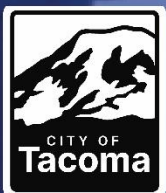


City of Tacoma

Environmental Services Department

Solid Waste Management Guide

MITHŪN



March 2025

Solid Waste Management Guide

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Environmental Services Department

Solid Waste Management

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Chapter 1: General Information

1.1 Introduction: Overview and Background

The City of Tacoma provides curb-side solid waste management services to over 58,500 homes and businesses across Tacoma. Housed within the Environmental Services Department, the Tacoma Solid Waste Management Division (SWM) is responsible for garbage, recycling, and food/yard waste management.

The Solid Waste Management Guide supports Environmental Services' mission to support healthy neighborhoods and a thriving Puget Sound to create a better Tacoma for all. This guide is a resource for architects, designers and developers in the design, development, and implementation of waste-related spaces in all contexts, from single-family residences and duplexes to apartment buildings and brick and mortar commercial spaces. This guide can be used as a tool to navigate compliance with SWM requirements while supporting efficient waste management practices and preserving quality building and public realm design.

This guide has been developed with consideration of SWM priorities as well as broader City, County, and State goals. SWM personnel are at the core of SWM services, performing crucial and labor-intensive work. The safety and wellbeing of these workers is essential to the successful operation of solid waste management services, and the city as a whole. These guidelines reflect SWM's prioritization of worker health and safety by including design recommendations that facilitate easy and efficient collection.

This guide also considers the new Home in Tacoma (HIT) development standards, and the design principles established therein, including walkability, preservation of neighborhood identity, and an engaging public realm. These solid waste guidelines support future growth and the development of middle housing typologies across Tacoma, balancing the needs of SWM operations with quality of life, walkability, development feasibility, and residents' needs.

This guide is also in alignment with the City's sustainability and resilience goals around increased diversion of waste from landfills. The design of waste-related spaces has the potential to improve the capture rates for recycling and food/yard waste streams.

Lastly, these guidelines specifically reflect the waste services provided by the City of Tacoma. It should be noted that private waste management recycling services for multifamily and commercial customers may vary in service frequency, collection, and container availability.

Customer resources regarding set-out schedules, service rates, sorting, educational materials and more are available through the City of Tacoma at cityoftacoma.org.



SWM Vehicle servicing 300-gallon automated collection container

1.1.1 Defining Service Types

Residential service is provided for lots with 1 and 2 units. This includes single-family homes, duplexes, single-family homes with backyard units, and any other configuration of up to 2 units on a single lot.

Multifamily service is provided for lots with three or more units. This includes all of the Urban Residential zone housing types with more than two units, such as Houseplexes (triplexes, fourplexes, fiveplexes, sixplexes), Rowhouses, Courtyard Housing, and Multiplexes. It also includes apartment buildings in all zones, as well as townhouses, cottage housing or any other configuration of more than three units on a lot. This service also includes the residential/multifamily portions of mixed-use buildings.

Commercial service is provided for businesses, industry, mobile home parks, and all other public, private and non-profit organizations in the City of Tacoma.

1.1.2 Defining Waste Streams

Garbage: Garbage describes all non-recyclable waste that will be sent to landfills. This includes items such as foam food containers, plastic bags, pizza boxes, dirty aluminum foil, and more.

Recycling: The recycling stream captures clean metal, plastic, paper, and cardboard. For multifamily and commercial customers, glass is offered as a separate service for an additional charge. For residential customers, glass can be recycled at drop-off locations across the city. Visit the [City of Tacoma website](#) for more information.

Food/Yard Waste: Food/yard waste is organic material such as food scraps, leaves, yard debris. Bags, cups, utensils, and other tableware labeled as "compostable" are not accepted in food/yard waste bins.

1.2 Approvals and Permitting

1.2.1 Certificate of Occupancy

All service levels, collection locations, storage areas, trash rooms, and enclosures require inspection and approval by SWM staff before a certificate of occupancy may be issued. Multifamily and Commercial services will be reviewed as part of a permitted site plan. A turning exhibit may be required to confirm collection vehicles can successfully service containers.

Interior trash rooms will be reviewed during the building permit submittal process.

1.2.2 Approval for Service

Construction of an enclosure for waste storage containers shall not commence prior to plan approval by Solid Waste Management. Failure to obtain plan approval prior to construction may require alterations, relocation, or complete reconstruction of the enclosure at the owner's expense. SWM may refuse to provide service to a customer who has enclosed a disposal container improperly.

1.2.3 Exceptions and Modifications

Exceptions to the Requirements

This manual discusses the requirements for facilitating Solid Waste Services and reflects information from the Tacoma Municipal Code (TMC) and various other regulatory codes. Exceptions to this manual may be requested in writing to the Environmental Services Department in accordance with TMC 12.09.020 to allow a waiver or modification of a requirement prior to permit approval and construction.

The Environmental Services Director, or approved authority, may grant an exception following a documented finding that:

- The exception is likely to be equally protective of public health, safety and welfare, the environment, and public and private property as the requirement from which an exception is sought, or;
- There are physical circumstances or conditions affecting the parcel such that substantial reasons exist for approving the requested exception, provided the exception will not cause significant harm.

Substantial reasons include, but are not limited to, the following:

- The requirement is not technically feasible, such as infeasibility due to utility conflicts, structure conflicts, and grade issues, etc.;
- An emergency situation necessitates approval of an exception;
- The requirement would cause significant harm or threat of harm to public health, safety, or welfare, to the environment, or to public and private property; and

- The strict application of these provisions would deprive the applicant of all reasonable use of the parcel of land in question.

The decision to grant an exception is at the sole discretion of the City. The Environmental Services Director, or approved authority, shall only approve an exception to the extent it is necessary. The applicant may be required to submit a report or analysis prepared by a Washington State licensed professional engineer along with the written request for an exception. Exceptions are intended to maintain a necessary flexible working relationship between the City and applicants. The approval of an exception shall not be construed to be an approval of any violation of the City's Municipal Code or of other valid law of a governmental entity that has jurisdiction.

Modifications

Modifications to design standards and other requirements in this manual may be requested in writing to Environmental Services/Site Development Group. The modification request must describe why the requirement in the manual cannot be met and why it will not likely create a detrimental impact to the solid waste system. Environmental Services/Site Development Group reserves the right to make the final determination of whether to approve or deny the modification and inform the applicant.

Chapter 2: Waste Volume Estimates

The expected volume of waste generated at any given site is calculated as an estimate based on several factors which vary based on service type. These volume estimates are used to determine ideal container types and sizes as well as storage space needs on site.

2.1 Residential Waste Estimates

2.1.1 Residential Garbage and Recycle

Residential garbage and recycle volumes are estimated based on household size. The following estimates can be used to determine garbage and recycling quantities:

- 4-person or fewer households: 30-45 gallons collected weekly
- 5- and 6-person households: 60 gallons collected weekly
- 6+-person households: 90 gallons collected weekly

Example: For a duplex with one 4-person household and one 2-person household, two 30-gallon containers would be used for garbage and two 30-gallon containers would be used for recycle if each household chooses to have their own solid waste service. Because the recycling service is bundled in the residential garbage rate, it is not uncommon for residential customers to sign up for the 90-gallon service level.

2.1.2 Residential Food / Yard Waste

Residential customers can request up to two 90-gallon food/yard waste containers. This service is included in standard residential garbage collection. Residential customers can request an additional 90-gallon containers at an additional cost. Food waste accounts for about 30% of garbage volumes. Sites utilizing the food/yard waste service are allowed to downsize garbage containers accordingly.

2.2 Multifamily Waste Estimates

Multifamily waste estimates are based on the number of units, and it is assumed that all units will share containers and services.

2.2.1 Multifamily Garbage

For multifamily sites, garbage quantities are estimated based on the number of units. SWM has determined the average garbage produced per week for typical multifamily units. The formulas below should be used to determine garbage quantities. It should be noted that organic waste accounts for up to 30% of the total garbage volume. If food/yard waste is collected, garbage containers may be downsized accordingly.

Garbage volume for sites with three or more units is calculated by multiplying the total number of units by the average garbage per unit to determine the average number of non-compacted cubic yards of garbage generated on a weekly basis.

Non-Compacted Garbage Volume Formula:
Number of Units X 0.1485 avg. gal/unit/yard = average number of non-
compacted cubic yards per week

Example: on a lot with 4 units, garbage would be calculated as:

$$4 \text{ units} \times 0.1485 = 0.594 \text{ cubic yards per week}$$

At multifamily sites that generate more than 8 cubic yards of non-compacted trash per week, property owners may consider using compactors to reduce waste volumes. The following formula can be used to estimate compacted garbage volumes:

Compacted Garbage Volume Formula:
(Number of Units X 0.1485 avg. gal/unit/yard) ÷ 4 = average number of
compacted cubic yards per week

Example: In a 54-unit multiplex with a trash compactor, garbage volume would be calculated as:

$$(54 \text{ units} \times 0.1485) \div 4 = (8 \text{ cubic yards}) \div 4 = 2 \text{ cubic yards per week}$$

2.2.2 Multifamily Recycle

For multifamily sites, recycle quantities are estimated based on the number of units. SWM has determined the average recycle volume produced per week for typical multifamily units. The formulas below should be used to determine recycle quantities.

Recycle volumes for sites with three or more units are calculated by multiplying the total number of units by the average recycle volume per unit to determine the average number of non-compacted cubic yards of recycle generated on a weekly basis.

Non-Compacted Recycle Volume Formula:
Number of Units X 0.2228 avg. gal/unit/yard = average number of non-
compacted cubic yards per week

Example: On a lot with 4 units, recycle would be calculated as:

$$4 \text{ units} \times 0.2228 = 0.89 \text{ cubic yards per week}$$

2.2.3 Multifamily Food / Yard Waste

Multifamily parcels producing more than 4 cubic yards of garbage per week are required to collect food/yard waste. Typically, this will apply to multifamily buildings with 27 units or more.

Smaller multifamily customers may opt in to food/yard waste collection. For 3- and 4-unit properties that are able to accommodate individual bin storage at the curb, 90-gallon containers should be used. For all other multifamily buildings with shared waste storage and service, 9 gallons of food/yard waste are estimated per unit weekly. When food/yard waste is diverted from the

garbage waste stream, customers may see up to a 30% reduction in garbage volumes. Downsizing of garbage containers accordingly is allowed.

2.2.4 Use of Residential Waste Estimates for Multifamily

Smaller multifamily customers, such as those with 3- and 4-unit lots, with ample curb space or alley frontage may choose to use Residential waste estimates instead of per-unit waste calculations. For example, on a lot with 3 units, 30-gallon containers should be used for each unit's garbage, 30-gallon containers used for recycling, and 90-gallon containers used for food/yard waste, resulting in three bins per unit, and nine bins total. At 19", 22" and 25" wide, respectively, each bin requires 3' of clear space between fixed objects such as parked cars, which means that this 3-unit property will need approximately 46'-6" of curb space.

2.3 Commercial Waste Estimates

2.3.1 Commercial Garbage, Recycle, and Food/Yard Waste Estimates

Commercial garbage and recycle stream volumes vary greatly based on the type and size of entity. Key considerations include a commercial customer's operations, size of staff, whether food service is performed, and gross square footage of the commercial site. In addition to garbage and recycling, all commercial customers producing more than 4 cubic yards of garbage per week are required to collect food/yard waste.

During the permitting process, the City of Tacoma SWM personnel will provide estimates of waste generation and storage needs to guide each commercial customer on a case-by-case basis. It is recommended that commercial tenants and/or developers schedule a pre-application meeting with SWM team to establish baseline understanding of waste needs and confirm service assumptions. Private waste management recycling providers may offer a different set of container sizes for each stream, service frequency options, and service costs. Commercial customers that opt in to private management services should consult their provider to determine storage, access, and collection needs.

Chapter 3: Container Specifications and Considerations

Container size and type can be determined based on the service type and anticipated volume of waste generated at each site.

3.1 Automated Collection Containers

Automated collection containers, or Automated Side Load (ASL) containers, are plastic, wheeled bins or barrels that range in size from 20-gallons to 300-gallons and can be used for every waste stream. These containers are used for all residential sites as well as some multifamily and commercial sites. Automated collection containers are collected from the right side of the truck which has an outside wheel turning radius of approximately 36.3-feet and an inside turning radius of approximately 33.8-feet. A minimum overhead height clearance of 16-feet is required to safely service these containers. While these containers can vary slightly from one manufacturer to another, Table 1 outlines typical dimensions of containers used in the City of Tacoma.



Automated Collection Containers

Table1: Automated Collection Container Specifications

CONTAINER SIZE (VOLUME)*	TYPICAL DIMENSIONS (INCHES)			Waste Stream		
	WIDTH (X)	DEPTH (Y)	HEIGHT (Z)	Garbage	Recycle	Food/Yard
20-gallon	18"	22"	33.5"	C/M	-	-
30-gallon	19"	21"	37"	C/M/R	C/M/R	-
45-gallon	22"	27"	37"	R	-	-
60-gallon	24.5"	26.5"	42"	C/M/R	C/M/R	C/M-FW
90-gallon	24.5"	33.5"	41"	C/M/R	C/M/R	C/M/R
300-gallon	54"	54"	54"	C/M	-	-

C = Commercial | R = Residential | M = Multifamily

*Exact container dimensions can vary by manufacturer

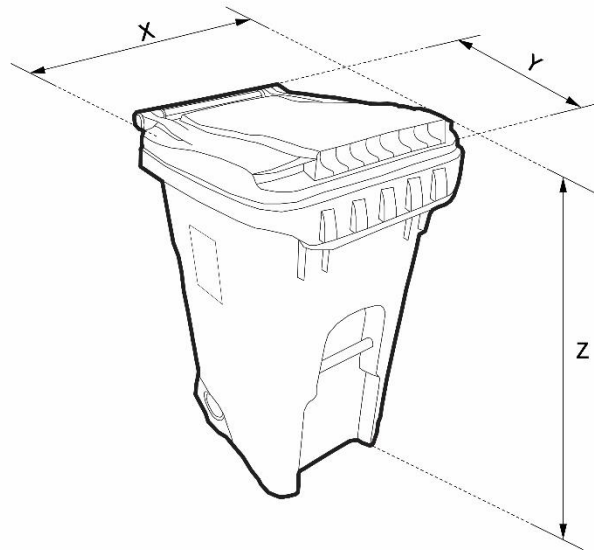


Figure 1: Container dimensions reference diagram

3.2 Frontload Collection Containers

Frontload collection containers include dumpsters and fork boxes and are available in 2-, 3-, 4-, 6- and 8-yard sizes. Frontload collection containers are used primarily in commercial settings and in some larger-scale multifamily contexts. They may also be used in middle housing settings when curb space is not available for multiple smaller containers.

These containers are collected from the front of the truck which has an outside wheel turning radius of approximately 46.5-feet and an inside turning radius of approximately 32.5-feet. These trucks are approximately 34-feet long and must line up directly in front of the container. A minimum overhead height clearance of 22-feet is required to safely service these containers.

Note: 6- and 8-yard fork boxes do not come with wheels.



Top: Frontload Collection Container, Cathedral-Style
Bottom: Frontload Collection Container, Fork-Box

Table 2: Front- and Rear-load Container Specifications

CONTAINER SIZE (VOLUME)	TYPICAL DIMENSIONS (INCHES)				Waste Stream		
	WIDTH (X)	DEPTH (Y)	HIGH HEIGHT (Z1)	LOW HEIGHT (Z2)	Garbage	Recycle	Food /Yard
2-yard*	80"	38"	45"	42"	C/M	-	-
2-yard^	78"	42"	52"		-	C/M	-
3-yard*	80"	46"	58"	48"	C/M	-	-
4-yard*	80"	54"	65"	55"	C/M	-	-
4-yard**	80"	48"	70"		-	C/M	-
6-yard*	80"	66"	77"	50"	C/M	-	-
6-yard**	80"	57"	75"		-	C/M	-
8-yard*	80"	71"	85"	56"	C/M	-	-
8-yard**	80"	71"	75"		-	C/M	-

C = Commercial | M = Multifamily

*Cathedral-Style (garbage) | **Fork-Box (recycling) | ^ Rear-load (recycling)

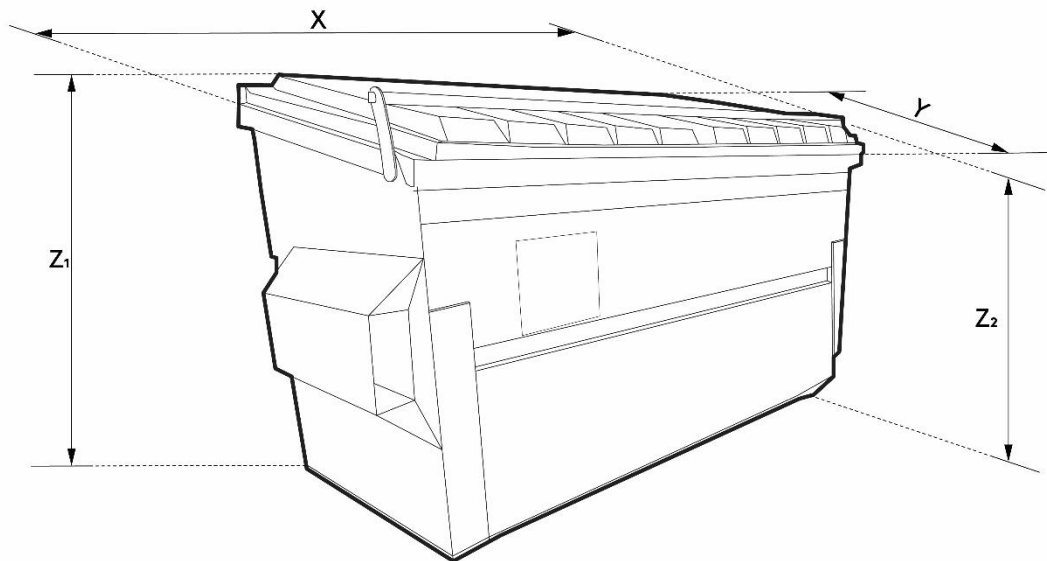


Figure 2: Container dimensions reference diagram

3.3 Roll-Off Containers and Compactors

Also called “drop-off containers” or “drop-off boxes” (DOB), roll-off containers and compactors are large capacity dumpsters ranging in size from 10 to 40 cubic yards. These large containers are hauled away to be serviced and returned to the site once emptied.

These containers are used primarily in commercial settings, and in some larger-scale multifamily contexts. Enclosures for drop-off containers shall have a minimum inside opening width of 14-feet and the depth must extend at least 3-feet beyond the end of the container. There must be a minimum 3-foot clearance between the enclosure wall and the container. Drop-off containers are approximately 16 to 20-feet long, 8-feet wide and the height varies with the capacity of the container.

These containers are collected with a truck that is approximately 32-feet in length and must be able to line up directly in front of the container. A minimum overhead height clearance of 24-feet is required to safely service these containers. Note that when located on a loading dock or platform, exceptions may apply.



Roll-off Container

Table 3: Roll-off Container Specifications

CONTAINER SIZE (VOLUME)	TYPICAL DIMENSIONS (INCHES)				Waste Stream		
	WIDTH (X)	DEPTH (Y)	HIGH HEIGHT (Z1)	LOW HEIGHT (Z2)	Garbage	Recycle	Food/Yard
10-yard	96"	150"	51"		-	C/M	-
15-yard	96"	200"	57"		C/M	C/M	-
20-yard	96"	200"	78"		C/M	C/M	-
25-yard	96"	220"	78"		C/M	C/M	-
30-yard	96"	220"	88"		C/M	C/M	-
40-yard	96"	245"	104"		C/M	C/M	-

C = Commercial | M = Multifamily

Chapter 4: Residential Storage and Service



SWM Vehicle servicing automated collection containers

4.1 Residential Storage Requirements

In compliance with **Tacoma Municipal Code 13.06.090L**, solid waste storage areas should be located in the alley when possible. When alley space is not available, storage spaces should be screened to minimize negative impacts to the pedestrian environment, including visual and auditory impacts. Landscaping and vegetation can be used to mitigate sensory impacts on passersby, with the added benefits of additional greenery. When shared service is used at residential sites, enclosures should be used to house and screen waste containers. Gates shall not swing across the public right-of-way and shall not block parking areas or walkways.

4.1.1 Sanitary Drains, Ventilation, and Access

To prevent pollutants from entering the stormwater system, the following must be placed on a pad with a drain to a wastewater system:

- Trash compactors that have food or liquid bearing waste
- Solid waste containers with a combined volume greater than one cubic yard
 - This does not include containers designated for recycling or yard waste.

This requirement applies to all commercial, industrial, multifamily, and/or residential sites. See BMP S117 in the City of Tacoma Stormwater Management Manual for additional information.

4.2 Residential Service

For collection, automated collection containers should be placed on the curb or adjacent to the alley. These containers are serviced by automated, side-load vehicles that require 3-feet of space around a container in all directions for successful service. This 3-feet of clearance also applies to property lines, but containers may line up with driveway aprons with no additional clearance.

Chapter 5: Multifamily Storage and Service

5.1 Multifamily Storage

5.1.1 Storage Area Requirements

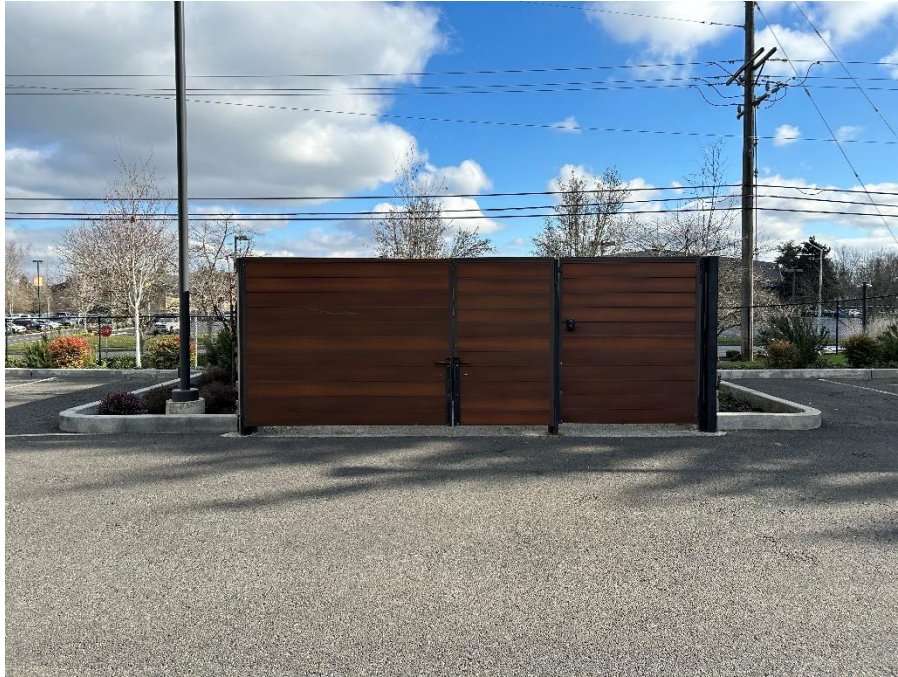
When shared service is used at multifamily sites, waste containers should be stored in dedicated rooms or enclosures. In cases where SWM personnel will not enter the storage area (i.e, when the containers are rolled to the curb for collection), there are no dimensional requirements. When SWM personnel do enter, storage spaces should be designed to facilitate safe and efficient access by SWM personnel while also accommodating building operations. In all cases, accessibility requirements must be met. Storage needs are determined by the size and type of container utilized at each site.

Storage for Automated Collection Containers

Storage areas for automated collection containers that are serviced directly by SWM personnel from the enclosure shall have a minimum inside opening width of 10 feet and a minimum inside depth of 7-feet for one container. In addition, when two or more containers that are serviced directly from the storage area, a 3-foot clearance between the storage area wall and container is required as well as a 3-foot clearance between containers. If gated, the gates must swing 180-degrees and must be able to be pinned in the open position. Gates shall not swing across the public right-of-way and shall not block parking areas or walkways.

Storage for Frontload Collection Containers

Storage areas for front-load containers that are serviced directly by SWM personnel from the enclosure should have a minimum inside opening width of 12-feet and a minimum inside depth of 10-feet for one container. For two or more containers, a 3-foot clearance between the storage area wall and container is required as well as a 2-foot clearance between containers. If gated, the gates must swing 180-degrees and must be able to be pinned in the open position. Gates shall not swing across the public right-of-way and shall not block parking areas or walkways.



Gated enclosure for frontload collection container

Storage for Drop-off Containers and Compactors

Storage areas for drop-off containers that are serviced directly by SWM personnel from the enclosure shall have a minimum inside opening width of 14 feet and the depth must extend at least 3-feet beyond the end of the container. There must be a minimum 3-foot clearance between the storage area wall and the container. Drop-off containers are approximately 16 to 20 feet long and 8 feet wide, with heights varying based on the capacity of the container. A minimum overhead height clearance of 24-feet is required to safely service these containers. If gated, the gates must swing

180-degrees and must be able to be pinned in the open position. Gates shall not swing across the public right-of-way and shall not block parking areas or walkways.

5.1.2 Sanitary Drains, Ventilation, and Access

All multifamily sites with a combined solid waste container volume greater than 1 cubic yard are required to provide sanitary drainage in trash storage areas. All compactors which may contain liquids are to be equipped with a drain and a connection to the sanitary sewer. The connection to the sanitary sewer must meet the requirements of both Solid Waste Management and the City's Wastewater Management Division. See the City of Tacoma [Side Sewer and Sanitary Sewer Availability Manual](#) for more information.

It is also important that trash rooms and enclosures are clean, well-lit, and spacious in order to minimize the presence of pests and to minimize unpleasant smells, sounds, and experiences. Designing waste storage areas with ample ventilation is key to minimizing odors and improving the overall experience of these spaces. These small design features can have a significant impact on the experience of residents as well as SWM personnel.

To prevent pollutants from entering the stormwater system, the following must be placed on a pad with a drain to a wastewater system:

- Trash compactors that have food or liquid bearing waste
- Solid waste containers with a combined volume greater than one cubic yard
 - This does not include containers designated for recycling or yard waste.

This requirement applies to all commercial, industrial, multifamily, and/or residential sites. See BMP S117 in the City of Tacoma Stormwater Management Manual for additional information.

5.1.3 Exterior Storage Screening Requirements

If stored on the exterior of a building, waste bins must be screened from public view with the use of an enclosure, in compliance with TMC 13.06.090.L. Landscaping can be used to screen waste storage areas while providing improvements to the streetscape.

5.2 Multifamily Service

5.2.1 Driveways and Street Clearances

For front-load and drop-off containers that are to be serviced directly from a storage room or enclosure by SWM personnel, a 20-foot-wide driveway must be provided for SWM vehicle access. Parking may not be allowed on either side of the street (depending on street size) adjacent to the driveway to allow adequate space for the collection vehicle to enter the driveway.

5.2.2 Service Requirements

Service for Automated Collection Containers

For collection, automated collection containers should be placed on the curb or adjacent to the alley. These containers are serviced by automated, side-load vehicles that require 3-feet of space

around a container in all directions for successful service. This 3-feet of clearance also applies to property lines, but containers may line up with driveway aprons with no additional clearance.

Service for Frontload Collection Containers

Frontload collection containers are serviced from the front of the truck which has an outside wheel turning radius of approximately 46.5-feet and an inside turning radius of approximately 32.5-feet. These trucks are approximately 34-feet long and must line up directly in front of the container. A minimum overhead height clearance of 22-feet is required to safely service these containers.

When possible, these containers may be set out along the street or adjacent to the alley for collection, while maintaining clear drive aisles in the street and alley. When curbside set out is not possible, frontload containers serviced directly from the storage area must provide driveway or access areas that are at least 40 feet long and free from overhead obstructions to facilitate safe and efficient collection. In some cases, designating a service area within the building footprint will be necessary to accommodate truck clearances.



City of Tacoma Front Load Vehicle

Service for Drop-off Containers and Compactors

Drop-off containers are picked up by SWM, emptied, and returned. To service these containers, a minimum overhead height clearance of 24-feet is required for safety. Drop-off containers are approximately 16 to 20 feet long and 8 feet wide, with heights varying based on the capacity of the

container. A minimum of 60 feet of clear space is required to accommodate the full length of the container and truck for collection and drop-off.



Drop-off Container collection

Chapter 6: Commercial Storage and Service

This section includes information about staging of bins for collection and vehicle access during collection. Commercial uses cover an exceedingly wide range of uses in Tacoma, from small-scale boutiques and specialty food stores to big box retailers, grocery stores and chain restaurants to schools, museums, and industrial sites. The waste needs of these commercial entities varies greatly, too, so requirements in this section are written with the understanding that one size does not fit all, and that commercial waste needs will be assessed on a case-by-case basis.

6.1 Commercial Storage

Commercial waste containers should be stored in dedicated rooms or enclosures. In cases where SWM personnel will not enter the storage area (i.e. when the containers are rolled to the curb for collection), there are no dimensional requirements. When SWM personnel do enter, storage spaces should be designed to facilitate safe and efficient access by SWM personnel while accommodating building operations. In all cases, accessibility requirements must be met. Storage needs are determined by the size and type of container utilized at each site.

6.1.1 Storage Area Requirements

Storage for Automated Collection Containers

Storage areas for automated collection containers shall have a minimum inside opening width of 10 feet and a minimum inside depth of 7 feet for one container. In addition, when two or more containers are serviced directly from the storage area, a 3-foot clearance between the storage area wall and container is required, as well as a 3-foot clearance between containers. If gated, the gates must swing 180-degrees and must be able to be pinned in the open position for efficient access. Gates cannot intersect with the public right-of-way and should be designed to avoid blocking parking areas or walkways.

Storage for Frontload Collection Containers

Storage areas for front-load containers should have a minimum inside opening width of 12 feet and a minimum inside depth of 10 feet for one container. For two or more containers, a 3-foot clearance between the storage area wall and container is required as well as a 2-foot clearance between containers. If gated, the gates must swing 180-degrees and must be able to be pinned in the open position. Gates shall not swing across the public right-of-way and shall not block parking areas or walkways.

Storage for Drop-off Containers and Compactors

Storage areas for drop-off containers shall have a minimum inside opening width of 14 feet and the depth must extend at least 3 feet beyond the end of the container. There must be a minimum 3-foot clearance between the storage area wall and the container. Drop-off containers are approximately 16 to 20 feet long and 8 feet wide, with heights varying based on the capacity of the container. A minimum overhead height clearance of 24-feet is required to safely service these containers. If gated, the gates must swing 180-degrees and must be able to be pinned in the open position. Gates shall not swing across the public right-of-way and shall not block parking areas or walkways.

6.1.2 Sanitary Drains, Ventilation, and Access

All commercial sites with a combined solid waste container volume greater than 1 cubic yard are required to provide sanitary drainage in trash storage areas. All compactors which may contain liquids are to be equipped with a drain and a connection to the sanitary sewer. The connection to the sanitary sewer must meet the requirements of both Solid Waste Management and the City's Wastewater Management Division. See the City of Tacoma [Side Sewer and Sanitary Sewer Availability Manual](#) for more information.

It is also important that trash rooms and enclosures are clean, well-lit, and spacious in order to minimize the presence of pests and to minimize unpleasant smells, sounds, and experiences. Designing waste storage areas with ample ventilation is key to minimizing odors and improving the overall experience of these spaces. These small design features can have a significant impact on the experience of workers, as well as SWM personnel.

To prevent pollutants from entering the stormwater system, the following must be placed on a pad with a drain to a wastewater system:

- Trash compactors that have food or liquid bearing waste
- Solid waste containers with a combined volume greater than one cubic yard
 - This does not include containers designated for recycling or yard waste.

This requirement applies to all commercial, industrial, multifamily, and/or residential sites. See BMP S117 in the City of Tacoma Stormwater Management Manual for additional information.

6.1.3 Exterior Storage Screening Requirements

If stored on the exterior of a building, waste bins must be screened from public view with the use of an enclosure, in compliance with TMC 13.06.090L. Landscaping can be used to screen waste storage areas while providing improvements to the streetscape.

6.2 Commercial Service

6.2.1 Driveway and Street Clearances

For front-load and drop-off containers that are to be serviced directly from a storage area, a 20-foot-wide driveway must be provided for SWM vehicle access. Parking may not be allowed on either side of the street (depending on street size) adjacent to the driveway to allow adequate space for the collection vehicle to back into the driveway.

6.2.2 Service Requirements

Service for Frontload Collection Containers

Frontload collection containers are serviced from the front of the truck which has an outside wheel turning radius of approximately 46.5-feet and an inside turning radius of approximately 32.5-feet. These trucks are approximately 34-feet long and must line up directly in front of the container. A minimum overhead height clearance of 22-feet is required to safely service these containers.

When possible, these containers may be set out along the street or in the alley for collection, while maintaining clear drive aisles in the street and alley. When curbside set out is not possible, frontload containers serviced directly from the storage area must provide driveway or access areas that are at least 40 feet long and free from overhead obstructions to facilitate safe and efficient collection.

Service for Drop-off Containers and Compactors

Drop-off containers are picked up by SWM, emptied, and returned. To service these containers, a minimum overhead height clearance of 24-feet is required for safety. Drop-off containers are approximately 16 to 18 feet long and 8 feet wide, with heights varying based on the capacity of the container. A minimum of 60 feet of clear space is required to accommodate the full length of the container and truck for collection and drop-off.

Appendix A: Case Studies

This section applies the Solid Waste Management Guide requirements to common scenarios, including storage design and staging for collection.

2-Unit Houseplex Example

Shared enclosure with curb-side waste collection

Step-by-Step Waste Volume Calculation:

1. Calculations:

Assuming four people per household:

Garbage Volume Estimate: 2 x 30-gal. = 60 gallons/week

Recycle Volume Estimate: 2 x 30-gal. = 60 gallons/week

Food/Yard Volume: 2 x 90-gal. = 180 gallons/week

2. Typical Container Recommendations*:

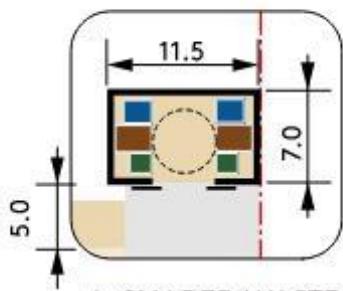
- Garbage: 2 x 30-gallon containers serviced weekly
- Recycling: 2 x 60-gallon** containers serviced weekly
- Food/Yard: 2 x 90-gallon containers serviced weekly

3. Enclosure and Set Out Requirements:

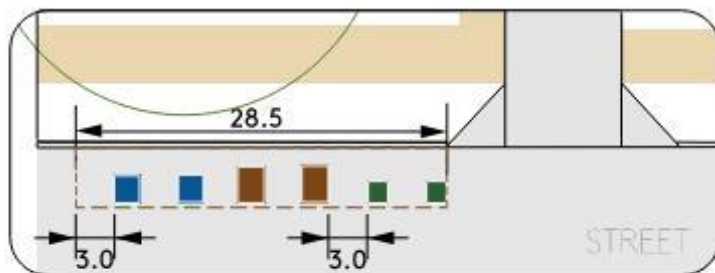
Services are chosen to be separate for each unit, but they could be shared to reduce container quantities. SWM does not regulate enclosure clearances for residential waste storage. On collection day, containers will be rolled to the curb by residents for pickup; the containers will occupy 28.5 feet (28'-6") of street frontage. 3' of clearance must be maintained from property lines and the edge of driveway aprons.

*Final container determined through SWM approvals.

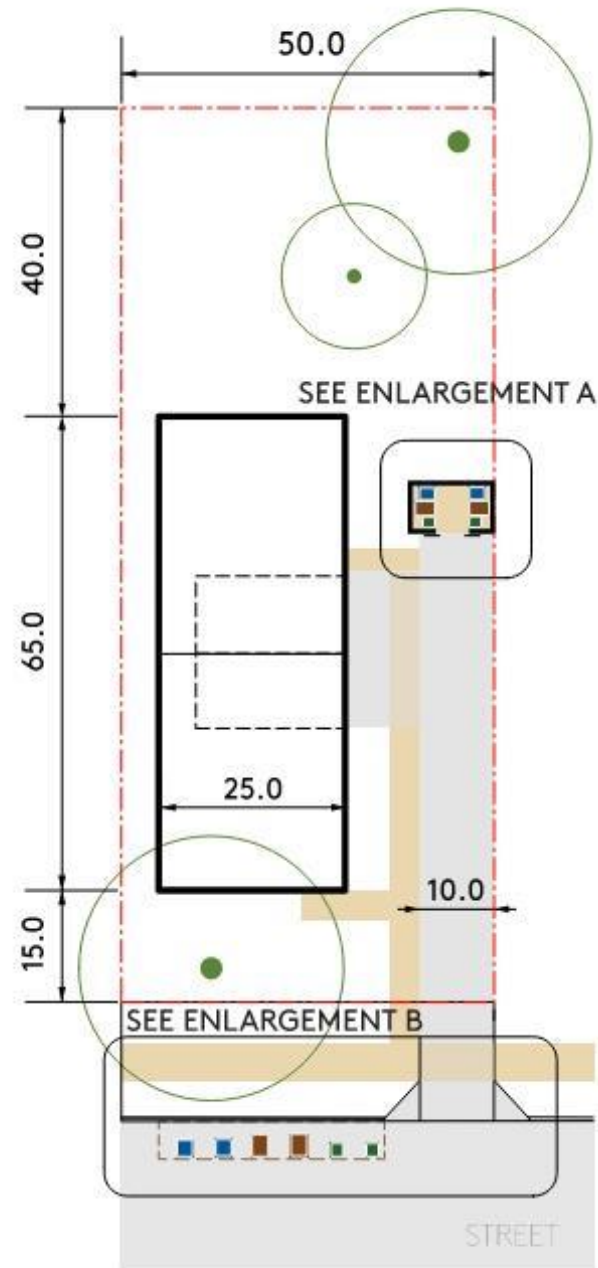
**60-gallon containers recommended based on SWM container sizes.



A. SHARED WASTE STORAGE



B. CURB-SIDE WASTE COLLECTION



- Garbage container (30-gal.)
- Recycle container (60-gal.)
- Food/yard waste container (90-gal.)

Note: illustrated containers reflect the typical dimensions specified in the Solid Waste Manual.

4-Unit Houseplex Example

Shared enclosure with alley waste collection

Step-by-Step Waste Volume Calculation:

1. **Calculations:**

Noncompacted Garbage Volume Estimate:

of units x 0.1485 avg. gal/unit/yard
 = 4 units x 0.1485 avg. gal/unit/yard
 = **0.594 cubic yard/week (~121 gallons/week)**

Noncompacted Recycle Volume Estimate:

of units x 0.2228 avg. gal/unit/yard
 = 4 units x 0.2228 avg. gal/unit/yard
 = **0.89 cubic yard biweekly (~182 gallons biweekly)**

Food/Yard Volume Estimate:

9 gallons of food/yard waste are estimated per unit per week
 = **9 gallons x 4 units = 36 gallons/week**

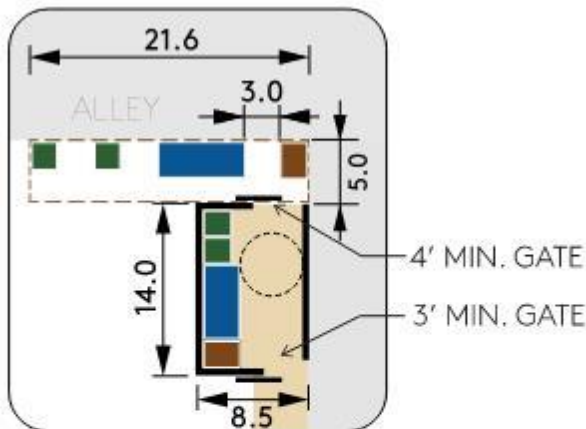
2. **Typical Container Recommendations*:**

- Garbage: 2 x 60-gallon containers serviced weekly
- Recycling: 1 x 2-yard rear load container serviced biweekly
 Note: For space and collection efficiency, one larger container is recommended, but multiple smaller containers could be used.
- Food/Yard: 1 x 90-gallon container serviced biweekly
 Note: Food and Yard waste containers only available in 90-gallon size

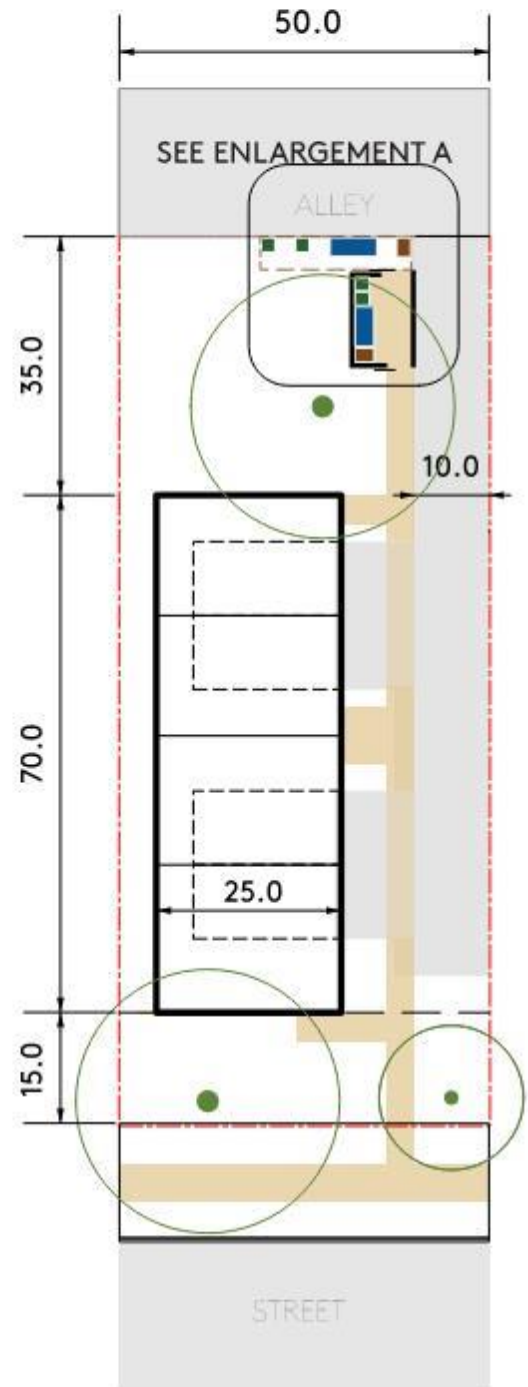
3. **Enclosure and Set Out Requirements:**

SWM does not regulate enclosure dimensions, container clearances, or gate swings unless their staff is hired to manipulate containers. The large enclosure can be entered from the yard without entering the alley. On collection day, containers will be rolled to the alley by residents for pickup. The containers will occupy 21.6 feet (21'-7 1/2") of alley frontage.

*Final container determined through SWM approvals.



A. SHARED WASTE STORAGE & COLLECTION ROUTE



- Garbage container (60-gal.)
- Recycle container (2-yard)
- Food/yard waste container (90-gal.)

Multiplex with 27 Units Example

In-building storage with curbside waste collection

Step-by-Step Waste Volume Calculation:

1. Calculations:

Noncompacted Garbage Volume Estimate:

of units x 0.1485 avg. gal/unit/yard
 = 27 units x 0.1485 avg. gal/unit/yard
 = **4 cubic yard/week (~808 gallons/week)**

Noncompacted Recycle Volume Estimate:

of units x 0.2228 avg. gal/unit/yard
 = 27 units x 0.2228 avg. gal/unit/yard
 = **6 cubic yard biweekly (~1212 gallons biweekly)**

Food/Yard Volume Estimate:

9 gallons of food/yard waste are estimated per unit per week
 = **9 gallons x 27 units = 234 gallons/week (1.2 cubic yards/week)**

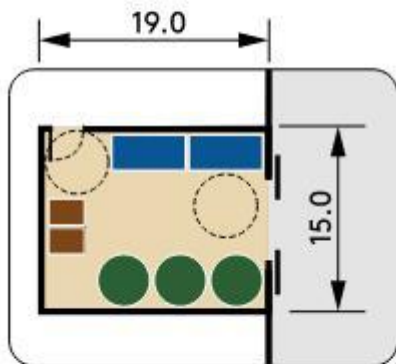
2. Typical Container Recommendations*:

- Garbage: 3 x 300-gallon containers serviced weekly
 - Recycling: 2 x 2-yard rearload containers serviced weekly
 - Food/Yard: 2 x 90-gallon container serviced weekly
- Note: Food/Yard waste calculation is based on 100% diversion. Two 90-gallon containers are recommended, but additional containers may be added as participation increases.

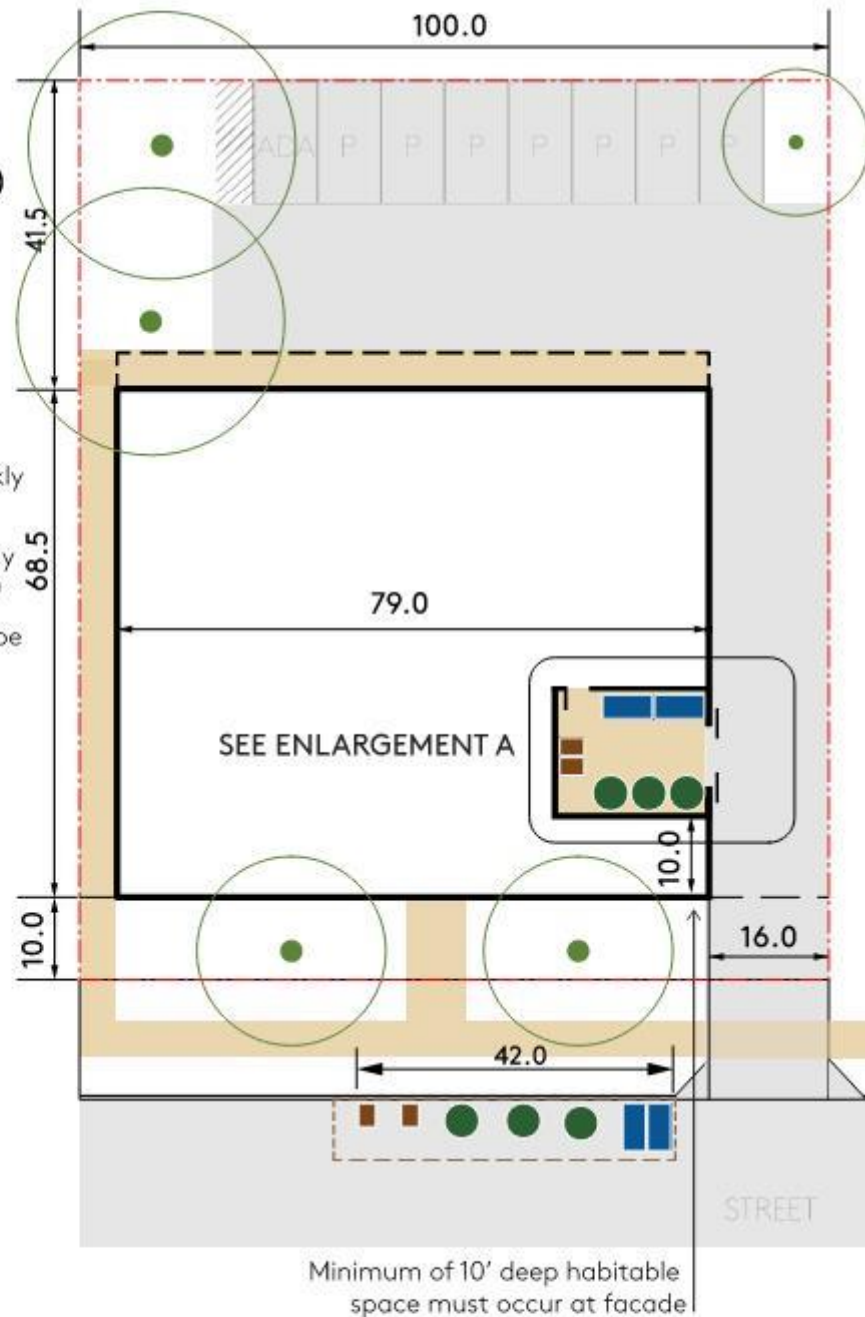
3. Enclosure and Set Out Requirements:

SWM does not regulate enclosure dimensions, container clearances, or gate swings unless their staff is hired to manipulate containers. On collection day, containers would be rolled to the curb by a building manager for pickup. The containers will occupy 42.0 (42'-0") of street frontage.

*Final container determined through SWM approvals.



A. SHARED IN-BUILDING WASTE COLLECTION



- Garbage container (300-gal.)
- Recycle container (2-yard)
- Food/yard waste container (90-gal.)

Note: illustrated containers reflect the typical dimensions specified in the Solid Waste Manual.

Appendix B: Glossary

“Automated collection.” The method of collecting waste through the use of mechanical collection equipment and special containers to accommodate the collection.

“Automated collection container.” A City-owned container designed specifically for Solid Waste Management’s automated collection operation.

“Bulk waste.” Large items of solid waste including, but not limited to, appliances, furniture, trees, stumps, and other oversized waste.

“Carry Service.” The transport of a container by Solid Waste Management personnel from the customer’s premises or other designated location to a location accessible for collection.

“City” means the City of Tacoma.

“Collection vehicle.” A vehicle used for the collection and/or transportation of commercial or residential solid waste.

“Commercial customer.” Any business premises, industry, and mobile home park; organization (either private/public, profit/nonprofit); multi-family dwellings (triplex or larger); and dwelling units with one or more utilities paid for by a single entity and located on contiguous property.

“Container.” An approved Solid Waste Management or customer-owned portable container; this includes bins, cans, recycling containers, front load boxes, compactors, and drop-off boxes to be used for the deposit of solid waste therein.

“Customer.” Any person or entity receiving service from Solid Waste Management.

“Drop-off box (DOB).” A large-volume (10 cubic yards or greater) detachable City- or customer-owned container that can be pulled onto a collection vehicle mechanically for transportation.

“Front-load container.” A City- or customer-owned container, from one yard to eight yards in capacity, designed to be emptied by an automated front-loading truck.

“Landfill.” A disposal facility, or part of a facility, at which solid waste is permanently placed in or on land.

“Liquid waste.” Any material which would produce measurable liquids when the Paint Filter Liquids Test Method 9095 of EPA Publication Number SW-846 is used.

“Mandatory service.” Compulsory and universal City collection, management, and disposal of solid waste within the City at the applicable rates established herein.

“Minimum service.” The minimum level of service established by Solid Waste Management for residential and commercial customers.

“Multi-business building or complex.” Buildings or premises that contain three or more commercial customers served by one water meter.

“Multi-family” Any building or portion thereof that contains three or more dwelling units.

“Premises.” A continuous tract of land, building, portion thereof, or group of adjacent buildings under a single control and responsibility. Multiple use or responsibility shall constitute a division of property into separate premises. Premises shall include, but are not limited to, dwelling unit, dwelling, multi-family dwelling, apartment house, mobile home park, club, restaurant, eating place, hotel, hospital, school, church, manufacturing establishment, and other places of business, either public or private.

“Recyclable material.” Means those solid wastes that are source separated from the waste stream for the purpose of recycling or reuse.

“Recycling.” Transforming or remanufacturing waste materials into usable or marketable material for use other than landfill disposal.

“Recycling container.” A stationary or portable container under City or customer ownership utilized for the collection of recyclable material and serviced mechanically or manually.

“Recycling drop-off box.” A drop-off box utilized for the collection of recyclable material only.

“Residential customer.” An individual who physically occupies the subject dwelling unit and is directly responsible for payment of all public utilities serving the residential unit to which solid waste service is provided.

“Solid waste.” All putrescible and non-putrescible solid or semi-solid waste, including, but not limited to, garbage, refuse, rubbish, ash, industrial waste, swill, demolition and construction waste, abandoned or junk vehicles or parts thereof, and discarded commodities, bulk waste, recyclable material, and unwanted vegetation or debris on publicly owned land or improved rights-of-way.

“Solid Waste Management.” The Solid Waste Management Division of the Environmental Services Department of the City of Tacoma.

“Special permit.” A permit issued by Solid Waste Management under TMC 12.09.070.

“Source separated.” The separation of different kinds of materials from the solid waste at the place where the waste originates.

“TMC” means Tacoma Municipal Code.

“WAC” means Washington Administrative Code.

“Yard waste.” Vegetation material generated as a result of normal maintenance of residential yards. These wastes include above-ground cuttings such as grass clippings, pruning cut limbs (up to 4 feet in length and 8 inches in diameter), and clean beauty bark, and food waste. Not included in yard waste are sod, dirt, rocks, and animal wastes.

“Yard waste container.” A container provided by Solid Waste Management. Plastic and biodegradable bags are not acceptable yard waste containers.

Appendix C: Plan Submittal Check List

Information to include in all plans:

- Show and label all enclosures and staging areas on site.
- Show all enclosure components to scale, including gates.
- Show containers to scale inside enclosures and indicate size and waste stream of each.
- If containers are serviced directly from enclosure, label required clearances around each container.

For large-scale multifamily and commercial customers:

- Arrange pre-application meeting with the Solid Waste Management team to determine waste storage and collection needs.
- Include waste storage spaces within the building.
- Include turning exhibits to demonstrate the safe and successful clearance of waste collection vehicle types being used.
- If required, show and label sanitary drains and connection to sanitary sewer. Show any necessary ventilation systems.