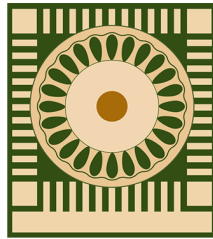


CITY OF HAYWARD

Hayward City Hall
777 B Street
Hayward, CA 94541
www.Hayward-CA.gov



CITY OF
HAYWARD
HEART OF THE BAY

Agenda

Wednesday, April 24, 2024

5:30 PM

Hybrid/Conference Room 2A

Council Infrastructure & Airport Committee

NOTICE: The Council Infrastructure & Airport Committee will hold a hybrid meeting in Conference Room 2A and virtually via Zoom

The **PUBLIC COMMENT** section provides an opportunity to address the Committee on items not listed on the agenda. The Committee welcomes comments and requests that speakers present their remarks in a respectful manner, within established time limits and focus on issues which directly affect the City or are within the jurisdiction of the City. As the Committee is prohibited by State law from discussing items not listed on the agenda, your item will be taken under consideration and may be referred to staff for further action. Speakers shall not use threatening, profane, or abusive language which disrupts, disturbs, or otherwise impedes the orderly conduct of a Committee meeting. The City is committed to maintaining a workplace free of unlawful harassment and is mindful that City staff regularly attend Committee meetings. Discriminatory statements or conduct that is hostile, intimidating, oppressive, or abusive and disruptive to a meeting and will not be tolerated.

How to submit written Public Comment:

Send an email to kathy.garcia@hayward-ca.gov by 1:00 p.m. the day of the meeting. Please identify the Agenda Item Number in the subject line of your email. Emails will be compiled into one file, distributed to the Council Infrastructure & Airport Committee and City staff, and published in the City's Meeting and Agenda Center under Documents Received After Published Agenda.

How to provide live Public Comment during the Council Infrastructure Committee Meeting:

1. Attend in person in Conference Room 2A in Hayward City Hall
2. Please click the link below to join the Webinar:

https://hayward.zoom.us/j/82106887118?pwd=q30BdcLtNEppzjMlEL6dL5WCyneyMd5vA7k.fz4_krFkiIrm4q0J

Webinar ID: 821 0688 7118

Password: CIAC@42424

Or join by phone:

US: +1 669 900 6833 or +1 646 931 3860

Webinar ID: 821 0688 7118

Password: 0460149100

International numbers available: <https://hayward.zoom.us/j/kuylkYjBa>

ROLL CALL

PUBLIC COMMENTS:

REPORTS/ACTION ITEMS

1. [MIN 24-053](#) Approval of Minutes of the Council Infrastructure Committee (CIC) Meeting Held on October 25, 2024

Attachments: [Attachment I October 25, 2024 CIC Meeting Minutes](#)

2. [ACT 24-030](#) Water Resource Recovery Facility (WRRF) Improvements, Phase II - Project Update

Attachments: [Attachment I Staff Report](#)

3. [ACT 24-028](#) Review of Recommended Capital Improvement Program for FY25 - FY34

Attachments: [Attachment I Staff Report](#)

4. [ACT 24-031](#) Updated Guidelines for Installation of Speed Humps - Discuss and Recommend to Council

Attachments: [Attachment I Staff Report](#)
[Attachment II Guidelines for Installation of Speed Humps](#)

FUTURE AGENDA ITEMS

COMMITTEE MEMBER/STAFF ANNOUNCEMENTS AND REFERRALS

ADJOURNMENT

Next Schedule Meeting: Wednesday, June 26, 2024



CITY OF HAYWARD

Hayward City Hall
777 B Street
Hayward, CA 94541
www.Hayward-CA.gov

File #: MIN 24-053

DATE: April 24, 2024

TO: Council Infrastructure & Airport Committee

FROM: Director of Public Works

SUBJECT

Approval of Minutes of the Council Infrastructure Committee (CIC) Meeting Held on October 25, 2024

RECOMMENDATION

That the CIC reviews and approves the October 25, 2023 CIC meeting minutes.

ATTACHMENTS

Attachment I October 25, 2024 CIC Meeting Minutes



COUNCIL INFRASTRUCTURE COMMITTEE SPECIAL MEETING
Hybrid Participation - Digital Zoom Meeting/Conference Room 2A

October 25, 2023

5:30 p.m.

MEETING MINUTES

CALL TO ORDER: Meeting called to order at 5:38 p.m. by Mayor Mark Salinas

ROLL CALL:

Members Present:

- Angela Andrews, City Council Member, Mayor Pro Tempore
- Ray Bonilla Jr., City Council Member
- Mark Salinas, Mayor

Staff Present:

- Alex Ameri, Director of Public Works
- Dustin Claussen, Assistant City Manager
- Suzan England, Utilities Engineering Manager
- Kathy Garcia, Deputy Director of Public Works
- Elli Lo, Senior Management Analyst
- Jade Kim, Assistant Transportation Engineer
- Judy Phung, Senior Secretary (Meeting Recorder)
- Mariza Sibal, Associate Civil Engineer
- Byron Tang, Senior Transportation Engineer
- Michael Wolny, Management Analyst

PUBLIC COMMENTS:

There were none.

1. Approval of Minutes of the Council Infrastructure Committee (CIC) Meeting Held on June 28, 2023

The item was moved by Council Member Bonilla, seconded by Council Member Andrews, and approved unanimously.

2. Approval of Minutes of the Council Infrastructure Committee (CIC) Meeting Held on September 14, 2023

The item was moved by Council Member Bonilla, seconded by Council Member Andrews, and approved unanimously.

3. East Bay Greenway Multimodal Project - Discussion and Recommendation to Council

Jhay Delos Reyes and Gary Huisinigh with Alameda County Transportation Commission (ACTC) and Byron Tang, Senior Transportation Engineer, provided the presentation.

Public Comments

Carl, a member of Bike East Bay, suggested a two-way cycle track along Grand Street and Whitman Street.

Robert, a team member of Bike East Bay, requested more direct communication from the City about project updates and improvements along Mission Blvd.

Jill, a team member of Bike East Bay, wanted increased safety measures on Mission Blvd.

Alejandro, a member of Bike East Bay, also wished for a safer route on Mission Blvd.

Committee Questions / Discussion

Councilmember Andrews inquired about community outreach that was done and if Bike East Bay had been addressed of the proposed alignment for the East Bay Greenway Multimodal (EBGWM) Project. CM Andrews mentioned a potential loss of parking, to which Director Ameri concurred. However, the project will bring about major improvements for bicyclists.

Councilmember Bonilla was in favor of the project and would like to see pedestrian safety improvements along Mission Boulevard.

Mayor Salinas was in support of the project but requested that incentives are offered, such as a voucher program for funded bikes, for the neighborhoods that may be affected by the loss of parking.

4. Water Pollution Control Facility (WPCF) Improvements - Phase II Project Administration Building Update, Remaining WPCF to "Water Resource Recovery Facility (WRRF)", and Laboratory Dedication

Greg Robley with MWA Architects provided the presentation.

Public Comments

There were none.

Committee Questions / Discussion

Director Ameri expressed the desire to dedicate the laboratory to the late Farid Ramezanzadeh, who served as the City's Laboratory Supervisor for nearly 20 years. Mayor Salinas was in support of it.

CM Andrews supported the idea of a name change from Water Pollution Control Facility (WCPF) to Water Resource Recovery Facility (WRRF) and encouraged making areas available within the facility for artwork and murals.

CM Bonilla commended the lab dedication and emphasized that the facility should be enjoyed by all staff who have given design input.

5. Informational Report: FY24 Quarter 1 Capital Improvement Program Progress Report

Elli Lo, Senior Management Analyst, provided the report and presentation.

Public Comments

There were none.

Committee Questions / Discussion

CM Bonilla recommended a visual indicator on the City CIP webpage showing progress and quarterly updates.

6. Proposed 2024 Agenda Planning Calendar: Review and Comment

Director Ameri proposed a Sidewalk Ordinance discussion for the Committee in January 2024. Assistant City Manager Claussen added that the ordinance will be more current and have better information.

Public Comments

There were none.

Committee Questions / Discussion

There were none.

ORAL REPORTS

There were none.

COMMITTEE MEMBER/STAFF ANNOUNCEMENTS AND REFERRALS

There were none.

ADJOURNMENT

Mayor Salinas adjourned the meeting at 6:51 p.m.

Attendance	MEETINGS			
	Present 10/25/23 Meeting	Present to Date This Fiscal Year	Excused to Date This Fiscal Year	Absent to Date This Fiscal Year
Angela Andrews	✓	5	0	0
Ray Bonilla Jr.	✓	3	1	0
Mark Salinas	✓	5	0	0



File #: ACT 24-030

DATE: April 24, 2024

TO: Council Infrastructure & Airport Committee

FROM: Director of Public Works

SUBJECT

Water Resource Recovery Facility (WRRF) Improvements, Phase II - Project Update

RECOMMENDATION

That the Council Infrastructure & Airport Committee (CIAC) reviews and comments on this report.

SUMMARY

This report is presented to update the CIAC on the progress of the WRRF Improvements - Phase II Project (Phase II Project). The project includes upgrades to the treatment process to enhance the treatment capabilities of WRRF and to reduce the discharge of nutrients to the bay in compliance with the Regional Water Quality Control Board's upcoming 3rd Watershed Permit. This project also includes construction of a new Administration Building and Laboratory.

The Water Resource Recovery Facility (WRRF, formerly WPCF) treats an average flow of approximately eleven million gallons per day (MGD) and meets current regulatory requirements for discharge of treated effluent to the deep waters of the San Francisco Bay. However, the current draft of the Regional Water Quality Control Board watershed permit, which is scheduled for adoption and planned to go into effect in August 2024, requires a 50% reduction in nutrients by 2034. In preparation for meeting the new requirements, design is underway on improvements with construction bid packages planned for advertisement in August 2024 for the Administration Building, and May 2025 for the Phase II Project. The proposed improvements include a new administration and laboratory building, relocated primary effluent equalization (PE EQ) tanks, a new biological nutrient removal (BNR) process, a new grit removal facility, modifications to the existing solids contact tank, demolition of the functionally obsolete existing west trickling filter, and construction of related ancillary facilities including pump stations, new aeration blower facilities, new process piping, and electrical infrastructure to support the new facilities.

The Administration Building is at the 100% design level, and is expected to bid in the fall of 2024. Relocation of the PE EQ Facility is at the 90% design level. Though initially designed as a standalone project, staff now recommends merging this project with the overall Phase II Improvements, which is currently scheduled to bid in April of 2025 and begin construction in fall of 2025. Overall project completion is scheduled for January of 2030.

ATTACHMENTS

File #: ACT 24-030

Attachment I Staff Report



DATE: April 24, 2024

TO: Council Infrastructure & Airport Committee

FROM: Director of Public Works

SUBJECT: Water Resource Recovery Facility (WRRF) Improvements, Phase II – Project Update

RECOMMENDATION

That the Council Infrastructure & Airport Committee (CIAC) reviews and comments on this report.

SUMMARY

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The Administration Building is at the 100% design level, and is expected to bid in the fall of 2024. Relocation of the PE EQ Facility is at the 90% design level. Though initially designed as a standalone project, staff now recommends merging this project with the overall Phase II

Improvements, which is currently scheduled to bid in April of 2025 and begin construction in fall of 2025. Overall project completion is scheduled for January of 2030.

BACKGROUND

The core infrastructure of the Water Resource Recovery Facility (WRRF), formerly known as Water Pollution Control Facility (WPCF), was originally constructed in 1952 to treat wastewater flows from the City's residents and businesses prior to discharge into the San Francisco Bay. Over the years, the WRRF has undergone several major upgrades to meet more stringent discharge requirements, as well as increasing capacity as the City's population and industry have grown. The WRRF now treats an average flow of approximately eleven million gallons per day (MGD) and meets current regulatory requirements for discharge of treated effluent to the deep waters of the San Francisco Bay (Bay).

In response to growing concerns about nutrients and their impacts on the Bay, in May 2019, the San Francisco Bay Regional Water Quality Control Board (Water Board) announced upcoming regulatory requirements limiting discharge of nutrients (nitrogen) to the Bay. Currently 37 publicly owned treatment works discharge treated effluent to the Bay, representing about 2/3 of the annual nitrogen loads to the Bay. Under the 2nd Nutrients Watershed Permit released in 2019, the City anticipated being required to reduce nutrients by 30%. In the summer of 2022, a harmful algal bloom (red tide) occurred in the Bay that was wide-spread and resulted in significant fish kills throughout the Bay. In late July 2023, another red tide was observed but dissipated by early August and was not observed to have the same impact as the previous year. In response to these events, the Regional Water Quality Control Board began considering expanding the required reductions. In February of 2024, the Regional Water Quality Control Board released the Draft version of the 3rd Nutrients Watershed Permit. As currently written, this permit would require the East Bay Dischargers Authority (of which the City of Hayward is a member) to reduce nutrients by 50% by 2034. It is anticipated that Hayward's share of the reduction would be 50%.

In June 2020, the City completed a comprehensive Master Plan update, the WPCF Phase II Facilities Plan (Facilities Plan) that identified improvements required to reduce nutrients in the treated effluent. In July 2022, Council authorized awarding design and engineering services during construction to Brown & Caldwell for the Phase II Project.

DISCUSSION

The main goal of the Phase II Project is to construct improvements necessary to enhance treatment capabilities of WRRF and to achieve nutrient reduction in compliance with the Water Board's upcoming 3rd Watershed Permit limiting discharge of nutrients to the Bay. The design services for this project also include assistance to procure funding and to produce environmental documentation, preliminary design, final design, engineering services during construction, startup assistance, and preparation of an Operations and Maintenance Manual. To date, staff have considered the overall project to consist of 3 sub-projects: The Administration Building, the Primary Effluent Equalization (PE EQ) Facility and the WRRF Improvements, Phase II. Updates on each project are described below.

Administration Building

As part of the Facilities Plan, the space needs of the WRRF staff and laboratory were evaluated and multiple design alternatives developed. A schematic design and site plan for a new 19,750 square foot Administration and Laboratory Building was presented to the CIC on October 23, 2019¹. In July 2022, the preliminary design phase of the WPCF Improvements Phase II Project began which included review of the programming needs assessment with City staff to confirm the previous assumptions are still valid and to confirm the overall building size. In addition, the location of the building was shifted on the site to avoid conflicting with essential medium voltage ductbanks that provide power to both the main switchgear and the East Trickling Filter substation. This resulted in a reconfiguration of the building and layout on the site. Building renderings, material selection, and color studies were also developed to finalize the look of the exterior of the building. On October 26, 2022², an update on the Phase II Project was presented to CIC that included updated floor plans and exterior elevations for the Administration Building.

Staff received the 100% plans and specifications in April 2024, and have begun the planning and building permit processes and will soon begin the grading permit process. Conditions of approval are expected to be received in June 2024. The project is scheduled to bid in fall of 2024, with construction anticipated to begin around the end of 2024.

The total building area is 21,563 square feet. The Administration and Laboratory Building is being designed for LEED Silver, with energy efficient lighting and HVAC equipment, solar covered parking, use of recycled water for landscaping irrigation, and other green technologies. No natural gas will be used at the building.

Primary Effluent Equalization Facility

The purpose of the existing PE EQ Basin is to store primary effluent when wet weather flows exceed the secondary treatment capacity at the plant. Currently, flows are automatically diverted to the PE EQ Basin when flows exceed approximately 35 million gallons per day (mgd). Most of the secondary treatment improvements identified in the Facilities Plan are sited in the location currently occupied by the PE EQ Basin. Therefore, the PE EQ Basin must be relocated to make room for the new treatment facilities. The relocated PE EQ Facility will consist of two 1.5 million gallon tanks located east of Whitesell Street and north of the east trickling filter, with a total storage of 3 million gallons.

Staff received 60% Plans and Specifications for the PE EQ Facility in December 2023. 90% Plans and Specifications are expected in April of 2023.

To date, the PE EQ facility has been designed as its own project separate from the overall Phase II Project. When the overall project was originally scoped, it was believed that completing the design and construction of PE EQ Facility Project first would expedite the overall schedule and that the facility could be operational prior to demolishing the existing

¹ <https://hayward.legistar.com/LegislationDetail.aspx?ID=4199607&GUID=A563E6F4-8E79-4E24-8515-DB7B78F67824&Options=&Search=>

² <https://hayward.legistar.com/View.ashx?M=F&ID=11356451&GUID=A0120D01-68E2-455A-A935-56D0A8FCCF0B>

EQ basin. However, as the design has progressed, and construction durations and sequencing have been developed into a preliminary construction schedule, it has been determined that waiting until the EQ Facility is operational would delay the Phase II project start date by up to two years. This is because most of the Phase II project facilities lie within the footprint of the existing EQ basin (biological nutrient removal basin, blower/electrical building, and a third final clarifier), and construction duration of the PE EQ Facility is currently projected to be longer than was previously anticipated. Therefore, temporary bypass pumping and storage utilizing two of the plant's winter sludge drying beds has been proposed to allow construction to proceed without having the PE EQ Facility operational. A temporary bypass pumping facility and storage also allows for construction of the PE EQ Facility to take place concurrently with the secondary treatment improvements. If performed by the same contractor, the following benefits could be realized:

- May offer efficiencies in construction due to construction of similar facilities (concrete pile supported structures) for the PE EQ tanks and the biological nutrient removal (BNR) basins.
- Minimize risk of two contractors competing with each other for space and timing of plant shutdowns, which would limit the overall risk of increased costs due to change orders.
- Provide for more consistency in electrical and mechanical equipment, as well as programming and integration of the supervisory control and data acquisition (SCADA) system.

Due to the above benefits, staff recommend combining the PE EQ Facility project with the overall Phase II Project into one construction package.

WRRF Improvements – Phase II Project

All preliminary technical memoranda have been completed for the Phase II project, and a preliminary design report compiling all the technical memoranda is expected to be completed in April 2024. The Phase II Project remains similar to how it was originally scoped with several changes which are outlined below.

- Five Basins treating 75% of flow: The project was originally scoped to treat 50% of the City's average dry weather flow, which would have required four biological nutrient removal basins. This would achieve 30% removal of nutrients, as was originally anticipated at the time of the 2nd Nutrients Water shed permit. However, the 3rd Nutrients Watershed, as currently written, requires 50% removal of nutrients. This necessitates sending 75% of average dry weather flow through the biological nutrient removal basins, which requires a 5th basin. A 5th basin has the added benefit of allowing for greater flexibility in plant operations.
- Final Clarifiers Rehabilitation: As originally scoped, staff had expected the existing final clarifiers could be rehabilitated by replacing failed concrete and adding external dewatering wells to relieve external hydrostatic pressures on the clarifiers when they are dewatered for routine maintenance. A hydrogeological investigation determined that it was not feasible to lower the groundwater surface with external wells and pumping systems due to the low permeability of the surrounding soils. Therefore, to protect the structures during future maintenance activities, a full clarifier re-build is

required. The retrofit includes installing micropiles under the clarifier slab to resist buoyant uplift, adding additional thickness to the existing slab, constructing new interior walls to resist the hydrostatic loading, and replacing the interior mechanisms due to the smaller interior diameter. These improvements are expected to extend the useful life of the structure by 50 or more years. These improvements must also be constructed one clarifier at a time following completion of the new third final clarifier. Because of the extent of the clarifier rehabilitation, and the constraint to complete the rebuilds one clarifier at a time following completion of the new clarifier, the overall project schedule is extended by a year.

Construction Cost Update

Construction cost estimates have been updated for the Administration Building and the Primary Effluent Equalization Facility based on 90% (Class 1) and 60% (Class 2) design levels of completion, respectively (though the City is in receipt of 100% plans and specifications for the Administration Building, the 100% construction cost estimate is not yet available). Phase II project elements are based on 30% (Class 4) design level of completion and are also updated to reflect the updated construction schedule and escalation factors for the new estimated midpoint of construction dates for the various elements. Because the overall estimated construction duration of the Phase II project increased by a year, some of the project elements that are constructed later in the project such as the grit facility and the final clarifier retrofits experienced cost escalations over previously presented costs. Nutrient treatment upgrades costs also reflect the addition of bypass pumping for primary effluent because the PE EQ Facility is now constructed in parallel with the Phase II Improvements. These costs will continue to be updated as the project progresses to the 60% design level of completion which is expected to be completed in June 2024.

Table 1 – Estimated Construction Cost⁽¹⁾⁽²⁾		
Project Element	Estimated Construction Cost⁽³⁾ (December 2023)	Current Estimated Construction Cost (April 2024)
New Grit Facility	\$21.0M Range \$15 - \$32M	\$22.9M Range \$16 - \$34M
New Primary Equalization (PE EQ) Tanks	\$21.3M Range \$15 - \$32M	\$29.5M Range \$25 - \$35M
Nutrient Upgrades	\$134M Range \$94 – \$201M	\$136M Range \$95 - \$204M
Existing Final Clarifiers Retrofits	\$25.1M Range \$18 – \$38M	\$26.8M Range \$19 - \$40M
New Administration Building and Laboratory	\$31.9M Range \$27 - \$38M	\$34.8M Range \$31 – \$40M
Site Waste Pump Station (SWPS) Improvements	\$1.5M Range \$1.0 to \$2.2M	\$1.4M Range \$1.0 – \$2.2M
3W System Upgrades	\$4.8M Range \$3.4 to \$7.2M	\$4.6M Range \$3.3 - \$7.0M
Total Estimated Construction Cost	\$239M Range \$173 to \$350M	\$256M Range \$191 - \$363M

Table 1 – Estimated Construction Cost⁽¹⁾⁽²⁾**Notes:**

- (1) Soft costs including design, engineering services during construction, construction management, inspection, materials testing, etc. are not included in the above costs.
- (2) Range reflects the accuracy of the estimate based on the design level of completion. The Administration Building and Laboratory estimate at 90% design level of completion (Class 1) range of accuracy is -10% to + 15%. PE EQ Facility is at 60% design level completion (Class 2) with a typical range of accuracy of -15% to +20%. The remaining project elements at 30% complete (Class 4) have a range of accuracy between -30% to +50%.
- (3) Costs from the December 12, 2023³ staff report Resolution Authorizing the City Manager to Apply for a United States Environmental Protection Agency (EPA) Water Infrastructure Finance and Innovation Act (WIFIA) Loan for the Water Pollution Control Facility (WPCF) Improvements – Phase II Project No. 07760).

Total Capital Cost

Total capital costs are in the process of being updated as part of the financing effort currently underway. Capital costs include facility planning, engineering design, support services during construction, construction management, administrative change orders during construction, staff time, financing costs, and other miscellaneous items like the cost of obtaining a building permit, etc. The total estimated project cost (\$530M) was presented in the April 16, 2024, staff report⁴. A breakdown of the estimated capital cost is presented in Table 2. Note that the capital cost range presented is based on the construction cost estimate rather than including the low end of the range because costs generally have not decreased with increasing accuracies of the estimate on this project. The upper end of the range (also presented in Table 2) is currently being used for developing the financing strategy and for the WIFIA loan application. The dollar amount requested can be adjusted down without penalty prior to loan closing.

Table 2 – Estimated Total Project Cost

Element	Estimated Construction Cost (April 2024)	Estimated Construction Cost High Range of Estimate (April 2024)
Estimated Construction Cost	\$256.3M	\$363.5M
Administrative Change Orders (ACO) (10% of Construction Cost)	\$25.6M	\$36.4M
Design and Engineering Services During Construction	\$23.5M	\$23.5M
Planning	\$0.75M	\$0.75M
Construction Management	\$22.0M	\$22.0M

³ <https://hayward.legistar.com/LegislationDetail.aspx?ID=6448360&GUID=CB5A4ECF-8AF0-49B8-B838-81002AFE119D&Options=&Search=>

⁴ <https://hayward.legistar.com/LegislationDetail.aspx?ID=6635303&GUID=E15C3971-6BB7-43C0-B855-89794911A013>

Table 2 – Estimated Total Project Cost		
Staff Time	\$5.0M	\$5.0M
Miscellaneous (Building permit, IT, LEED commissioning, etc.)	\$0.5M	\$0.5M
Project Contingency (Assume 10% of Construction Cost and ACO)	\$28.2M	\$40.0M
Financing Costs & Debt Service Reserve Funds (Estimated)	\$31.9M	\$42.7M
Total Project Cost	\$394M	\$534M

ECONOMIC IMPACT

The current estimated construction cost is estimated to be between \$256 and \$364 million, and the total project cost is estimated to be between \$394 and \$534M. This project will affect sewer service rates and sewer connection fees. The extent to which rates will need to be adjusted cannot be determined with certainty at this point, however it is anticipated that customers could see a significant impact over the current rates. The impact to rate payers is currently being evaluated as part of an overall funding strategy approach and in support of a WIFIA loan application as well as funding through a combination of bonding and cash. Funding efforts may also pursue financing under the CWSRF loan program however the preliminary outlook indicates due to competing projects with higher scores than what the Phase II Project is able to score, it is unlikely that securing CWSRF funding will be successful.

FISCAL IMPACT

The estimated total capital cost for the overall project is estimated to be between \$394 and \$534M. The cost breakdown is provided in Table 2 above.

As the design progresses, the estimated project cost is expected to be adjusted, especially as construction costs become more refined as the design becomes more complete. Budget adjustments will be brought forward to Council through the annual budget approval process and upon Council award of the construction contracts. Approval of plans and specifications and call for bids for the Administration Building Project is anticipated for August 2024, with construction award in November 2024. Approval of plans and specifications and call for bids for the combined PE EQ Facility Project and the Phase II Project is anticipated for April 2025, with construction award in August 2025.

As noted above, Staff is in the process of applying for a WIFIA loan and considering applying for funding from CWSRF in the future, as well as selling bonds. WIFIA funding can be applied to fund multiple projects, as well as retroactively reimburse for engineering design services, however WIFIA funds can only cover 49% of the eligible project costs. The Administration Building will not be eligible to apply for CWSRF since it will not be able to score high enough to be on the eligible list. Only the Phase II Project is likely to score high enough to be eligible for CWSRF funding; however, loans are currently limited to \$50 million in the FY 23-24 funding cycle, and competition is very high with many projects already included on the eligible funding list ahead of the City's project and with higher scores/priorities.

Furthermore, CWSRF may experience a funding hiatus where new projects are not considered for funding that could start in FY 25, therefore Staff are pursuing financing through bonds as part of the funding strategy. Staff will also continue to seek grants throughout the life of the project.

STRATEGIC ROADMAP

This agenda item supports the various goals of Council's Strategic Roadmap. The WPCF Improvements Phase II Project will address infrastructure needs and improvements to increase the reliability of the City's treatment plant, and construct process improvements to meet more stringent nutrient limits in accordance with upcoming regulatory requirements, while supporting the goals of the Council. Specifically, this item relates to the implementation of the following projects:

Confront Climate Crises & Champion Environmental Justice.

Mitigate Climate Crisis Impacts through Resilient Design and Community Engagement
Project C14b: Implement Shoreline Master Plan, including mitigating sea level rise in the industrial corridor through building requirements and outreach

Invest in Infrastructure.

Invest in Water Supplies, Sanitation Infrastructure & Storm Sewers
Project N19: Update Water Pollution Control Facility Phase II Plan

SUSTAINABILITY FEATURES

The WRRF Improvement Project Phase II will help maintain and improve the biology and health of the Bay which is vital for the region and the State. The Phase II Project will position the City to meet the nutrient limits as specified in the Water board's 3rd Watershed Permit to reduce nitrogen loads to the Bay.

The effects and risks of rising sea water levels will be reviewed and incorporated into the design of the new facilities and some retrofitted facilities where appropriate.

The Administration and Laboratory Building will be reviewed by the City's Building Division for conformance with State and local requirements related to sustainability (i.e., California Building Code, California Energy Code, etc.) which require a minimum level of energy efficiency, resource conservation, material recycling, etc. In addition, the building will be designed and constructed to meet the City required Leadership in Energy and Environmental Design (LEED) standards for a Silver Certification.

PUBLIC CONTACT

As part of the funding process, an environmental study (CEQA and/or Initial Study and Mitigated Negative Declaration) will be posted for public review and comment.

The project includes a web page to be hosted on the City's website which is being periodically updated throughout the multi-year duration of the project.

NEXT STEPS

The following schedule has been developed for this project:

Submit WIFIA Application	June 2024
Approval of Environmental Study – IS/MND or CEQA	June 2024
Approval of Plans and Specifications and Call for Bids for the Administration and Laboratory Building	August 2024
Award of Construction Contract for the Administration Building Project	November 2024
WIFIA Loan Fully Funded	January 2025
Approval of Plans and Specifications and Call for Bids for the Phase II Improvements Project	April 2025
Award of Construction Contract for the Phase II Improvements Project	August 2025
Administration Building Project Construction Completion	January 2027
Phase II Improvements Project Construction Completion	January 2030

Prepared by: Kyle Carbert, Senior Civil Engineer

Reviewed by: Suzan England, Utilities Engineering Manager

Recommended by: Alex Ameri, Director of Public Works

Approved by:



Kelly McAdoo, City Manager



CITY OF HAYWARD

Hayward City Hall
777 B Street
Hayward, CA 94541
www.Hayward-CA.gov

File #: ACT 24-028

DATE: April 24, 2024

TO: Council Infrastructure & Airport Committee

FROM: Director of Public Works

SUBJECT

Review of Recommended Capital Improvement Program for FY25 - FY34

RECOMMENDATION

That the Council Infrastructure & Airport Committee (CIAC) reviews and comments on the Recommended Capital Improvement Program (CIP) for FY25 through FY34.

SUMMARY

The CIP is a planning document intended to guide the City's capital project expenditures for the upcoming ten-year period. The proposed CIP budget includes approximately \$161 million in FY25 and an estimated \$1 billion in the next ten years. Given that Hayward is a full-service city, the CIP covers a wide range of projects, which may include street construction and improvements; bike and pedestrian improvements; traffic calming; wastewater, recycled water, storm water, and water system upgrades; groundwater projects; construction of public buildings; airport projects; replacement of major equipment; clean and renewable energy generation; and other miscellaneous projects. As in past years, the document also includes Identified and Unfunded Capital Needs, which currently total \$690 million.

The Recommended FY25 - FY34 CIP can be found on the City's website and features a new online format. More information about navigating the new format can be found at the provided link.

Planning Commission Review

State law requires that the Planning Commission review the Recommended CIP to ensure consistency with the City's adopted General Plan. The Recommended FY25 - FY34 CIP was presented to the Planning Commission at their April 11, 2024 meeting, and the Commission unanimously found that the Recommended FY25 - FY34 CIP is consistent with the City's 2040 General Plan.

ATTACHMENTS

Attachment I Staff Report



DATE: April 24, 2024

TO: Council Infrastructure & Airport Committee

FROM: Director of Public Works

SUBJECT: Review of Recommended Capital Improvement Program for FY25 – FY34

RECOMMENDATION

That the Council Infrastructure & Airport Committee (CIAC) reviews and comments on the Recommended Capital Improvement Program (CIP) for FY25 through FY34.

SUMMARY

The CIP is a planning document intended to guide the City's capital project expenditures for the upcoming ten-year period. The proposed CIP budget includes approximately \$161 million in FY25 and an estimated \$1 billion in the next ten years. Given that Hayward is a full-service city, the CIP covers a wide range of projects, which may include street construction and improvements; bike and pedestrian improvements; traffic calming; wastewater, recycled water, storm water, and water system upgrades; groundwater projects; construction of public buildings; airport projects; replacement of major equipment; clean and renewable energy generation; and other miscellaneous projects. As in past years, the document also includes Identified and Unfunded Capital Needs, which currently total \$690 million.

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State law requires that the Planning Commission review the Recommended CIP to ensure consistency with the City's adopted General Plan. The Recommended FY25 – FY34 CIP was presented to the Planning Commission at their April 11, 2024 meeting², and the Commission unanimously found that the Recommended FY25 – FY34 CIP is consistent with the City's 2040 General Plan.

¹ <https://www.hayward-ca.gov/your-government/documents/capital-improvement-program>

² <https://hayward.legistar.com/MeetingDetail.aspx?ID=1189779&GUID=5E483A40-F17D-450E-B6A5-43F99B012E09&Options=info|&Search=>

BACKGROUND

The CIP process begins with staff's preparation of projects and related cost estimates, which are framed by the guidance provided by Council, as well as the needs of the community. Capital projects are identified and prioritized with an emphasis on eliminating geographic inequities in the distribution of City services and infrastructure. Highest priority is given to areas in the community which have experienced a disproportionate level of improvements in past years, as well as those communities with the current highest need.

The projects in the Recommended FY25 – FY34 CIP have also been identified and prioritized based on their relevancy to the Strategic Roadmap. The CIP, by its nature, predominantly supports the Invest in Infrastructure Priority, but it also includes several projects which support the Confront Climate Crisis & Champion Environmental Justice, Enhance Community Safety & Quality of Life, Grow the Economy, and Strengthen Organizational Health Priorities.

The projects ultimately identified for inclusion in the CIP are designed to meet the requirements of the City's General Plan, specific plans, and master plans. The capital project funding requests are then submitted for evaluation to an internal capital projects review committee. Once the review committee's feedback is incorporated, the Recommended Ten-Year CIP is compiled and presented to the Planning Commission for determination of consistency with the General Plan. In May, the Recommended Ten-Year CIP will be reviewed by Council at a work session. The public has the opportunity to provide comments at each of these meetings, as well as at the last public hearing, which is tentatively planned to take place on June 4, 2024. It is at this final public hearing that the capital spending plan for the upcoming year will be considered by Council for adoption.

DISCUSSION

The CIP is a planning document intended to guide the City's capital project expenditures for the upcoming ten-year period. The proposed CIP budget includes approximately \$161 million in FY 2025 and an estimated \$1 billion in the next ten years. Given that Hayward is a full-service city, the CIP covers a wide range of projects, which may include street construction and improvements; wastewater, recycled water, storm water, and water system upgrades; groundwater projects; construction of public buildings; airport projects; replacement of major equipment; clean and renewable energy generation; and other miscellaneous projects. As in past years, the document also includes Identified and Unfunded Capital Needs, which currently total \$690 million.

Below is a discussion of major projects in each category for which work will begin or continue into FY25. Please note that not all of the projects featured in this report are being recommended to receive new FY25 funding.

Livable Neighborhoods Projects

Projects categorized as "Livable Neighborhoods" include street lighting projects, pedestrian traffic signal improvements, parks, buildings, public art and engagement, transportation equity projects, and traffic calming measures, as well as sidewalk and wheelchair ramp improvements throughout the City. Some examples of Livable Neighborhoods Projects in

the Recommended FY25 – FY34 CIP include the Campus Drive Improvements, through which the City is implementing pedestrian, bicycle, and traffic calming improvements to address safety concerns and mobility needs in the 0.78 mile-stretch of Campus Drive between 2nd Street and Hayward Boulevard.

Another ongoing Livable Neighborhoods Project is La Vista Park, the 39-acre destination park located a quarter mile east of the intersection of Tennyson Road and Mission Boulevard in South Hayward. In FY 2022, the California Environmental Quality Act (CEQA) report was updated to include the park expansion area, and staff are currently working with consultants to finalize the design. Construction bid documents are anticipated to be completed by Spring 2024, and construction is planned to commence in late Spring or early Summer 2024.

The Safe Routes for Seniors (SR4S) and Safe Routes to School (SR2S) projects are two additional projects included in the Livable Neighborhoods category. The SR4S Program is a collaborative effort between the City and local senior housing facilities, senior centers, and community-based organizations. Through these partnerships, the City is working to identify areas in Hayward at which to focus accessibility and walkability improvements.

The City's first SR4S effort was completed in four downtown Hayward intersections, including Foothill Blvd/Hazel Ave-City Center Dr, Montgomery Ave/A St, Montgomery Ave/B St, and Watkins Ave/D St. Improvements include increased pedestrian crossing times, installation of high-visibility ADA ramps, repositioning of cross walks and pedestrian push buttons to align with ADA improvements, and widening medians for pedestrian refuge, and more. Future SR4S intersection improvements will be evaluated and then selected within the Tennyson Rd corridor in FY25.

The City completed its first SR2S project in late FY 2023 near Cesar Chavez Middle School, which included installation of curb and median extensions, advanced stop and yield marking, yellow high-visibility crosswalks, bike lanes, updated push buttons and more. The goal was to provide safer access and better visibility for pedestrians and bicyclists, especially for the students walking to and from the middle school. The project went to bid in May 2023, construction began in August 2023, and the project was closed out in December 2023.

Palma Ceia Elementary participated in a school safety assessment as part of the Alameda County's Safe Routes to Schools Program in April 2022. The safety assessment resulted in infrastructure recommendations to improve safety and accessibility in the vicinity of the school. These improvements include traffic calming, curb extensions, and increased visibility of crosswalks. The design for this project is expected to be completed in Winter 2024 and is included as part of the scope of the Safe Routes to School Implementation Project.

Road and Streets Projects

Projects in the "Road and Streets" category range from curb and gutter repair to major gateway corridor improvements and are primarily funded through non-discretionary funding including Measures B (Fund 215 and 216) and Measure BB (Fund 212, 213, and 219), Gas Tax (Fund 210), Vehicle Registration Fee (VRF) (Fund 218), Road 238 Corridor Improvement (Fund 410), Streets Improvement (Fund 450), Transportation System

Improvement (Fund 460), and grants such as LATIP and the Alameda County Transportation Commission (Alameda CTC) funds.

A key project in this category is Phase 3 of the Mission Boulevard Corridor Improvement Project, located from A Street to the northern City limit at Rose Street. Phase 3 is the last phase of the three-phase Mission Blvd Corridor Improvement Project. Improvements include undergrounding of overhead utilities, electrical service conversions of private properties, construction of bicycle cycle track, sidewalk, curb and gutter, rehabilitation of pavement, installation of traffic signals and streetlights, installation of traffic striping, pavement marking and signage, improvements to storm drains systems, installation of irrigation system and landscaping, as well as City of Hayward monument signs. The construction bids received in 2021 to implement this project were significantly higher than expected and subsequently rejected, delaying the project timeline. The call for bids was reinitiated in March 2023. Construction began in July 2023 and is anticipated to be completed at the end of 2024.

Another project in this category is the Main Street Complete Streets project. This project will improve pedestrian and bicycle facilities along Main Street to create a safe and friendly environment for multimodal travel in the Downtown Hayward Priority Development Area. Proposed improvements include reducing the roadway from four to two lanes and one center lane for left turns and temporary areas for delivery truck loading and unloading, adding bulb-outs (curb extensions) and bike lanes, improving ADA access with new curb ramps, replacing existing sidewalk, adding decorative streetlights, creating on-street parking opportunities that provide door zone protection for bicyclists, resurfacing and restriping roadways, and creating an attractive, sustainable landscaping buffer along sidewalks. Construction for this project will begin in June 2024 and completion is anticipated in Summer 2025.

Pavement Rehabilitation

Pavement Rehabilitation projects are a subsection of the Road and Streets projects which are typically discussed separately because they represent a relatively large part of the annual CIP. Approximately \$13.1 million in Pavement Rehabilitation programming is recommended for FY25.

Street selection for pavement rehabilitation projects is based on several criteria. First, the Pavement Management Program (PMP) is used to evaluate current roadway conditions and future condition predictions. The PMP provides a logical and efficient method for identifying street rehabilitation needs and determining a path for implementation. Staff also refers to the Metropolitan Transportation Commission's (MTC) guidelines, Maintenance Services staff's reports on streets in need of repair, especially after a severe rainy season, and public requests for street rehabilitation. The PMP is updated every two years and is a prerequisite for certain funding sources. The industry standard practice recommended by MTC is that a minimum of 15% of funding be spent on preventive maintenance and a maximum of 85% on pavement rehabilitation. The City improves on this standard with a minimum of 20% spent on preventive maintenance and 80% on pavement rehabilitation. Additionally, in 2014, Council approved the Economic Development Strategic Plan, which recommended additional improvements be made to streets in the Industrial area. Approximately 15% to 20% of the overall paving budget is allocated to improvements in that area. Staff also has an internal policy to allocate at least

10% of the overall paving budget to roads with a Pavement Conditions Index (PCI)³ of less than 30.

The table below shows the City’s historical PCI for the last ten years. It is measured on a scale of 0 to 100, where 100 means a newly paved road.

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Pavement Conditions Index (PCI)	67	70	71	70	70	69	70	67	70	73

Municipal Facility Improvements

The “Municipal Facility Improvements” category includes projects that involve improvements to existing municipal buildings and construction of new municipal buildings. One major project included in this category is the Fire Station No. 6 & Fire Training Center Project. The new training center was constructed at the Hayward Executive Airport as a campus with classrooms, offices, a training tower, a burn building, and other facilities for urban search and rescue, as well as a new Fire Station No. 6. Construction began in August 2020 and was completed in Fall 2023. Remaining punch list items are expected to be completed by Summer 2024.

Another project to highlight would be the Hayward Police Department (HPD) Locker Rooms Design and Construction project. HPD needs a new locker room for separated use by both male and female police officers, other employees, and visitors. The existing facilities that are housed inside the HPD building are inadequate in terms of both space and amenities. The HPD Locker Room Projects will involve designing and constructing a new building adjacent to the existing HPD building to accommodate necessary improvements.

Sewer System Projects

The “Sewer Systems” category includes projects which are Enterprise Fund-supported, and which are related to the improvement of our sewer system, water re-use efforts, and Water Resource Recovery Facility (WRRF), formerly known as Water Pollution Control Facility (WPCF)

The City’s sewer line replacement projects are examples of key projects in this category. They typically involve the replacement of pipelines that are showing signs of age, or the upsizing of undersized mains to increase their conveyance capacity to handle current and future flows. With an ambitious goal of replacing an average of 2.5 miles of sewer mains annually, the proposed CIP recommends \$7 million in funding for the FY25 Sewer Line Replacement Program.

Other projects in this category include those related to the WRRF Phase II Improvements, which have been established following the recent development of a Facilities Plan Update, which is intended to guide the plant’s infrastructure and technology needs for the next twenty years. The Phase II Facilities Plan addresses future regulatory requirements restricting discharge of nutrients to the Bay. Although the San Francisco Bay has not been

³ <https://mtc.ca.gov/operations/programs-projects/streets-roads-arterials/pavement-condition-index>

adversely impacted by nutrient loading, discharge of nutrients is a growing concern and, as a result, recent requirements have been developed regulating their discharge into the Bay.

The final plan update was completed in June 2020 and in Spring 2022, Staff began working with a consultant for the design work to implement the identified improvements. In addition to the design and construction of the Phase II WRRF Upgrade, the project includes a new administration building and laboratory, as well as other related improvement needs. The total cost of the project, including the Design and construction of the improvements, is currently estimated to cost \$324.7 million. Staff is in the process of applying for a USEPA Water Infrastructure Finance and Innovation Act (WIFIA) loan, and plan to apply for the State Revolving Fund (SRF) and selling municipal bonds to help finance the project.

Recycled Water Projects

The Recycled Water Projects are also included in the Sewer Systems category. These projects are intended to improve the City's overall water supply reliability and conserve drinking water supplies through the delivery of tertiary treated recycled water to sites near the WRRF for landscape irrigation and industrial uses. Construction of the storage tank, pump station, and distribution pipelines for the system was completed in FY 2020. Construction of the treatment facility was completed in Summer 2020, and recycled water deliveries to the first phase of customers began in March 2022. Staff is currently developing a Master Plan to guide design and construction efforts for Phase II of the Recycled Water Program. Phase II will involve increasing the recycled water customer base, which will require designing and constructing an expanded treatment facility to meet the increased demand.

Water Systems Projects

"Water System Projects" are Enterprise Fund-supported and are related to the improvement of our water system, as well as projects which promote water conservation. One key program in this category is the Cast Iron Water Pipeline Replacement Program. Over the next ten years, the City will annually replace existing cast iron and asbestos cement pipes that are either reaching the end of their practical useful life, as evidenced by the frequency of the main and service connection breaks and leaks, or they are hydraulically undersized. The Recommended CIP includes \$500,000 in annual programming to support this effort.

The FY25 Annual Line Replacement Program is another key Water Systems project, which involves the replacement of existing water mains to provide adequate capacity for fire flow and to maintain the operability of the water distribution system. Water mains are selected for a variety of reasons including having exceeded service life, frequency of breaks, and/or upgrades needed for supply reliability. With a goal of replacing an average of 2.5 miles of water pipeline annually, the proposed CIP includes \$6.5 million in funding for the FY25 Annual Line Replacement Program.

Fleet Management

The "Fleet Management" category is comprised of projects involving the replacement of fleet units in various departments, divisions, and work groups. Fleet purchases benefitting the Fire and Police departments are predominantly funded by transfers from the General Fund, while fleet purchases benefitting the Airport, Stormwater, Sewer, and Water divisions are predominantly supported by Enterprise funding. Approximately \$5.1 million in FY 2025 Fleet Management category projects are included in the proposed CIP, and

involve projects supporting General Fund fleet replacement efforts, Enterprise Fund-supported fleet replacement efforts, and Electric Vehicle Infrastructure efforts.

The City maintains a fleet of approximately 450 vehicles and equipment units, and the useful life of these fleet units is maximized and managed via the 10 Year Fleet Capital Replacement Plan. The plan identifies replacement timelines based on age, mileage, maintenance, and safety. When it comes time to retire a unit, carbon emissions are a key consideration. This is in alignment with the City's Strategic Roadmap "Confront Climate Crisis & Champion Environmental Justice" Priority Project to transition 15% of total City fleet to EV/hybrid models.

Following a successful pilot program in FY21, Fleet Management adopted a new standard for Hayward Police Patrol Vehicles in which all replacement purchases will be hybrid-powered models. In FY 2022, a total of ten hybrid patrol cars were ordered to replace vehicles that have reached the end of their useful life, and an additional nine were ordered in FY 2023. Once received and placed into service, the fleet vehicle matrix will consist of 18% EV/hybrid units.

The Citywide EV Charging Projects are another key group of projects in this category. A recent report by East Bay Community Energy (EBCE) provided an analysis of the charging infrastructure that will be needed to electrify the City's 129 light duty, non-emergency, fleet vehicles. The report concluded the City will need three Level 1 chargers (15-20 Amps each), fifty-four Level 2 chargers (40 Amps each) and four Direct Current Fast Chargers (80 Amps or more) installed across eleven City facilities. Staff is currently preparing an assessment of charging needs for City employees. Installation of charging infrastructure for the City's fleet and employees will begin after the assessment is completed.

Staff is also working with EBCE to install one to three fast charging hubs for electric vehicle charging. Hubs would serve the general public, but would be sited to also serve residents of multi-family properties, many of which are older buildings that lack the infrastructure needed to support EV charging. Implementation of these projects will be contingent on receiving funding through the Federal Infrastructure Investment and Jobs Act, which staff plan to apply for.

Equipment and Software

The "Equipment and Software" category is predominantly comprised of equipment-related purchases supporting the Fire, Police, Maintenance Services, Public Works & Utilities, and Information Technology Departments, such as the purchase of Fire Department radios, purchase of fleet cameras, and replacement of aging fiber optic lines between City facilities. The recommended FY25 CIP includes programming of approximately \$5.6 million in this category.

Airport

This category encompasses all projects related to the improvement of the Hayward Executive Airport (HWD), the City's self-supporting general aviation reliever airport which encompasses nearly 500 acres. One key project in this category is the Sulphur Creek Safety Enhancement – Design and Construction Project, which involves the installation of box culvert to place portions of Sulphur Creek underground adjacent to airport runways. These areas were identified by the local Runway Safety Action Team as a safety hazard. The

project is designed to eliminate open ditches and create a flat surface near the runways. This will prevent damage to aircraft that veer off the runway pavement. Implementation of this project has been delayed due to the issues related to inter-agency agreement related to location of a suitable environmental mitigation site, and the project is anticipated to begin after Fiscal Year 2025. The project includes a total budget of \$8.3 million, which is being provided by the Federal Aviation Administration (FAA), Caltrans Division of Aeronautics, and the City's Airport Enterprise fund.

Miscellaneous

The "Miscellaneous" category includes projects which do not neatly fit into the other categories. Projects include the Comprehensive General Plan Update, Property Acquisition Management, Route 238 Property Projects, and Parcel Group Projects. The Parcel Group projects, which are currently budgeted at \$585,000 combined in FY25, are used to facilitate the new cohesive development of former Caltrans 238 property parcels with the goals of eliminating blight, creating public benefits for the community, and generating excess land value to the City.

Identified and Unfunded Capital Needs

The last section of the Recommended FY25 – FY34 CIP is the Identified and Unfunded Capital Needs section. This list was last significantly modified for the FY 2016 CIP to remove projects that were funded with Measure C and Measure BB funds, like improvements to Fire Stations 1-6, construction of a new 21st Century Library and Community Learning Center, and \$1 million per year for paving improvements. A significant reduction occurred with street and transportation-related projects, due to the passage of Measure C, Measure BB, and the Road Repair and Accountability Act (RRAA) (SB1).

While the approval of Measure C allowed the City to address many critical facility needs (e.g., the new Library, upgrades to Fire Stations, and the new Fire Training Center), significant needs still exist. The facility update to the City's Corporation Yard (Corp Yard) is one such capital need that remains unfunded. The Corp Yard is comprised of six buildings on Soto Road which were originally constructed in the early 1980s and are in need of major improvements. The necessary improvements to the Corp Yard were estimated to amount to more than \$66 million. The FY25 CIP included a "Corporation Needs Assessment" Project, which is funding the development of a revised assessment to determine the current improvement needs and update costs.

Another significant need included in the Unfunded Capital Needs list as part of the Recommended CIP is the South Hayward Youth and Family Center, which currently has an unfunded need of an estimated \$25,000,000 for the future phases of the project.

Unfunded Capital Needs are generally broken down into the following categories:

Information Technology:	\$1,100,000
Street Improvement:	\$11,500,000
Airport:	\$43,000,000
Sewer System:	\$56,000,000
Alternate Modes:	\$59,000,000
Interchange:	\$74,500,000

Pavement Maintenance:	\$142,000,000
Facilities and Improvement:	<u>\$303,000,000</u>
Total:	\$690,100,000

It is important to reiterate that this list identifies critical needs that have, as of now, no identified funding sources. The number of projects will continue to grow over time, as will the amounts needed to fund these extremely important upgrades and repairs to infrastructure and equipment.

ECONOMIC IMPACT

The direct economic impact of these projects is not quantifiable. However, maintaining and improving the City's infrastructure, fleet, and equipment will have an unquestionable impact on maintaining and improving economic health and vitality of the City. It is also important to note that capital projects are identified and prioritized with an emphasis on eliminating geographic inequities in the distribution of City services and infrastructure. Highest priority is given to areas in the community which have experienced a disproportionate level of improvements in past years, as well as those communities with the current highest need.

FISCAL IMPACT

The capital budget for FY 2025 totals approximately \$161 million, with a total of approximately \$1 billion tentatively programmed for the entire ten-year period from FY 2025 through FY 2034. An additional \$690 million of unfunded needs have been identified for the same period.

Four of the twenty-three CIP funds rely on transfers from the General Fund for project expenses. The following table reflects the proposed General Fund transfers to these four funds when compared to FY 2024.

CIP Fund	FY 2024 GF Transfer	FY 2025 GF Transfer	Increase / (Decrease) from FY 2024
405/Capital Projects (General)	\$2,231,630	\$500,000	(\$1,731,630)
460/Transportation System Improvement	\$500,000	\$1,000,000	\$500,000
726/Facilities Management Capital	\$360,000	\$360,000	\$0
731/Information Technology Capital	\$300,000	\$1,248,000	\$948,000
Total Cost to General Fund	\$3,391,630	\$3,108,000	(\$283,630)

Four of the CIP funds are also Internal Service Funds, meaning they use Internal Service Fees (ISF) to finance project expenses. Internal Service Fees are collected when one City department provides a service to another, drawing those service expenses from the operating budget of the benefiting department. Although some departments are funded by Enterprise funds, many are part of the General Fund. The Internal Service Fees paid by General Fund-supported departments have an impact on the General Fund. The total proposed Internal Service Fees for FY 2025 are shown below.

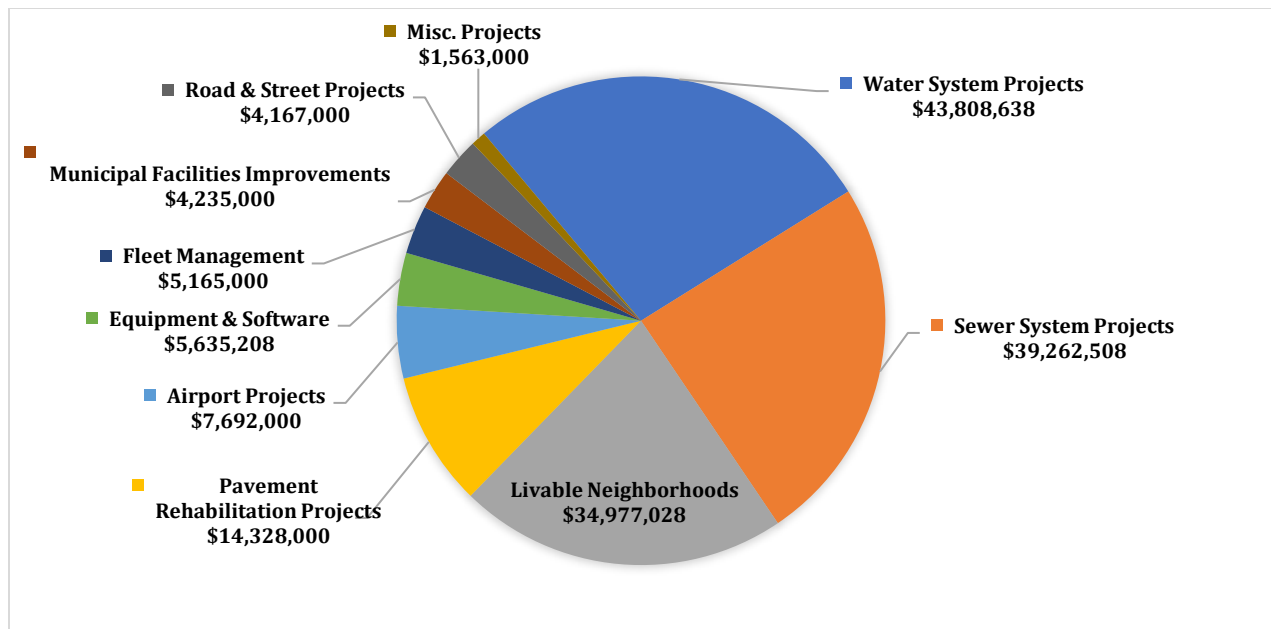
CIP Fund	FY 2024 ISF	FY 2025 ISF	Increase /(Decrease) from FY 2024
726/Facilities Management Capital	\$350,000	\$450,000	\$100,000
731/Information Technology Capital	\$810,000	\$850,000	\$40,000
736/Fleet Management Capital (General Fund)	\$4,000,000	\$3,100,000	(\$900,000)
737/Fleet Replacement (Enterprise Funds)	\$156,000	\$156,000	\$0
Total ISF	\$5,316,000	\$4,556,000	(\$760,000)

As displayed in the tables above, there is an overall decrease of \$283,630 in proposed FY 2025 General Fund transfers when compared to FY 2024, and a decrease of \$760,000 in proposed FY 2025 ISF. It is important to note that some of the ISF referenced above have General Fund impacts, as many Departments paying ISF are funded by the General Fund. Fund 736 for General Fund Fleet Replacement, for instance, supports fleet replacement efforts for the Fire Department, Police Department, and other General Fund-funded departments, and therefore has a direct General Fund Impact.

Project Cost by CIP Category

The proposed project costs by CIP category are as follows:

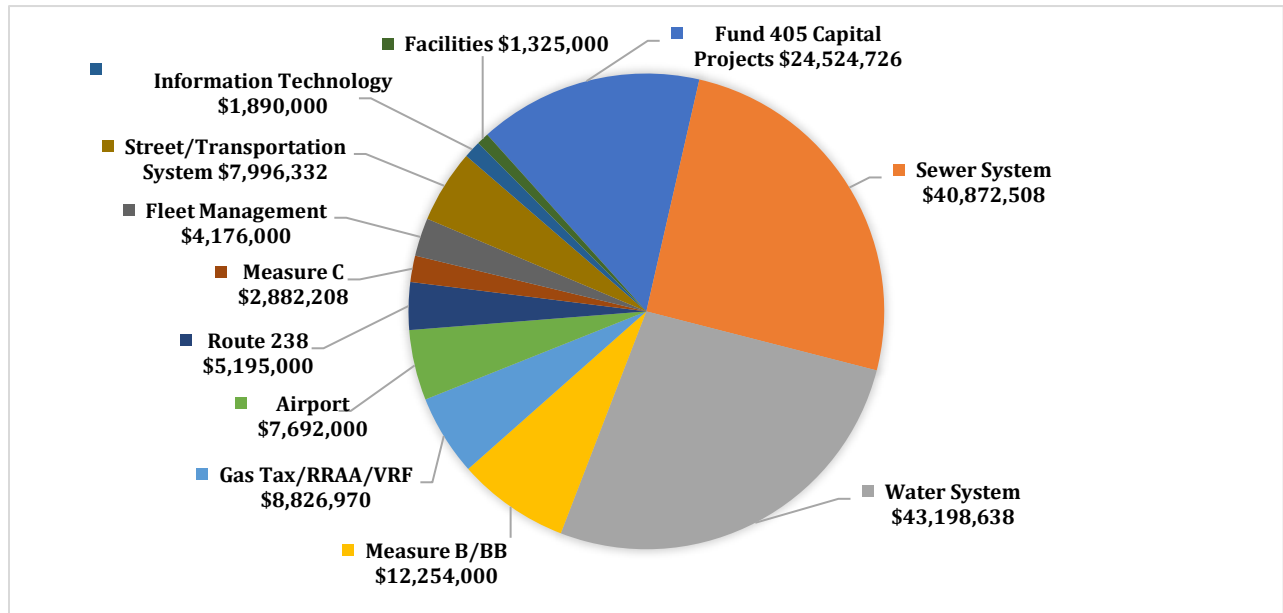
Project Category	FY 2024 Adopted	FY 2025 Recommended	Increase/ (Decrease) from FY 2024 CIP
Water System Projects	\$18,527,000	\$43,808,638	\$25,281,638
Sewer System Projects	\$28,135,390	\$39,262,508	\$11,127,118
Livable Neighborhoods	\$21,789,265	\$34,977,028	\$13,187,763
Pavement Rehabilitation Projects	\$16,539,000	\$14,328,000	(\$2,211,000)
Airport Projects	\$1,015,000	\$7,692,000	\$6,677,000
Equipment & Software	\$8,040,000	\$5,635,208	(\$2,404,792)
Fleet Management	\$1,286,000	\$5,165,000	\$3,879,000
Municipal Facilities Improvements	\$8,727,000	\$4,235,000	(\$4,492,000)
Road & Street Projects	\$6,789,000	\$4,167,000	(\$2,622,000)
Misc. Projects	\$4,742,000	\$1,563,000	(\$3,179,000)
Total Capital Improvement Projects	\$115,589,655	\$160,833,382	\$45,243,727



Project Cost by CIP Fund

The proposed project costs in each CIP Fund are as follows:

CIP Fund	FY 2025 Recommended
(210) Special Gas Tax	\$3,986,970
(211) RRAA (SB1)	\$4,000,000
(212) Measure BB - Local Transportation	\$9,267,000
(213) Measure BB - Ped & Bike	\$1,895,000
(215) Measure B - Local Transportation	\$39,000
(216) Measure B - Ped & Bike	\$53,000
(218) Vehicle Registration Fund	\$840,000
(219) Measure BB - Paratransit	\$1,000,000
(405) Capital Projects	\$24,524,726
(406) Measure C Capital	\$2,882,208
(410) Rte. 238 Corridor Improvement	\$4,157,000
(411) Rte. 238 Settlement Admin	\$1,038,000
(450) Street System Improvements	\$3,436,000
(460) Transportation System Improvements	\$4,560,332
(603) Water Replacement	\$27,203,765
(604) Water Improvement	\$15,994,873
(611) Sewer Replacement	\$12,391,500
(612) Sewer Improvement	\$28,481,008
(621) Airport Capital	\$7,692,000
(726) Facilities Capital	\$1,325,000
(731) Information Tech Capital	\$1,890,000
(736) Fleet Management Capital	\$3,276,000
(737) Fleet Management Enterprise	\$900,000



STRATEGIC ROADMAP

The Strategic Roadmap adopted in 2023 are at the forefront of the City's capital project planning efforts, and each CIP project is evaluated for consistency with the City's Strategic Priorities.

The Recommended CIP Projects touch the Confront Climate Crisis & Champion Environmental Justice, Enhance Community Safety & Quality of Life, Grow the Economy, and Strengthen Organizational Health Priorities, but predominantly support the Invest in Infrastructure Priority.

SOCIAL EQUITY

Consideration of social equity has been an important element of selecting projects, such as roadway improvements, sidewalk improvements, traffic calming, complete streets, and landscaping.

SUSTAINABILITY FEATURES

While the proposed projects are aligned with and advance the Council's Sustainability goals and policies, the action taken for this agenda report will not result in a physical development, purchase or service, or a new policy or legislation. Any physical work will depend upon a future Council action. Sustainability features for individual CIP projects are listed in each staff report.

PUBLIC CONTACT

On March 29, 2024, a Notice of this Public Hearing for the Planning Commission meeting was published in *The Daily Review* newspaper. A copy of the Recommended CIP is made available online at www.hayward-ca.gov/CIP, and printed copies are available at the Public

Works & Utilities' Department office, at the City Clerk's office, and at both [Libraries](#). Individual projects receive Council approval and public input as appropriate. Staff previously presented the Recommended FY25 – FY34 CIP to the Planning Commission at their April 11, 2024⁴ meeting, at which the Commission unanimously found that the CIP was in conformance with the Hayward 2040 General Plan.

NEXT STEPS

The public will also have an additional opportunity to review and comment on the CIP at an upcoming City Council work session, which has been tentatively scheduled for May 7, 2024, and the Council Public Hearing, which has been tentatively scheduled for June 4, 2024. A notice advising residents about the Council Public Hearing on the CIP will be published in the *Daily Review* newspaper at least ten days in advance.

Prepared by: Michael Wolny, Management Analyst

Recommended by: Alex Ameri, Director of Public Works

Approved by:



Kelly McAdoo, City Manager

⁴ <https://hayward.legistar.com/MeetingDetail.aspx?ID=1189779&GUID=5E483A40-F17D-450E-B6A5-43F99B012E09&Options=info|&Search=>



CITY OF HAYWARD

Hayward City Hall
777 B Street
Hayward, CA 94541
www.Hayward-CA.gov

File #: ACT 24-031

DATE: April 24, 2024

TO: Council Infrastructure & Airport Committee

FROM: Director of Public Works

SUBJECT

Updated Guidelines for Installation of Speed Humps - Discuss and Recommend to Council

RECOMMENDATION

That the Council Infrastructure and Airport Committee (CI&AC) recommends submitting the new Guidelines for Installation of Speed Humps to Council.

SUMMARY

Staff recommends updating criteria relevant to Hayward's traffic conditions and street characteristics. The Guidelines for Installation of Speed Humps can be found in Attachment II.

ATTACHMENTS

Attachment I Staff Report

Attachment II Guidelines for Installation of Speed Humps



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Staff recommends updating criteria relevant to Hayward's traffic conditions and street characteristics. The Guidelines for Installation of Speed Humps can be found in Attachment II.

BACKGROUND

First adopted by Council in December of 1995, the Guidelines for Installation of Speed Humps were proposed as a strategy to address concerns about speeding on public streets. The California State Traffic Control Devices Committee classifies speed humps as a "roadway design" feature, not a "traffic control" feature, which allows local jurisdictions to establish their own standards for their use. Hayward's guidelines were developed to be similar to those of other nearby jurisdictions.

In 2001, Council asked staff to revisit the criteria for minimum block length and maximum turning radius. The Guidelines for Installation of Speed Humps was revisited again in 2002 to provide flexibility for the installation of speed humps along bus routes in appropriate circumstances.

On July 3, 2018, Council adopted the Neighborhood Traffic Calming Program (NTCP) to establish a guide for City staff, elected officials, and residents to implement proper and effective traffic calming solutions with community outreach and collaboration. Through the NTCP residents can apply for traffic calming treatments such as speed humps.

DISCUSSION

No major changes have been made to the Guidelines for Installation of Speed Humps since 2002. In that time, there have been at least two updates to Institute of Transportation Engineers' (ITE's) "Guide to Vertical Deflection Speed Reduction Techniques" with the most recent update in 2022. The ITE update focuses on current state-of-the-practice in the selection, design, and application of speed humps, speed tables, and other vertical deflection tools, based on data collected to evaluate traffic calming effectiveness over the past decade.

The proposed update to the City's guidelines addresses lessons learned over the last decade and improves the organization of the guidelines. The recommended guidelines are categorized into two sections:

- 1) Street Geometry and Physical Characteristics
- 2) Speed Hump Placement

Street Geometry and Physical Characteristics

Under Street Geometry and Physical Characteristics staff recommends six revisions. First, the current 85th percentile speed of traffic guideline requires that speed must be 32 mph or greater. ITE provides new safety-related speed metrics that can be used in place of the current 85th percentile guideline, which is a measure more of vehicle performance than neighborhood livability or safety. ITE states that a street may have a speeding problem if the 85th percentile speed is 5+ mph above the posted speed limit. Because speed humps are only allowed on 25 mph streets, staff is recommending reducing our current 32 mph guideline to 30 mph. The updated guidelines also permit data from tube counts, which provide sufficient detail and are easier to collect than radar speed surveys.

The second revision replaces "residential" streets with "local or collector" streets for consistency with more precisely defined roadway classification systems.

Third, staff recommends reducing the minimum uninterrupted block length from 750 feet to 300 feet, unless the block intersects an arterial, in which case the minimum is 500 feet. Speed humps can be an effective strategy to control speeds on shorter blocks than current policy allows, so the existing guideline needlessly restricts the streets on which speed humps can be placed. Further, it contradicts another guideline regarding the spacing of speed humps.

The fourth revision changes the language of the average daily traffic volume from "must" range from 500 to 4,000 vehicles per day to "should." This allows flexibility for streets that meet all other guidelines but have slightly higher or lower traffic volume.

While AC Transit has demonstrated openness to context-appropriate traffic calming, speed humps can in some circumstances impact bus routes and transit riders. The fifth recommended update is to include a guideline for staff to coordinate with AC Transit staff in these situations.

The last recommendation under this section replaces the 85th percentile speed requirement from “requests fronting schools” to “requests within a school zone as defined by the California Vehicle Code.” This provides consistency with other school traffic control measures and acknowledges that even streets that aren’t directly adjacent to schools can be important for school travel.

Speed Hump Placement

Under Speed Hump Placement, staff recommends four revisions. First, staff recommends shortening the minimum placement distance to local and collector street intersections from 250 feet to 150 feet and requiring 250 feet for all intersections with an arterial street. ITE recommends 100 feet away from a collector street and 250 feet from a traffic signal. This guideline is in place because arterial intersections can present challenges for the safe and effective deployment of speed humps due to the higher posted speeds. However not every arterial intersection is signalized, so expanding guideline to all arterial intersections is recommended.

Second, staff recommends making the distance to driveways flexible by changing the language from “must” be no closer than 10 feet to “should” and including “when possible” to allow the use of speed humps on streets that meet all other guidelines but have an abundance of driveways without the required distance between them.

Third, staff recommends adding the phrase “it is preferable to install two humps on the same block but where other requirements would preclude two humps, one is acceptable” to clarify that a street may qualify if it can only fit one hump but that more than one is more effective in reducing speeding.

The last update includes distance requirements to bus stops as suggested by AC Transit for safe bus operations on streets with speed humps.

Below is a summary of the proposed revisions:

Criteria	Existing	Proposed
2. 85 th percentile speed	32 mph	30 mph
3. Street classification	Residential	Local and collector
7. Uninterrupted block length	750 feet	300 feet
9. Average daily traffic volume	Must range from 500 to 4,000 vehicles	Should range from 500 to 4,000 vehicles
11. Transit route	Prohibited	Possible, but requires coordination with AC Transit
14. 85 th percentile guideline may be waived for schools	For streets fronting schools	For streets within school zones defined by California Vehicle Code
16. Placement distance to intersections	250 feet	150 feet. 250 feet from intersection with arterial
20. Distance to driveways	Must be no closer than 10 feet	Should be no closer than 10 feet

21. Number of speed humps	Spacing should allow at least two speed humps on each block	One speed hump is acceptable where other requirements preclude two
24. Placement with transit stops	N/A	No closer than 110 feet before and 30 feet after transit stop

ECONOMIC IMPACT

There will be no economic impact associated with this action.

FISCAL IMPACT

The expanded guidelines will result in more streets being eligible for speed humps. However, the existing Neighborhood Traffic Calming Program fund and Pavement Improvement Program fund are sufficient to accommodate this. Priority ranking of applications will be conducted if funding is not sufficient and staff will return to Committee and City Council if necessary.

STRATEGIC ROADMAP

This agenda item supports the Strategy Priority of Invest in Infrastructure. Specifically, this update relates to the following project:

Invest in Community-Centered Crime Response and Enforcement Models
Project N1: Continue to implement major corridor traffic calming initiatives.

SUSTAINABILITY FEATURES

There are no sustainability features associated with this action.

PUBLIC CONTACT

This update to the Guidelines for Installation of Speed Humps will expand the range of qualifying applications for speed humps that the City receives through the Neighborhood Traffic Calming Program. Applications are submitted by residents and require signatures from 25 percent of the residents fronting that street segment. Once the application is approved, a petition for speed hump installation requires signatures from two-thirds of the residents on that street segment.

NEXT STEPS

If the CI&AC approves this update, staff will present it to Council for consideration.

Prepared by: Colin Patterson, Associate Transportation Planner
Hugh Louch, Deputy Director of Public Works - Transportation

Recommended by: Alex Ameri, Director of Public Works

Approved by:

A handwritten signature in black ink, appearing to read 'K. McAdoo', with a long horizontal stroke extending to the right.

Kelly McAdoo, City Manager

GUIDELINES FOR INSTALLATION OF SPEED HUMPS

The installation of speed Humps (“Humps”) on streets within the jurisdiction of the City of Hayward is to be considered only if found warranted by the Department of Public Works, Engineering and Transportation, or if specifically recommended by the Director of Public Works. The following criteria shall be considered to determine whether to install humps along a given street segment:

Street Geometry and Physical Characteristics

1. Posted speed limit on the street does not exceed 25 miles per hour
2. By means of a speed radar survey or tube counts, it is found that 85th percentile speed of traffic is 30 mph or greater
3. Street should be a local or collector street
4. Street must contain no more than one travel lane in each direction
5. Street must have a paved width of no more than 48 feet
6. Street must be a through-street (no cul-de-sacs or alleys)
7. Segment must have a minimum uninterrupted block length of 300 feet unless block intersects with an arterial then 500 feet
8. Street must have a standard curb and gutter
9. Average daily traffic volume for both directions should range from 500 to 4,000 vehicles per day on average weekdays
10. Street must not be in an industrial area nor be along established truck routes, or an established and/or preferred emergency vehicle route
11. Proposed speed humps which may impact AC Transit bus routes or transit riders should be discussed with AC Transit
12. Street grade is less than 5%
13. The centerline radius is greater than 300 feet
14. The 85th percentile speed requirement may be waived for requests within a school zone as defined by the California Vehicle Code

Speed Hump Placement

15. The spacing between speed humps should be no less than 175 feet.
16. Location of speed hump must be 150 ft minimum from intersection, 250 ft for intersection with an arterial street.
17. Speed humps should not be installed at locations, which will result in displacement of traffic to parallel streets.
18. Speed humps shall not be placed over manholes, drainage structures, water meters, or other utility access points and shall only be placed at locations which do not create adverse impact on drainage patterns.
19. If possible, speed humps should be placed near existing street lighting.

20. Speed humps should be installed no closer than 10 feet to the nearest driveway when possible and 25 feet to the nearest fire hydrant.
21. It is preferable to install two humps on the same block but where other requirements would preclude two humps, one is acceptable. Any one series of humps should generally not be greater than one-half mile in length and the end of one series should not be immediately adjacent to another series.
22. Speed humps shall be located so that they are clearly visible for at least 200 feet from each approach.
23. Proposed installations near schools which may impact school bus routes or young bicyclists and pedestrians should be discussed with Hayward Unified School District.
24. Speed humps should be no closer than 110 feet from a bus stop pole for bus pull-in and no less than 30 feet after the pole location for bus pull-out.