Trash, Recyclables & Organics Enclosure Guidelines

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II. RESOURCES

- Trash, Recycling & Organics Enclosure Checklist
- Collection Container Specifications (Carts, Bins, Dumpsters & Compactors)
- Enclosure Design Specifications - Exhibits EG1- EG12
- Definitions
- Contact Information

The Trash, Recycling & Organic Enclosure Guidelines are for reference purposed only. The requirements listed are subject to change due to updates in State, Federal or local mandates or changes in code or other regulations.

It is the responsibility of the applicant to be familiar with all current State, Federal and local mandates that may impact your project.

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* For purposed of the Enclosure Guidelines “Municipal Solid Waste”, “MSW” and “Trash” are used interchangeably and are defined the same.

I. DETERMINING ENCLOSURE SIZE

A. Maximizing Collection Efficiency

The automated collection trucks used by the City of Fairfield's (City) authorized franchised collector achieve maximum efficiency when the number of times the driver gets out of the truck is minimized. Properly designed enclosures allow the driver to "stab" bins without physically moving them when bins are used for collection. Additionally, the collection system is most efficient and economical if trucks only need to service a site once per week. The goal is to size enclosures to be large enough to contain one-week's volume of Municipal Solid Waste (MSW)*, recyclables and organics when possible.

B. User Convenience to Minimize Contamination

Enclosures must be designed to make it convenient for those using the various containers (tenants, employees, and property owners) to place MSW, recyclables and organics in the correct containers with minimum effort. Containers should not be placed in front of each other to avoid restricting access to each. Rather, containers should "wrap" the perimeter of the inside of the enclosure whenever possible to allow access to each container.

C. Determining Service Needs for MUNICIPAL SOLID WASTE (MSW) & RECYCLABLES Generators

1. State Requirements

The State of California (State) requires new development projects, including commercial, industrial or institutional buildings and multi-family developments of 5 units or more, to provide adequate, accessible and convenient areas for collecting and loading recyclables (See Public Resources Code §42900 et seq.) In addition, each local government, including the City, is required to reduce waste destined for landfills by 50 percent or risk a State-initiated fine of $10,000 per day. (See Public Resources Code §40000 et seq.). A new goal of diverting 75 percent of waste from landfill disposal by 2020 was established by the State.

2. Calculating Generation of MSW & Recyclables

In order to determine what type and how much service a business will need, the business must first determine the type of materials that will be generated by the business. The three primary service types that require separation into different containers are: MSW, recyclables, and organics (food waste, soiled paper products and/or yard waste). Will the business generate all three categories of material?

- If a business will be producing organics such as food waste and/or yard waste please see **Section D - Determining Service Needs for Organics Generators** to determine the enclosure sizing needs. Food facilities must construct an enclosure that has a roof and drain connected to the sanitary sewer. Specific design details can be found in **Section II "Enclosure Design & Compliance Requirements"** of this document.
- Industrial/commercial with organics properties are required to have at least one enclosure sized for the collection of organics. In business complexes where

tenants are specified and do include retail food businesses that generate organic waste, the nearest enclosure to the business that generates food shall be designed to meet guidelines for a food facility enclosure.

- See ***Table A*** to help determine the enclosure size needed for businesses that generate only MSW and recyclables.

TABLE A

Trash (MSW) & Recyclables ONLY

Enclosure Size & Container Need by Building Use, Square Footage, and Estimated Weekly Generation

Business / Land Use	Square Footage	Estimated Weekly Generation*	Enclosure Size Required (width x depth)	Sample Diagram**
Office, Retail, Industrial and General Commercial**	Less than 5,000 sq. ft.	2 cubic yards	13' x 8'	EN1. Cart Enclosure***
	5,000-10,000 sq. ft.	4 cubic yards	18' x 9'	EN2. Small Bin Enclosure (two 2-yd. bins)
	10,000-20,000 sq. ft.	8 cubic yards	18' x 10'	EN3. Medium Bin Enclosure (two 4-yd. bins)
	over 20,000 sq. ft.	12 cubic yards or more	18' x 12'	EN4. Large Bin Enclosure or multiple enclosures (two 6-yd. bins or >)
Multi-Unit Residential**	20 units or less	8 cubic yards	18' x 10'	EN3. Medium Bin Enclosure (two 4-yd. bins)
	Each additional 20 units	8 cubic yards	18' x 10'	EN3. Medium Bin Enclosure (two 4–yd. bins)

* Generation assumes 50% MSW and 50% recyclables with no organics (Assumes yard waste is removed by landscapers or mulched on-site)

** Sample diagrams for each of the MSW & recyclables enclosures are in Exhibits EN1-EN4

*** Cart-only service for generation beyond 2 cubic yards may require multiple pickups per week for businesses with limited space

D. Determining Service Needs for ORGANICS generators

1. State Requirements

The State requires all commercial businesses that generate specified quantities of organics to participate in a collection program (Public Resources Code §42649.8 et seq.). The deadlines for participating are as follows:

- Businesses that generate 8 cubic yards or more of food waste and/or yard waste per week must participate by April 1, 2016.

- Businesses that generate 4 cubic yards or more of food waste and/or yard waste per week must participate by January 1, 2017.

- Businesses that generate 4 cubic yards or more of MSW per week must participate by January 1, 2019.

- Businesses that generate 2 cubic yards of MSW per week may be required to participate in the future.

2. Calculating Generation of Yard Waste

The City's organics collection carts allow for the deposit of both food scraps and yard waste. Most multi-family complexes and business properties have commercial landscapers who leave grass clippings on lawns or remove the yard waste from the property for composting. If this is the case, there is no need to make room within the enclosure to accommodate the yard waste that is generated. The below table and information included in these Guidelines is primarily focused on food facilities that generate food scraps and soiled paper. Please contact the authorized collector for assistance in determining on site collection needs should a business need to dispose of yard waste on site.

3. Calculating Generation of Food Scraps

If a business stores, prepares, packages, serves, vends or otherwise provides food for human consumption it is considered a retail food facility. Food facilities may include, but are not limited to restaurants, grocery stores, schools, nursing homes and hospitals. The City offers an environmentally beneficial commercial food composting collection program that collects organics in 65-gallon carts with lids and special signage. All food waste (fruit, vegetables, meat, fish, cheese, bread, pasta, coffee grounds, etc.) as well as soiled paper products are acceptable as organics.

Food facilities must provide adequate space within their enclosure(s) to accommodate 65-gallon organics carts and comply with all building requirements related to the storage of food. The installation of a roof and drain that is connected to the sanitary sewer maybe required. Detailed information about these requirements can be found in **Section II "Enclosure Design & Compliance Requirements"** If future tenants will be, or may be, food facilities, the applicant/owner must identify on site plans, the future location and connections to water and sanitary sewer to accommodate future expansion. Additionally, food facilities that generate cooking oil/grease must provide adequate space in the enclosure for a container designed specifically for the storage and collection of cooking oil and grease.

The enclosure must be sized to hold all of the containers requires, which will include containers for MSW, recyclables, organics and a cooking oil/grease tank if the business generates oil and grease and does not have a separate used oil holding tank.

Table B: Trash, Recycling & Organics Without Oil and ***Table C:*** **Trash Recycling & Organics With Oil/Grease Tank** are guidelines to help determine weekly material generation from a restaurant based on the size of the food facility, the quantity and type of containers needed for service, and the size of enclosure that is needed to house containers.

Individual results may vary depending on preparation methods and materials, reuse of leftovers, and type of food service. When planning, keep in mind any seasonal changes and future business changes that may increase the amount of material generated, therefore increasing the number and/or size of containers required. Food facilities such as nursing homes and hospitals require a waste assessment to accurately assess their needs.

- Size determined by service level requested
- Generation assumes 25% MSW, 25% recyclables and 50% organics
- Sample diagrams for each of the food facility enclosure types are in Exhibits EN5-EN12
- Medium and Large Food Facility enclosures may require twice or more a week collection of organics carts

TABLE B

Trash (MSW), Recyclables & Organics – Without Oil

Enclosure Size & Container Need by Square Footage and Estimated Weekly Generation

Business /Land Use	Square Footage	Estimated Weekly Generation*	Enclosure Size Required (width x depth)	Sample Diagram**	Containers Required
Food Facility **WITHOUT** Oil/Grease Tank	Less than 4,000 sq. ft.	2 cubic yards	11' x 11'	EN5. Extra Small Food Enclosure	1, 95-gal MSW Cart 1, 95-gal Recyclables Cart 3, 65-gal Organics Carts
	4,000-8,000 sq. ft.	4 cubic yards	15' x 15'	EN6. Small Food Enclosure	2, 95-gal MSW Carts 2, 95-gal Recyclables Carts 6, 65-gal Organics Carts
	8,000-16,000 sq. ft.	8 cubic yards	20' x 14'	EN7. Medium Food Enclosure***	1, 2 yd. MSW Bin 1, 2 yd. Recyclables Bin 6, 65-gal Organics Carts **2X/wk.**
	Over 16,000 sq. ft.	12 cubic yards or more	21' x 15'	EN8. Large Food Enclosure***	1, 3 yd. MSW Bin 1, 3 yd. Recyclables Bin 9, 65-gal Organics Carts **2X/wk.**

* Generation assumes 25% MSW, 25% recyclables and 50% organics
** Sample diagrams for each of the food facility enclosure types are in Exhibits EN5-EN12
*** **Medium and Large Food Facility enclosures require twice a week collection of organics carts**

TABLE C

Trash (MSW), Recyclables & Organics – With Used Oil / Grease Tank

Enclosure Size & Container Need by Square Footage and Estimated Weekly Generation

Business /Land Use	Square Footage	Estimated Weekly Generation*	Enclosure Size Required (width x depth)	Sample Diagram**	Containers Required
Food Facility **WITH** Oil/Grease Tank	Less than 4,000 sq. ft.	2 cubic yards	15' x 11'	EN9. Extra Small Food/Oil Enclosure	1, 95-gal MSW Cart 1, 95-gal Recyclables Cart 3, 65-gal Organics Carts 1, 100-gal Oil/Grease Tank
	4,000-8,000 sq. ft.	4 cubic yards	21' x 13'	EN10. Small Food/Oil Enclosure	2, 95-gal MSW Carts 2, 95-gal Recyclables Carts 6, 65-gal Organics Carts 1, 200-gal Oil/Grease Tank
	8,000-16,000 sq. ft.	8 cubic yards	21' x 15'	EN11. Medium Food/Oil Enclosure***	1, 2 yd. MSW Bin 1, 2 yd. Recyclables Bin 6, 65-gal Organics Carts **2X/wk.** 1, 200-gal Oil/Grease Tank
	Over 16,000 sq. ft.	12 cubic yards or more	23' x 16'	EN12. Large Food/Oil Enclosure***	1, 3 yd. MSW Bin 1, 3 yd. Recyclables Bin 9, 65-gal Organics Carts **2X/wk.** 1, 300-gal Oil/Grease Tank

* Generation assumes 25% MSW, 25% recyclables and 50% organics

** Sample diagrams for each of the food facility enclosure types are in Exhibits EN5-EN12

***** Medium and Large Food Facility enclosures require twice a week collection of organics carts**

II. ENCLOSURE DESIGN AND COMPLIANCE REQUIREMENTS

A. Construction & Design

1. Location & Accessibility

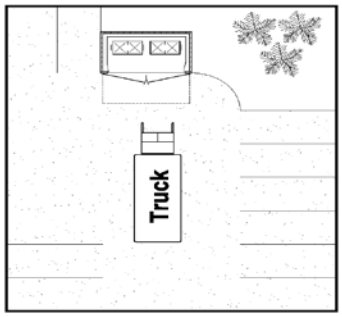
a. Enclosures shall not be located in any required front yard, street side yard, landscaped, or open space areas or any area required by the City Code to be maintained as unencumbered (e.g., required parking areas, utility rights-of way or easements).

b. Enclosures shall be conveniently accessible to residents and/or employees.

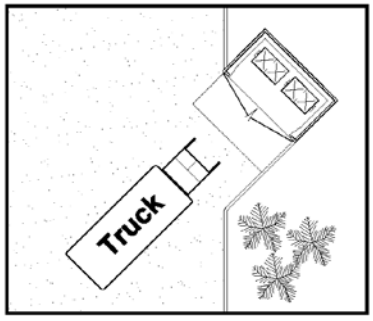
c. All enclosures are required to have direct access for collection trucks. Direct access means the collection truck can drive directly at the bin or compactor, and insert the forks into the sides of the bin without the driver having to get out of the truck again (since the driver already must open the gate) to move the bin (See Diagram Below). A minimum straight approach of 50 feet is necessary to line up directly with bins and 75 feet is required for access to compactors and roll-off boxes. Angled direct access for bin service may be acceptable (with an angle of up to 30 degrees) if approved by the Public Works Department. An applicant may request such approval by submitting a Waste Management Plan to the City that details how MSW, recyclables and food waste (if applicable) will be managed.

d. It is the responsibility of the business to provide enclosure access to the authorized collector. If an enclosure is located within a locked area, the business must provide access to the area. The City's authorized collector provides key locks for $15. If a business provides their own lock, it must be a combination lock and the combination code must be provided to the authorized collector prior to servicing of containers.

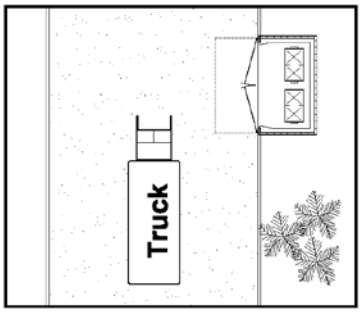
DIRECT ACCESS FOR BIN SERVICE (Preferred)



ANGLED DIRECT ACCESS FOR BIN SERVICE (Acceptable w/approval of up to 30 degrees)



NON-DIRECT ACCESS FOR BIN SERVICE *(Not Acceptable)



*May be acceptable for approved For cart-only service.

Enclosures with poor accessibility, no accessibility or enclosures with atypical orientations are not permitted because the likelihood of driver injury and/or property damage increases. In addition, if a driver is required to move or push the bin in order to empty it, an additional collection fee may be charged.

- It is difficult and dangerous for a collection truck to back-up. Providing a turn around or separate exit that allows the truck to move forward rather than backwards is required. Maximum back-up distance is 50 feet for any maneuver and shall be in a straight line. A 75' distance is required for compactors or roll-off boxes.
- If a business proposes to locate containers in an indoor room or area that is difficult or unable to be service with a collection truck, the business must contact the authorized collector and City to obtain approval and arrange service. There may be an additional fee for special collection service.
- Containers shall not be placed in front of fire hydrants or equipment.

2. Driveways

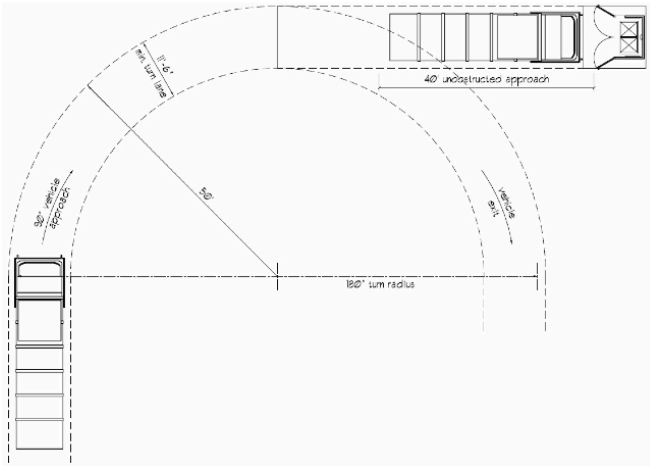
a. An asphalt or concrete driveway with 50 feet of straight, direct access that leads to and from the enclosures to bins and 75 feet for compactors and roll-off boxes is required and shall be built in accordance with the City Standard Plans and Specifications and be able to withstand trucks weighing up to 56,000 lbs. Gross Vehicle Weight (GVW).

3. Turning Radius Requirements & Truck Dimensions

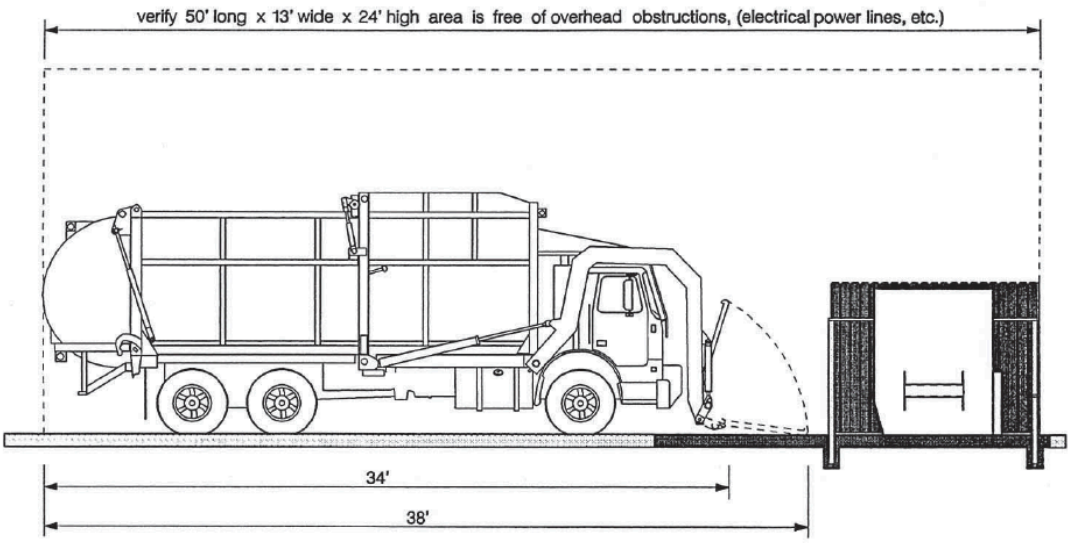
a. The turning radius shall be adequate for a 3-axle truck. Please detail this on all submitted plans.

DESCRIPTION	RADIUS	DIAMETER
Turning	35' - 0"	70' - 0"
Curb to curb turning	36' - 0"	72' - 0"
Wall to wall turning	39' - 0"	78' - 0"

Turning radius:	Radius of the track of the centerline of the front wheel.
Curb to curb turning radius:	Radius of the smallest circle inside of which the vehicle's tires can turn.
Wall to wall turning radius:	Radius of the smallest circle inside of which the entire vehicle can turn.



DESCRIPTION	FEET/INCHES
Overall length	38’ - 0”
Bumper to front axle	6’ - 0”
Wheelbase (front axle to pivot point rear tandem axle)	16’ - 2”
Pivot point rear tandem axle to rear of vehicle	10’ - 10”
Height	13’ - 8”
Width (includes mirrors)	11’ - 0”
Steering lock angle - 25.2 degrees	N/A



4. Stress Concrete Apron

a. Apron surface shall be the same elevation as the enclosure pad threshold and the surrounding surfaces, with a slope of 1/8 inch (1% grade) per foot away from the enclosure pad; and,

b. To prevent damage to the asphalt paving by container impact, the enclosure shall be provided with an apron that extends a minimum of 8 feet from the enclosure pad and matches the width of the enclosure opening. This apron shall have a minimum sub-base of 4" of class 2 aggregate and shall consist of

3,000 psi concrete (six sack mix) or stronger, which is at least 6" thick with #4 rebar placed mid height at 12" on center each way. Alternatively, the builder shall provide evidence that construction specifications are engineered to withstand a minimum of 20,000 lbs. of direct downward force from a single truck axle.

5. Enclosure Concrete Pad

a. Enclosure pad shall be engineered to withstand up to 20,000 lbs. of direct force from a single truck axle; and

b. Enclosure pad surface shall be the same elevation as the apron threshold.

c. Food facility enclosures that have a drain connected to the sanitary sewer must have a grade break line constructed on the open side at the inside edge of the wall with the slab sloping inwards on the inside of the structure and away from the structure on the outside. Additionally, the ground shall be sloped away from the structure on all other sides.

d. The City requires that the grade of all non-food facility enclosure pads be flat such that no stormwater shall escape the enclosure if commingled with MSW.

6. Height Clearance of Enclosure Approach

a. In front of the enclosure, collection trucks require at least 15 feet of vertical clearance over the entire approach to and from the enclosure to accommodate truck height, and 32 feet high just in front of the enclosure itself or wherever the bin will be emptied to accommodate the truck lifting the bins up to dump the contents.

b. Food facility enclosures require a roof and must have a roof height inside the enclosure of no less than 8 feet.

7. Interior

a. Please refer to **Exhibits EN1-EN12** to determine enclosure size.

b. The minimum interior dimension for an enclosure needed to house at least two (2) cubic yard bins is 18’ X 9’. For cart-only service the minimum size is 13’ X 8’ to store two 95-gal MSW carts and two 95-gal recyclables carts. The smallest size enclosure for a food facility without an oil/grease tank is 11’ X 11’ to house one 95-gal cart for MSW, one 95-gal cart for recyclables and three 65-gal organics carts. Interior dimensions will increase depending on the size, type and number of containers (See **Section I. Determining Enclosure Size** for recommended sizes.)

c. The enclosure shall be large enough to provide a 6” clearance from the back interior wall to all bins and/or compactors and a minimum of 16” or more to each side of any bin or compactor. Additionally, 36” is required from the front of all bins or compactors to the front gate. All containers, including carts and bins must have a minimum of 3” between them. Oil/grease tanks must have 1 ½ feet between the tank and any collection containers to facilitate safe empting of the oil tank. No clearance is required between the back enclosure wall and carts for cart service. Adding a 6” concrete curb or bumper on the back wall to

prevent damage to the enclosure during servicing of bins or compactors is recommended. If permanent bollards are used within the enclosure, be sure to increase the size of the enclosure since these structures reduce useable interior container space and accessibility.

8. Water

a. Food facilities must have hot and cold water plumbed into the enclosure per Solano County Department of Environmental Health (Solano County). If hot water cannot be plumbed in from a nearby source, a wall mounted water heater should be placed within the enclosure.

b. A 6" 3000PSI P.C.C. curb with 6" rounded curb corners should be built into the enclosure to protect containers from damaging plumbing fixtures. (See Exhibit EN13)

9. Wall Height

a. Minimum 6 foot high masonry wall

b. Enclosure walls shall be constructed to prevent pedestrian entrance and/or waste deposit above or below all enclosure walls and gates. This should be accomplished by attaching a permanent metal security screen or rail between the roof and all walls as well as the top of the gate.

The above enclosure shows a security rail that has been attached to the gates to avoid pedestrian entrance and/or waste deposits over the gate.

10. Material

a. Walls should be constructed with concrete blocks and covered with a façade that is compatible with the surrounding structures and land uses; employ a style, materials, and colors to be consistent with any buildings on the property; and designed in compliance with the Enclosure Standard Detail provided by the City Community Development Director.

11. Roof

a. Enclosures for retail food facilities that are connected to the sanitary sewer, and building projects 10,000 sq. foot or more shall be covered and protected from roof and surface drainage. It is recommended that the lowest part of the roof be no lower than 8 feet high with the roof extending past any open sides for a distance equal to ½ the height of the opening (i.e. if the roof is 10 feet

above the ground it would extend 5 feet past the wall.) Additionally, a 6" front roof overhang is recommended.

b. Within all multi-family projects, all enclosures shall be provided with a roof.

12. Gates/Pedestrian Doors

a. Two gates are required for enclosures. When the enclosure does not allow for two gates, it may necessitate a single gate that shall open to 110 degrees.

b. Gates shall be free standing with no center pole.

c. Gates shall be metal, solid view obstructing gates with outside handles on each door and a slide latch to secure the doors.

d. Gated openings for ingress/egress of bins shall be a minimum of 16 feet wide with no posts in the middle, place gate posts outside this span to avoid reducing the span. Mounting gates outside of the enclosure opening and securing them to something other than the enclosure side walls will decrease the likelihood of damage to the enclosure walls should the gates be hit during collection.

e. Use bolts, not screws, to secure gate to the poles or walls.

f. Provide a means to secure gate doors open and closed utilizing a cane bolt with a pavement sleeve and slide latch between doors. The bolts should be at least 18 inches tall with a minimum ½ inch in diameter. Sleeves should be a minimum of 1 inch or double the size of the bolt to allow flexibility and drop a minimum of 4 inches into the ground.

g. Cane bolts should be secured to the outside of the gate and utilize two guides to allow upward and downward movement of the bolt. When they are not in use, there should be a means of latching the bolt up to avoid dragging on the ground when gates are opened.

h. Gates shall remain closed unless in use and must open to at least 110 degrees and be able to be secured open.

i. Gates shall be constructed to prevent pedestrian entrance above or below the gate when the gates are securely locked. Any openings or gaps larger than 6 inches between the top of the gate and the lowest point of the roof eves should be screened with permanent metal rails, bars or screening material.

j. A separate additional pedestrian entrance with a door (to reduce scavenging) is recommended from the back or the side for both non-residential facilities and residential multi-family complex developments.

k. The California Building Code requires the pedestrian entrance door to open with no more than 5 lbs. of force. The opening hardware should be lever type centered 34" – 44" above the finished surface and the bottom 10" of the gate shall have a smooth, uninterrupted surface to allow the gate to be opened by a wheelchair footrest without creating a trap or hazardous condition.

13. Signage

a. The area directly in front of the enclosure gates shall have “NO PARKING” painted in reflective paint on the ground. The letters shall be at minimum the width of the enclosure. Additionally, “NO PARKING” signs shall either be installed permanently affixed to each gate, or painted on each gate in letters no smaller than 6” in height. Further, a minimum 12” by 18” sign with a minimum 1” lettering indicating contact information for the property owner and/or management company responsible for maintenance of the enclosure area (name/phone number) shall be permanently affixed to one of the front gates of the enclosure.

14. Electrical

a. If a compactor will be used, the enclosure will most often require a double phase 220 outlet. In some cases a single phase 110 is necessary. Compactor specifications should be consulted prior to wiring of an electrical outlet.

b. If security lighting and point of use water heaters are used, then a110-volt maybe required. Check product specifications.

15. Storage

a. The property owner shall ensure that only MSW, recyclables and organics containers, as well as an oil/grease tank (if applicable), are stored in the enclosure. The enclosure is strictly for the storage of containers and cannot be used for general storage of restaurant racks, wood pallets, electronic equipment, etc. Additionally, structures such as storage sheds should not be placed within enclosures.

B. Regulations: Stormwater, Pollution Control, Public Health & Fire

1. Stormwater & Pollution Control

a. The City Stormwater Management and Discharge Control Ordinance states that any non-stormwater discharges to the City storm drain system are prohibited.

b. This ordinance also requires any construction contractor performing work in the City, where discharge of stormwater to the City storm drain system is possible to implement Best Management Practices (BMPs) to retain any debris, dirt or other pollutant on the project site from flowing into the City's storm drain system.

c. All enclosures should have the following features:

- Runoff from enclosures shall not discharge to the storm drain system. Enclosures shall be designed to avoid run-on to the trash enclosure area.
- Enclosure areas shall be paved with an impervious surface, designed to prevent water run-on to the area and run off from the area.
- Container lids shall be closed at all times and fit securely and should not allow material to spill out or overflow the bin or cart. Leakage from containers shall not be discharged to, or allowed to reach, the storm drain system.
- Retail food facilities, multi-family residential complexes and any projects that create 10,000 sq. ft. or more of impervious surface (collectively over the entire project site) shall provide a roofed and enclosed area for all collection containers. The area shall be designed to prevent water run-on to the area and run off from the area and to contain litter and trash, so that it is not dispersed by the wind or runoff during waste removal.
- The City and Solano County require installation of drains that connect to the sanitary sewer for retail food establishments enclosures that are servicing restaurants or other types of food facilities (i.e. grocery stores). Fairfield-Suisun Sewer District (FSSD) requires that the wastewater drain be connected to the facility's grease interceptor upstream of the public sanitary sewer system. The drains must be connected to a properly sized grease removal device and/or treatment devices prior to discharging to the sanitary sewer.
- Wastewater from the cleaning of enclosure areas and areas where material is stored or contained may not be discharged to, or allowed to reach, the street or storm drain system. Wastewater may not be left as "standing" water. Any enclosure wastewater discharged to the sanitary sewer shall be in accordance with FSSD requirements. FSSD can be contacted at: (707) 429-8930 or contactus@fssd.com

2. Public Health – Retail Food Establishments

a. The California Health & Safety Code (Article 4, Refuse 114245.7) states the following enclosure cleaning standards be implemented. For more information, please contact the Solano County Department of Resource Management/Environmental Health Division (Solano County) at: (707) 784-6765 or jhbenefield@solanocounty.com

- Suitable implements and supplies such as high pressure pumps, hot water, steam, and detergent shall be provided as necessary for effective cleaning of receptacles and waste handling units for refuse, recyclables, and returnables.
- If approved by the County, off-premises-based cleaning services may be used if on-premises cleaning implements and supplies are not provided.

3. Fire Prevention

Per the current California Fire Code, as amended by the City, compliance with the following is required:

a. Storage of combustible material shall not produce conditions that will create a nuisance or a hazard to the public health, safety or welfare.

b. Combustible material, and MSW kept within a structure shall be stored in accordance with the California Fire Code.

c. Materials susceptible to spontaneous ignition, such as oily rags, shall be stored in a listed disposable container. Contents of such containers shall be moved and disposed of daily.

d. Containers with a capacity exceeding 5.33 cubic feet (40 gallons) (0.15m cubed) shall be provided with lids. Containers and lids shall be constructed of noncombustible materials or approved combustible materials.

- Exception: Wastebaskets complying with Section 808 and 304.3.3 of the California Fire Code

e. Containers with an individual capacity of 1.5 cubic yards, 40.5 cubic feet (1.1.5 m cubed) or more shall not be stored in buildings or placed within 5 feet (1524 mm) of combustible walls, openings, combustible roof eave lines or overhangs.

- Exception: Containers in areas protected by an approved automatic sprinkler system installed throughout in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.2.3.2 of the California Fire Code
- Exception: Storage in a structure shall not be prohibited where the structure is of Type I or IIA construction, located not less than 10 feet from other buildings and used exclusively for container storage.

f. Containers with an individual capacity of 1.0 cubic yards, 200 gallons or more shall not be stored in buildings or placed within 5 feet of combustible walls, openings, combustible roof eave lines or overhangs unless the containers are constructed of noncombustible materials or of combustible materials with a peak rate of heat release not exceeding 300kW/m2 when tested in accordance with ASTM E 1354 at an incident heat flux of 50 kW/m2 in the horizontal orientation.

- Exception: Containers in areas protected by an approved automatic sprinkler system installed throughout in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.2.3.2 of the California Fire Code
- Exception: Storage in a structure shall not be prohibited where the structure is of Type I or IIA construction, located not less than 10 feet from other buildings and used exclusively for container storage.

C. Safety & Crime Prevention – CPTED

1. Location

a. Enclosures should be placed in areas that allow clear visibility around the enclosure. The enclosure should not be placed adjacent to buildings or fencing to prevent potential hiding places and climbing areas that could allow a pedestrian to gain access into nearby secured property.

2. Ventilation

a. Enclosures must be designed to allow for the ventilation of air. Vent openings no larger than 6 inches in height is recommended. They can be located along the bottom, top or within the enclosure wall or gate design.

3. Roof & Security Screen

a. A roof is recommended on all enclosures to prevent pedestrians from climbing inside the enclosure or the tossing of material over the enclosure walls.

b. If an enclosure has a roof, as an additional precaution any openings or gaps larger than 6 inches between the top of the wall or gate and the lowest point of the roof eves should be screened. The security screen should be spaced apart to allow ventilation and visibility into the enclosure. The security screen should be a permanent part of the structure and can be either decorative metal rails, bars or screening material.

4. Lighting

a. Enclosures should be located in a well lit area. The access doors and interior of the enclosure should have permanently installed motion sensor white lighting of sufficient brightness to light the interior of the enclosure. It is recommended that lighting be of 3-5 candlefoot luminance.

5. Enclosure Access

a. Enclosure access should only be provided to those employees that are authorized to deposit material in the enclosure. Ensure that all users are properly trained on how to lock and secure all enclosure entrance points. If a compactor is used within the enclosure, the compactor door should be securely closed each time material is deposited to initiate the compaction of the material.

6. Graffiti

a. All graffiti should be immediately removed to avoid attracting additional vandalism. It is recommended that anti-graffiti paint or sealant be used to seal the enclosure surface to promote easy removal of graffiti.

7. Scavenging

a. To prevent scavenging for redemption value aluminum cans and glass/plastic bottles, consider locking all recycling containers within the enclosure or storing all bottles and cans in a separate location.

8. Confidential Material

a. Prevent identity theft by shredding all personal documents before placing them in any publically accessible enclosure containers. Paper shredded at home, should be placed in a paper bag or box, but can also be placed in a clear plastic bag, and placed in recycling bin. Companies that offer shredding services are available for a fee. Monthly community paper shredding events may be available for free. Visit www.fairfield.ca.gov/recycling for more information.

9. Housekeeping

a. Keep the area around and inside the enclosure clean and free of debris. Do not pile trash or junk around or inside the enclosure. Areas that are kept clean and tidy are less likely to present trip hazards, attract graffiti or pests such as ants, roaches and rodents.

Trash, Recyclables & Organics Enclosure
✓ Check-list

This check-list identifies items that may impact your project. For more detailed information, refer to the City's Trash & Recycling Enclosure Guidelines at www.fairfield.ca.gov/en.

Location & Accessibility

- ☐ Convenient to users
- ☐ Direct access for collection trucks- minimum straight approach of 50' for bins and 75' for compactors/roll-off boxes
- ☐ Access to the enclosure provided to authorized hauler
- ☐ Containers not placed in front of fire hydrants or equipment

Driveways

- ☐ Asphalt or concrete
- ☐ Withstand up to 56,000 lbs. gross vehicle weight (GVW)

Turning Radius Requirements

- ☐ Adequate for a 3 axle truck
- ☐ Minimum 35' turning radius

Stress Concrete Apron

- ☐ Apron same elevation as enclosure pad and surrounding surfaces
- ☐ Slope of 1/8" (1% grade) per ft. from enclosure pad
- ☐ Minimum 8' apron extension from enclosure pad
- ☐ Width matched to enclosure opening
- ☐ Minimum sub-base of 4" of class 2 aggregate
- ☐ 3,000 psi concrete or stronger, 6" thick with #4 rebar placed mid height at 12" on center each way

Enclosure Concrete Pad

- ☐ Withstand up to 20,000 lbs. of direct force from a single truck axle
- ☐ Pad same elevation as apron
- ☐ Grade break line constructed on the open side at the inside edge of the wall with the slab sloping inwards on the inside of the structure and away from the structure on the outside (Food facilities with drains connected to the sanitary sewer)
- ☐ Sloped ground away from the structure on all sides (Food facilities with drains connected to the sanitary sewer)
- ☐ Grade flat to prevent stormwater from escaping the enclosure if commingled with MSW (Non-food facilities)

Height Clearance of Enclosure Approach

- ☐ 15' of vertical clearance over the entire approach
- ☐ 32' high directly in front of enclosure to accommodate bin lifting
- ☐ Roof no less than 8' inside enclosure (Food facilities only)

Interior

- ☐ Accommodates all streams generated (MSW, recyclables, compostables & oil tank)
- ☐ 6" clearance form back interior wall to all bins and/or compactors
- ☐ 16" or more to each side of any bin or compactor
- ☐ 36" from front of all bins or compactors and front gate
- ☐ 3" between all containers
- ☐ 1 ½' between kitchen oil tank and collection containers
- ☐ Wood or rubber bumper to protect back wall damage

Water

- ☐ Access to hot & cold water within the enclosure for retail food facilities
- ☐ 6" curb within the enclosure to protect plumbing fixtures from containers

Wall Height

- ☐ Minimum 6' high
- ☐ Security screen or rail between walls and roof to prevent pedestrian entrance

Material

- ☐ Masonry walls
- ☐ Facade covering to match existing surrounding structures

Roof

- ☐ Required for all food facilities, multi-family projects and projects over 10,000 sq. ft.
- ☐ Recommend lowest part of roof not be lower than 8' high
- ☐ Recommend extending past open sides a distance equal to ½ the height of opening
- ☐ 6" roof overhang recommended

Gates/Pedestrian Doors

- ☐ Two free standing gates with no center pole
- ☐ Metal, solid view gates with handles on each door
- ☐ Slide latch to secure doors
- ☐ Minimum 16' gated opening
- ☐ Gate posts placed outside opening span to avoid reducing span
- ☐ Gates secured to poles or walls with bolts (not screws)
- ☐ Utilize a minimum 18" tall and ½ diameter cane bolt that drops a minimum of 4" into the ground
- ☐ Utilize a minimum 1" diameter pavement sleeve (double the size of the cane bolt)
- ☐ Cane bolts secured to outside of gate with two guides and a means of latching the bolt up
- ☐ Gates open at least 110 degrees with a means to secure open
- ☐ Security screen or rail between gate and roof/ground to prevent pedestrian entrance
- ☐ 36" Pedestrian entrance with locking door recommended

Signage

- ☐ "NO PARKING" painted in reflective paint on ground in front of enclosure gates
- ☐ "NO PARKING" signs affixed to each gate
- ☐ Minimum 12X18" sign with property owner or management company information

Electrical (security lighting, water heater or compactor)

- ☐ Double phase 220 outlet or single phase 110 may be needed

Storage

- ☐ Built to only store collection containers

Stormwater & Pollution Control

- ☐ Implement best management practices (BMPs) to retain potential discharge
- ☐ Designed to prevent run-on to enclosure area
- ☐ Paved with an impervious surface to prevent run-on and run-off
- ☐ Containers should close securely and be leak proof
- ☐ Contains all litter and trash
- ☐ Drain connected to sanitary sewer for food facility and multi-family enclosures
- ☐ Drain connected to grease removal device or treatment device for food facitlies

Public Health

- ☐ Suitable implements and supplies such as high pressure pumps, hot water, steam and detergent available for cleaning containers and enclosures

Fire Prevention

- ☐ Storage of combustible material does not produce conditions that will create a nuisance or hazard
- ☐ Material within the enclosure stored in accordance with Fire Code
- ☐ Material susceptible to spontaneous ignition stored in a disposable container and disposed of daily
- ☐ Containers larger than 40 gallons must have lids
- ☐ Containers and lids constructed of noncombustible materials or approved combustible materials (See Fire Code for exceptions)
- ☐ Containers with an individual capacity of 1 yard or more not stored in buildings or placed within 5' of combustible walls, openings, roof eave lines or overhangs (See Fire Code for exceptions)