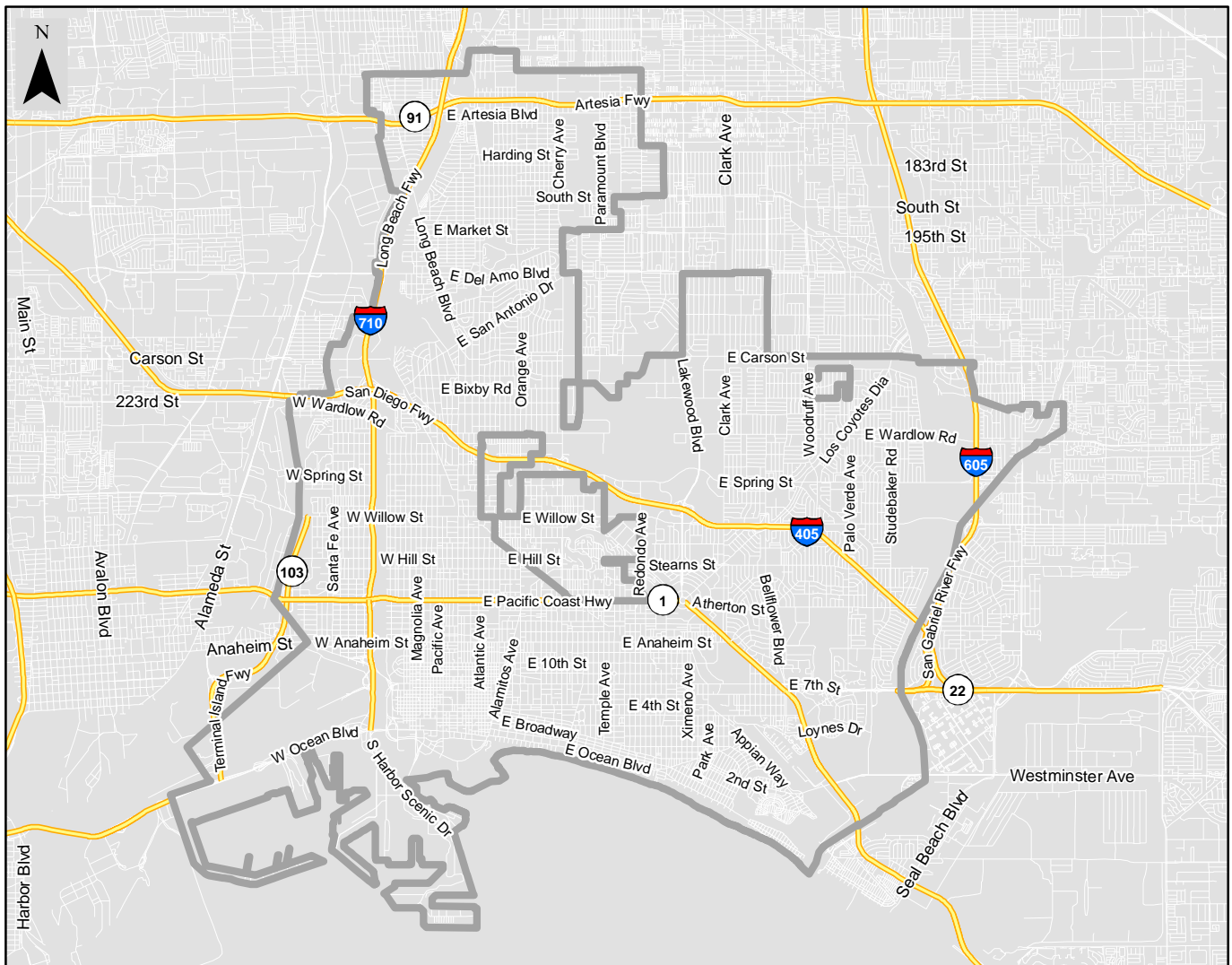
Project Description: Assess condition and repair/replace large valves at multiple locations in Long Beach.

Purpose: Ensure the integrity, dependability, and prolonged life of the water system.

Location: TBD

Council District: TBD

FY 2022/23 Budget: \$13,100



**LONG BEACH WATER DEPARTMENT
CAPITAL IMPROVEMENT PROGRAM
FY 2022/23 WATER FUND PROJECTS**

**PROJECT CATEGORY: RESERVOIR/TREATMENT PLANT SYSTEM
IMPROVEMENTS**

Project Description	Cost Estimate
Alamitos Tank No. 6 Rehabilitation	\$19,039
Alamitos Tank No. 7 Rehabilitation	\$60,600
Alamitos Tank No. 8 & 10 Rehabilitation	\$2,401,715
Alamitos Tank No. 11 & 13 Rehabilitation	\$19,100
Alamitos Tank No. 22 Rehabilitation	\$73,500
J. Will Johnson Chemical Dosing System	\$26,010
J. Will Johnson Tanks Roof Repair	\$100,000
Treatment Plant Master Plan Study	\$6,054
Treatment Plant HVAC System Improvements	\$3,838,280
Treatment Plant Filter Rehabilitation Design and Phase 1	\$179,200
Treatment Plant Improvement Project 1	\$262,000
Alamitos Tank No.19 & 20 Conversion	\$3,006,000
TOTAL	\$9,991,498

SUMMARY:

The Long Beach Water Department (LBWD) has a total of 36 steel water storage tanks at the Alamitos Reservoir and J. Will Johnson Reservoir. Each tank has a capacity of 3.3 million gallons of water. LBWD's tank rehabilitation program ensures the integrity, dependability, and prolonged life of these tanks. LBWD also operates the second largest groundwater treatment plant in the United States. The Treatment Plant Master Plan identifies improvement projects at the plant and related infrastructure which will ensure the City's high quality drinking water consistently meets or betters all Federal and State drinking water regulations. LBWD's Tank Conversion Projects from potable to recycled water at the Alamitos Reservoir involve improvements to the existing tanks and will provide additional storage facility for the City's recycled water supply.





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: ALAMITOS TANK 6 REHABILITATION

Fund: Water

Project Category: Reservoir/Treatment Plant System Improvements

Project Description: This project will include recoating the tank and constructing seismic and structural improvements.

Purpose: Ensure the integrity, dependability, and prolonged life of the water system.

Location: Alamitos Reservoir Site

Council District: 4

FY 2022/23 Budget: \$19,039





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: ALAMITOS TANK 7 REHABILITATION

Fund: Water

Project Category: Reservoir/Treatment Plant System Improvements

Project Description: This project will include recoating the tank and constructing seismic and structural improvements.

Purpose: Ensure the integrity, dependability, and prolonged life of the water system.

Location: Alamitos Reservoir Site

Council District: 4

FY 2022/23 Budget: \$60,600





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: ALAMITOS TANKS 8 & 10 REHABILITATION

Fund: Water

Project Category: Reservoir/Treatment Plant System Improvements

Project Description: This project will include recoating the tank and constructing seismic and structural improvements.

Purpose: Ensure the integrity, dependability, and prolonged life of the water system.

Location: Alamitos Reservoir Site

Council District: 4

FY 2022/23 Budget: \$2,401,715





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: ALAMITOS TANKS 11 & 13 REHABILITATION

Fund: Water

Project Category: Reservoir/Treatment Plant System Improvements

Project Description: This project will include recoating the tank and constructing seismic and structural improvements.

Purpose: Ensure the integrity, dependability, and prolonged life of the water system.

Location: Alamitos Reservoir Site

Council District: 4

FY 2022/23 Budget: \$19,100





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: ALAMITOS TANK 22 REHABILITATION

Fund: Water

Project Category: Reservoir/Treatment Plant System Improvements

Project Description: This project will include recoating the tank and constructing seismic and structural improvements.

Purpose: Ensure the integrity, dependability, and prolonged life of the water system.

Location: Alamitos Reservoir Site

Council District: 4

FY 2022/23 Budget: \$73,500





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: JWW CHEMICAL DOSING SYSTEM

Fund: Water

Project Category: Reservoir/Treatment Plant System Improvements

Project Description: Evaluation of existing chemical feed systems at the JWW Reservoir site and optimization and design of permanent chlorine and ammonia injection, including locating equipment and injection locations, SCADA, and identification of necessary equipment.

Purpose: Optimization and design of permanent chlorine and ammonia injection

Location: JWW Reservoir Site

Council District:

FY 2022/23 Budget: \$26,010





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: J. WILL JOHNSON TANKS ROOF REPAIR

Fund: Water

Project Category: Reservoir/Treatment Plant System Improvements

Project Description: This project will include replacing roofing material and associated improvements.

Purpose: Ensure the integrity, dependability, and prolonged life of the water system.

Location: JWW Reservoir Site

Council District:

FY 2022/23 Budget: \$100,000





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: GWTP HVAC IMPROVEMENTS

Fund: Water

Project Category: Reservoir/Treatment Plant System Improvements

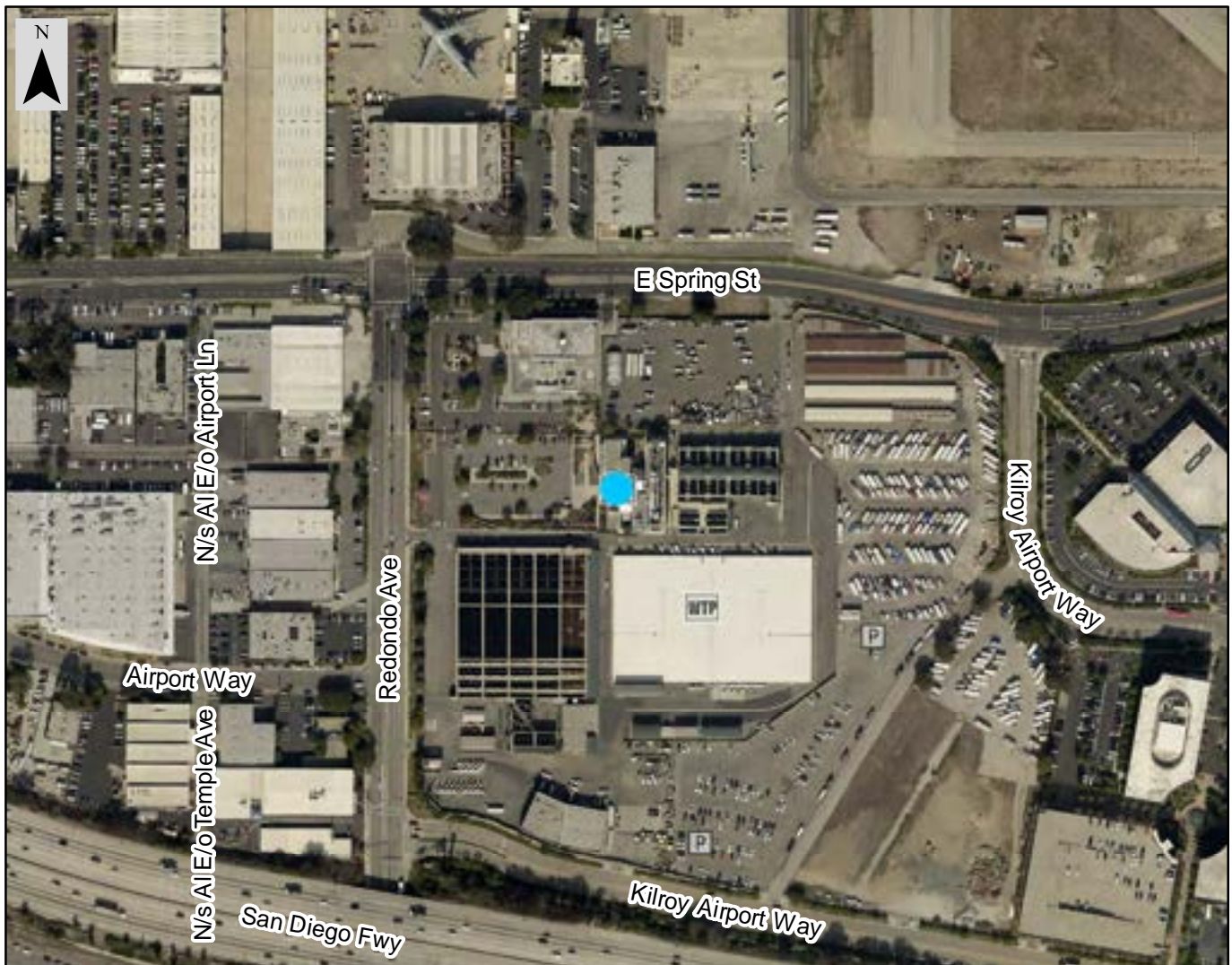
Project Description: This project will include modernizing the existing HVAC systems at the Groundwater Treatment Plant.

Purpose: Ensure the integrity and dependability of water infrastructure.

Location: Long Beach Water Department Groundwater Treatment Plant

Council District: 4

FY 2022/23 Budget: \$3,838,280





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: TREATMENT PLANT MASTER PLAN STUDY

Fund: Water

Project Category: Reservoir/Treatment Plant System Improvements

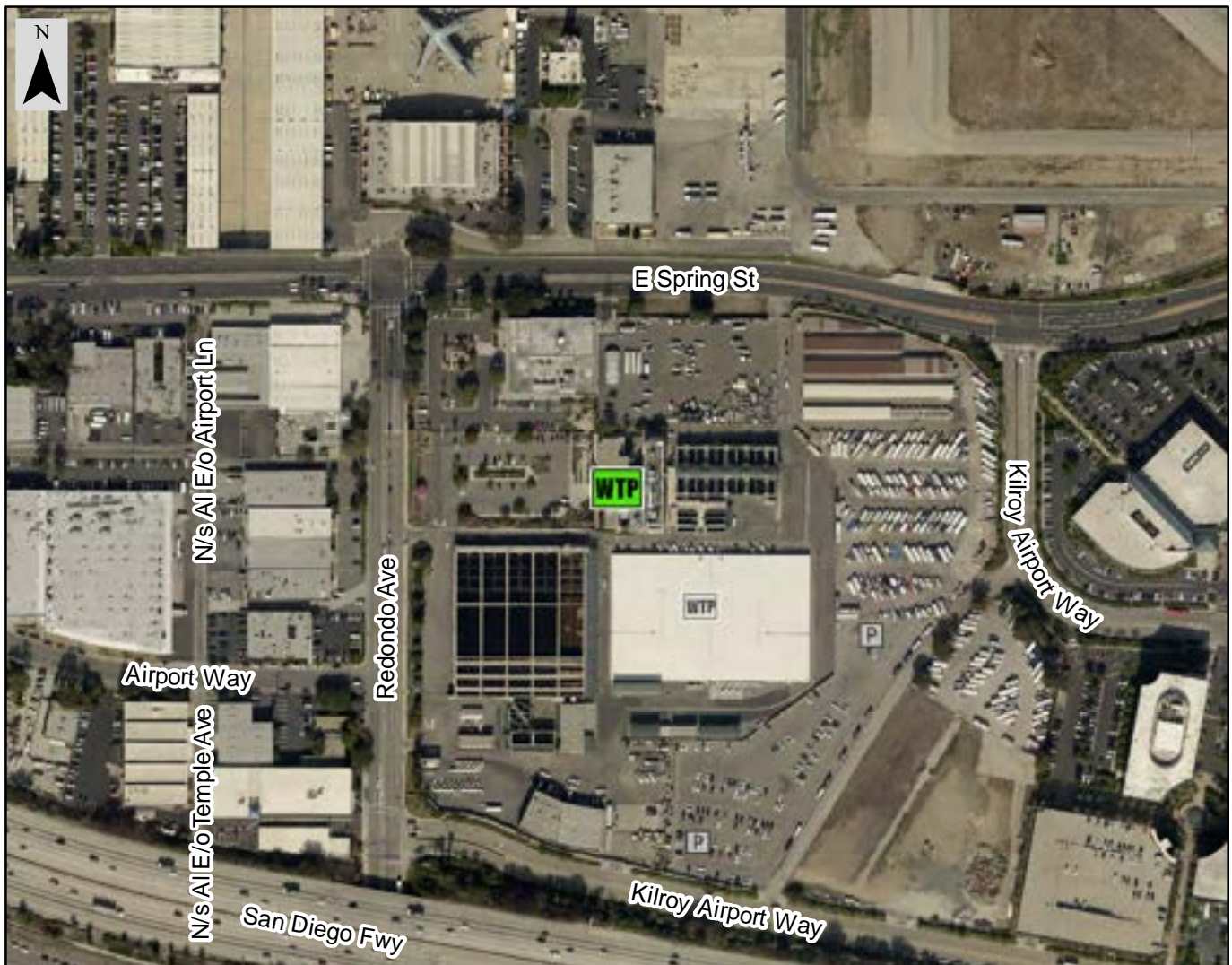
Project Description: This project will include a condition assessment of the Groundwater Treatment Plant to determine needed improvements and maintenance.

Purpose: Ensure the integrity, dependability, and prolonged life of the water system.

Location: Long Beach Water Department Groundwater Treatment Plant

Council District: 4

FY 2022/23 Budget: \$6,054





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: ALAMITOS TANKS 19 & 20 CONVERSION

Fund: Water

Project Category: Reservoir/Treatment Plant System Improvements

Project Description: This project will include recoating the tank and constructing seismic and structural improvements. These tanks will also be converted from potable to reclaimed water.

Purpose: Ensure the integrity, dependability, and prolonged life of the water system.

Location: Alamitos Reservoir Site

Council District: 4

FY 2022/23 Budget: \$3,006,000





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: TREATMENT PLANT FILTER GALLERY IMPROVEMENT PROJECT DESIGN AND PHASE 1

Fund: Water

Project Category: Reservoir/Treatment Plant System Improvements

Project Description: This project will replace various filter gallery valves and rehabilitate the filter gallery

Purpose: Rehabilitate valves and appurtenances within the Groundwater Treatment Plant Filter Gallery

Location: Long Beach Water Department Groundwater Treatment Plant

Council District: 4

FY 2022/23 Budget: \$179,200





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: TREATMENT PLANT IMPROVEMENT PROJECT 1

Fund: Water

Project Category: Reservoir/Treatment Plant System Improvements

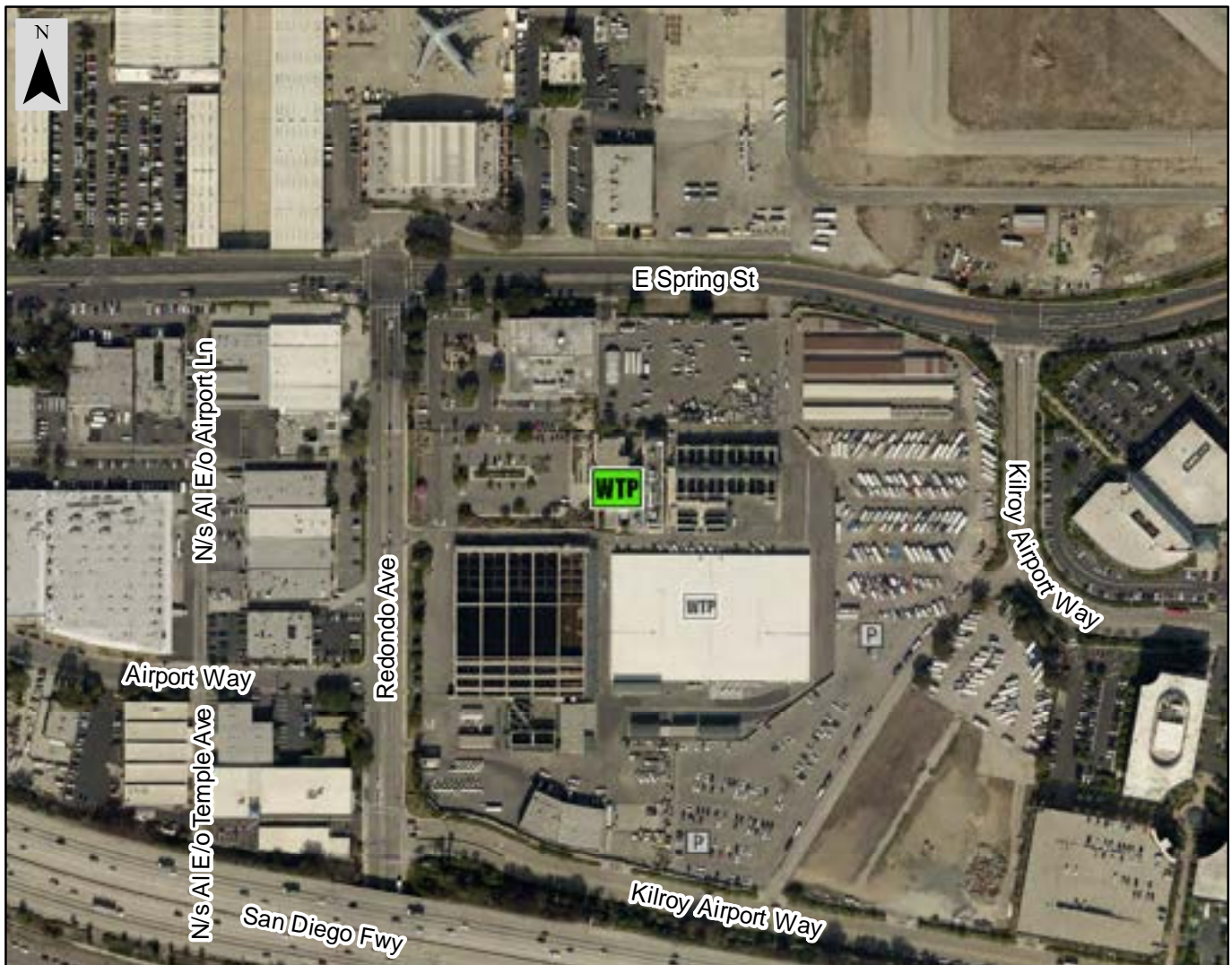
Project Description: TBD

Purpose: TBD

Location: Long Beach Water Department Groundwater Treatment Plant

Council District: 4

FY 2022/23 Budget: \$262,000



**LONG BEACH WATER DEPARTMENT
CAPITAL IMPROVEMENT PROGRAM
FY 2022/23 WATER FUND PROJECTS**

PROJECT CATEGORY: WATER SUPPLY PROJECTS

Project Description	Cost Estimate
West Coast Basin Well Equipment	\$1,041,458
New Wells NLB 13 & 14	\$3,142,170
New Wells Alamitos 9A & 14	\$3,670,000
New Wells Commission 23A & El Dorado 2	\$545,290
Commission 15 & 18 Well Rehabilitation	\$1,640,600
Citizens 10 & Commission 14 Well Rehabilitation	\$646,841
Commission 24 & 25 Well Rehabilitation	\$65,746
Commission 21 & Development 9 Well Rehabilitation	\$70,000
Miscellaneous Well Repair/Rehabilitation	\$124,900
32 nd Street Booster Station Rehabilitation	\$111,249
Desalination Sub-Ocean Floor Research and Development	\$3,701,775
TOTAL	\$15,645,989

SUMMARY:

The Long Beach Water Department (LBWD) currently has 31 groundwater wells it operates and maintains. These wells produce approximately 29,000 Acre-Feet of water each year that is conveyed to LBWD's Ground Water Treatment Plant. LBWD's well rehabilitation and repair program aim to restore wells to their most efficient production condition. LBWD's endeavors includes 12 new well projects as part of a long-term strategy to supplement LBWD's water supply and meet future demands. Improvements to the 32nd Street Booster Station will ensure dependability of the facility for water distribution to the boosted area. The Sub-Ocean Floor Seawater Intake is the removal of demonstration-scale facility after the research project is completed.





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: WEST COAST BASIN WELL EQUIPMENT

Fund: Water

Project Category: Water Supply

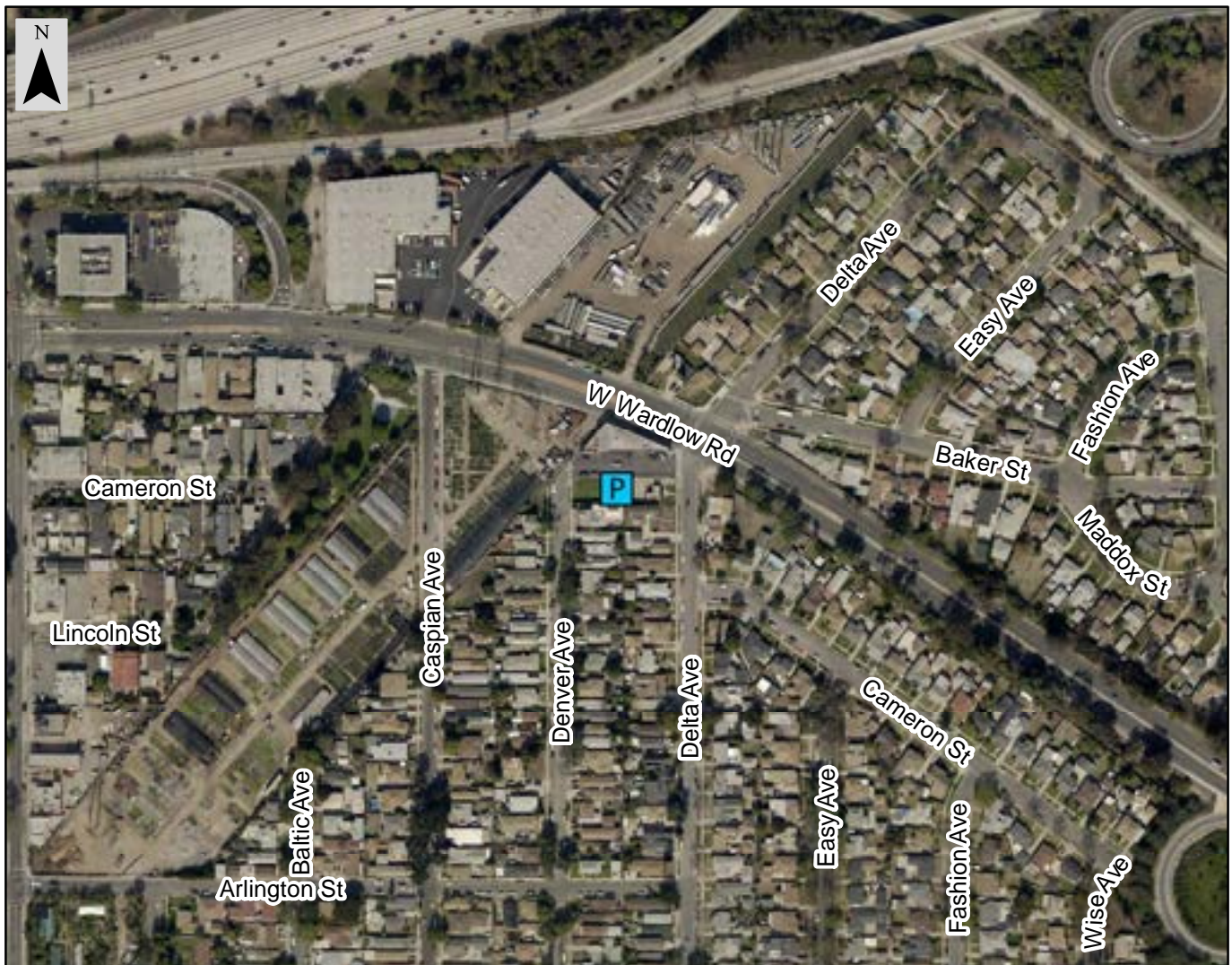
Project Description: This project will include equipping new groundwater production wells for water sampling.

Purpose: Ensure future groundwater production.

Location: 3665 Delta Ave.

Council District: 7

FY 2022/23 Budget: \$50,000





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: NEW WELLS NORTH LONG BEACH 13 & 14

Fund: Water

Project Category: Water Supply

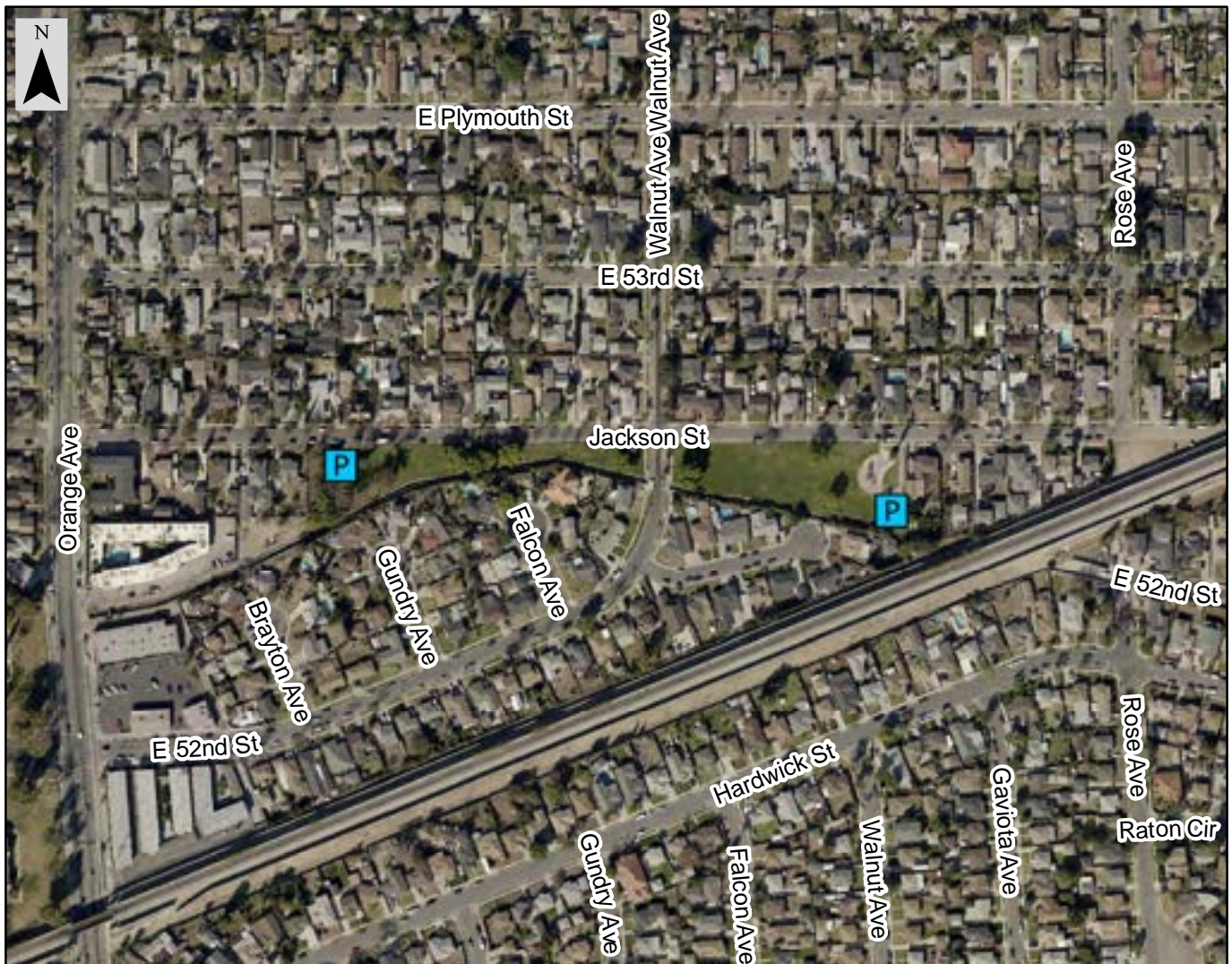
Project Description: This project will include drilling, developing and equipping new groundwater production wells.

Purpose: Ensure future groundwater production.

Location: Jackson Park

Council District: 8

FY 2022/23 Budget: \$3,142,170





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: NEW WELLS ALAMITOS 9A & 14

Fund: Water

Project Category: Water Supply

Project Description: This project will include drilling, developing and equipping new groundwater production wells.

Purpose: Ensure future groundwater production.

Location: Stearns Champions Park

Council District: 4

FY 2022/23 Budget: \$3,670,000





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: NEW WELLS COMMISSION 23A & EL DORADO 2

Fund: Water

Project Category: Water Supply

Project Description: This project will include drilling, developing and equipping new groundwater production wells.

Purpose: Ensure future groundwater production.

Location: Commission 23A - 7325 E Wardlow Rd & El Dorado 2 - 7335 E Wardlow Rd

Council District: 4

FY 2022/23 Budget: \$545,290





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: NEW WELLS GROUND WATER TREATMENT PLANT 1 & 2

Fund: Water

Project Category: Water Supply

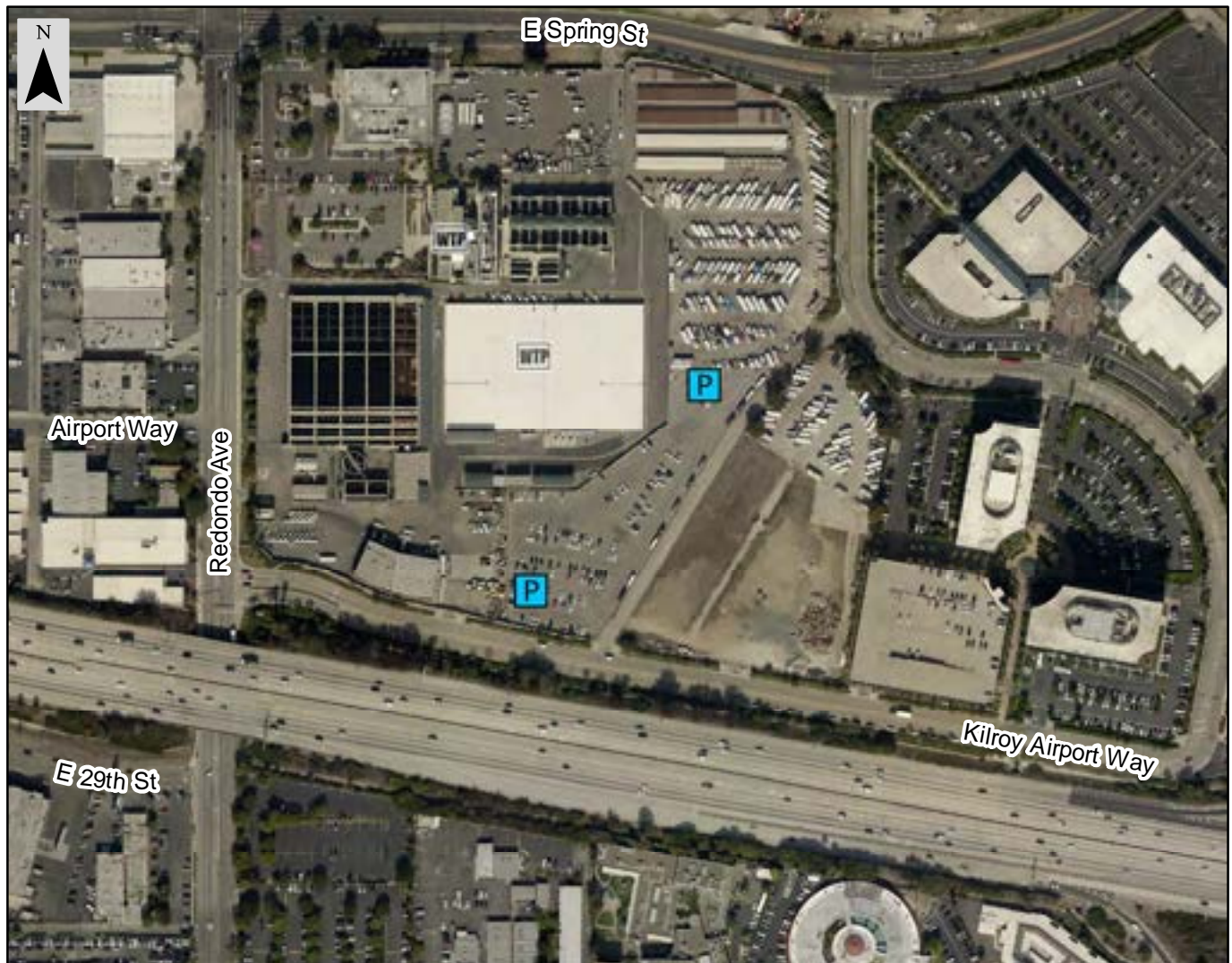
Project Description: This project will include drilling, developing and equipping new groundwater production wells.

Purpose: Ensure future groundwater production.

Location: Long Beach Water Department Groundwater Treatment Plant

Council District: 4

FY 2022/23 Budget: \$377,000





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: DESALINATION SUBOCEAN FLOOR RESEARCH AND DEV

Fund: Water

Project Category: Water Supply

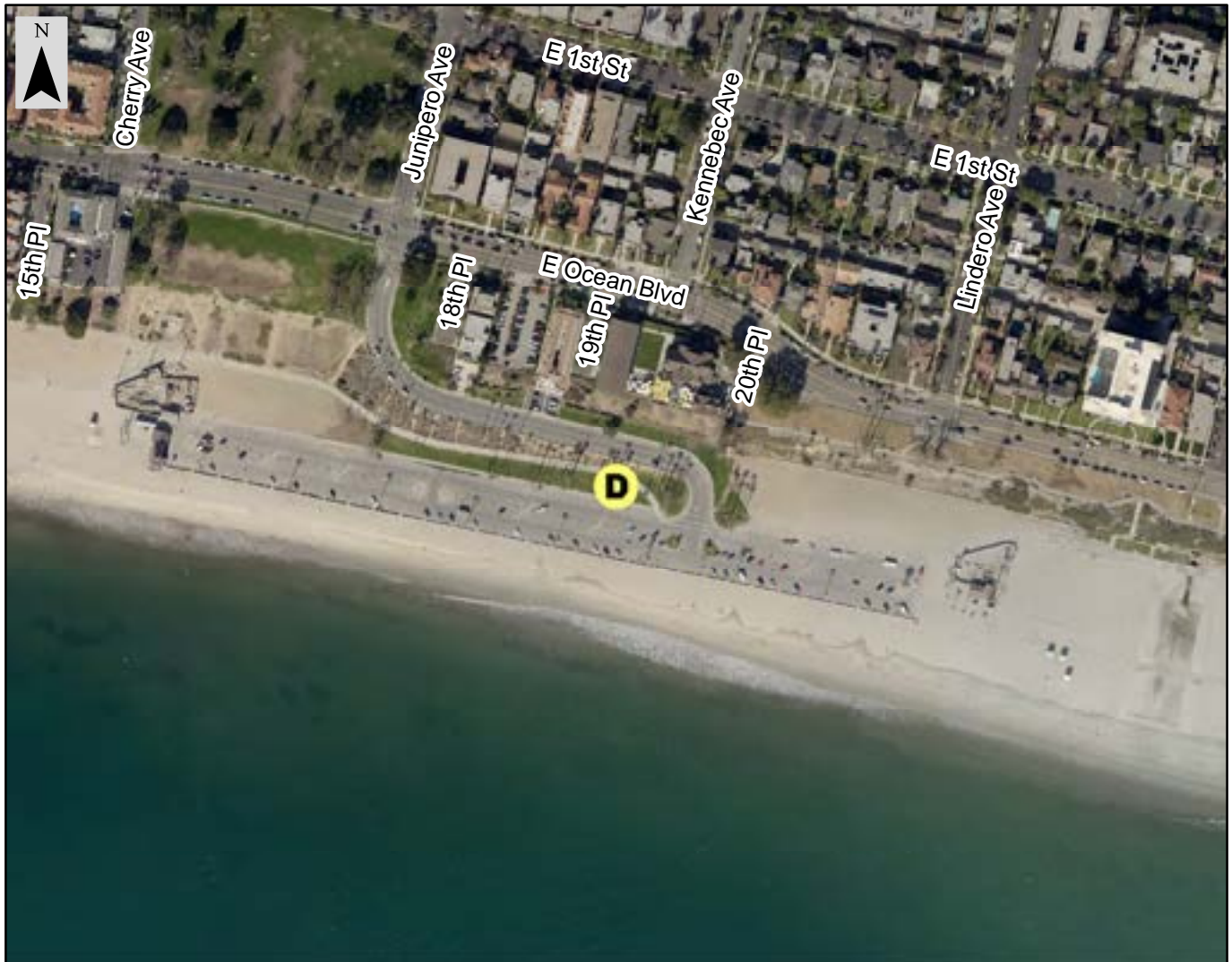
Project Description: This project is for the demolition and removal of the seawater intake and discharge system (built in 2008) on Junipero Beach.

Purpose: The original permit from the California Coastal Commission requires the removal of these facilities.

Location: Juniper Beach off E Ocean Blvd and Junipero Ave. The address for the Junipero Beach parking lot is 2100 E Ocean Blvd, Long Beach, CA 90803.

Council District: 2

FY 2022/23 Budget: \$3,701,775





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: 32ND ST BOOSTER STATION REHABILITATION

Fund: Water

Project Category: Water Supply

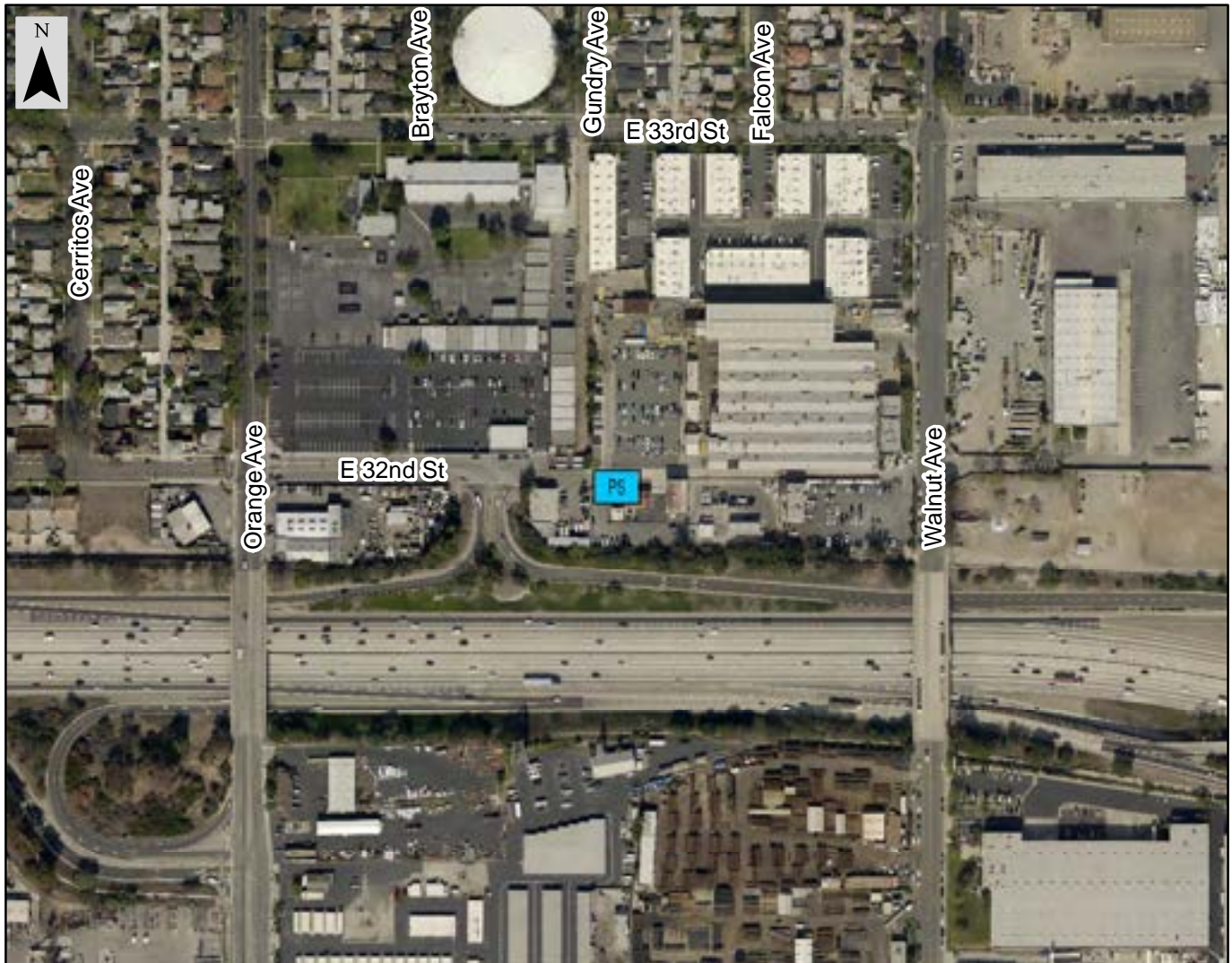
Project Description: This project will include assessing and rehabilitating the existing 32nd Street Booster Pump Station.

Purpose: Ensure the integrity and dependability of water infrastructure.

Location: 1420 E 32nd Street

Council District: 7

FY 2022/23 Budget: \$111,249





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: WELL REHABILITATION - COMMISSION 15 & 18

Fund: Water

Project Category: Water Supply

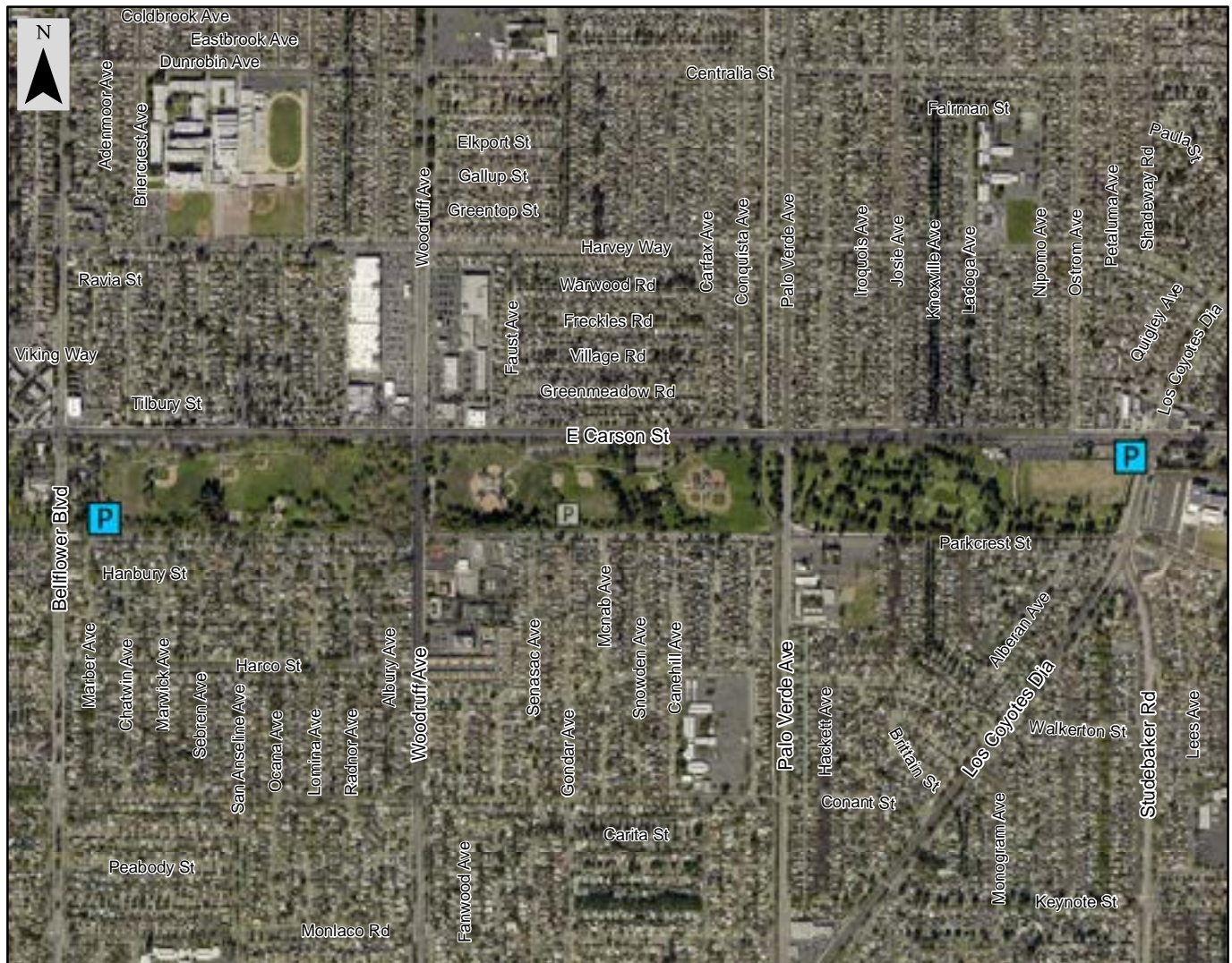
Project Description: This project will include rehabilitating groundwater production well.

Purpose: Restore a well to its most efficient condition.

Location: COM 15-Heartwell Park, COM 18-Heartwell Golf Course

Council District: 5

FY 2022/23 Budget: \$1,640,600





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: WELL REHABILITATION - CITIZENS 10 & COMMISSION 14

Fund: Water

Project Category: Water Supply

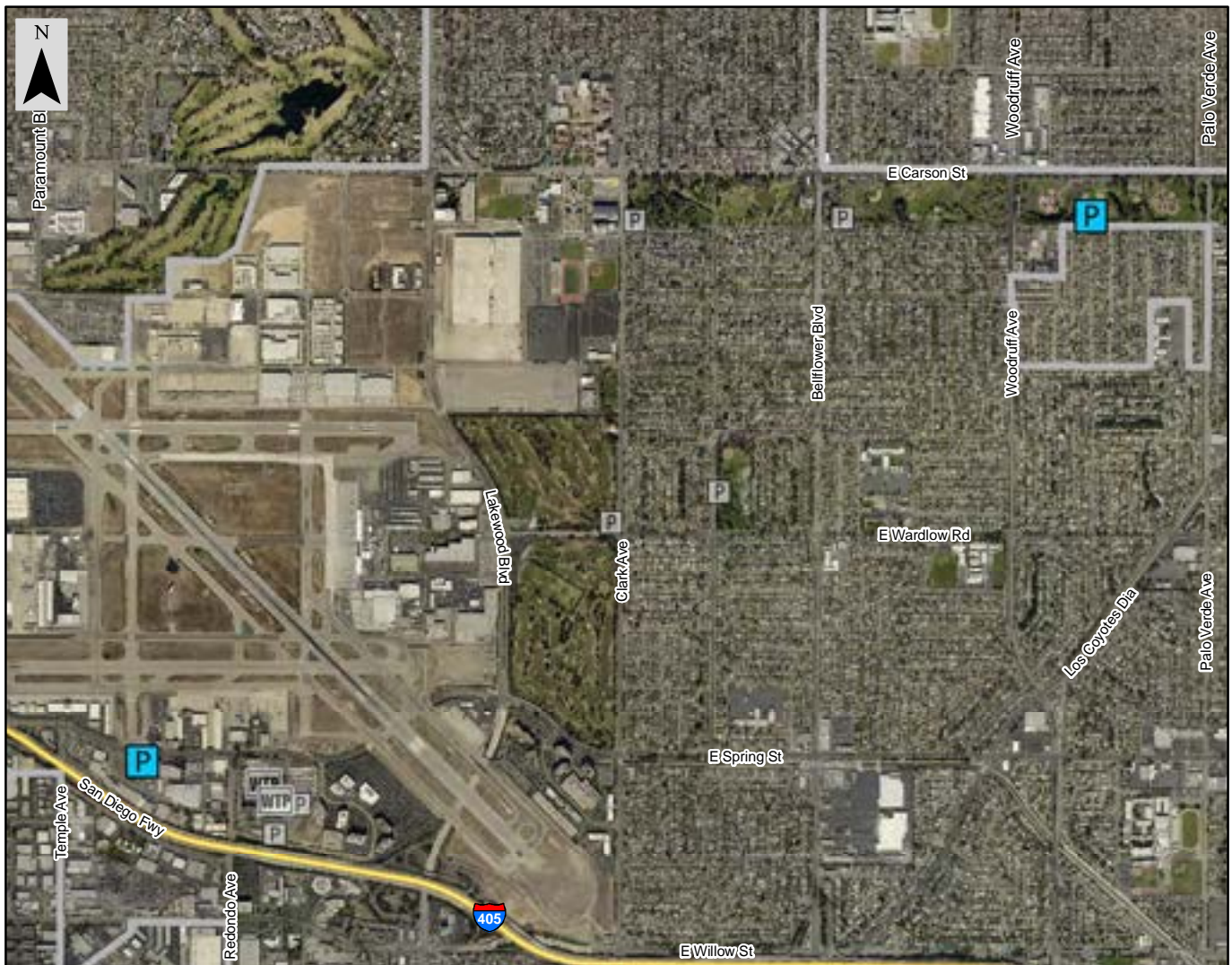
Project Description: This project will include rehabilitating groundwater production well.

Purpose: Restore a well to its most efficient condition.

Location: Heartwell Park, between Woodruff Ave and Palo Verde Ave and 2939 Airport Way

Council District: 5

FY 2022/23 Budget: \$646,841





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: WELL REHABILITATION - COMMISSION 24 & 25

Fund: Water

Project Category: Water Supply

Project Description: This project will include rehabilitating groundwater production well.

Purpose: Restore a well to its most efficient condition.

Location: Heartwell Park, between Clark Ave and Bellflower Blvd. Wardlow Park, on Stanbridge Ave between Wardlow and Monlaco Rd

Council District: 5

FY 2022/23 Budget: \$65,747





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: MISCELLANEOUS WELL REPAIR AND REHABILITATION

Fund: Water

Project Category: Water Supply

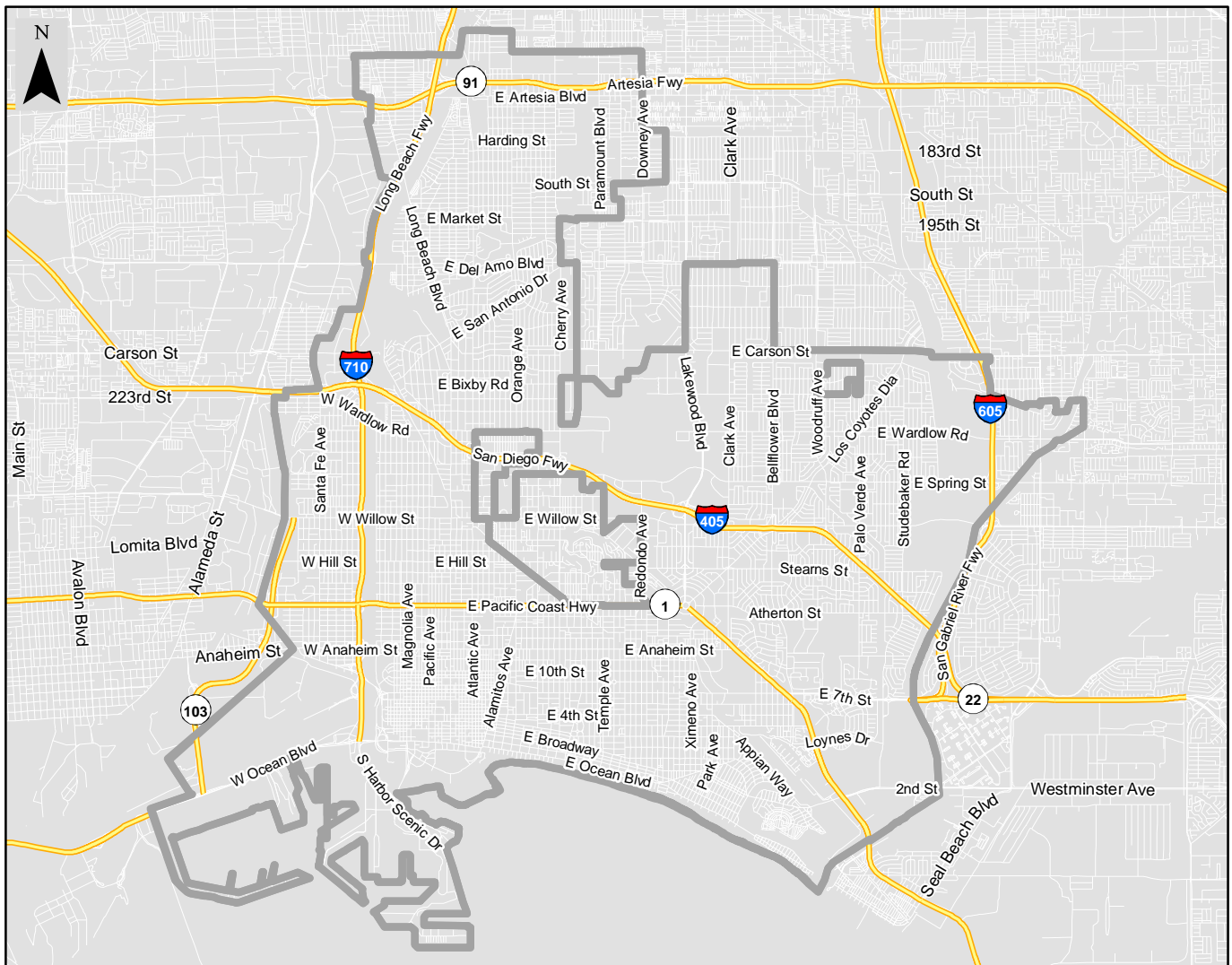
Project Description: This is an on-call services to assist with well permit and miscellaneous well related technical support

Purpose: This is an on-call services to assist with well permit and miscellaneous well related technical support.

Location: City-Wide

Council District: TBD

FY 2022/23 Budget: \$54,900



**LONG BEACH WATER DEPARTMENT
CAPITAL IMPROVEMENT PROGRAM
FY 2022/23 WATER FUND PROJECTS**

PROJECT CATEGORY: WATER FACILITY IMPROVEMENTS

Project Description	Cost Estimate
1 st to 4 th Floor Administration Building Renovation	\$521,207
Facilities Roofing	\$100,000
TOTAL	\$621,207

SUMMARY:

Water facility or building improvement projects ensure the integrity, dependability, and prolonged life of vital building structures. Space planning helps LBWD make strategic design decisions and necessary improvements to accommodate employees and workplace needs. Assessment and performing necessary improvements to replace existing roofing system will help address ongoing water damage to facilities and improve building life span.





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: ADMINISTRATION BUILDING RENOVATION

Fund: Water

Project Category: Water Facility Improvements

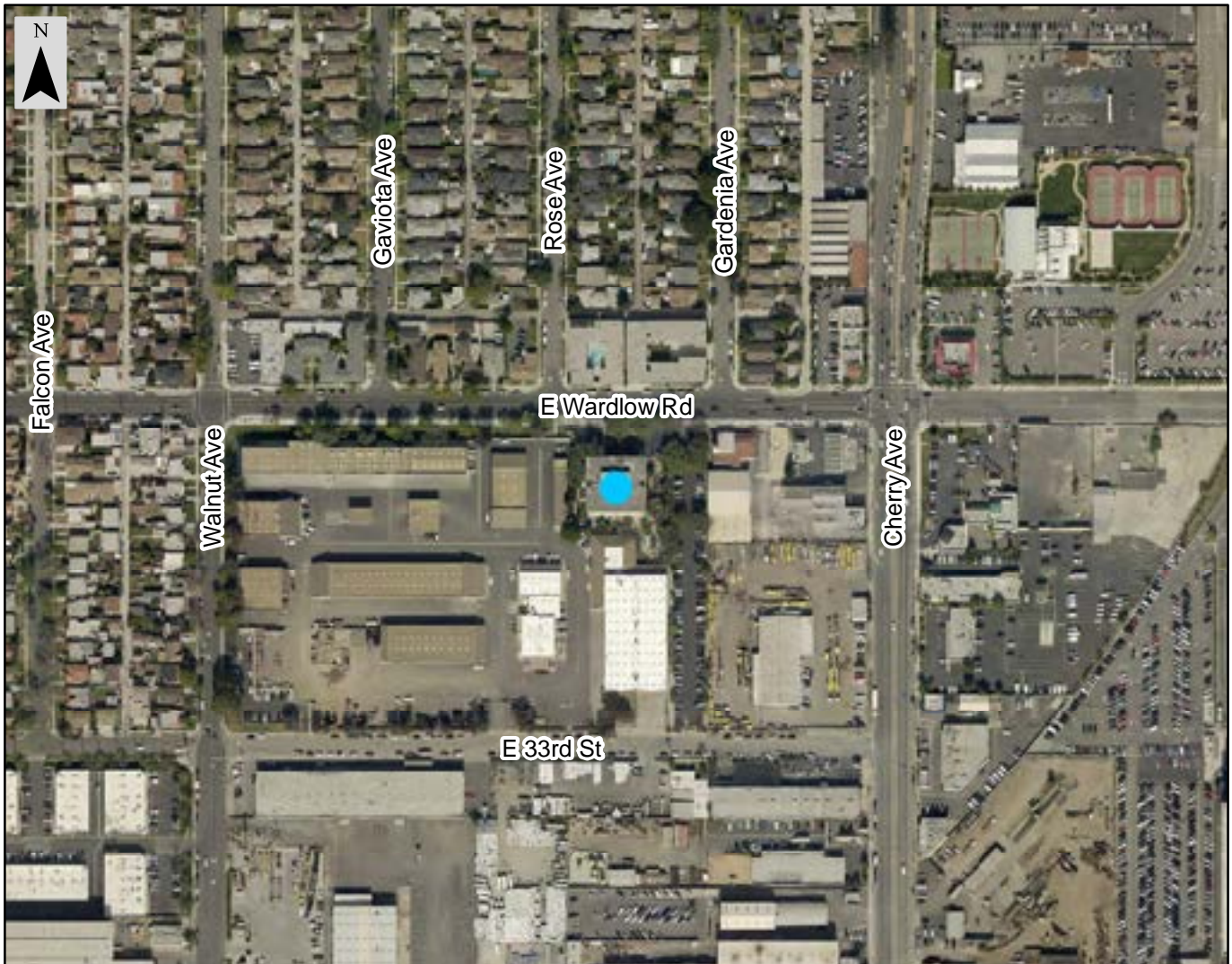
Project Description: This project will include reorganization of existing work space.

Purpose: Accommodate staffing and workflow efficiencies.

Location: Long Beach Water Department Administration Building and Operations Service Center

Council District: 7

FY 2022/23 Budget: \$168,250





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: FACILITIES ROOFING - ADMINISTRATION & TREATMENT PLANT

Fund: Water

Project Category: Water Facility Improvements

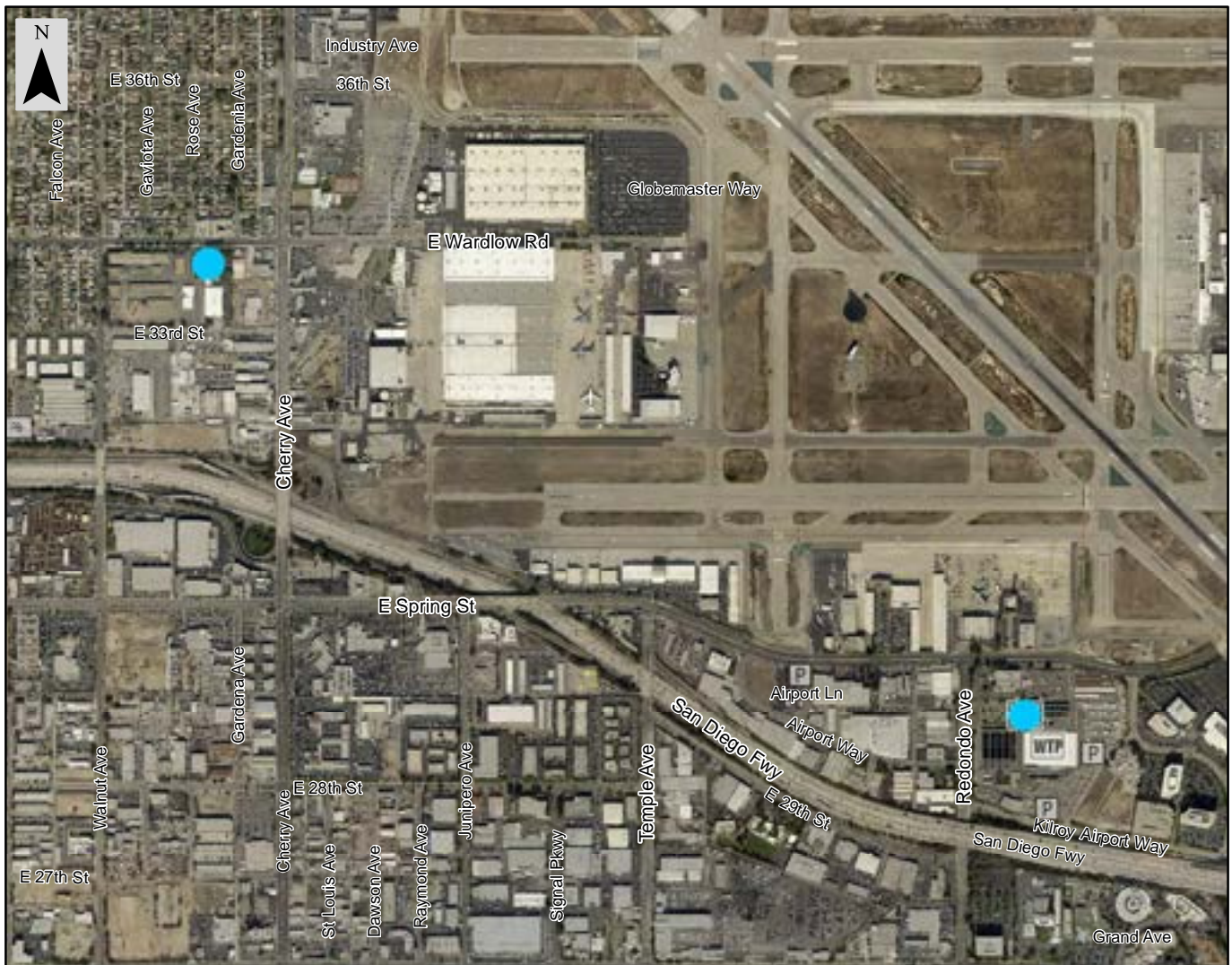
Project Description: Replacing roofing system that has reached its useful life.

Purpose: Replacing roofing system that has reached its useful life.

Location: LBWD Administration Building and Treatment Plant

Council District: 4

FY 2022/23 Budget: \$100,000



**LONG BEACH WATER DEPARTMENT
CAPITAL IMPROVEMENT PROGRAM
FY 2022/23 WATER FUND PROJECTS**

PROJECT CATEGORY: WATER DEVELOPER PROJECTS

Project Description	Cost Estimate
Recycled Water Main Installation (LADWP Haynes)	\$542,300
TOTAL	\$542,300

SUMMARY:

In partnership with private developers, other City Departments, and other local agencies, LBWD performs water facility-related improvements based on the needs of the proposed Developments throughout the City. LBWD works directly with private developers' design consultants to determine required improvements to the existing water system to properly served the proposed project. For the Haynes Plant Recycled Water Main Installation Project, LBWD is working with Los Angeles Department of Water and Power (LADWP) and has conducted a study on the expansion of LBWD water and sewer systems. The study identified two separate projects: recycled water pipeline and sewer pipeline constructions which will serve the future needs of the power generating station.





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: RECYCLED WATER MAIN INSTALLATION ALONG STUDEBAKER ROAD (LADWP HAYNES)

Fund: Water

Project Category: Water Developers Project

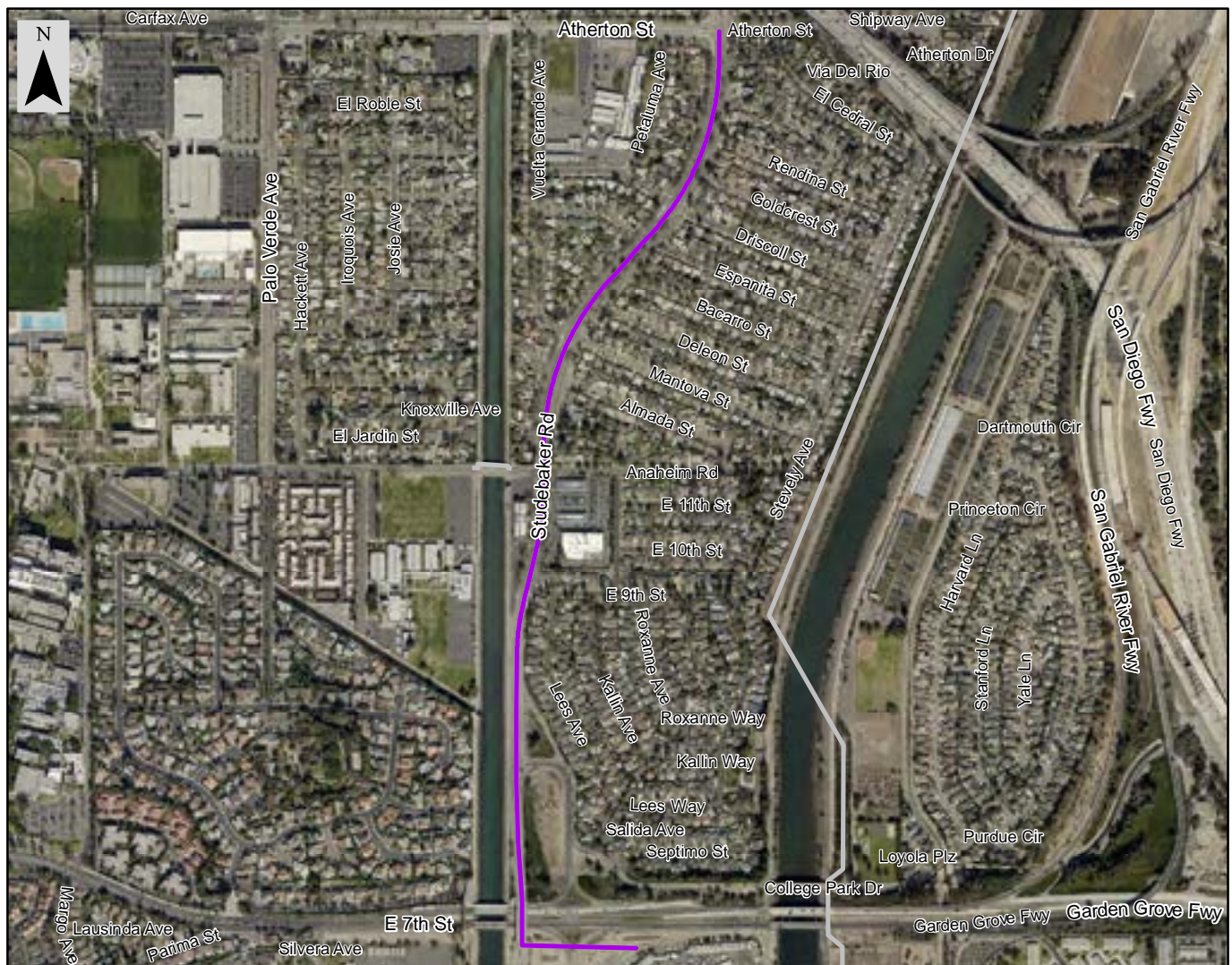
Project Description: This project will include extending our recycled water system from Atherton Street south along Studebaker Road with a new 21-inch main to install a new large recycled water service for LADWP Haynes Generating Station.

Purpose: Extend LBWD's recycled water infrastructure.

Location: South along Studebaker Road from Atherton Street to SR-22, then east across the San Gabriel River to a connection north of Haynes Generating Station.

Council District: 3 & 4

FY 2022/23 Budget: \$542,300



**LONG BEACH WATER DEPARTMENT
CAPITAL IMPROVEMENT PROGRAM
FY 2022/23 SEWER FUND PROJECTS**

PROJECT CATEGORY: SEWER PIPELINE IMPROVEMENTS

Project Description	Cost Estimate
Sanitary Sewer Rehabilitation/Replacement Project – SSRRP 9	\$274,178
Sanitary Sewer Rehabilitation/Replacement Project – SSRRP 11	\$50,000
Sewer Improvements – Arbor Street and Locust Avenue	\$47,619
TOTAL	\$371,797

SUMMARY:

To maintain sanitary sewer system reliability and capacity and stay in compliance with the State of California's Waste Discharge Requirements, it is the Long Beach Water Department's (LBWD) priority to overhaul deficient and aging sewer infrastructure to ensure the swift removal of sanitary sewage from Long Beach residences and businesses. LBWD's Sewer Master Plan identifies projects that will address any required improvements and additions to the existing sewer system. Pipes that are capacity deficient will be upsized and those that are structurally deficient and cannot be rehabilitated will be replaced.





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: ARBOR AND LOCUST SEWER IMPROVEMENTS

Fund: Sewer

Project Category: Sewer Pipeline Improvements

Project Description: This project will include evaluating existing sewer pipeline deficiencies within the project area and providing recommended improvements.

Purpose: Improve the reliability and capacity of the existing sanitary sewer system.

Location: Area bounded by Del Amo Boulevard, 46th Street, Atlantic Avenue, and Long Beach Boulevard

Council District: 8

FY 2022/23 Budget: \$47,619





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: SSRRP PROJECT NO. 11

Fund: Sewer

Project Category: Sewer Pipeline Improvements

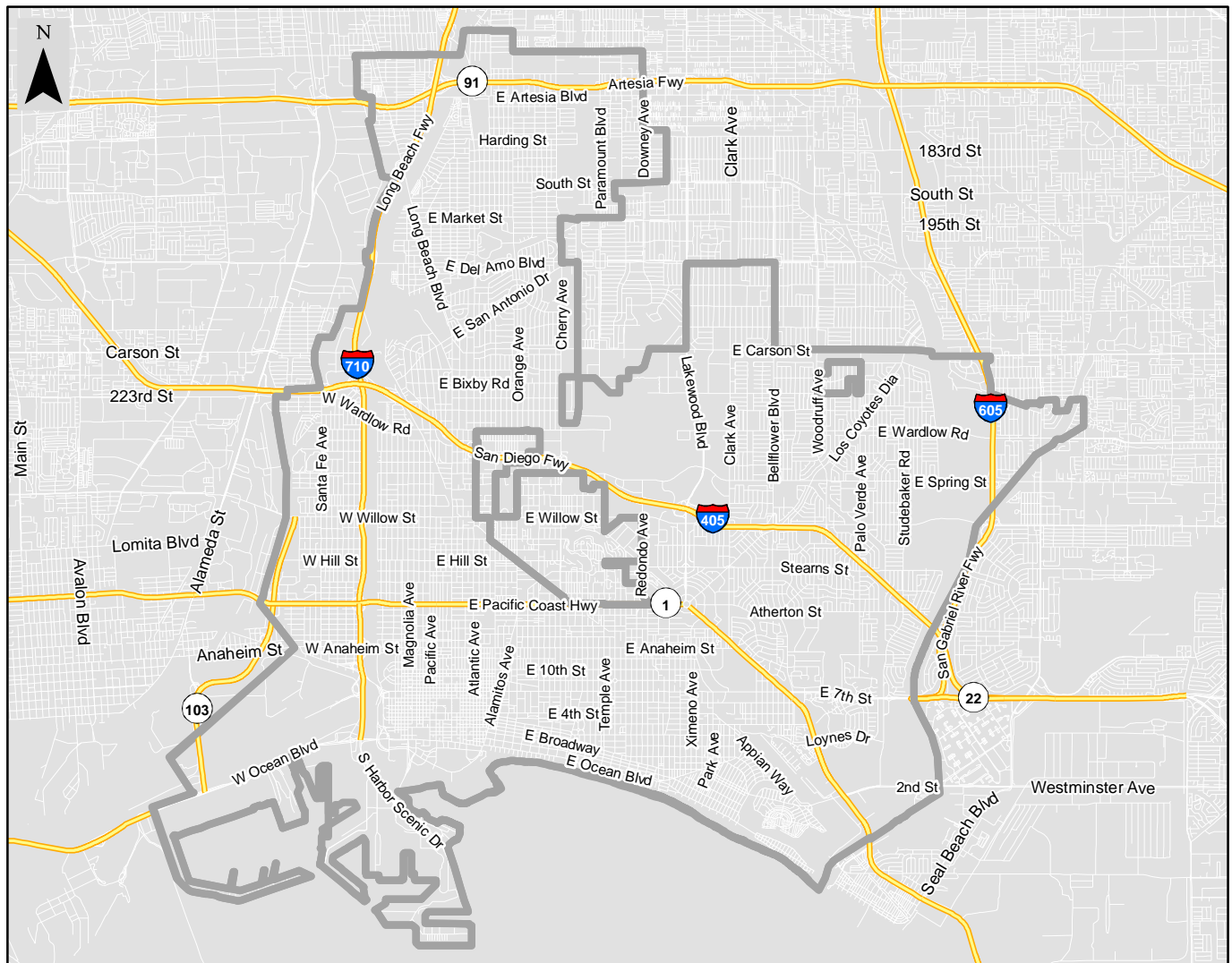
Project Description: This project will include cleaning, CCTV inspecting and potential repairing, replacing and/or rehabilitating of approximately 9,000 linear feet of sewer mains.

Purpose: Improve the reliability and capacity of the existing sanitary sewer system.

Location: Various locations in Long Beach

Council District: Various

FY 2022/23 Budget: \$50,000



**LONG BEACH WATER DEPARTMENT
CAPITAL IMPROVEMENT PROGRAM
FY 2022/23 SEWER FUND PROJECTS**

PROJECT CATEGORY: SEWER LIFT STATION REHABILITATIONS

Project Description	Cost Estimate
S-7 Sewer Lift Station Rehabilitation	\$530,798
S-8 Sewer Lift Station Rehabilitation	\$176,000
S-25 Sewer Lift Station Rehabilitation	\$3,539,705
TOTAL	\$4,246,503

SUMMARY:

In order to maintain sanitary sewer system reliability and capacity and stay in compliance with the State of California's Waste Discharge Requirements, it is the Long Beach Water Department's (LBWD) priority to overhaul deficient and aging sewer infrastructure to ensure the swift removal of sanitary sewage from Long Beach residences and businesses. Sewer lift stations are rehabilitated to ensure the integrity, dependability, and prolonged life of critical sewer facilities.





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: S-8 SEWER LIFT STATION REHABILITATION

Fund: Sewer

Project Category: Sewer Lift Station Rehabilitations

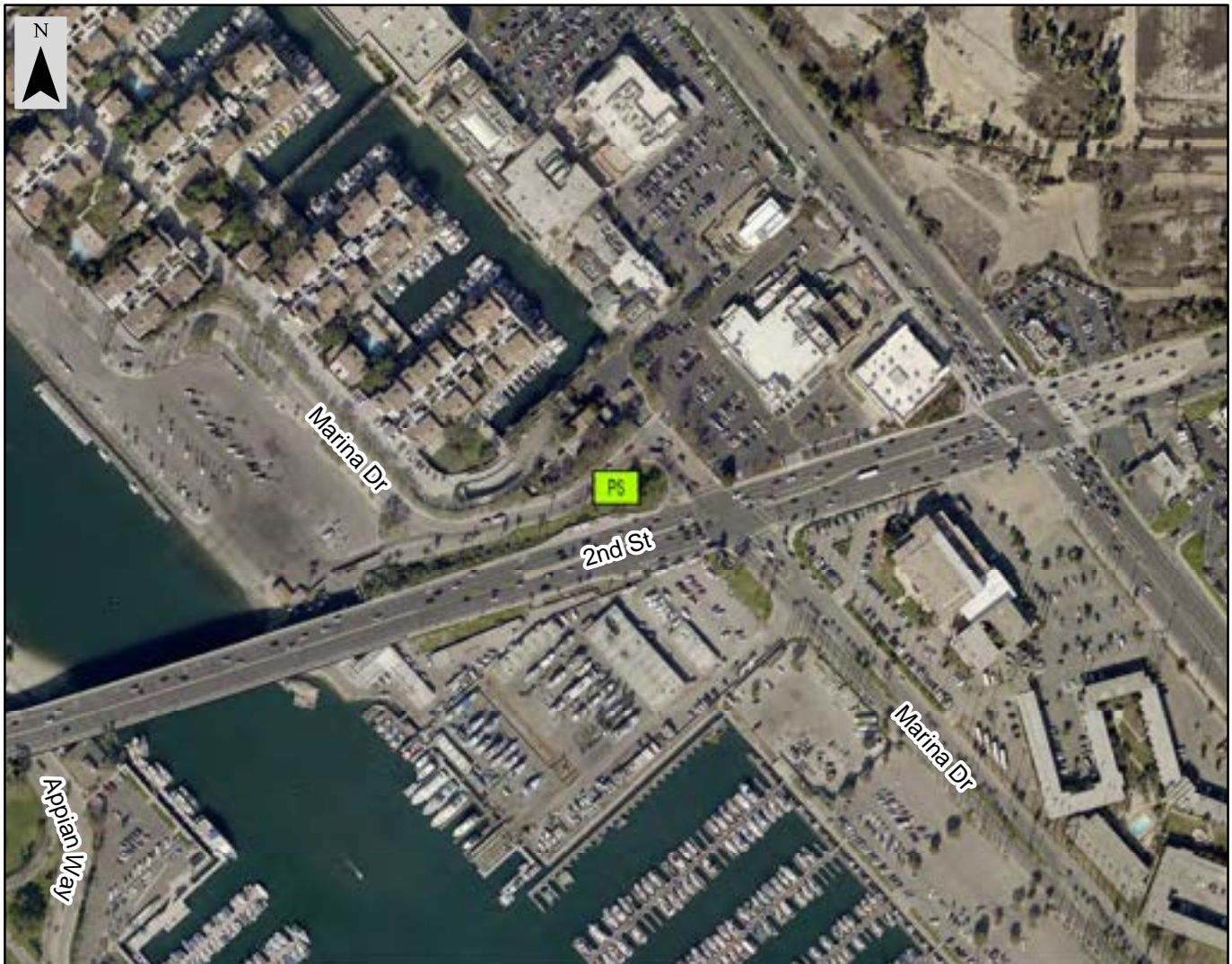
Project Description: This project will include interior wet well repairs, electrical and mechanical system upgrades, ventilation and odor control system upgrades, and structural and seismic improvements.

Purpose: Improve the station's overall reliability.

Location: Dennis Williams Greenway Park

Council District: 3

FY 2022/23 Budget: \$176,000





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: S-7 SEWER LIFT STATION REHABILITATION

Fund: Sewer

Project Category: Sewer Lift Station Rehabilitations

Project Description: This project will include interior wet well repairs, electrical and mechanical system upgrades, ventilation and odor control system upgrades, and structural and seismic improvements.

Purpose: Improve the station's overall reliability.

Location: 349 Lakeview St

Council District: 3

FY 2022/23 Budget: \$530,798





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: S-25 SEWER LIFT STATION REHABILITATION

Fund: Sewer

Project Category: Sewer Lift Station Rehabilitations

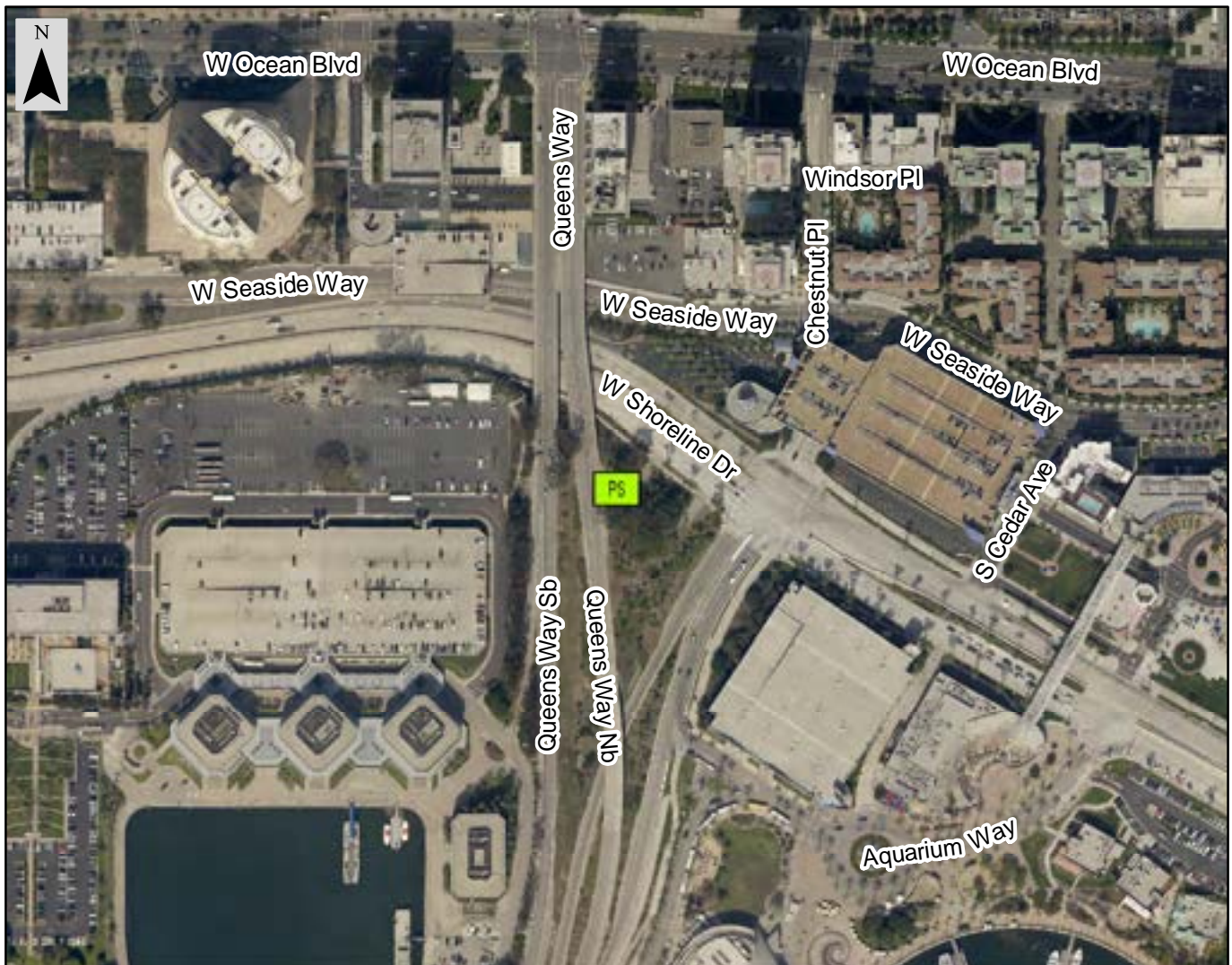
Project Description: This project will include interior wet well repairs, electrical and mechanical system upgrades, ventilation and odor control system upgrades, and structural and seismic improvements.

Purpose: Improve the station's overall reliability.

Location: S-25 Sewer Lift Station, 420 Shoreline Dr, Long Beach,

Council District: 1

FY 2022/23 Budget: \$3,539,705



**LONG BEACH WATER DEPARTMENT
CAPITAL IMPROVEMENT PROGRAM
FY 2022/23 SEWER FUND PROJECTS**

PROJECT CATEGORY: SEWER DEVELOPER PROJECTS

Project Description	Cost Estimate
Sewer Main Installation (LADWP Haynes)	\$560,700
TOTAL	\$560,700

SUMMARY:

In partnership with private developers, other City Departments, and other local agencies, LBWD performs water facility-related improvements based on the needs of the proposed Developments throughout the City. LBWD works directly with private developers' design consultants to determine required improvements to the existing water system to properly served the proposed project. For the Haynes Plant Recycled Water Main Installation Project, LBWD is working with Los Angeles Department of Water and Power (LADWP) and has conducted a study on the expansion of LBWD water and sewer systems. The study identified two separate projects: recycled water pipeline and sewer pipeline constructions which will serve the future needs of the power generating station.





Long Beach Water Department Capital Improvement Program FY 2022/23

Project: SEWER FORCE MAIN INSTALLATION FOR LADWP HAYNES GENERATING STATION

Fund: Sewer

Project Category: Sewer Developers Project

Project Description: This project will include construction of a new sewer force main from LADWP Haynes Generating Station to the Long Beach Water Reclamation Plant.

Purpose: Augment our recycled water supply with increased industrial discharge.

Location: From Haynes Generating Station to Long Beach Water Reclamation Plant, along the western or eastern banks of the San Gabriel River.

Council District: 4

FY 2022/23 Budget: \$560,700

