



DATE: May 21, 2019

TO: Mayor and City Council

FROM: Director of Public Works

SUBJECT: Approval of Plans and Specifications and Call for Bids for Trash Capture Device Installation on Arf Avenue

RECOMMENDATION

That the City Council adopts the attached resolution (Attachment II) approving the plans and specifications for the installation of trash capture infrastructure on Arf Avenue, and calling for construction bids to be received on June 25, 2019.

SUMMARY

This project involves the installation of trash capture infrastructure consisting of two continuous deflective separator (CDS) units with one bypass diversion box in the existing storm drain box culvert on Arf Avenue, near its intersection with Pueblo Spring. The units would help remove trash from the City's storm water system, increasing the City's overall reduction of stormwater-borne trash. This increase in stormwater trash reduction would bring the City closer to meeting the San Francisco Regional Water Quality Control Board's (Water Board) mandate that the City reduce 100% of trash from the storm water system by 2022. The project would be primarily funded by the Environmental Protection Agency (EPA) Water Quality Improvement Fund grant awarded to the City in January 2015.

BACKGROUND

In December 2015, the Water Board adopted the current Municipal Regional Stormwater Permit (MRP 2.0) requirements to regulate storm water discharge from its permittees, which include municipalities and local agencies in Alameda, Contra Costa, San Mateo, and Santa Clara Counties, as well as the cities of Fairfield, Suisun, and Vallejo. Under the MRP 2.0, permittees are required to reduce trash entering state waters from their respective Municipal Separate Storm Sewer Systems (MS4s) by 100% by 2022.

In January 2015, the EPA awarded the City \$800,000 to fund the Hayward Youth-Based Trash Capture, Reduction, and Watershed Education Project. The four-year project includes a school curriculum for first through twelfth grade students to educate them about watersheds, pollution, and engineered trash reduction facilities like CDS units.

For further background regarding the EPA grant project and the Water Board's trash reduction mandate, please refer to the following reports previously presented to the Council Sustainability Committee:

- USEPA Region IX Trash Reduction Grant - March 23, 2015¹
- Update on EPA Trash Reduction Grant - December 10, 2015²
- Municipal Regional Permit 2.0 - March 14, 2016³

The City currently has two existing CDS units: one at the intersection of Tyrell Avenue and West Tennyson Road, installed in 2012; and one on Patrick Avenue. The Patrick Avenue CDS unit was installed in 2017 as part of the EPA grant project. Both units were manufactured by Contech Stormwater Solutions (Contech).

DISCUSSION

This project would involve the installation of trash capture infrastructure consisting of two CDS trash capture devices with one bypass diversion box in the existing storm drain box on Arf Avenue to treat storm water and bring the City closer to meeting the Water Board's 100% stormwater trash reduction mandate. Like the CDS unit on Patrick Avenue, the installation of these two CDS trash capture units at Arf Avenue will be incorporated into the EPA grant-funded Hayward Youth-Based Trash Capture, Reduction, and Watershed Education Project.

The installation location on Arf Avenue (identified in Attachment III) was strategically selected based on the fact that it is just upstream of the Alameda County flood control channel, meaning that a very high volume of storm water passes through this location just before it is discharged to the County flood control channel. The location was also selected based on input from Maintenance Services Department staff, who regularly remove large amounts of trash from the storm system in this area. The new proposed trash capture infrastructure would treat storm water runoff from approximately 481 acres and would help the City to reduce its water borne trash by approximately 6%.

As previously referenced, the City and all other Water Board permittees are required to reduce trash from their municipal storm drain system by 100% by July 1, 2022. To assist in keeping permittees on track to meet this mandate, the Water Board also set interim requirements to reach 70% by July 1, 2017, and 90% by July 1, 2019. As of September 2017, the City had achieved a trash reduction of 79%; however, in FY2018, litter pickup activities were not included in the percentage. Staff monitors areas cleaned by the Keep Hayward Clean and Green Task Force and most are not remaining clean in the weeks following cleanup events. Additionally, several cleanup events have occurred in areas already treated by trash capture infrastructure and cannot be double-counted. As of September 2018, the City is currently at 61% trash reduction. The Arf Avenue project will increase the City's reduction to approximately 67%. As indicated with the estimates in Attachment IV, staff are currently

¹ [USEPA Region IX Trash Reduction Grant - March 23, 2015](#)

² [Update on EPA Trash Reduction Grant - December 10, 2015](#)

³ [Municipal Regional Permit 2.0 - March 14, 2016](#)

working to identify additional locations for trash capture device installation to meet the 100% reduction mandate.

If the attached resolution is approved, staff will release a call for competitive bids to contractors to install the necessary infrastructure. Staff will also secure the necessary permits, including an encroachment permit from the Alameda County Flood Control and Water Conservation District. The construction portion of the project will entail excavation in the street, installation of two CDS units with one bypass diversion box in-line with the storm drain, backfill of the area, and repair of the street to pre-construction conditions. Prior to backfilling and street repair, the CDS units will also be leak-tested to assure water tightness at all joints.

ECONOMIC IMPACT

There is no direct economic impact associated with this item.

FISCAL IMPACT

The estimated total project costs are as follows:

Design and Construction Administration - City Staff	\$15,000
Testing and Inspection Services	\$15,000
Alameda County Encroachment Permit	\$30,000
Construction Contract	\$450,000
Two CDS Trash Capture Devices + Bypass Diversion Box	\$350,000
Administrative Change Order	<u>\$45,000</u>
Total:	\$905,000

As previously mentioned, the EPA awarded the City an \$800,000 grant in 2015 to fund the Hayward Youth-Based Trash Capture, Reduction, and Watershed Education Project. The \$450,000 that still remains of these grant funds would be used to cover a portion of the expenses associated with this project. The difference would be funded by the Stormwater Fund. As was done with the most recent CDS device installation on Patrick Avenue, purchase of the CDS trash capture infrastructure for this project would not be included in the construction contract. Purchasing the devices directly from the vendor would enable the City to avoid paying additional fees that a contractor would likely charge to procure the equipment. If the project is approved, staff will return to Council for authorization of this purchase at a later date.

STRATEGIC INITIATIVES

While this item does not directly relate to one of the Council's three Strategic Initiatives, it is directly aligned with the Council's "Clean" priority, as the installation of this infrastructure would aid in the removal of waste from our community's stormwater system and, ultimately, the San Francisco Bay.

SUSTAINABILITY FEATURES

The CDS units, along with the existing trash capture devices in the City's storm drain system, will help to limit the pollutants that enter local creeks and the San Francisco Bay.

PUBLIC CONTACT

Prior to and during construction, notices will be provided to affected residents, property, and business owners to inform them of the nature and purpose of the work, potential impacts, work schedule, and City contact for additional information. In addition, staff will work closely with residents in the vicinity of the project to minimize potential impacts.

NEXT STEPS

Should Council approve the attached resolution, staff will advertise the construction project for public bidding. Staff will return to Council for the award of the construction contract after construction bids have been received and reviewed. Staff may also return to Council to request authorization to proceed with a sole source purchase of the two CDS units and a bypass diversion box from Contech.

The following schedule has been developed for this project:

Receive Bids	June 25, 2019
Award Construction Contract	July 16, 2019
Construction Completion	October 2019

The Arf Avenue Trash Capture Device Installation project, if approved, would fully exhaust the EPA grant funds. As such, staff will identify additional outside funding for future trash reduction projects to meet the Water Board's mandate by 2022. Staff is currently working with Caltrans to explore mutual trash reduction projects within the City's jurisdiction and Caltrans' right of way. Staff has already identified at least three potential projects that would involve Caltrans collaboration and will pursue these projects in the next two to three years.

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Recommended by: Alex Ameri, Director of Public Works

Approved by:



Kelly McAdoo, City Manager