

File No. 210749

Committee Item No. 2

Board Item No. _____

COMMITTEE/BOARD OF SUPERVISORS

AGENDA PACKET CONTENTS LIST

Committee: Budget & Finance Committee

Date July 21, 2021

Board of Supervisors Meeting

Date _____

Cmte Board

- Motion
- Resolution
- Ordinance
- Legislative Digest
- Budget and Legislative Analyst Report
- Youth Commission Report
- Introduction Form
- Department/Agency Cover Letter and/or Report
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- Grant Information Form
- Grant Budget
- Subcontract Budget
- Contract/Agreement
- Form 126 – Ethics Commission
- Award Letter
- Application
- Public Correspondence

OTHER (Use back side if additional space is needed)

- Presentation from Public Works - July 21, 2021
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Completed by: Linda Wong Date July 15, 2021

Completed by: Linda Wong Date _____



London N. Breed
Mayor

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June 21, 2021

President Shamann Walton
San Francisco Board of Supervisors
1 Dr. Carlton B. Goodlett Place, Room 282
San Francisco, CA 94102-4689

Dear President Walton,

On September 22, 2020, the Budget and Appropriation Ordinance (File No. 200567) was amended to place \$840,000 for new trash can design and deployment on Full Board of Supervisors Reserve in Fiscal Year 2020-21 and Fiscal Year 2021-22.

Public Works would like to request the release of \$537,000 of that funding to complete detailed design of the new can options and move forward into the prototyping phase.

The department has been working with an industrial designer to develop a can that is durable, tamper-resistant, easy to service and aesthetically pleasing. The final conceptual designs have been approved by Civic Design Review. If the funding is released, Public Works will complete detailed design schematics and manufacture 15 prototype cans for field testing.

We would like to request a Committee of the Whole to consider this request. We look forward to discussing this matter with the Board. Please let me know if you need any additional information.

Sincerely,

Jeremy Spitz
Policy and Government Affairs
Jeremy.Spitz@sfdpw.org
415-361-2368

Item 2 File 21-0749	Department: Department of Public Works
EXECUTIVE SUMMARY	
<p style="text-align: center;">Legislative Objectives</p> <ul style="list-style-type: none"> • The Department of Public Works is requesting the Budget and Finance Committee of the Board of Supervisors to release \$537,000 of the \$840,000 placed on reserve by the Board of Supervisors during the FY 2020-21 budget review. <p style="text-align: center;">Key Points</p> <ul style="list-style-type: none"> • On September 22, 2020, the Budget and Appropriation Ordinance (File 20-0567) was amended to place \$840,000 appropriated to the Department of Public Works for new trash can design and deployment on Board of Supervisors reserve in FY 2020-21 and FY 2021-22. • The department will be working with an industrial designer to develop a trash can that is durable, tamper-resistant, easy to service and aesthetically pleasing. The final conceptual designs have been approved by Civic Design Review. If the funding is released, Public Works will complete detailed design schematics and manufacture 15 prototype cans for field testing. The department plans to eventually replace all 3,300 City trash receptables with the new design. <p style="text-align: center;">Fiscal Impact</p> <ul style="list-style-type: none"> • The \$537,000 on Board of Supervisors reserve would be used to complete detailed design of the new public trash can options and move forward into the prototyping phase. Expenditures include design costs for the trash can and toter (a garbage cart with wheels), 15 prototype trash cans, 10 prototype toters, project management, off-the-shelf trashcan purchase, and a contingency. <p style="text-align: center;">Recommendation</p> <ul style="list-style-type: none"> • Approve the requested release of \$537,000 of the \$840,000. 	

MANDATE STATEMENT

City Administrative Code Section 3.3(j) states the Board of Supervisors may reserve proposed expenditures to be released at a later date subject to Board of Supervisors approval. The practice of the Board of Supervisors is for the Budget and Finance Committee to approve release of funds placed on reserve by the Committee, without further Board of Supervisors approval.

BACKGROUND

On September 22, 2020, the Budget and Appropriation Ordinance (File 20-0567) was amended to place \$840,000 appropriated to the Department of Public Works for new trash can design and deployment on Board of Supervisors reserve in FY 2020-21 and FY 2021-22.

DETAILS OF PROPOSED LEGISLATION

The Department of Public Works is requesting the Budget and Finance Committee of the Board of Supervisors to release \$537,000 of the \$840,000 placed on reserve by the Board of Supervisors during the FY 2020-21 budget review.

According to Mr. Jeremy Spitz, Special Assistant for Policy and Government Affairs at Department of Public Works, the requested release of \$537,000 on Board of Supervisors reserve would be used to complete detailed design of the new public trash can options and move forward into the prototyping phase. Mr. Spitz states that the department will be working with an industrial designer¹ to develop a trash can that is durable, tamper-resistant, easy to service and aesthetically pleasing. The final conceptual designs have been approved by Civic Design Review.² If the funding is released, Public Works will complete detailed design schematics and

¹ According to Mr. Spitz, the department has chosen APROE (Advanced Prototype Engineering LLC) as the industrial designer, a San Francisco-based company that provides design and prototype services for industrial and commercial products. Public Works requested quotes from five companies (Forms and Surfaces, APROE, Victor Stanley, Reification, and Standard Metal Products) who can produce prototypes. Of these five companies, only Forms and Surfaces and APROE provided a cost proposal. Mr. Spitz states that APROE's cost and service were determined to be most cost effective and appropriate for the trashcan pilot. DPW received approval from the Office of Contract Administration to waive competitive solicitation requirements for the pilot project per Section 21.5(e) of the Administrative Code. Mr. Spitz states that the department has not entered into a contract yet with APROE since the release of funds has not been secured.

² Civic Design Review is a Charter-mandated responsibility of the Arts Commission per Charter Section 5.103. The Civic Design Review Committee is comprised of five Commissioners appointed by the Mayor, including two architects, a landscape architect and two other design professionals and/or lay persons. The Commissioners conduct a multi-phase review of all civic buildings, viaducts, elevated ways, gates, fences, street furniture, lamps or other structures on City and County land. The Committee also reviews historic plaques, arches, bridges, approaches and other structures extending over or onto any street, highway, park or other public place belonging to the City. According to Mr. Spitz, the Civic Design Review for Phase 1 and Phase 2 for the trash can was approved on September 21, 2020.

manufacture 15 prototype cans for field testing. According to Mr. Spitz, the department plans to eventually replace all 3,300 City trash receptacles with the new design.

FISCAL IMPACT

Table 1 below summarizes the breakdown of the Department of Public Works' requested release of \$537,000 placed on Board of Supervisors reserve for new trash can design and deployment. According to Mr. Spitz, the source of funds is revenue from refuse rates.³

³ Under the 1932 Refuse Collection and Disposal Initiative Ordinance, the City approves and sets residential refuse (garbage) rates. Funds for the requested reserve are located in Fund 14000 Impound Account, which is funded by revenue from the refuse rates. The account includes funding for City departments that support refuse-related programs that benefit ratepayers. The refuse rates, collected by Recology and approved by the City per the 1932 Ordinance, include funding for several City initiatives. According to Mr. Spitz, Recology collects the revenue from the rates and deposits a certain amount into various City accounts, including the Impound Account. Mr. Spitz states that expenditure of monies from the Impound Account for City costs is subject to the City's annual budgeting process and management review.

Table 1: Summary of Department of Public Works' New Trash Can Design and Deployment Costs

Costs	Amount
Design	
Trash Can	\$67,500 ⁴
Toter ⁵	\$10,000 ⁶
Prototype⁷	
15 Trash Cans (\$20,000 per prototype)	\$300,000
10 Toters (\$2,000 per prototype)	\$20,000
Project Management ⁸	\$40,000
Off-the-Shelf Trashcan Purchase (Proposition Q) ⁹	\$10,000
Contingency (20 percent) ¹⁰	\$89,500
Total	\$537,000

Source: Department of Public Works

According to Mr. Spitz, the department anticipates requesting release of reserves for the remainder of the funds (\$303,000) after the pilot is complete and a decision is made regarding the preferred trash can. The specific timeline is to be determined.

RECOMMENDATION

Approve the requested release of \$537,000 of the \$840,000.

⁴ Budget is not to exceed 450 hours at \$150/hour.

⁵ A toter is a garbage cart with wheels.

⁶ Budget is not to exceed 67 hours at \$150/hour.

⁷ Prototype costs are based on estimates provided by APROE. APROE estimated between \$10,000 - \$20,000 per trashcan based on current concept designs, and the budget is based on the higher range. Mr. Spitz states that more accurate costs for the prototypes will be provided at the conclusion of the design refinement phase and the goal is to bring the unit cost closer to the lower range.

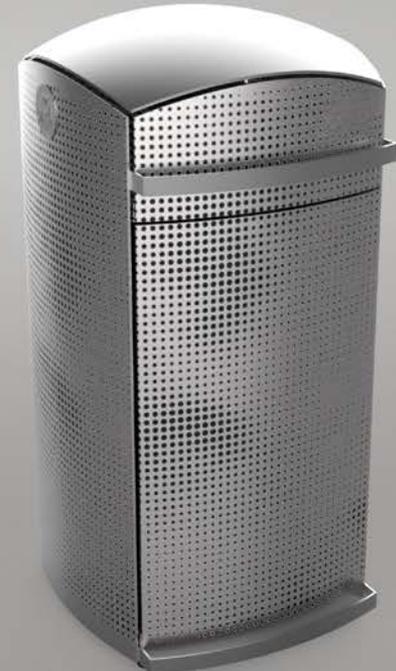
⁸ A DPW cost. Budget is not to exceed 4 hours per week for 16 weeks at an hourly rate of \$230/hour. Additional approximately \$26,000 is included in costs to balance current project management expenditures.

⁹ In 1993, a charter amendment (Proposition Q) was passed that changed the City's purchasing procedures to allow, with the Purchaser's approval, departments to buy supplies and equipment on their own if the purchase was less than \$5,000 (now \$10,000). According to Ms. Lisa Zhuo, DPW Project Manager, this purchase is to be used to evaluate the adaptability of the off-the-shelf cans to the City's unique environment, which includes weather and social behavior; the department is also proposing to incorporate a new sensor to the trash cans to alert pick-ups. Ms. Zhuo states that by evaluating off-the-shelf cans alongside custom trash cans, the department is also able to identify successful features or deficiencies in each of the cans and make improvements.

¹⁰ The contingency is a reserve set aside for unexpected fees or unknown costs at the time of budgeting. (i.e., scope changes, add services, etc). According to Mr. Spitz, the percentage is typical for a design project.

SF Trash Can Replacement Project

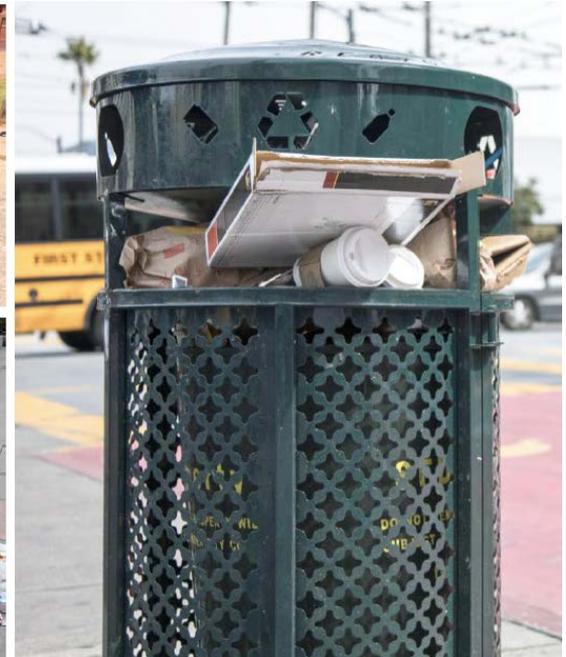
Budget and Finance Committee Meeting, July 21, 2021



EXISTING TRASH CANS

Problems with current trash cans:

1. Overflowing and raiding
2. Durability – locks are easily broken
3. Non-rollable liner
4. Rats and other pests
5. Vandalism and high maintenance cost



DESIGN CRITERIA FOR NEW TRASH CANS

- Ability to accommodate a minimum of 32 gallon rolling toter.
- Weather protection – prevents rain from pouring into can / proper drainage
- Incorporate recycling exchange
- Discourage improper use – such as disposal of household waste
- Durable locking mechanism
- Durable materials that can withstand daily use by public; anti-vandalism
- Anti-rats
- ADA compliance
- Incorporate electronic sensor

INITIAL CONCEPT DESIGNS



APPROVED CONCEPT DESIGNS



Salt & Pepper



Slim Silhouette



Soft Square

APPROVED CONCEPT DESIGN

Salt & Pepper

Salt and pepper's unique profile stands out from afar, easily distinguishable for someone looking to discard items. The silhouette denotes two separate refuse areas, with cans and bottles for redemption exchange above and regular trash below. Steel fins welded to ribs give Salt and Pepper a durable frame, as well as providing visibility for security and deterrence to graffiti. A shroud minimizes the size of items capable of being discarded, discouraging oversized, obstructive items. The bold new form also communicates the city's efforts to usher in a new, more cleanly era on the streets of San Francisco.



APPROVED CONCEPT DESIGN

Salt & Pepper



APPROVED CONCEPT DESIGN

Salt & Pepper



APPROVED CONCEPT DESIGN

Salt & Pepper

Salt and Pepper design allows for multiple top solutions. “Stacked” employs a simple shroud, limiting size of items thrown in garbage. “Side by side” incorporates a secure “chute” design (similar to some public mailboxes) that more thoroughly discourages harvesting of discarded items.



Stacked

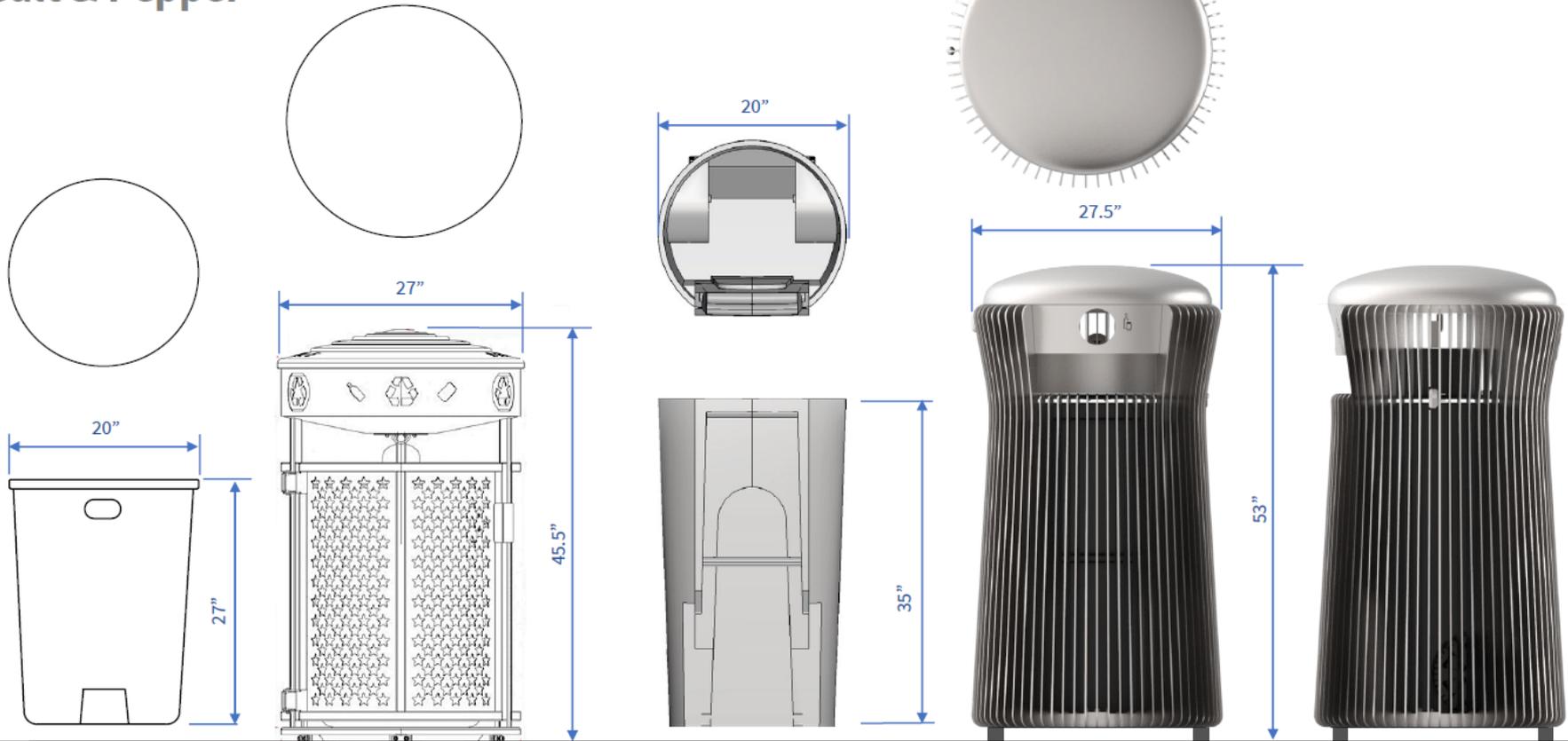


Side by side

APPROVED CONCEPT DESIGN

Custom Toter

Salt & Pepper



Renaissance liner

Current Renaissance Receptacle

Salt & Pepper- liner/toter

Salt & Pepper - Top & Front

Salt & Pepper- Side

APPROVED CONCEPT DESIGN

Slim Silhouette

Slim Silhouette's slim side profile allows more space on the sidewalks for people to move about freely while clearly presenting discard options on the front face, trash or recycle exchange. This single sided access and the chute shaped trash opening makes rummaging more difficult, so more trash stays inside. The trash and recycle openings have a generously rounded bezel inviting people in. The stainless steel pipe construction ensures longer lasting beauty with easier cleanability and less flat surface for graffiti. Slim Silhouette keeps the streets clean with personality!



APPROVED CONCEPT DESIGN

Slim Silhouette

Curved slanted top draws eye around while discouraging item placement

Funnel and recycle exchange visible through pipes



Spun bezels with rounded edge invite people to discard their trash

APPROVED CONCEPT DESIGN

Slim Silhouette

Cans / bottles area.
Slid off into the toter
when serviced

Sensor located
below shelf

Pill shaped
custom toter



City seal and
key lock

1/2" diameter pipe
construction

APPROVED CONCEPT DESIGN

Slim Silhouette

As we move toward engineering and product realization, we have envisioned two options for construction, Full Pipes and Partial Pipes. Depending on the capabilities of the selected manufacturer and unit cost one option may offer advantages over the other.



Full Pipes

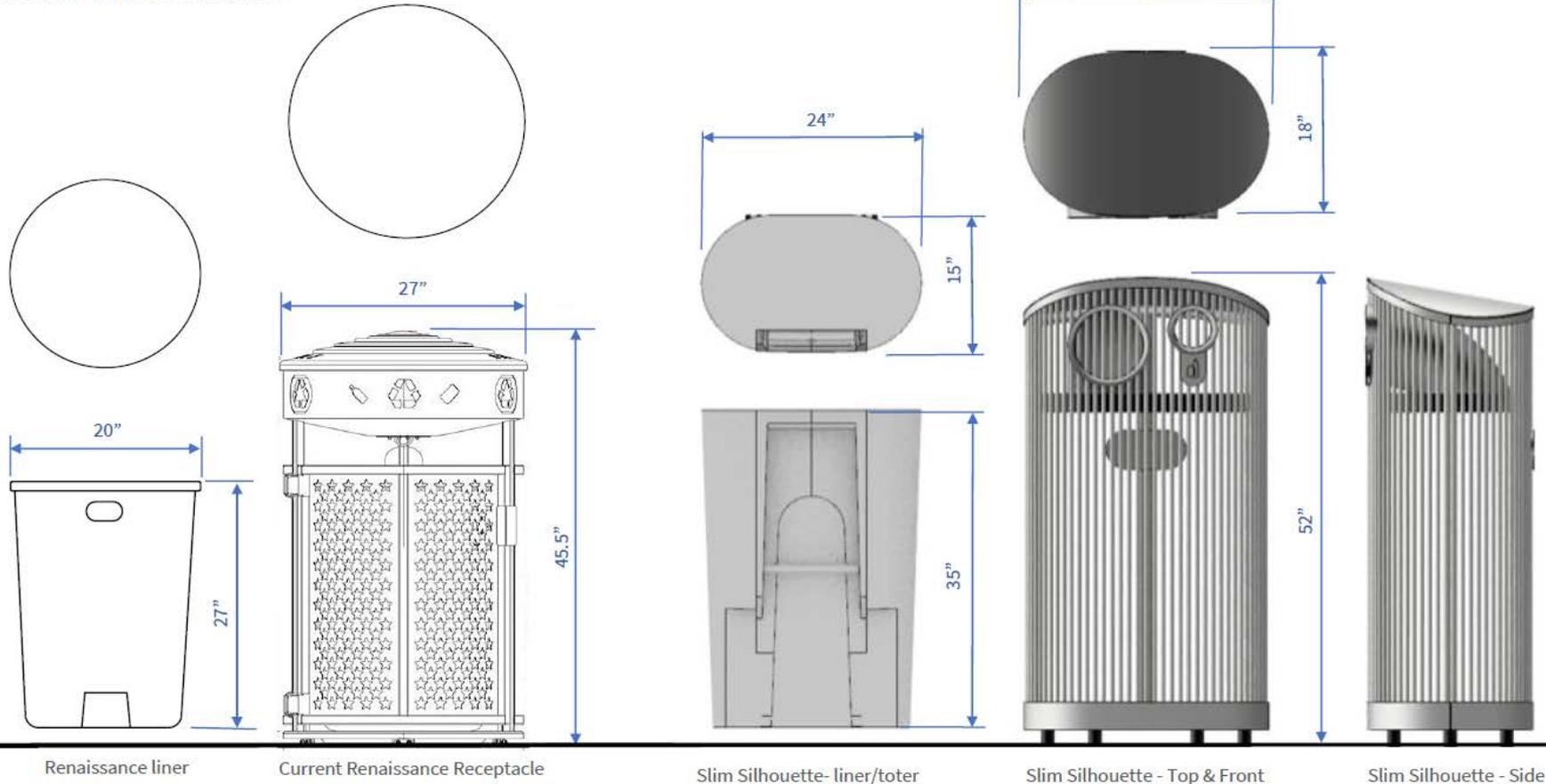


Partial Pipes

APPROVED CONCEPT DESIGN

Custom Toter

Slim Silhouette



APPROVED CONCEPT DESIGN

Soft Square

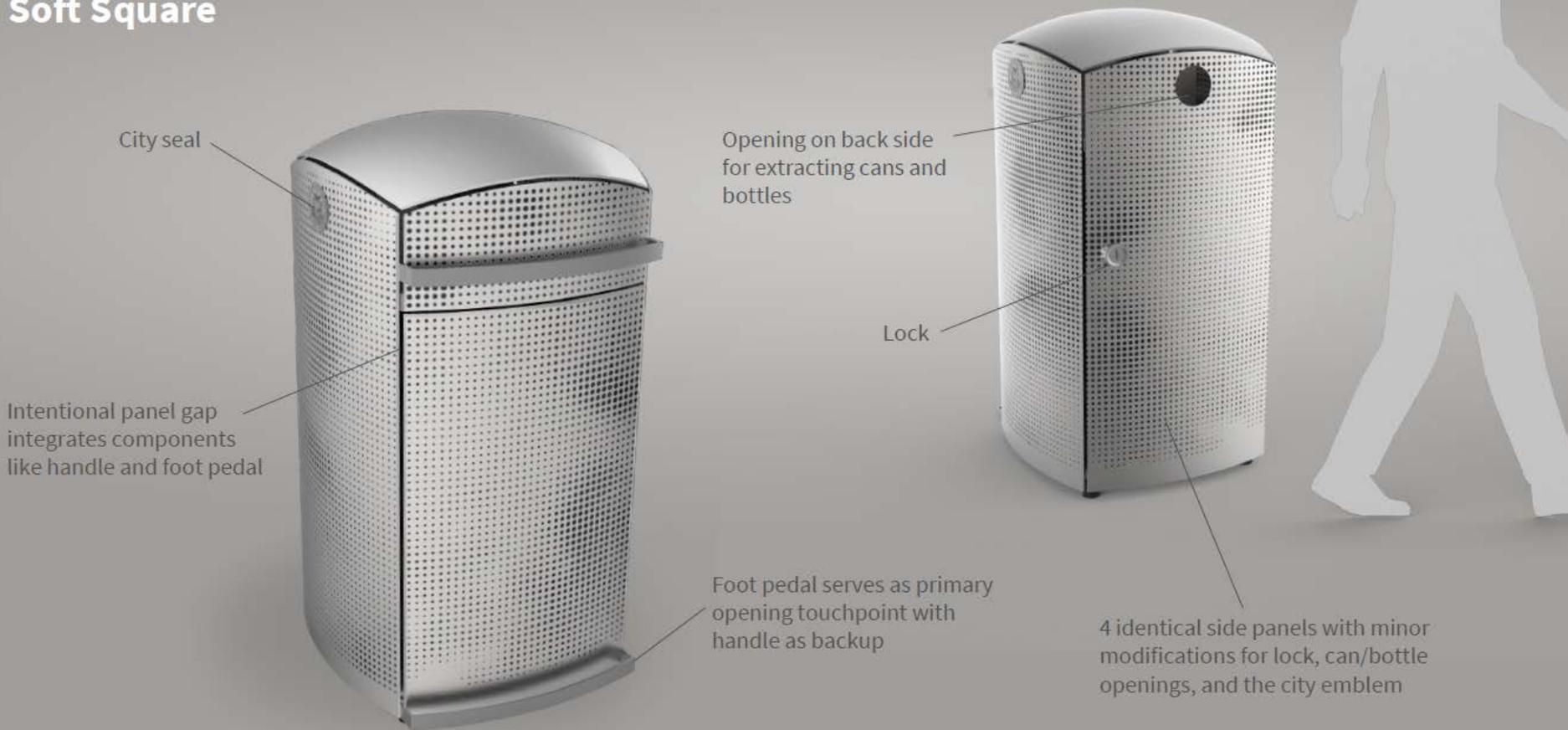
Soft Square keeps an identifiable trash can silhouette while bringing the aesthetic into the 21st century. Designed as a kit of parts, Soft Square is comprised of four curved panels, an adjustable base, and a domed top. Intentional gap separations between the panels allow for an elegant integration of components including the handle, foot pedal and hinge. Openings for the trash and bottles/cans are behind the front hopper door giving the design a clean

appearance. The hopper design also makes it extremely difficult for over filling and rummaging. The stainless steel construction can be customized through different perforation patterns.



APPROVED CONCEPT DESIGN

Soft Square



APPROVED CONCEPT DESIGN

Soft Square



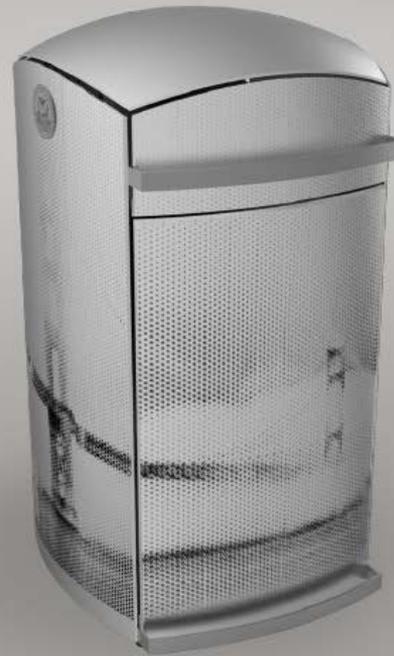
APPROVED CONCEPT DESIGN

Soft Square

Soft Square's side panels could potentially be fabricated with a range of perforated patterns. This would give the opportunity for trash receptacles to be tailored to different neighborhoods in the city, or for different locations. For example, a park may employ a more natural looking, free form type of pattern, while the business district's pattern might be more angular or geometrical.



Fog



Fog GGB

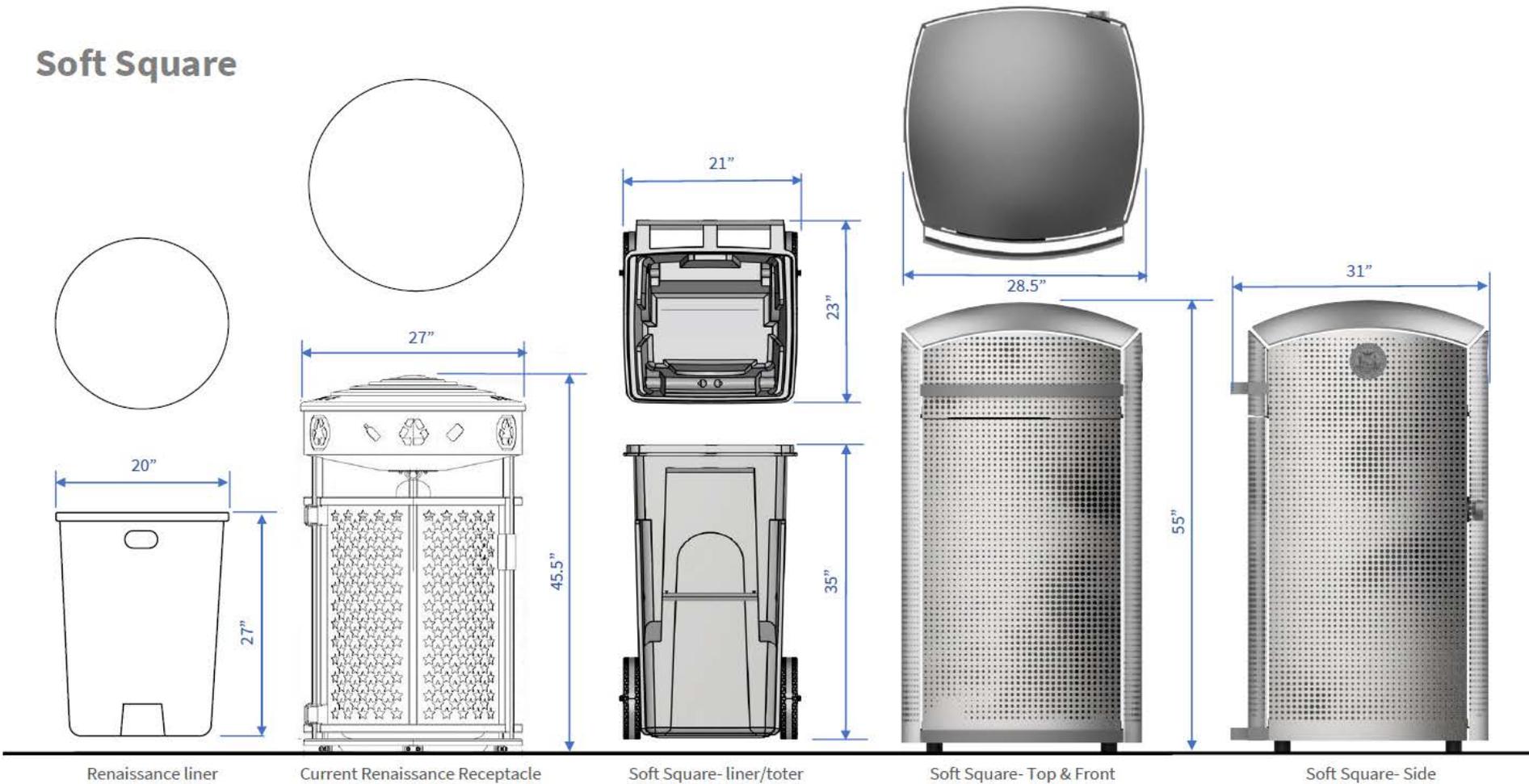


Memphis

APPROVED CONCEPT DESIGN

Non-custom toter

Soft Square



SCHEDULE & NEXT STEPS

DESIGN PHASE

- Concept Design RFP Release – Nov 2018
- Industrial Designer on board – April 2019
- Concept Design Development – April 2019 to July 2020
- Public Outreach – Sept 2020
 - Online survey – over 350 responses received
 - Virtual meeting with key constituents (CBDs, Merchant Groups)
- Press Release – Sept 2020
- Civic Design Review Phase 1 & 2 Approval – Sept 2020

PROTOTYPING PHASE

- Reviewed Quotes and Company Qualifications - Dec 2020 – April 2021
- Waiver for Competitive Solicitation Requirement Approved by Office of Contract Administration (OCA) – April 2021
 - Admin Code Reg 21.5(e) Pilot Project with a Term Not to Exceed Two Years
- Chapter 14B Subcontracting Goal Waiver Approved by Contract Monitoring Division (CMD) – May 2021
- 30-Day Union Notification Period – June 2021
- **Civil Service Commission Approval** – July 2021
- **BOS Approves Release of Reserve** – July 2021
- **Execute Contractor Agreement** – Aug 2021
- **Prototype Design Refinement** – Aug 2021 to Oct 2021
- **Prototype Fabrication** – Oct 2021 to Nov 2021
- **60-Day Trial** – Nov 2021 to Jan 2022 (exact date to be determined)
- **Design and Performance Evaluation** – Jan to Feb 2022
- **Design Modification (if necessary)** –Feb 2022
- **Final Design Completion** – March 2022
- **RFP for large quantity procurement** - TBD

SCHEDULE

	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22
Contract & Award												
Office of Contract Administration Approval - Pilot Project												
Chapter 14B Subcontracting Goal waiver request												
30-Day Union Notification Period												
Civil Service Commission Approval												
BOS Approves Release of Reserve												
Execute Contractor Agreement												
Design Refinement												
Presentation to SF Coalition / discuss placement of pilot cans												
Prototype Fabrication												
Trash Can Installation												
60-Day Trial Period												
Design & Performance Evaluation												
Design Modification (if necessary)												
Final Design Completion												
RFP for Large Quantity Procurement												

* Schedule and dates are estimated based on current project information and progression.

BUDGET

	Budget
Design	
Trash Can	\$ 67,500.00
Toter	\$ 10,000.00
Prototype	
Trash Can (Qty: 15)	\$ 300,000.00 *
Toter (Qty: 10)	\$ 20,000.00
Project Management	\$ 40,000.00
Off-the-shelf Trashcan Purchase (Prop Q.)	\$ 10,000.00
Contingency (20%)	\$ 89,500.00
Total	\$ 537,000.00

* The cost for trash can prototypes is an estimate based on the current concept design; the final cost will be provided at the conclusion of the design refinement phase when manufacturing details are developed.