

City of Lomita CIP Master Plan 2022 - 2027



June 2022

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Introduction

The Capital Improvement Program (CIP) Master Plan is a planning tool for financial planning, staffing resources, capital outlay, and prioritization of capital projects and capital equipment.

The CIP Master Plan allows for short- and long-range planning to ensure assets are maintained for the benefit of residents, businesses, property owners, and visitors.

The CIP Master Plan incorporated input from other planning tools such as the Water Master Plan, the ADA transition plan, Bike and Pedestrian Master Plan, the Safety and Housing Elements, the Pavement Management Plan, City Council, resident inquiries, and staff.

The last CIP Master Plan covered fiscal years 2014 through 2019. Going forward, the intent is to update the CIP Master Plan every two years to continually maintain a prioritized project list as circumstances and funding changes. External funding opportunities often require a council-approved planning document, so maintaining a current CIP Master Plan will allow the City to be prepared to apply for funding.

Procedure for Developing a Five-Year CIP

In December of 2021, Department Heads were asked to initiate capital requests through a standardized form. The requests included descriptions, justification, estimate of costs, year(s) of expenditure, and known funding sources. The CIP was reviewed holistically with Department Heads, and then a City Council Working Session on April 26, 2022 allowed for detailed discussion of priorities. Following this, the draft CIP Master Plan was presented to the Planning

Commission on May 9, 2022 for verification of compliance with the General Plan. Additionally, the Public Safety and Traffic Commission received a presentation on May 18, 2022 on the draft CIP Master Plan. The final CIP Master incorporates minor changes and input by Council; it will be presented for approval to City Council with the FY 22-23 and 23-24 budget. All Commission and Council meetings provided opportunities for community input.

The goal of this five-year CIP is to enhance the City's forecasting, project evaluation and community engagement processes by creating a planning resource to be used throughout the decision-making process. It is not intended to limit the City's ability to adjust its programs, services, and projects as unexpected needs arise.

Supporting Plans

The City relied on several planning documents and regulatory factors in support of this CIP Master Plan including

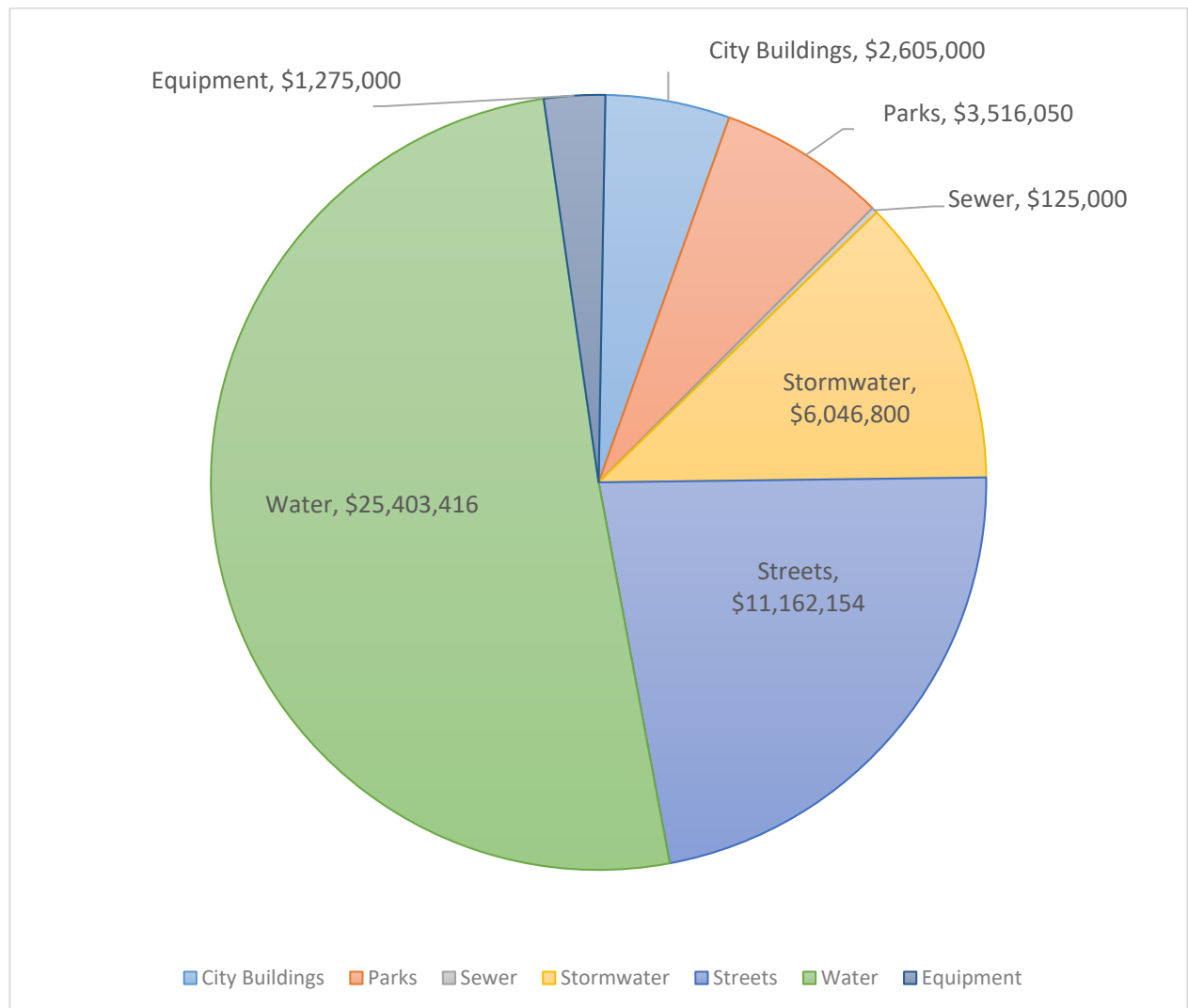
- Water Master Plan (2022),
- Pavement Management Program (2020-21),
- ADA Transition Plan,
- Bike and Pedestrian Master Plan,
- Safety and Housing Elements, and
- Stormwater MS4 (Municipal Separate Storm Sewer System) Permit

Projects identified in the Water Master Plan are incorporated into the CIP Master Plan. In addition, annual rehabilitation and replacement is included, which was not part of the Water Master Plan to replace aged and leaking pipes. The costing and general scope is included in Appendix B – Water Rehab & Replacement Letter. The Pavement Management Program (PMP) identifies and ranks each street in the City and gives it a rating based on condition. A recommendation for repair is provided and this was the basis for street repair projects incorporated into the CIP Master Plan. Some street and water projects are scheduled in years 5-10. If resources become available, they may be moved into earlier years.

Overview

Over the five-year CIP Master Plan cycle, the majority of projects (51%) are focused on water system improvements. Following this, the next highest category of projects are street projects (22%), stormwater (12%), Parks (7%), city buildings (5%), equipment (3%), and sewer (<1%). In addition to expense allocation, the equipment and projects are summarized in tables below.

Allocation of CIP Master Plan Projects/Investments, 2022-27



Equipment – By Year

ID	Type	Description	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27
A	IT	Backup and Disaster Recovery			\$15,000		
B	IT	Server and Storage Replacement				\$150,000	
C	IT	PC Replacement		\$25,000	\$105,000	\$25,000	
D	IT	Replace Firewalls, Switches, Wireless Networks				\$65,000	
E	Vehicle	1995 Backhoe 580L with S510 Bobcat skid steer				\$165,000	
F	Vehicle	2000 Chevy Silverado replace	\$45,000				
G	Vehicle	2000 Ford Ranger replace	\$45,000				
H	Vehicle	2002 Ford Ranger replace with Ford F150	\$45,000				
I	Vehicle	2004 Ford F550 (Service Truck) replace with F350 truck and utility bed		\$90,000			
J	Vehicle	2006 F150 replace			\$45,000		
K	Vehicle	2006 580M Backhoe replace with 580N Case Backhoe			\$100,000		
L	Vehicle	2006 Dodge Ram replace		\$45,000			
M	Vehicle	2006 Ford F350 replace			\$45,000		
N	Vehicle	2006 Ford F350 replace					\$45,000
O	Vehicle	2007 John Deere Mower replace				\$30,000	
P	Vehicle	2008 Chevy C4500 replace		\$45,000			
Q	Vehicle	2013 Dump Truck replace with 5-yard dump truck with dump bed			\$90,000		
R	Water	Water (valve turning)	\$30,000				
S	Water	Water (boring)	\$5,000				
T	Water	Water (CLA)					\$20,000
Total:			\$170,000	\$205,000	\$400,000	\$435,000	\$65,000

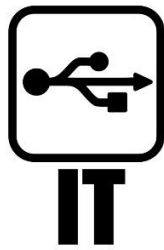
Capital Project – by Year

No.	Type	Description	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	FY27-32
1	City Buildings	Stephenson Center Maintenance Project	\$250,000					
2	City Buildings	Tom Rico Center Roof Replacement Project		\$180,000				
3	City Buildings	Tom Rico Center Women's Restroom Maintenance Project			\$50,000			
4	City Buildings	Railroad Museum Maintenance Project	\$75,000					
5	City Buildings	Appian Way Pump Station Roof Replacement Project	\$50,000					
6	City Buildings	Workplace Safety & EOC Upgrades Project		\$1,000,000				
7	City Buildings	New Public Works Yard/facility				\$1,000,000		
8	Parks	Navy Field – Little League			\$549,200	\$854,850	\$1,253,000	
9	Parks	Booster Pump for Hathaway Park	\$9,000					
10	Parks	Park Bench and Table Replacements at Hathaway and Lomita Parks	\$15,000			\$15,000		
11	Parks	Picnic Shelter Replacement			\$35,000			
12	Parks	Park Playground Equipment	\$500,000					
13	Parks	Resurface Basketball and Tennis Courts		\$25,000	\$10,000			
14	Parks	Landscape Maintenance District Refurbish			\$250,000			
15	Sewer	Sewer System Master Plan	\$100,000					
16	Sewer	Sewer System Management Plan update and Audit	\$25,000					
17	Stormwater	Downtown Lomita Multi-Benefit Stormwater Project	\$323,500	\$323,300	\$2,695,000	\$2,695,000		
18	Stormwater	Feasibility Study for another Stormwater Project	\$10,000					
19	Streets	Traffic Calming	\$120,000					
20	Streets	Street Improvements – Zones C&F	\$2,743,344					
21	Streets	Lomita Boulevard Corridor Planning	\$90,000					
22	Streets	ADA Improvement projects	\$70,000	\$250,000	\$40,000	\$250,000	\$40,000	\$4,247,500

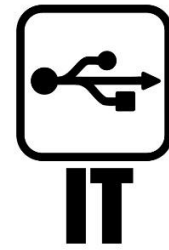
No.	Type	Description	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	FY27-32
23	Streets	Intersection Improvements at Walnut/253rd/Ebony and Walnut/Bland					\$150,000	TBD
24	Streets	Gutter Repairs - Narbonne Avenue	\$35,000					
25	Streets	Street Improvements - Zone G	\$173,500	\$1,200,000	\$858,328			
26	Streets	Street Improvements - Zone D				\$2,000,000	\$1,441,982	
27	Streets	Street Improvements - Zone E						\$2,781,170
28	Streets	Street Improvements - Zone A						\$2,056,798
29	Streets	Narbonne South Pipe Replacement	\$600,000	\$600,000				
30	Streets	Sidewalk Program	\$250,000	\$250,000				
31	Water	Emergency Generator for Appian Way	\$110,000					
32	Water	246 th St., 247 th Pl, 247 th St Western Water Main Replacement	\$1,364,916					
33	Water	Cypress Water Production Facility Upgrades	\$2,500,000					
34	Water	Narbonne South Pipe Replacement	\$1,445,000	\$1,445,000				
35	Water	Second Potable Well Evaluation	\$50,000					
36	Water	Narbonne Ave Pipeline Upsizing				\$1,147,000		
37	Water	W. Lomita Blvd Pipeline Upsizing				\$275,000	\$1,600,000	\$3,568,000
38	Water	PCH Pipeline Upsizing			\$3,534,000			
39	Water	Annual Pipe Rehab and Replacement (R&R)	\$1,156,100	\$1,156,100	\$1,156,100	\$1,156,100	\$1,156,100	\$5,780,400
40	Water	Annual Pipeline Upsizing Project		\$250,000	\$1,875,000	\$1,875,000	\$1,987,000	
41	Water	Zones 2 and 3 Booster Feasibility Study			\$50,000			
42	Water	Pressure Zone Boundary Modification Study			\$50,000			
43	Water	New Interconnection at Narbonne Ave Oak Street PRS Study			\$50,000			
44	Water	Water Quality Sample Station Upgrades					\$15,000	
		Total:	\$12,065,360	\$6,679,400	\$11,202,628	\$11,267,950	\$7,643,082	\$18,463,868

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Equipment



Back-up and Disaster Recovery Refresh



Equipment

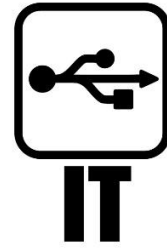
Project type: Equipment Replacement
New or On-going Project: New
Total Project Estimate: \$15,000

Description: Refresh of backup and disaster recover (in the event of a cyber attack, etc.).

Justification: Current system will be towards the end of its useful life.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
General Fund			\$7,500			
Water			\$7,500			
Total:			\$15,000			

Replacement of Firewalls, Switches, and Wireless Networks



Equipment

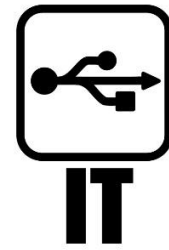
Project type: Equipment Replacement
 New or On-going Project: New
 Total Project Estimate: \$65,000

Description: Replacement of firewalls, switches and wireless network for City Hall and Lomita Park.

Justification: Current system will have exceeded its useful life.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
General Fund				\$52,000		
Water				\$13,000		
Total:				\$65,000		

PC Replacement



Equipment

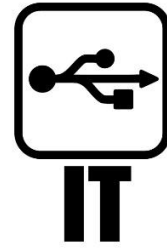
Project type: Equipment Replacement
New or On-going Project: New
Total Project Estimate: \$155,000

Description: Citywide replacement of PCs.

Justification: Current system will have exceeded its useful life. Minimum requirements for new operating systems may force the City to replace PCs.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
General Fund		\$20,000	\$84,000	\$20,000		
Water		\$5,000	\$21,000	\$5,000		
Total:		\$25,000	\$105,000	\$25,000		

Server and Storage Replacement



Equipment

Project type: Equipment Replacement
New or On-going Project: New
Total Project Estimate: \$150,000

Description: Server and storage replacement at City Hall. Future technology may go towards cloud services rather than on-site servers.

Justification: Hardware will have exceeded its useful life.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
General Fund				\$75,000		
Water				\$75,000		
Total:				\$150,000		

Water Equipment



Equipment

Project type: Equipment Purchase/Replacement
New or On-going Project: New
Total Project Estimate: \$35,000

Description: The valve turning machine will be replaced. In addition, a boring tool will be procured. A large valve (CLA valve) at Appian will be replaced.

Justification: Valve turning is required as part of the City's water system. The existing equipment needs replacement. A boring tool will aid in the installation of installing water meter service lines reducing the need for trenching. The CLA valve at Appian Way will exceed its useful life and will be replaced.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
Water (valve turning)	\$30,000					
Water (boring)	\$5,000					
Water (CLA)					\$20,000	
Total:	\$35,000				\$20,000	

Equipment/Vehicle Replacement



Equipment

Project type: Equipment Purchase/Replacement
 New or On-going Project: New
 Total Project Estimate:

Description: Heavy equipment and vehicles will be replaced.

Justification: Much of the equipment has exceeded its useful life, some is inoperable, and some will no longer be in compliance with emissions regulations. Much of the equipment is over 15 years old and repairs are no longer cost effective and some parts unavailable. Six pieces of equipment were scheduled for replacement in the last CIP master plan, but not replaced. The equipment/vehicles proposed for replacement include the following:

- 1995 Backhoe 580L with S510 Bobcat skid steer
- 1999 Aerial Lift/hoist
- 2000 Chevy Silverado replace
- 2000 Ford Ranger replace
- 2002 Ford Ranger replace with Ford F150
- 2004 Ford F550 (Service Truck) replace with F350 truck and utility bed
- 2006 F150 replace
- 2006 580M Backhoe replace with 580N Case Backhoe
- 2006 Dodge Ram replace
- 2006 Ford F350 replace
- 2006 Ford F350 replace
- 2007 John Deere Mower replace
- 2008 Chevy C4500 replace
- 2013 Dump Truck replace with 5-yard dump truck with dump bed

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
Water	\$45,000	\$90,000	\$140,000	\$85,000		
General Fund	\$90,000	\$90,000	\$140,000	\$110,000	\$45,000	
Total:	\$135,000	\$180,000	\$140,000	\$195,000	\$130,000	

City Buildings



1 Stephenson Center Maintenance Project



City Buildings

Project type: Maintenance
New or On-going Project: New
Total Project Estimate: \$250,000

Description: Remove and replace all plumbing, fixtures, windows, flooring and paint in the two first floor public restrooms. Bring into ADA compliance. Replace the two levels of roofing, remove and replace two existing skylights. Add permanent storage shelving and cabinets in the community room area.

Justification: The City has been awarded a grant through Prop 68, Projects must be complete by June 2024. The areas identified have exceeded useful life. Restrooms have not been updated since at least 1982. Roof currently leaks frequently requiring service. Skylights do not seal and allow hot and cold air in from the outside, resulting in the unnecessary use of the HVAC system.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
Grant	\$190,642					
General Fund	\$59,358					
Total:	\$250,000					

2 Tom Rico Center Roof Replacement Project



Project type: Maintenance
New or On-going Project: New
Total Project Estimate: \$180,000

Description: Remove and replace roofs of the Tom Rico Center buildings including the gym and the community building.

Justification: The roofs have exceeded their useful life.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
General Fund		\$180,000				
Total:		\$180,000				

3 Tom Rico Center Women's Restroom Maintenance Project



Project type: Maintenance
 New or On-going Project: New
 Total Project Estimate: \$50,000

Description: Remove and replace all plumbing, fixtures, flooring, and paint in the restroom. Bring into ADA compliance.

Justification: The restrooms have not been updated in over 20 years. There are frequent plumbing issues requiring servicing, and ADA modifications are necessary. The men's restroom was updated ~10 years ago.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
General Fund			\$50,000			
Total:			\$50,000			

4 Railroad Museum Maintenance Project



City Buildings

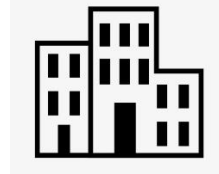
Project type: Maintenance
New or On-going Project: New
Total Project Estimate: \$75,000

Description: Remove and replace museum roof. Repair and/or replace eaves and fascia boards. Update façade and signage. Paint exterior of the building and replace brickwork at the Annex.

Justification: All items have exceeded their useful life.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
General Fund	\$75,000					
Total:	\$75,000					

5 Workplace Safety & EOC Upgrades Project



City Buildings

Project type: Maintenance
 New or On-going Project: New
 Total Project Estimate: \$1,000,000

Description: This project will complete upgrades for workplace safety and Emergency Operations Center. This includes heating ventilation and air conditioning (HVAC) for City Hall

Justification: Some building systems are over 30 years old and have exceeded their useful life.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
General Fund		\$1,000,000				
Total:		\$1,000,000				

6 Appian Way Pump Station Roof Replacement Project



City Buildings

Project type: Maintenance
New or On-going Project: New
Total Project Estimate: \$50,000

Description: Replacement of the roof and other damaged wood.

Justification: The roof at this facility has extensive termite damage and needs replacement.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
Water Fund	\$50,000					
Total:	\$50,000					

7 New Public Works Yard



City Buildings

Project type: Land/Facility Acquisition
New or On-going Project: New
Total Project Estimate: \$1,000,000

Description: Identify land and/or facility for a larger Public Works Yard. This would free up space at Lomita Park for expansion and allow for more efficient operations.

Justification: The existing Public Works facility/yard is undersized for current operations. The vehicles and mobile equipment are often blocked in, the storage bays are full, serving the Park, Street, Trees, Recreation, and Water. In addition, the break room is inadequately sized for lunches, meetings, and training.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
General Fund				\$1,000,000		
Total:				\$1,000,000		

Parks



8 Navy Field – Little League



Project type: Design and Construction
 New or On-going: New
 Total Project Estimate: \$2,657,050

Description: This project includes demolition of existing facilities and construction including grading, surveying, sewer, water, parking lot, lighting, fencing, security, bleachers, landscaping, curbs, scoreboards, restrooms, drinking fountains, and a snack bar.

Justification: To allow a third party to utilize the fields, underground utilities, infrastructure structures need to be brought up to code. This requires demolition and rebuilding.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
General Fund			\$549,200	\$854,850	\$1,253,000	
Total:			\$549,200	\$854,850	\$1,253,000	

9 Booster Pump for Hathaway Park



Project type: Construction
New or On-going: New
Total Project Estimate: \$9,000

Description: This project will add a booster pump to improve water pressure and irrigation.

Justification: The addition of a booster pump will enable water to more effectively be distributed on the turf. Currently there are dry spots during summer months as the water pressure does not permit full distribution.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
General Fund	\$9,000					
Total:	\$9,000					

10 Park Bench and Table Replacements at Hathaway and Lomita Parks



Project type: Capital Purchase (replacement)
 New or On-going expense: New
 Total Project Estimate: \$30,000

Description: This project will replace park tables and benches.

Justification: The existing tables and benches are cracked and damaged as they wear with time and exposure to the elements.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
General Fund	\$15,000			\$15,000		
Total:	\$15,000			\$15,000		

11 Picnic Shelter Replacement at Lomita Park



Project type: Maintenance
 New or On-going Project: New
 Total Project Estimate: \$20,000

Description: This project will replace/repair the picnic shelter.

Justification: The existing shelter is damaged/deteriorated.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
General Fund			\$35,000			
Total:			\$35,000			

12 Park Playground Equipment



Project type: Maintenance
New or On-going Project: New
Total Project Estimate: \$500,000

Description: This project will install playground equipment at the Railroad Museum/Annex.

Justification: There is a need for additional playground areas.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
General Fund	\$500,000					
Total:	\$500,000					

13 Resurface Basketball and Tennis Courts



Project type: Maintenance
 New or On-going Project: New
 Total Project Estimate: \$35,000

Description: This project will resurface the basketball courts at Hathaway and Lomita Parks and the tennis courts at Lomita Park.

Justification: The tennis courts have a grading issue that needs repair, the basketball court at Hathaway was damaged and a temporary patch was put in place. All surfaces have reached the end of their useful life.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
General Fund		\$25,000	\$10,000			
Total:		\$25,000	\$10,000			

14 Landscape Maintenance District Refurbish



Project type: Maintenance
 New or On-going Project: New
 Total Project Estimate: \$250,000

Description: This project will resurface and relandscape the Landscape Maintenance District on Palos Verdes Drive North between Western Ave and Rolling Vista Drive.

Justification: The existing asphalt is deteriorated, and the landscaping/irrigation is water intensive and worn. Updating this landscaping will beautify the area and reduce water demand.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
LMD			\$11,737			
General Fund			\$238,263			
Total:			\$250,000			

Sewers



15 Sewer System Master Plan



Sewers

Project type: Study
New or On-going Project: New
Total Project Estimate: \$100,000

Description: This project will review sewer capacity and identify needs.

Justification: With potential for increased development, it is critical for the city to know its sewer capacity and plan for any pipe upsizing

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
Sewer fund	\$100,000					
Total:	\$100,000					

16 Sewer System Management Plan Update and Audit



Sewers

Project type: Study
New or On-going Project: New
Total Project Estimate: \$25,000

Description: This project will update the City's Sewer System Management Plan and conduct an audit.

Justification: These are regulatory requirements.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
Sewer fund	\$25,000					
Total:	\$25,000					

Stormwater



17 Downtown Lomita Multi-Benefit Project



Stormwater

Project type: Design and Construction
 New or On-going Project: On-going
 Total Project Estimate: \$6,288,800

Description: The Project will divert 5.6 acre-feet of stormwater from three LACFCD storm drains in the downtown area of Lomita to an infiltration gallery and a series of drywells. Additional features include bioretention areas, pervious pavement, planting of vegetation with drought tolerant, native plants, 45 new shade trees, 10 benches, and a bike lane along Lomita Boulevard. It will reduce flooding, increase infiltration, add greenscaping, bike lane, reduce heat island effect, and reduce contaminant loading to the Wilmington Drain Watershed/Machado Lake Watershed.

Justification: This project will reduce stormwater contaminants (zinc and lead), as required by the Municipal Separate Storm Sewer System (MS4) permit.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
SCW Regional Funding*	\$300,000	\$149,300				
SCW Municipal Funding	\$173,500	\$174,000				
TBD			\$2,695,000	\$2,695,000		
Total:	\$323,500	\$323,300	\$2,695,000	\$2,695,000		

*Contingent upon approval/award

18 Feasibility Study for another Stormwater Project



Stormwater

Project type: Study
New or On-going Project: New
Total Project Estimate: \$10,000

Description: This project will identify another potential stormwater project

Justification: In order to comply with the MS4 permit, the City needs to consider additional projects for removal of contaminants entering the storm drain system.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
SCW Regional Funding*						
SCW Municipal Funding	\$10,000					
TBD						
Total:	\$10,000					

Streets / Traffic



19 Traffic Calming



Streets / Traffic

Project type: Study
New or On-going Project: New
Total Project Estimate: \$120,000

Description: This project would be a study of current traffic speeds and patterns and make recommendations for changes to calm traffic on roads where the City receives complaints, including Eshelman, Walnut, Pennsylvania, Ebony-253rd St-253rd Pl-Walnut, Bland-Walnut-257th St.

Justification: The City periodically receives concerns from residents about speeding. Residents often request speed bumps to slow traffic; however, this has not been utilized in the past due to emergency vehicle access. Alternate methods will be considered.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
General Fund	\$120,000					
Total:	\$120,000					

20 Street Improvements – Zones C&F



Streets / Traffic

Project type: Construction
 New or On-going Project: On-Going
 Total Project Estimate: \$2,743,344

Description: Street Resurfacing/Rehabilitation. This includes, where needed based on the City's 2017 Pavement Management Plan update, asphalt rubber hot mix overlay, hot-mixed asphalt concrete overlay, or removal of the existing pavement section to a prescribed depth followed by the placement of a conventional flexible pavement section using a structural hot mix or a full depth asphalt. The project includes the upgrade of all curb ramps to meet current ADA requirements, pavement markings and pavement striping. This project has been designed in FY 2020-21 and construction is scheduled for FY 2021-22. *Location:* Zones C (north of 250th St to Lomita Blvd.) and F (NW corner of the City) (240th, 245th St., 247th St., 248th St., Aldona Dr., Allbrook St., Alliene Ave, Bani Ave., Benhill Ave., Cadiz Dr., Cypress St., Eshelman Ave. cul-de-sac, Hendricks Ave., Lomita Park Pl., Lucille Ave., and Moon Ave.)

Justification: Streets are beyond their useful life and in need of repair.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
Gas Tax	\$478,257					
Measure R	\$702,018					
Measure M	\$776,949					
Street Impr	\$786,120					
Total:	\$2,743,344					

21 Lomita Boulevard Corridor Planning



Streets / Traffic

Project type: Study
New or On-going Project: New
Total Project Estimate: \$90,000

Description: This project will evaluate the Lomita Corridor (Crenshaw to Narbonne) and outline modifications for improvements related to the public right of way. Elements evaluated will include striping, width of street, sidewalk, ADA compliance, streetscape, above and below ground utilities, bike lanes, and bus stops/pads. This plan will support future housing or zoning changes along Lomita Boulevard.

Justification: As properties are being re-developed along this corridor, it is essential to know the utility and traffic constraints and begin addressing early for a cohesive approach on this corridor.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
Prop C	\$90,000					
Total:	\$90,000					

22 ADA Improvements Project



Streets / Traffic

Project type: Construction
New or On-going Project: New
Total Project Estimate: \$50,000

Description: This project will make progress on the changes in the ADA transition plan.

Justification: To make progress on the ADA transition plan.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
Prop C	\$70,000	\$250,000	\$40,000	\$250,000	\$40,000	\$4,247,500
Total:	\$70,000	\$250,000	\$40,000	\$250,000	\$40,000	\$4,247,500

23 Intersection Improvements at Walnut/253rd/Ebony and Walnut/Bland



Streets / Traffic

Project type: Design and Construction
 New or On-going Project: New
 Total Project Estimate: \$150,000

Description: This project will design and construct modifications to these intersections. The prior Walnut Street project restriped but did not include these two intersections. There may be opportunities to improve flow of traffic and beautify the area.

Justification: These intersections did not get reconstructed and are in need of street repairs and curb, gutters and ramps.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
Street Fund					\$150,000	TBD
Total:					\$150,000	

24 Gutter Repairs – Narbonne Avenue



Streets / Traffic

Project type: Construction
New or On-going Project: New
Total Project Estimate: \$35,000

Description: This project will repair drainage issues in the gutters.

Justification: The gutter that runs under the sidewalk along the west side of Lomita Boulevard in downtown Lomita at 243rd Street is unable to be cleared causing pooling. The drain needs to be re-graded.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
Street Fund	\$35,000					
Total:	\$35,000					

25 Street Improvements – Zone G



Streets / Traffic

Project type: Design and Construction
New or On-going Project: New
Total Project Estimate: \$2,231,828

Description: This project includes primarily street reconstruction in Zone G.

Justification: Zone G is the last section of City to be addressed for street repairs and many of the streets require significant repairs as called out in the 2021 Pavement Management Plan.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
Street Funds	\$173,500	\$1,200,000	\$858,328			
Total:	\$173,500	\$1,200,000	\$858,328			

26 Street Improvements – Zone D



Streets / Traffic

Project type: Design and Construction
New or On-going Project: New
Total Project Estimate: \$3,441,982

Description: This project includes street reconstruction and slurry seal in Zone D.

Justification: Repairs and maintenance for this Zone are called out in the 2021 Pavement Management Plan.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
Street Funds				\$2,000,000	\$1,441,982	
Total:				\$2,000,000	\$1,441,982	

27 Street Improvements – Zone E



Streets / Traffic

Project type: Design and Construction
New or On-going Project: New
Total Project Estimate: \$2,781,170

Description: This project includes street reconstruction and slurry seal in Zone E.

Justification: Repairs and maintenance for this Zone are called out in the 2021 Pavement Management Plan.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
Street Funds						\$2,781,170
Total:						\$2,781,170

28 Street Improvements – Zone A



Streets / Traffic

Project type: Design and Construction
New or On-going Project: New
Total Project Estimate: \$2,056,798

Description: This project includes street reconstruction and slurry seal in Zone A.

Justification: Repairs and maintenance for this Zone are called out in the 2021 Pavement Management Plan.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
Street Funds						\$2,056,798
Total:						\$2,056,798

29 Narbonne South Pipe Replacement



Streets / Traffic

Project type: Design and Construction
New or On-going Project: New
Total Project Estimate: \$1,200,000

Description: This project includes the street portion of the water pipe replacement south of Pacific Coast Highway.

Justification: The street is in need of repairs and it is most economical to complete at the same time as the pipe replacement.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
Gas Tax	\$600,000	\$600,000				
Total:	\$600,000	\$600,000				

30 Sidewalk Program



Streets / Traffic

Project type: Construction
New or On-going Project: New
Total Project Estimate: \$500,000

Description: This project will implement repairs to sidewalks identified during the inspection program.

Justification: Many sidewalks are in need of repair.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
Gas Tax	\$250,000	\$250,000				
Total:	\$250,000	\$250,000				

Water



31 Emergency Generator for Appian Way



Project type: Design and Construction
New or On-going Project: New
Total Project Estimate: \$110,000

Description: This project will design and construct an emergency generator for the Appian Way Pump Station.

Justification: An emergency generator would allow for pumping during power outages.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
Water	\$110,000					
Total:	\$100,000					

32 246th St., 247th Pl, 247th St Western Water Main Replacement



Project type: Design and Construction
 New or On-going Project: On-Going
 Total Project Estimate: \$1,499,916

Description: This project replaces pipe and 'loops' the water system for improved water quality.

Justification: This project will reduce risk of water lines breaking and damaging private property.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
OES Grant	\$1,364,916					
Water						
Total:	\$1,364,916					

33 Cypress Water Production Facility Upgrades



Project type: Design and Construction
New or On-going Project: On-Going
Total Project Estimate: \$5,000,000

Description: This project upgrades the Cypress Water Production Facility with granular activated carbon vessels, new chemical tanks, relocation of generator, updated security and SCADA.

Justification: To treat for benzene and taste and odor.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
WRD Grant	\$2,000,000					
Water	\$500,000					
Total:	\$2,500,000					

34 Narbonne South Pipe Replacement



Project type: Design and Construction
New or On-going Project: New
Total Project Estimate: \$2,890,000

Description: This project replaces a portion of pipe on Narbonne south of Pacific Coast Highway. There is a companion 'street' project to repair the street at the same time.

Justification: The pipe is aged and needs replacement.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
Federal Community Project	\$890,000					
Water	\$555,000	\$1,445,000				
Total:	\$1,445,000	\$1,445,000				

35 Second Potable Well Evaluation



Project type: Study
New or On-going Project: New
Total Project Estimate: \$50,000

Description: This project evaluates locations and feasibility of locating a second groundwater production well.

Justification: Due to the City's reliance on just one groundwater production well leaves the City's local water supply is dependent on full functionality of the well. An additional well would provide flexibility and redundancy in the event of contamination or other damage. This does not include design or construction.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
Federal Community Project	\$50,000					
Total:	\$50,000					

36 Narbonne Avenue Pipeline Upsizing



Project type: Design and Construction
New or On-going Project: New
Total Project Estimate: \$2,890,000

Description: Upsize 1,200 LF of Zone 1 6-inch and 8-inch pipe and tie into new 12-inch pipe on Lomita Blvd.

Justification: The existing pipe cannot handle 3,500 gpm fire flow in commercial area.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
Water					\$1,147,000	
Total:					\$1,147,000	

37 W. Lomita Blvd Pipeline Upsizing



Project type: Design and Construction
New or On-going Project: New
Total Project Estimate: \$5,443,000

Description: Upsize 5,700 LF of Zone 1 6-inch and 8-inch pipe to 12-inch pipe on Lomita Blvd.

Justification: The existing pipe cannot handle 3,500 gpm fire flow in commercial area.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
Water				\$275,000	\$1,600,000	\$3,568,000
Total:				\$275,000	\$1,600,000	\$3,568,000

38 PCH Pipeline Upsizing



Project type: Design and Construction
New or On-going Project: New
Total Project Estimate: \$3,534,000

Description: Upsize 3,700 LF of Zone 2 6-inch to 12-inch pipe.

Justification: The existing pipe cannot handle 3,500 gpm fire flow in commercial area, and aged pipe.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
Water			\$3,534,000			
Total:			\$3,534,000			

39 Annual Pipe Rehabilitation and Replacement (R&R) Project



Project type: Design and Construction
 New or On-going Project: New
 Total Project Estimate: \$11,560,900

Description: Replace aged pipes, 1928 installation.

Justification: The City's water infrastructure has many old pipes that are in need of replacement. A significant portion was installed in 1928. These pipes have frequent breaks causing emergency outages. Following the completion of the Water Master Plan, Dudek consultants provided information regarding recommended R&R for the City's pipe infrastructure. This was not included in the water master plan.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
Water	\$1,156,100	\$1,156,100	\$1,156,100	\$1,156,100	\$1,156,100	\$5,780,400
Total:	\$1,156,100	\$1,156,100	\$1,156,100	\$1,156,100	\$1,156,100	\$5,780,400

40 Annual Pipeline Upsizing Project



Project type: Design and Construction
New or On-going Project: New
Total Project Estimate: \$5,987,000

Description: Upsize 2- and 4- inch to 6 inch if looped or 8-inch to last hydrant. Upsize 4-inch dead end pipes to 8-inch.

Justification: These are recommended in the 2022 Water Master Plan, projects P-4, P5, P-6, for residential fire flow.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
Water		\$250,000	\$1,875,000	\$1,875,000	\$1,987,000	
Total:		\$250,000	\$1,875,000	\$1,875,000	\$1,987,000	

41 Zones 2 and 3 Booster Feasibility Study



Project type: Study
New or On-going Project: New
Total Project Estimate: \$50,000

Description: This project evaluates the feasibility of booster water from Zone 1 to Zones 2 and 3.

Justification: If the City could boost water from Zone 1, it could allow locally pumped and treated water to be supplied to Zones 2 and 3. Local water can be supplied at a lower cost and environmental impact than imported water.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
Water			\$50,000			
Total:			\$50,000			

42 Pressure Zone Boundary Modification Study



Project type: Study
New or On-going Project: New
Total Project Estimate: \$50,000

Description: This project will evaluate the pressure zone boundaries and determine if changes are feasible for improving pressures.

Justification: Some areas in Zone 1 experience low pressure and this could optimize

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
Water			\$50,000			
Total:			\$50,000			

43 New Interconnection at Narbonne Ave Oak Street PRS Study



Project type: Study
 New or On-going Project: New
 Total Project Estimate: \$50,000

Description: This project will evaluate the feasibility of a new interconnection at Narbonne-Ave Oak Street PRS for backup water supply to Zone 2.

Justification: Improve redundancy in supply for Zone 2.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
Water			\$50,000			
Total:			\$50,000			

44 Water Quality Sample Station Upgrades



Project type: Maintenance
New or On-going Project: New
Total Project Estimate: \$15,000

Description: This project will upgrade/replace sample stations within the distribution system.

Justification: Sample stations are required for regulatory compliance. This project will replace parts and equipment.

Source	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FYs 27-32
Water					\$15,000	
Total:					\$15,000	

Appendices

Appendix A Zone Map



Appendix B
Water Rehab & Replacement Letter

April 11, 2022

Ms. Carla Dillon
City of Lomita
24300 Narbonne Ave
Lomita, CA 90717

Subject: Additional Infrastructure Costs Based on Pipe Age Only

Dear Ms. Dillon,

The 2022 City of Lomita Water Master Plan developed recommended capital improvement program (CIP) project recommendations based on capacity restrictions, with pipe age used as a secondary factor for prioritization. The master plan did not include recommendations based on pipe age alone, as would be done in a rehabilitation and replacement plan. In order to develop estimated replacement costs based on pipe age alone, we utilized the City's GIS, which includes age, pipeline diameter and length of pipe. The results of this analysis are shown in **Table 1**, on the following page.

Table 1 includes data for pipes known to have an installation date on or before 1961 and also includes approximately 6,400 lineal feet (LF) of pipeline with an unknown installation year. Total estimated project costs for all projects (including pipelines of unknown age) are \$54 million.

Project costs estimates developed in Table 1 are based on the same assumptions utilized in the 2022 Water Master Plan, including a pipeline replacement (construction) cost of \$51/in-diam/LF. Project costs were developed assuming a 30% contingency, 10% engineering, 10% construction management, 2% engineering services during construction, 2% environmental and 2% administration, for a total markup up 56% on the construction cost subtotal.

If you have any questions, please do not hesitate to contact me at ecaliva@dudek.com or 760-479-4114.

Sincerely,



Elizabeth Caliva, P.E.
Project Manager

Table 1. Estimated Project Costs for Pipelines Installation Over 60 Years

Installation Year	Length (LF)	Diam (in)	Construction Cost Estimate ¹	Project Cost Estimate ²
Unknown	827.80	4	\$169,000	\$263,640
Unknown	1627.73	6	\$499,000	\$778,440
Unknown	1316.30	8	\$538,000	\$839,280
Unknown	5.00	10	\$3,000	\$4,680
Unknown	2315.61	12	\$1,418,000	\$2,212,080
Unknown	278.44	13	\$182,000	\$283,920
Unknown	1.00	16	\$1,000	\$1,560
Pipes Over 60 Years Old				
1923	32.16	4	\$7,000	\$10,920
1928	375.07	2	\$39,000	\$60,840
1928	6595.62	4	\$1,346,000	\$2,099,760
1928	24102.73	6	\$7,376,000	\$11,506,560
1928	5444.48	8	\$2,222,000	\$3,466,320
1928	1475.71	10	\$753,000	\$1,174,680
1939	827.86	2	\$85,000	\$132,600
1939	1810.49	4	\$370,000	\$577,200
1939	4485.92	6	\$1,373,000	\$2,141,880
1939	409.22	8	\$167,000	\$260,520
1949	316.21	12	\$194,000	\$302,640
1950	387.87	4	\$80,000	\$124,800
1953	960.68	6	\$294,000	\$458,640
1954	523.72	4	\$107,000	\$166,920
1954	2589.75	6	\$793,000	\$1,237,080
1955	1637.44	6	\$502,000	\$783,120
1956	1163.69	4	\$238,000	\$371,280
1956	1898.43	6	\$581,000	\$906,360
1957	4938.60	6	\$1,512,000	\$2,358,720
1958	3806.48	6	\$1,165,000	\$1,817,400

Table 1. Estimated Project Costs for Pipelines Installation Over 60 Years

Installation Year	Length (LF)	Diam (in)	Construction Cost Estimate ¹	Project Cost Estimate ²
1959	413.10	6	\$127,000	\$198,120
1959	1637.88	10	\$836,000	\$1,304,160
1960	1897.16	6	\$581,000	\$906,360
1960	33.73	8	\$14,000	\$21,840
1960	825.04	10	\$421,000	\$656,760
1961	301.76	4	\$62,000	\$96,720
1961	10005.62	6	\$3,062,000	\$4,776,720
1961	5717.35	8	\$2,333,000	\$3,639,480
1961	10047.59	10	\$5,125,000	\$7,995,000
Total for all Pipes 1928-1961			31,765,000	49,553,400
Total including Pipes of Unknown Age			34,575,000	53,937,000
Notes:				
¹ Cost based on replacement cost of \$51/in-diam/LF, consistent with 2022 Water Master Plan.				
² Project Cost estimate assumes 30% contingency, 10% engineering, 10% construction management, 2% engineering services during construction, 2% environmental and 2% administration, for a total markup up 56%				