Solid Waste Design Manual and Operations Guidelines

City of Banning

Public Works Department

TABLE OF CONTENTS

This guide provides standards that will help with the design of trash enclosures while meeting Building codes, accessibility requirements, and recycling requirements. The information in this guide will help design a space efficient trash enclosure that has sufficient capacity for proposed development. Final City Engineer approval is required.

GENERAL INFORMATION

Per the Banning Municipal Code (BMC), new and redeveloped commercial, industrial and multifamily properties shall have a waste enclosure on the premises. This applies to all new and substantially remodeled or expanded buildings or facilities. Enclosures shall be constructed to the standards established by the Public Works Department as outlined in the following and shall be sufficient in size to accommodate the waste materials generated by the facility. Locations in the downtown area defined by the BMC as being bounded on the east by Hargrave Street, on the west by Sunset Avenue, on the south by Interstate 10 (I-10), and on the north by Williams Street, shall secure and lock waste containers, bins and enclosures to prevent access to unauthorized persons, animals, wind, rain, insects and rodents.

CONSTRUCTION AND DEMOLITION

The City of Banning requires all qualifying building and demolition permit applicants to submit a Construction and Demolition Recycling Plan. The applicant must show how they intend to recycle materials to meet the 65% diversion of waste generated from the project as per Cal Green code (4.408 and 5.408). The results of the construction and demolition plan must be submitted at the completion of the project. Diversion tickets and confirmation of diversion is required prior to final sign off/approval. The plan is distributed at the time of application for permit. For further information please contact City of Banning Environmental Program Coordinator or refuse@banningca.gov or 951.922.3130.

City of Banning Franchised Hauler Information:

https://www.wm.com 1-800-423-9986

SITE DESIGN CONSIDERATIONS

The appropriate location of solid waste enclosures is essential for efficient collection from the City's contracted trash hauler. The following sections provide guidance on the location of trash enclosures within the property's site design.

The Public Works Department will review the siting of solid waste enclosures during project entitlement and verify that final construction drawings are consistent with approved entitlement documents and the contents of this design manual.

Where to Site the Enclosure

In Relation to Buildings

The path between the building and the enclosure will be used by those that empty the solid waste containers in the building. Consider the hours of operation, type of business, and how waste will be brought to the enclosure. Make sure that the path of travel works for the building occupants. An accessible route of travel from the building will be required.

- **Minimum Distance from Building**: Dumpsters cannot be placed within 5 feet of combustible walls, openings, or combustible roof eave lines unless the enclosure is protected by an approved automatic fire sprinkler system. This restriction does not apply to carts. Containers cannot be placed under stairways. If proposed structure is located within 5' of property line, all materials used for construction shall be of the non-combustible type.
- **Maximum Distance from Building:** Unless otherwise approved, commercial waste enclosures shall not be located further than 250' from the nearest point of the building served. For residential complexes where occupants empty their own trash and recycle, 150' is the maximum.
- **Setbacks:** Trash and recycling enclosures may not be located within any required zoning setback, the front yard, or required open yard areas for lots developed with residential uses.
- **Offsite Enclosures:** Trash enclosures generally must be located on the parcel on which the waste is generated. An enclosure located on a separate parcel from the proposed development will be considered an offsite enclosure, even if both parcels are owned by the same person. The owners of both parcels will have to record an easement created by the City that binds both properties regardless of ownership and sale.

Accessibility

Accessibility requirements only apply to enclosures that must be accessible as required by the California Building Code Chapter 11B and as per federal guidelines – American with Disabilities Act. For applicable enclosures, there must be an accessible path of travel from the building to the enclosure. The following restrictions address some of the most common problems for path of travel to a trash enclosure, but are not comprehensive:

- Maximum slope is 5% in the direction of travel and maximum 2% cross slope.
- Path of travel cannot be behind parked cars.
- Crossing the vehicle path of travel may be permissible, but detectable warnings are required.
- Compliant doors and level landing are required.

Public or Customer Areas

Solid waste should not be transported by employees through public or customer areas since waste taken out multiple times per day may result in

litter or liquid waste on the path of travel.

In Relation to the Truck Access Point (TAP)

The TAP is where the solid waste truck stops and lifts the trash and recycling containers into the truck. Ideally, the truck access point is the concrete apron in front of the enclosure, but this is not always possible. Dumpsters and carts can be pushed by the truck driver to the TAP. The access point must be engineered to withstand up to 62,000 lbs. of direct force from a single truck axle, multiple times per week. The path between the enclosure and the truck access point will be traveled by the waste haulers, moving the trash and recycling containers.

- **Maximum Distance from TAP:** The enclosure should be located no more than 25' from the TAP with a maximum distance of 50'. For distances longer than 25', additional charges apply for servicing.
- **Maximum Slope:** Slope from the enclosure to the TAP must not exceed 2% when dumpsters are used. If dumpster must be pushed down (and up) a curb cut to the TAP, maximum dumpster size is 3 cu. yd. There is no restriction for carts.
- **Surface:** The entire path of travel must be paved with asphalt, concrete, or smooth pavers, free of obstructions, and have curb cuts to the TAP. Degraded surfaces must be repaved.
- **Overhead Clearance:** Allow for overhead clearance of 20' where bin is serviced. The driver will typically move the container about 8' away from the enclosure before dumping.
- **Public or Customer Areas:** Trash and recycling should not be transported through public or customer areas by the hauler to the TAP. Hauler may need to collect waste during business hours and waste collection may result in litter or liquid waste on the path of travel.
- **Multifamily Residential Carts:** If the waste hauler cannot drive up to the enclosure where *carts* are located, a pull-out charge service charge may apply

Driveway and Parking Lot Considerations

Trash and recycling enclosure may not displace any required parking space.

The driveway must be paved with asphalt, concrete, or pavers and be able to withstand trucks weighing up to 62,000 lbs. The driveway must have a minimum width of 11'6'' in one direction and must be free of storm drain grills. Curves must be designed with a turning radius of 34' as shown below. The approach must be designed to minimize backing situations since trash trucks cannot back around curves. Trash truck access should not conflict with parked cars or delivery trucks. The driveway must have an overhead clearance of 16' that is free from obstructions or overhanging tree branches.

If dumpsters are pushed to a pickup point in the roadway, the roadway will endure 62,000 lbs. of direct force each time the dumpster is emptied, and it may be several times per week. For new construction, the roadway must be designed to

accommodate this. Sharp turns will grind and weaken roadways due to the truck weight and frequency of servicing. When dumpsters are used, do not locate the enclosure on a hill. Dumpsters are heavy and easily turn into runaways on a slope. Maximum slope shall not exceed 2%.

Indoor Enclosure Locations

Haulers must have access to parking garages or locked gates without restriction or prior notification. The building occupants may bring out containers for collection, but they must stay within the development or on a back street or alley. Building occupants may not bring out dumpsters and leave them out on public streets on collection day.

For indoor locations where there will be food scraps bins, the trash/recycling area requires these additional features for sanitation:

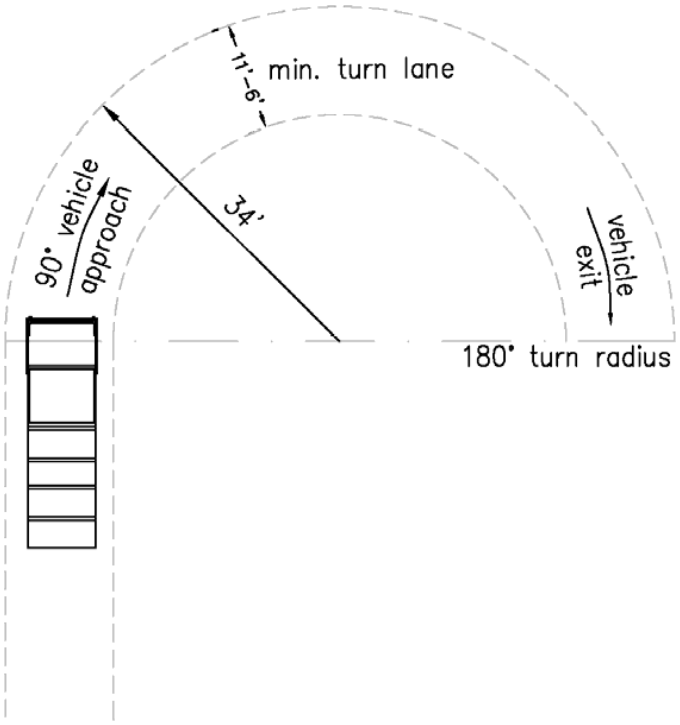
- Fully enclosed room (including ceiling) within the parking garage/building.
- Walls and floor constructed with a smooth finish that can be easily cleaned.
- Mechanical ventilation, or with screened vent openings to the outdoors.
- Floor drain with proper drainage slope that connected to the sanitary sewer.
- Spigot with hose for cleaning.

An indoor trash/recycling area will require additional features and must meet the standards and specifications of Riverside County Environmental Health Department.

Vehicle Access Requirements

- Refuse Vehicle Turning Radii
  - Inside radius.....25 feet
  - Outside radius.....42 feet
  - Refuse vehicle height clearance .....25 feet
  - Refuse vehicle width clearance .....25 feet
- Refuse vehicle backing: Straight only. Distance is determined on a case by case basis.
- A minimum 25-foot distance must be maintained in front of a bin enclosure. The enclosure must face the driveway, not parking spaces.
- Alleys must be a minimum of 20 feet in width and have enough room to allow for a 25- foot minimum turning radius when making turns at 90-degree intersections in the alley.

- Containers must not obstruct the travel path of refuse vehicle or compromise the ability of the refuse vehicle to safely service the container.



SOLID WASTE ENCLOSURE DESIGN

The sections below cover the design requirements of solid waste enclosures for various project types.

New Enclosures

The following guideline are for new solid waste enclosures for Commercial, Industrial, Multifamily projects.

Enclosure Standards

- Through circulation shall be provided for solid waste vehicles. All refuse enclosures shall be located on major drives within developments to achieve adequate circulation of refuse vehicles.
- A five-foot-wide concrete apron, with a 2% maximum pitch, shall be placed in front of all refuse enclosures to allow for safe and efficient removal of bins. No drainage V-ditches or catch basins shall be allowed within the five-foot apron.
- Stormwater shall not be permitted to enter into the trash enclosure, nor shall stormwater be permitted to drain out of the covered enclosure. A stormwater inlet with appropriate trash capture device may be required.
- To encourage recycling, enclosures shall be designed to house at a minimum, the three (3) bin system. Enclosures shall allow for storage of trash, recycling, and organics. The size and dimensions of the trash enclosure shall be based on

the required number and size of containers at a minimum accommodating one (1) container each for trash, recyclables, and organics materials.

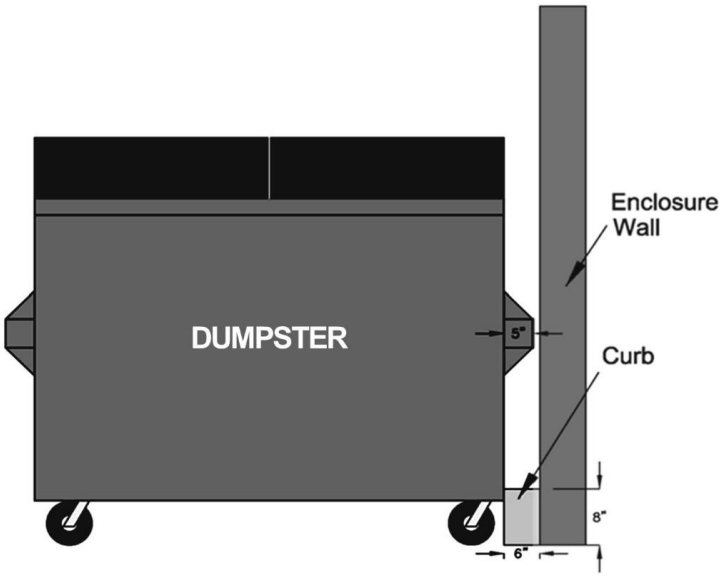
- Enclosures must be designed so that refuse and recycling containers may be accessed by the generator and serviced by the service provider without moving other bins.
- Enclosures shall be enclosed with a six-foot high wall with gates. A solid roof covering is required.
- Enclosures must be designed so that bin lids face the pedestrian access location.
- Pedestrian access shall be independent of service provider doors.
- Enclosures must be designed with a roof or overhang at least 8 vertical feet from the ground. Enclosures shall be constructed with a solid roof meeting architectural and structural design criteria from Planning Department, Building and Safety Division.
- Enclosures shall be located so that refuse vehicles can pull within 5 feet of gates.
- Enclosures located closer than 5 feet to an adjacent structure shall be protected by automatic fire sprinklers approved by the City of Banning State Fire Marshall.
- Gate stop bollards shall be installed to prevent enclosure gates from swinging into adjacent parking stalls. Steel cane bolt sleeves shall be installed in the ground outside of bin enclosure gates to prevent gates from swinging shut.
- City Engineer approval shall be obtained in writing prior to the construction of any solid waste enclosure.
- Submitted plans shall be drawn to scale and shall include complete elevations, plot plans, perspective views, and detailed construction plans.
- For security purposes, enclosures shall not create blind spots or hiding areas.
- Enclosures shall provide convenient access for dumping, pick-up and shall not block circulation of drivers near loading areas. Enclosures shall be located in an area such as inside parking courts or at the end of parking bays, not prominent to public view.

Enclosure Parts and Specifications

- **Floor**: The container must rest on a flat, level concrete surface, or on a slightly sloped surface (not to exceed 1% in any direction). When floor drains are used, they must drain to an appropriate BMP identified in the project WQMP prior to discharge from the property. A concrete apron measuring the width of the enclosure and extending out 8’ from the front will join the enclosure pad to the surrounding pavement. The apron surface must be the same elevation as the enclosure pad threshold and the surrounding surfaces, with a slope of 1/8 inch per foot away from the enclosure pad. It must be engineered to withstand up to 62,000 lbs. of direct force from a single truck axle. If the concrete apron transitions to asphalt, sufficient subsurface preparation is required to prevent

dimpling or breakdown of the asphalt over time.

- **Walls and Interior Curbs**: Walls must generally be constructed of masonry, with finishes and colors that are compatible with the adjacent architecture. No chain link fencing is allowed. Minimum wall height is 6' for dumpsters. For enclosures within Specific Plans, the architectural style of details may require enhancement of materials or finishes.
- Provide interior curb bumpers that are 8" high and 6" wide along each wall to prevent damage to the interior walls. The curb must be high enough to stop the body of the dumpster, not the wheels. Use curbs for dumpster placement when multiple dumpsters are used.



- **Gates**: Dumpster/cart enclosures require two gates, an accessible one for the building occupants to use, and a large, industrial gate for the haulers to bring out the containers.
    - **Pedestrian/Accessible Entrance**: There must be an accessible latch on the gate. If there is no gate, the opening must not be visible from a street, alley, or parking lot. The pedestrian gate must be 36' wide, with a 32" clearance of all hardware.
    - **Hauler Gate**: Hinged doors that swing outward or sliding doors that move side to side are acceptable. Gates may not open onto sidewalks or the public right of way. Sliding gates may be more appropriate for enclosures facing the public right of way. When using sliding gates, the guide cannot sit above the floor because the dumpster will not be able to roll over it. Either use a recessed guide, or a top mounted guide. Hauler gates must lead to the driveway, not to parking spaces or the handicapped safety zone.
    - Doors must be made of solid metal materials. Hardware must be of sufficient strength to accommodate repetitive swinging and individuals with gloves must be able to open them. Provide means to secure gate doors both opened and closed, e.g. cane bolt w/sleeve and slide latch between doors and sleeve in pavement. The bolts should be a minimum ½ inch in diameter and the sleeves for both should be a minimum of 1

inch or double the size of the bolt to allow flexibility. Be sure to have bolt drop in the ground a minimum of 4 inches into the ground. Use bolts, not screws, to secure gate to the poles or walls.

- Doors shall be lockable and/or contain locking bins. Locking mechanisms on enclosures and/or bins shall be approved by the City of Banning and its Solid Waste Franchise Hauler.
- Gates must be of sufficient size and quantity so that it is not necessary to remove one dumpster to service another (trash, recycling, food, and organics are emptied on different schedules). Gates must be 2" off the ground and hung on the outside. Gates must open to at least 120°. Opening dimensions must be clear of doors edges, hinges, or other obstructions. Openings must be sized for the largest dumpster in the enclosure. Gate openings are as follows:
  - 3-4 cubic yard dumpsters pulled out sideways: 79" Dumpsters pulled out straight: 105"
  - 1.5-2 Cubic yard dumpsters pulled out sideways: 64" Dumpsters pulled out straight: 105" (Additional pull-out charges apply for sideways carts).
  - Dumpsters are not very maneuverable. It is difficult to remove them from a restricted opening, and difficult to replace them so that the aisle between dumpsters is maintained. Do not block removal of dumpsters by putting pillars or gate posts in the middle of the hauler gates. If you need support, attach wheels to bottom of gates where they meet. Use bolts and sleeves to secure gate, with optional hardware on top of gates to secure them to each other. Design gates for the full width of the opening.

- **Roof and Drainage:** The enclosure must drain to landscaping, vegetated swales, permeable pavement, or bio retention basins, which must be sized to capture and treat the volume of runoff generated by 3-hour 100-year flood as per City ordinance. The enclosure may not drain directly into storm drains or pavement, it must drain to an appropriate BMP identified in the project WQMP prior to discharge from the property. The enclosure must be protected from run-on water with slopes or diversions. The enclosure must be fully roofed with a solid metal roof, and protected from rainfall; the enclosure may have a drain to the approved BMP. The minimum clearance inside a roofed or partially roofed enclosure is 7'6" with a 6'8" high entryway for pedestrian access.

  (See Attachment A for Clarification)

Existing Enclosures

Enclosure Upgrades

Some existing commercial and multifamily developments were constructed

without consideration of modern trash and recycling space needs. In these cases, existing trash locations may be determined to be non-conforming with respect to location, size, and screening. If an existing enclosure does not meet the following requirements, it may have to be modified or rebuilt. The list below includes cases where the enclosure may have to be modified or rebuilt.

a. All waste containers are screened from view in a manner compatible with existing architecture. This includes food and/or recycling containers and grease barrels that may be currently outside enclosures due to lack of space.
b. Equal space is provided in the enclosure for trash and recycling. 50% of the enclosure space must be designated for trash while the other 50% shall be designated for Recycling bin or any other combination of recycling. For example, 50% trash, 25% recycling bin, and 25% organics container food scraps.
c. The enclosure shall be accessible, including an accessible path of travel provided to the enclosure.
d. Space is provided for food scraps containers for current or future food producing or serving businesses.

Building/Site Upgrades and Permits

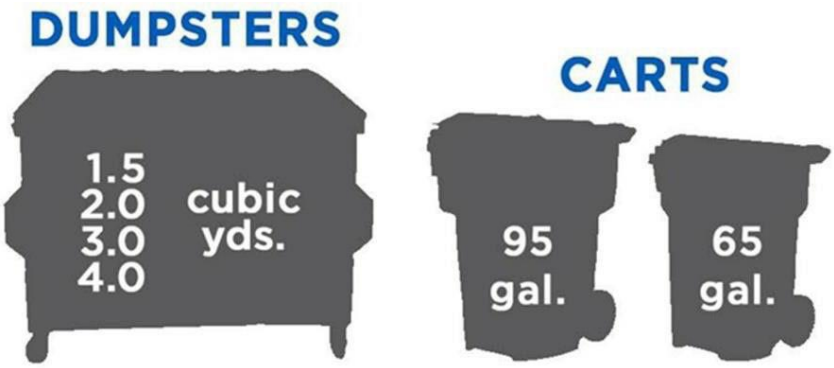
Many building permits require upgrading the solid waste enclosure. A site plan review is required for minor modifications to an existing site. Upgrades can be required for both building shell and tenant improvement permits. Only minor improvements will be exempted from current enclosure standards. Enclosure upgrades may also be required if a complaint is received for unscreened, overflowing, or inappropriately sited waste containers. Note that site plan review approval and a building permit is required for all new commercial and multifamily trash and recycling enclosures, even those that result from enforcement cases. Enclosure upgrades will be required for the following types of improvements:

a. Building shell and site improvements. Any new development or comprehensive site improvement plan that includes some or all of the following components: building upgrades, parking, landscaping, and other site infrastructure.
b. Alterations to existing outdoor areas or parking areas, such as: reconfiguring a parking lot, adding, or removing parking spaces (not including a like-for-like restripe or ADA upgrades), and significant alterations to the site configuration and yard areas.
c. Any change to an existing trash enclosure, construction of a new trash enclosure, or a change in enclosure location.
d. Food establishments, new and modified and/or expanded
e. Change to building use, type, size, or occupancy space.
f. A Building permit, for the upgrades, will be required in all instances.

CONTAINER REQUIREMENTS

Each enclosure must be designed to handle the required containers for service. The following sections describe the container requirements. For particular requirements for various project types, please contact the City of Banning Environmental Program Coordinator or refuse@banningca.gov or 951.922.3130.

- The enclosure must have enough space to house trash, recycling, and organic containers. Each material is placed into separate containers and collected by separate trucks. Trash is in a maroon or black container with a black lid, grey bin recycling or black with blue lid, green waste/organics in green or black with green lid. All developments that include food producing or food serving elements must accommodate food scraps containers. Restaurants or grease generating businesses must also include a grease bin in the enclosure. Businesses or multi-unit complexes with their own maintenance staff or gardeners may require green waste containers.
- Dumpsters are required to be designed for the largest container possible. Four (4) cubic yard dumpsters are recommended making the enclosure more flexible for the users.
- In mixed-use developments, carts are only for organic/green waste, and recycling. The maximum size for residential dumpsters is 4 cubic yards. The maximum size is 4 cubic yards for senior developments where the seniors, rather than paid staff, handle waste material. Container dimensions are detailed below.
- Design for the largest container possible to allow for future changes to site operations and/or uses.



Container Dimensions

The table below include container dimensions. These dimensions should be utilized in final enclosure design.

Solid Waste Carts

Waste carts are for residential service. Carts can only be used in industrial, commercial, multifamily, or mixed-use applications with pre-approval from the City of Banning. Questions on cart service can be completed by contacting the City of Banning Environmental Program Coordinator or refuse@banningca.gov or 951.922.3130.

Carts			
Dimensions	96 Gallons	64 Gallons	32 Gallons
Height	45" (3'9")	38" (3'2")	38" (3'2")
Width	28" (2'4")	27.5" (2'3.5")	20" (1'8")
Depth	35" (2'11")	30" (2'6")	24" (2')

Solid Waste Bins

Solid Waste bins shall be used for all industrial, commercial, multifamily, and mixed-use projects. The bin sizes for various capacities are listed below.

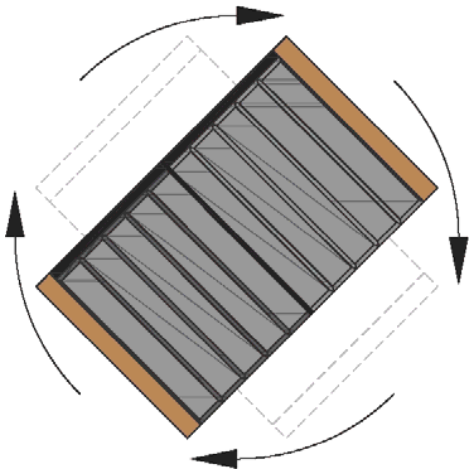
Bins				
Dimensions	2 cubic yards	3 cubic yards	4 cubic yards	6 cubic yards
Height	44" (3'8")	60" (5')	67" (5'7")	76" (6'4")
Width	81" (6'9")	81" (6'9")	81" (6'9")	81" (6'9")
Depth	36" (3'0")	46" (3' 10")	56" (4'8")	86" (7'2")

CONTAINER LAYOUT

The users must be able to access all containers with a full trash bag in hand without moving the container or brushing against. Trash, recycling, food scraps, and green waste containers are picked up by different trucks on different days. The hauler should not be required to remove recycling/ organics bin from the enclosure to get the trash bin out. When designing the layout, don't rely on perfect placement of dumpsters. The hauler will put them back but are not responsible for maintaining aisle widths. Use interior curbs if you need to place the dumpster precisely in the center of an enclosure. Allow 6" width for curbs in the layout and allow for 6" between containers or between containers and gates.

Dumpsters

Dumpsters must be accessed by users from the long side. Designs that block or partially block access from the long side will not be approved. There must be a minimum 36" aisle along the long side of the dumpsters. Where multiple containers are used, it is better to place containers in rows with aisles see the next page for details on dumpster layouts.



Dumpsters do not easily rotate on a fixed point. Unless the enclosure is large, dumpsters cannot turn 90° to get out of the gate.

The gates must span the full width of the enclosure

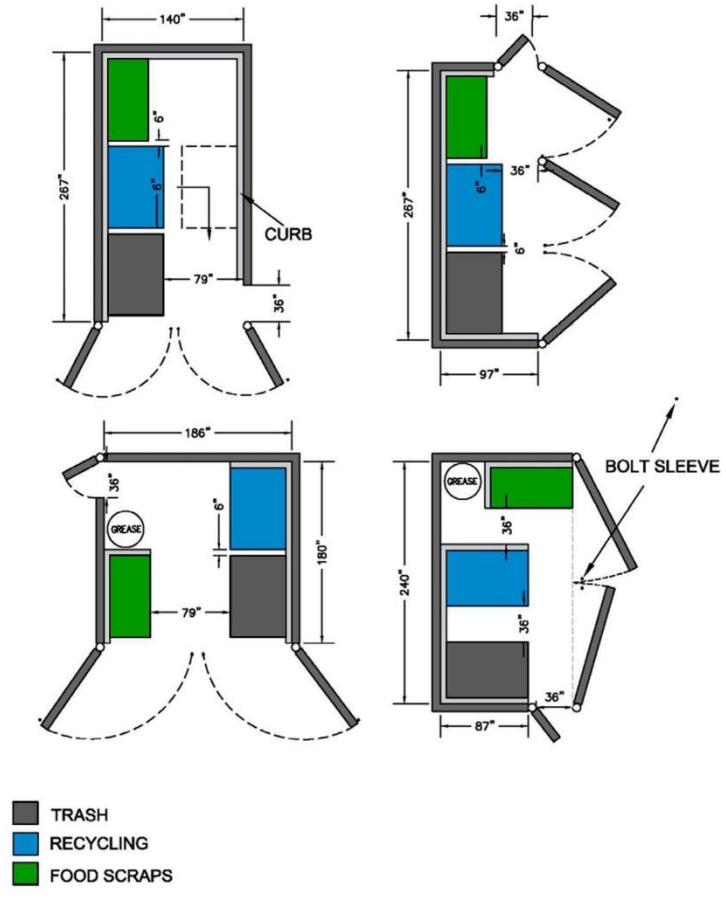
so that dumpsters can be pulled straight out. Provide an aisle that is at least 12" wider than the dumpster for removal. The aisle must be free and clear of gate hardware. The aisle must be maintained along the entire path of travel from the daily location to the truck access point.

Grease Containers

Grease containers are required for restaurants that deep fry food or separate grease. The design for immovable containers is based on the fact that some grease containers have wheels, while others do not. They are emptied via a suction hose, truck must be able to drive up to enclosure and put a hose in the container. The maximum distance from the truck access point to the grease container is 45'.

Sample Layouts

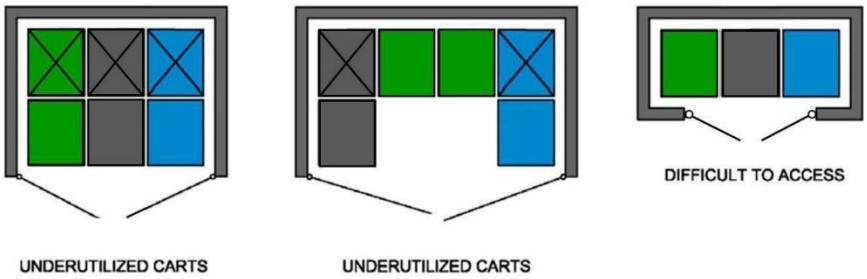
The layouts provided below are intended to provide guidance to designers on layout options for the trash enclosure. The first 4 sample drawings show a layout with appropriate accessible user access and hauler access. The bins are accessible by the waste hauler. When necessary, the grease trap is protected by a curb from the bins.



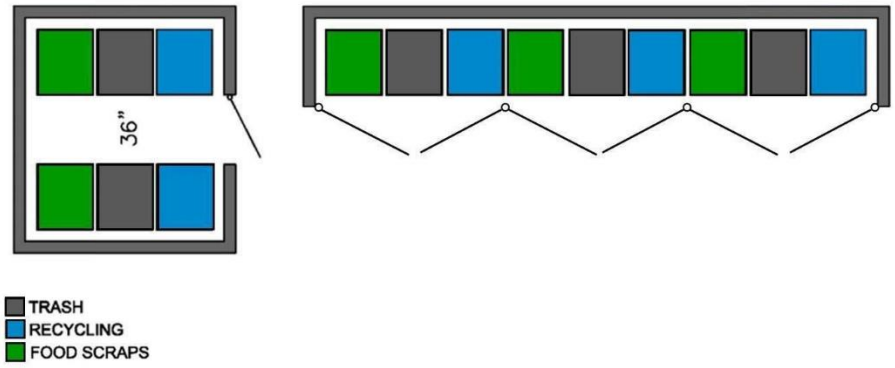
ALL FIGURES INCLUDE TWO 4 CUBIC YARD DUMPSTERS AND ONE 2 CUBIC YARD DUMPSTER.
GREASE BARREL MEASURES 36" IN DIAMETER. DIMENSIONS TO INSIDE WALLS.

For cases where multiple carts are required for the same service in the same enclosure, attention should be paid to ensure that bins are not blocked by other bins or made difficult to access without needing to move other bins. In these cases of poor design, the hauler may assess additional fees to pull out and maneuver carts to the waste collection vehicle.

POOR DESIGN



GOOD DESIGN



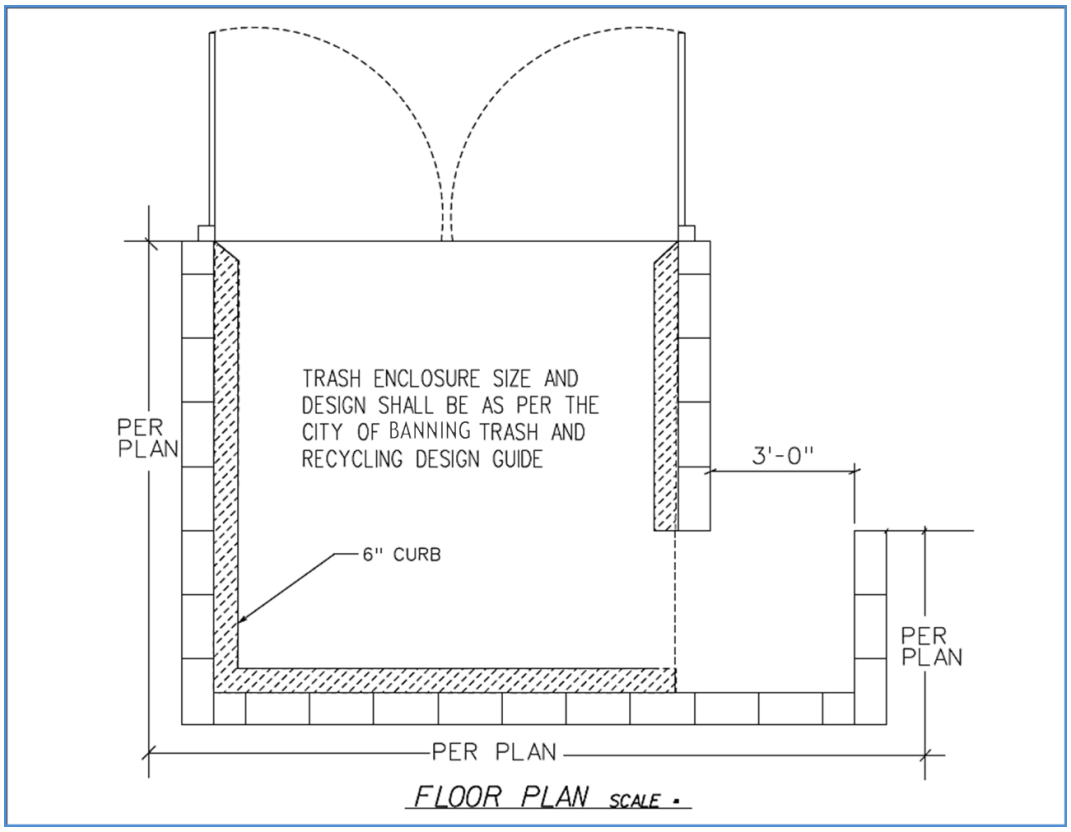
ATTACHMENT 1 – SAMPLE DRAWING

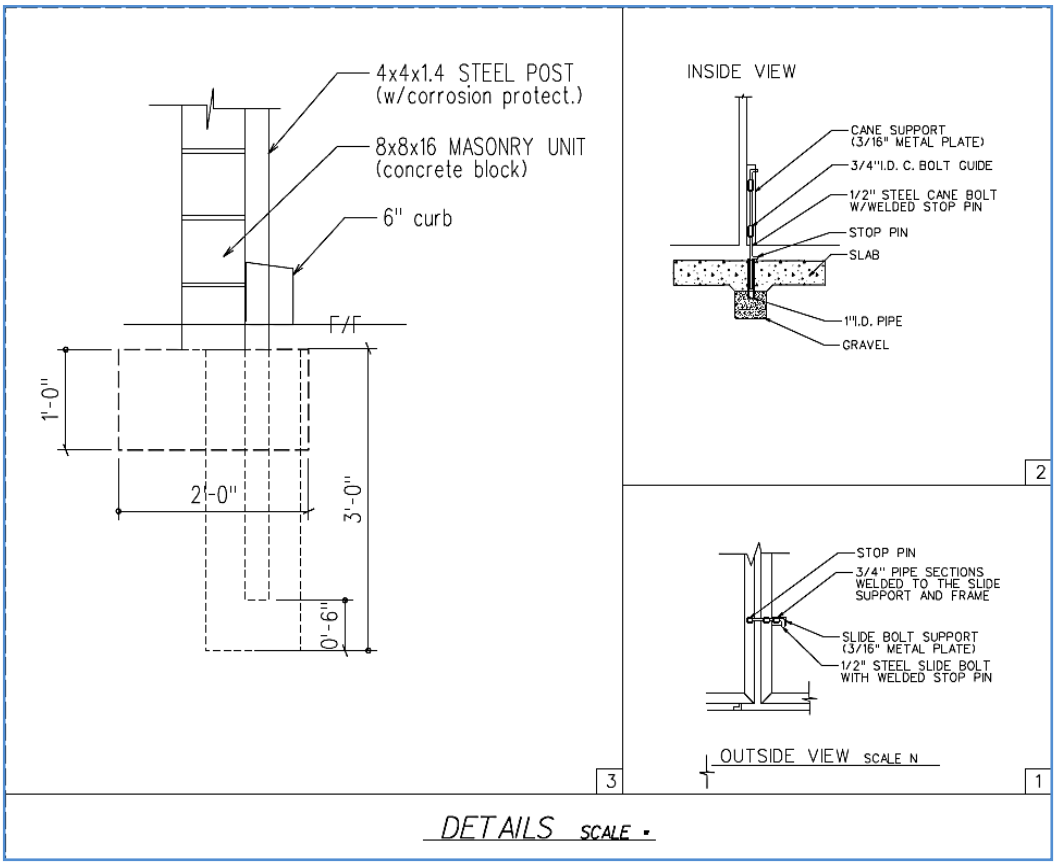
City of Banning Trash Enclosure Construction Detail

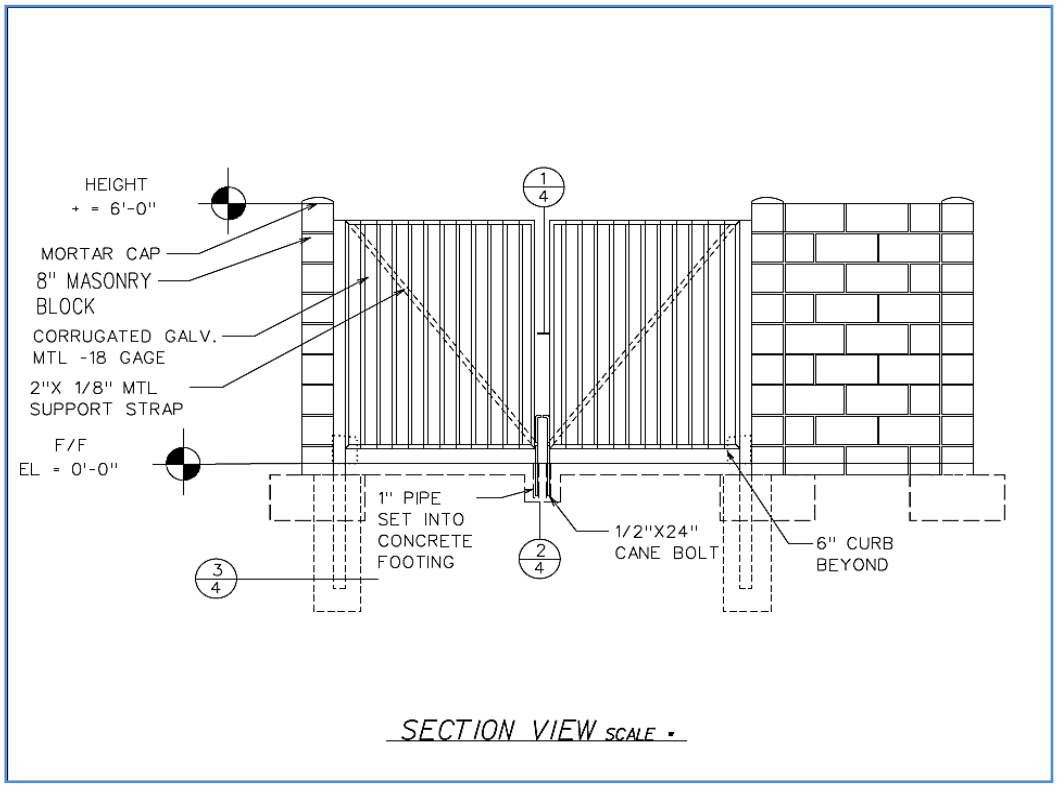
- 6' x 6' x HSS gate post or 6" diameter galvanized post.
- Skim Coat Stucco or another option is to leave with decorative block or standard block (work with planning division to ensure architectural compatibility).
- 8 x 8 x 16 concrete block with mortar cap or decorative block cap
- 6" concrete slab with #3 rebar @ 18" OC each way over 90% compacted base, 4%maximum slope to drain.
- 6" concrete curb (Wheel stop), typ. At inside perimeter.
- Slide bolt and cane bolt per details herein
- 2 x 3-inch tube steel gate frame, miter cut & weld corners grind all corners smooth: 1-1/2 x 3/8- inch bar stop welded flush with inside face frame.
- Roof material must be standing seam roof. Color to match building (earth tones recommended)

** Trash enclosure is to be furnished with a solid roof cover over it, Structural design shall be made part of the submittal documents.

*** CITY ENGINEER FINAL APPROVAL REQUIRED




4x4x1.4 STEEL POST
(w/corrosion protect.)
8x8x16 MASONRY UNIT
(concrete block)
6" curb
F/F
1'-0"
2'-0"
3'-0"
0'-6"
3
INSIDE VIEW
CANE SUPPORT
(3/16" METAL PLATE)
3/4"I.D. C. BOLT GUIDE
1/2" STEEL CANE BOLT
W/WELDED STOP PIN
STOP PIN
SLAB
1"I.D. PIPE
GRAVEL
2
STOP PIN
3/4" PIPE SECTIONS
WELDED TO THE SLIDE
SUPPORT AND FRAME
SLIDE BOLT SUPPORT
(3/16" METAL PLATE)
1/2" STEEL SLIDE BOLT
WITH WELDED STOP PIN
OUTSIDE VIEW SCALE N
1
DETAILS SCALE -


HEIGHT
+ = 6'-0"
MORTAR CAP
8" MASONRY
BLOCK
CORRUGATED GALV.
MTL -18 GAGE
2"X 1/8" MTL
SUPPORT STRAP
F/F
EL = 0'-0"
1" PIPE
SET INTO
CONCRETE
FOOTING
1/2"X24"
CANE BOLT
6" CURB
BEYOND
1/4
2/4
3/4
SECTION VIEW SCALE -

ATTACHMENT 2 – CITY OF BANNING CONSTRUCTION AND DEMOLITION WASTE DIVERSION PLAN

City of Banning
Public Works Department

99 East Ramsey Street
P.O. Box 998
Banning, CA 92220
refuse@banningca.gov

Construction and Demolition Waste Diversion Plan
(Provide During Plan Review)

All residential, commercial and industrial building permits require construction waste reduction, disposal and recycling services that comply with the 2022 California Green Building Standards Code (CALGreen) as described in the Non-Residential (5.408) or Residential (4.408) sections. Per CALGreen regulations, applicants are required to submit a Construction Waste Management (CWM) Plan and/or use a waste management company with verifiable documentation. Applicants are required to use the City's exclusive franchise hauler unless otherwise approved in writing by the Public Works Department. Applicants are encouraged to review the referenced sections in the 2022 California Green Building Standard Code:
https://codes.iccsafe.org/content/CAGBC2022P3/preface

Project Name:_____

Project Description: _____

Accessor Parcel Number (APN): _____

Permit #:_____

Applicant Name: _____

Applicant Address: _____

Applicant's Email: _____ Phone: _____

Contractor: _____

Contractor's Address: _____

Contractor Project Manager:

_____

Email: _____ Phone:_____

Waste Hauling Company: _____

Contact Info: _____

Estimated Project Start Date: _____

Estimated Project Completion Date: _____

Construction and Demolition Waste Diversion Plan
Performance Goals

Under the terms of the CALGreen Code, contractors are required to recycle, reuse, compost, and/or salvage a minimum of sixty-five (65%) by weight of the material and/or waste generated at the site. As a result, this project will recycle, reuse, and/or salvage a minimum of 65% by weight in order to obtain compliance.

Construction and Demolition Waste Diversion Plan
Contractor/Applicant Acknowledgment of Requirements

Please read the following requirements and initial each box to acknowledge agreement to comply with these conditions.

	Waste prevention & recycling activities will be discussed at the beginning of each safety meeting for tract home, industrial or commercial projects. For single family construction projects, alterations or additions, the project applicant will ensure the project contractor is aware of the waste diversion program and the 65% diversion performance goal.
	The permit applicant shall 1) provide each subcontractor with copies of the completed Construction and Demolition Waste Diversion Plan and shall provide each subcontractor with a tour of the site's recycling areas or 2) for single family construction projects, building alterations, room additions, or tenant improvements with no designated subcontractor(s) the applicant shall clearly designate recycling bins, or stockpiles for project recycling.
	During project construction, the project site shall have, at a minimum, two (2) bins: one for waste disposal and the other for the recycling of Construction and Demolition (C&D) materials. All recycling containers will be clearly labeled and lists of acceptable and unacceptable material will be posted throughout the project site.
	Only the following are authorized to collect and transport the Project's waste material: 1) Self-haul; 2) Franchise Hauler (Waste Management) and 3) Project/General Contractor associated with the Project.
	Construction and Demolition Waste Diversion Plan shall be approved by the Public Works Department prior to the issuance of Building Permits.
	Reporting Form and diversion documentation shall be approved by the Public Works Department prior to the issuance of Occupancy Permits.
	Reporting Form and diversion documentation MUST be accompanied by legible letters and/or receipts including certified weights, for all materials and/or waste recycled, reused, composted, salvaged, and/or landfilled.

I am aware that all receipts, weight tickets, invoices or other acceptable evidence of recycling construction debris shall be provided to the City prior to final inspection as proof that a minimum of 65% of the amount of debris generated by this project was recycled and that non-compliance will result in project delay or no final inspection.

Signature: _____ Title: _____

Print Name: _____

Construction Waste Management Plan: Estimated Diversion
(Provide During Plan Review and During Construction)

Anticipated Material Disposal/Diversion Worksheet

Please complete this Worksheet to help identify the types of materials, estimated quantities, and how waste material will be reduced, recycled or disposed of, from the project site. Estimates should be calculated in tons (see Material Conversion Table for conversion factors if needed).

Project Name: _____
APN: _____ Permit #: _____

MATERIAL TYPE	**A** Total Quantity Construction Waste	**B** Salvaged or Reuse	**C** Recycled	**D** Disposal (non-recyclable)
EXAMPLE: Asphalt	1ton	0.25 tons	0.5 tons	0.25 tons
Asphalt				
Brick/Masonry				
Cardboard				
Carpet/Carpet Pads				
Concrete				
Shotcrete				
Drywall/Gypsum Board				
Fixtures (doors, toilets, windows, etc.)				
Green Waste				
Metal				
Mixed Recyclables (bottles, cans, paper, etc.)				
Mixed Plastics #1-7 (No Film Plastics)				
Rigid Insulation				
Fiberglass Insulation				
Acoustic Ceiling Tiles				
Plastic				
Plastic Pipe				
Hard Plank Siding and Boards				
Pallets				
Wood				
Other – Explain				
Refuse / Trash				
Totals				

(Total Column B + Column C) / Column A = # x 100% = Total Diversion Percentage _____%
Is the percentage listed above greater than or equal to 65%? ☐ Yes ☐ No

-or-

Total pounds disposed/total square footage of project = _____lbs/sq ft (Residential: Maximum 3.4 lbs/sq ft listed above < /= 2 pounds/square foot (non-residential new construction only)

☐ Yes ☐ No

Construction and Demolition Waste Diversion Plan
Conversion Chart

Material	Pounds/CY	Tons/CY
Acoustical Ceiling Tiles	68	0.03
Asphalt	1380	0.69
Brick	3024	1.51
Cardboard	100	0.05
Carpet	84	0.04
Concrete	1855	0.93
Drywall	1620-2160	0.81-1.08
Fiberglass Insulation	17	0.085
Glass (Window)	80-100	0.04-0.05
Gypsum Drywall	500	0.27
Mixed Construction & Demolition Debris	900	0.45
Mixed Office Recycling	363.5	0.18
Mixed Plastics	32	0.02
Mixed Waste/Trash	100-350	0.05-0.0178
Pallet	35 (one average size)	0.175
Plastic Pipes	341	0.17
Scrap Metal	906	0.45
Wood	329	0.27
Brush (prunings)	47	0.02
Pine Needles	74	0.04
Stumps	1080	0.54
Metals	906	0.45

For more conversion factors, please visit: http//www.calrecycle.ca.gov and search “Conversion Factors”.

Single Family Residential ONLY:

Material	Weight (lbs)	Volume (CY)
Solid Dimensional Wood	1600	6
Engineered Wood	1400	5
Drywall	2000	6
Cardboard	600	20
Metal	150	1
PVC	150	1
Masonry	1000	1
Hazardous Materials	50	-
Other	1050	11
TOTAL	**8000**	**50**

Construction and Demolition Plan
Subcontractor Acknowledgement
(Use During Project Construction)

Project Name: _____

APN: _____ Permit #: _____

The Foreman for each new Subcontractor that comes on site is to receive a copy of the Construction Waste Management Plan and complete this Acknowledgment Form.

I have read the Waste Management Plan for the project; I understand the goals of this plan and agree to follow the procedures described in this plan.

DATE	SUBCONTRACTOR COMPANY NAME	FOREMAN NAME	SIGNATURE

ATTACHMENT 3 – CITY OF BANNING CONSTRUCTION AND DEMOLITION WASTE DIVERSION REPORTING FORM

City of Banning
Public Works Department

99 East Ramsey Street
P.O. Box 998
Banning, CA 92220
refuse@banningca.gov

Construction and Demolition Waste Diversion
REPORTING FORM

Project Name:_____

Project Description: _____

Accessor Parcel Number (APN): _____

Permit #:_____

Applicant: _____

Applicant Address: _____

Applicant's Email: _____ Phone: _____

Contractor: _____

Contractor's Address: _____

Contractor Project Manager: _____

Email: _____ Phone:_____

Waste Hauling Company: _____

Contractor Name: _____

Project Start Date: _____

Project Completion Date: _____

Construction Waste Management Diversion Reporting Form
Performance Measurements

This project recycled, reused, composted, and/or salvaged a minimum of sixty-five percent (65%) by weight and/or waste generated on-site, during the project.

Construction Waste Management Diversion Reporting Form
Material Disposal / Diversion Worksheet (Actuals)

Please complete this worksheet to identify the types of materials, quantities, and how waste material was reduced, recycled or disposed of during the project and include supporting documentation (i.e., diversion tickets, reporting statement from authorized disposal site, etc.). Calculation should be provided in tons (see Material Conversion Table for conversion factors if needed).

Project Name: _____
APN: _____ Permit #: _____

MATERIAL TYPE	**A** Total Quantity Construction Waste	**B** Salvaged or Reuse	**C** Recycled	**D** Disposal (non-recyclable)
EXAMPLE: Asphalt	1 ton	0.25 tons	0.5 tons	0.25 tons
Asphalt				
Brick/Masonry				
Cardboard				
Carpet/Carpet Pads				
Concrete				
Shotcrete				
Drywall/Gypsum Board				
Fixtures (doors, toilets, windows, etc.)				
Green Waste				
Metal				
Mixed Recyclables (bottles, cans, paper, etc.)				
Mixed Plastics #1-7 (No Film Plastics)				
Rigid Insulation				
Fiberglass Insulation				
Acoustic Ceiling Tiles				
Plastic				
Plastic Pipe				
Hard Plank Siding and Boards				
Pallets				
Wood				
Other – Explain				
Refuse / Trash				
Totals				

(Total Column B + Column C) / Column A = # x 100% = Total Diversion Percentage _____%
Is the percentage listed above greater than or equal to 65%? ☐ Yes ☐ No
-or-
Total pounds disposed/total square footage of project = _____lbs/sq ft (Residential: Maximum 3.4 lbs/sq ft listed above < /= 2 pounds/square foot (non-residential new construction only) ☐ Yes ☐ No

MATERIAL	**Project Material Types**	**Waste Management Method** (i.e., Recycle, Reuse, Compost, Salvage, Landfill)	**Authorized Disposal Site or Diversion Facility**	**Comments**
Example: Mixed Recyclables	X	Recycled	Waste Management Azusa Recovery Facility (1501 W. Gladstone Street, Azusa, CA 91702	Used Franchise Hauler
Asphalt				
Brick/Masonry				
Cardboard				
Carpet/Carpet Pads				
Concrete				
Shotcrete				
Drywall/Gypsum Board				
Fixtures (doors, toilets, windows, etc.)				
Green Waste				
Metal				
Mixed Recyclables (bottles, cans, paper, etc.)				
Mixed Plastics #1-7 (No Film Plastics)				
Rigid Insulation				
Fiberglass Insulation				
Acoustic Ceiling Tiles				
Plastic				
Plastic Pipe				
Hard Plank Siding and Boards				
Pallets				
Wood				
Other – Explain				
Refuse / Trash				
Totals				

Construction and Demolition Waste Diversion Plan
Conversion Chart

Material	Pounds/CY	Tons/CY
Acoustical Ceiling Tiles	68	0.03
Asphalt	1380	0.69
Brick	3024	1.51
Cardboard	100	0.05
Carpet	84	0.04
Concrete	1855	0.93
Drywall	1620-2160	0.81-1.08
Fiberglass Insulation	17	0.085
Glass (Window)	80-100	0.04-0.05
Gypsum Drywall	500	0.27
Mixed Construction & Demolition Debris	900	0.45
Mixed Office Recycling	363.5	0.18
Mixed Plastics	32	0.02
Mixed Waste/Trash	100-350	0.05-0.0178
Pallet	35 (one average size)	0.175
Plastic Pipes	341	0.17
Scrap Metal	906	0.45
Wood	329	0.27
Brush (prunings)	47	0.02
Pine Needles	74	0.04
Stumps	1080	0.54
Metals	906	0.45

For more conversion factors, please visit: http//www.calrecycle.ca.gov and search “Conversion Factors” or visit http://www.calrecycle.ca.gov/swfacilities/CDI/Tools/Calculations.htm. All weight must be converted to tons.

Single Family Residential ONLY:

Material	Weight (lbs)	Volume (CY)
Solid Dimensional Wood	1600	6
Engineered Wood	1400	5
Drywall	2000	6
Cardboard	600	20
Metal	150	1
PVC	150	1
Masonry	1000	1
Hazardous Materials	50	-
Other	1050	11
TOTAL	**8000**	**50**

ATTACHMENT 4 – WASTE MANAGEMENT CONSTRUCTION MATERIALS GUIDELINES

Construction Material Guidelines

Inert Recyclables (10 yd lowboy bins)	Construction and Demolition Recyclables (25 and 40 yd bins)	Trash
Clean Asphalt	Clean untreated wood	Painted/treated wood
Clean Concrete (2ft x2ft max)	Clean drywall	Concrete loads with rebar exposed and more than 10% dirt or rock.
Clean stucco	Metal	Stucco loads with paper and wire mesh
Concrete block and brick	Porcelain Tile	Dirt
Clean loads of River Rock	Porcelain sinks and bath tubs	Insulation
	Ceramic Tile	Plastic packaging materials
	Cardboard	Styrofoam
	Types 1 and 2 Plastics	Vinyl Flooring
	Ceiling Tile	Carpet and Carpet Pad
	Green Waste (chipper size)	Red brick
		Industrial Plastics
		Palm Fronds
		Succlulents

Mixed Construction and Demolition debris loads (Demo Loads) can contain some trash but not more than 30% of a full container can be items listed in the trash column or the load will be rejected.

Benefit from Our Expertise

The last worry you should have with your construction or demolition project is timely and efficient waste removal. Each one of your projects has its own unique demands. For this reason, a qualified Waste Management C&D expert will be assigned to your project. A Waste Management C&D expert:

- Coordinates the removal of your waste and recycling products.
- Understands each and every C&D project is different and makes recommendations to meet project demands.
- Learns your company's processes to work seamlessly together.
- Addresses safety issues to provide recommendations and solutions.
- Helps with the billing process.
- Provides a one-stop contact for all your C&D project needs.

WASTE MANAGEMENT

THINK GREEN.®

Service Management – The Waste Management Guarantee

Waste Management is the only major waste services company that will guarantee your total satisfaction in writing! We guarantee:

- Accurate account set-ups.
- On-time container service.
- Same day emergency service when called in before 2 p.m.
- Responsive customer service.
- Accurate invoicing.

No other waste company is more committed to your success than Waste Management.

For more information regarding on-site C&D services, please call 866 445 8296.

Printed on Recycled Paper

WASTE MANAGEMENT

THINK GREEN.®

Construction and Demolition Recycling Services

Recycling with Waste Management is easy and can save your business money.

WASTE MANAGEMENT

THINK GREEN.®

TEMPORARY DUMPSTERS

10 YARD (approximate size 18x8x2)

- Low Profile
- Perfect for Concrete or Dirt
- Used for heavy Materials

40 YARD (approximate size 22x8x6)

- Construction Site
- Roofing
- Home Demo
- Land Clearing
- Weed Abatement

TEMPORARY BIN DUMPSTER RENTAL

3 YARD (approximate size 6x4x4)

- Home Clean-up
- 1500lbs. max weight
- Tree Trimming/Landscape
- NO Concrete or Dirt

For more information call Waste Management at 866 445 8296.

Common Recyclable Materials:

You can recycle most common C&D materials with Waste Management, including: concrete, porcelain, rigid plastics, tile, lumber, metals, masonry, plastic, rock, carpet, insulation and more.

How your material becomes part of the solution.

The goal with every recycling program is to retain as much value as possible. We help you do that by turning your materials into new resources. Here are a few examples of what we can do:

- Used Inerts Become Road Base.
- Cardboard, Paper, Plastics and Metals Convert into New Goods.
- Clean Wood Transforms into Mulch or Biomass Fuel.
- Crushed Concrete Turns into Gravel or Dry Aggregate for New Concrete.

Contractors with qualifying loads will receive recycling credit to meet City and County C&D recycling mandates.

Waste Management will continue to offer reduced rates for source-separated materials such as dirt, concrete, asphalt and wood/green waste.

WM WASTE MANAGEMENT

THINK GREEN.®

ATTACHMENT 5 – CITY OF BANNING COMMERCIAL WASTE AND RECYCLING SERVICE GUIDE

City of Banning

Commercial Waste and Recycling Service Guide

WM is proud to offer commercial waste and recycling services in the CIty of Banning. We are available to assess your waste generation needs and determine the right container sizes and service levels for your business.

Banning Service Information

WM's trash, recycling and organics service collection consists of bins and carts for commercial properties. Commercial services are available using bins that range in size.

64-gallon cart

Recycling and Organics

WM offers weekly bin and cart recycling and organics collection. Recycle carts are provided to customers with space constraints or who are low-material generators. Commercial organics are collected in 64-gallon carts.

Bulky Item Collection

WM offers bulky item pick-up service to all commercial customers at a nominal cost. WM will collect items on your regular collection day. Bulky items include: couches, washers, dryers, refrigerators and electronic waste. The following items will not be accepted as bulky items: car bodies, construction and demolition waste, tires, hazardous waste or any single item that two workers cannot pick up. Advance notice is required to schedule bulky item pick-ups. Please contact the WM Customer Care Center at (800) 423-9986 at least 24 hours before your regular collection day to schedule a pick-up.

Holidays

WM observes the following holidays. When your collection day falls on/or after one of these holidays, your collection will be delayed by one day for that week only.

- New Year's Day
- Independence Day
- Thanksgiving Day
- Memorial Day
- Labor Day
- Christmas Day

Collection Times

Collection times for commercial businesses in the City of Banning are from 4 a.m. - 6 p.m. Monday - Saturday and 6 a.m. - 6 p.m. Sunday..

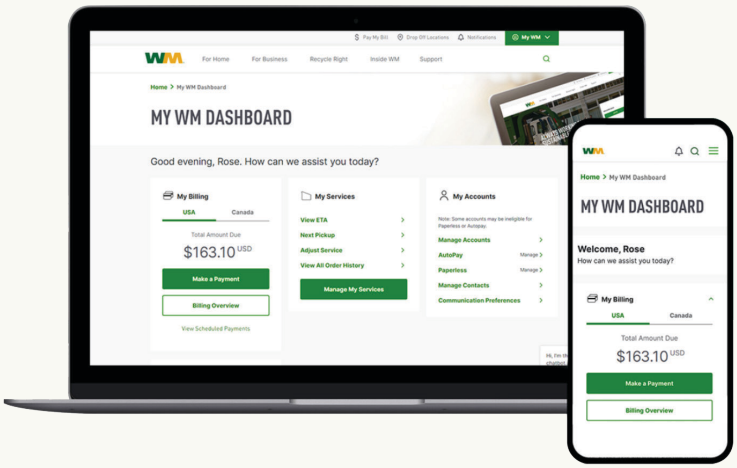
WM Customer Care Center (800) 423-9986
business.wm.com/Banning

Container Accessibility

Please ensure that containers are accessible on your regularly scheduled collection day(s), and that gates are open or that our driver has a key or gate code. Please ensure that cars, delivery trucks, excessive trash or other obstructions do not prevent access to your container.

Construction & Demolition Services

WM can tailor recycling and trash programs to meet the needs of local developers and do-it-yourselfers with roll-off bins and dumpsters for construction and demolition projects. For service options and pricing, please contact WM Builders Direct Desk at (866) 445-8296.



Weight and Volume Limits and Overflowing Containers

Please make sure not to overfill your bins or carts. All waste must be placed inside of the containers with the lids closed. Do not overfill the cart by tightly packing it; all items inside the cart must freely fall out when emptied. Dirt, rock, concrete and other construction debris are not allowed in waste containers. To maximize the capacity of your container, please break down all cardboard boxes. Please request additional collection service if necessary.

Temporary Bins

No matter your project's size, WM has various service options for you - from three (3) cubic yard bins for smaller jobs to temporary roll-offs for larger jobs.

Permanent Roll-Offs

WM has roll-offs in various sizes for trash or recycling services as well as compactor services for commercial and industrial customers who need to handle large volumes of material.

Customer Service

Powerful My WM capabilities are available to help you manage your service online. Pay your bill online, sign up for paperless billing, chat with an agent, view your pickup schedule and more by signing up for your online account today. Visit wm.com/us/en/user/register. Access all the functionality of your My WM account on your phone via the My WM app available for either iOs (iTunes App Store) or Android (Google Play) phones.

Online: wm.com | WM Virtual Assistant chatbot
Phone: WM Customer Care Center (800) 423-9986
Monday – Friday 8 a.m. to 5 p.m. | Saturday 8 a.m. to noon
For updates and additional information, please visit business.wm.com/Banning.

WM Customer Care Center (800) 423-9986
business.wm.com/Banning

State of California's Mandatory Commercial Recycling Laws

Recycling Law	Requirements for Businesses and Multi-family Properties
Mandatory Commercial Recycling (AB 341)	AB 341 requires commercial businesses and public entities that generate four (4) or more cubic yards per week of solid waste (trash), and multi-family housing complexes with five (5) or more units to have a recycling program in place.
Mandatory Commercial Organic Waste Recycling (AB 1826)	California's Mandatory Organic Waste Recycling Law (AB 1826) requires businesses and multi-family housing complexes with five (5) or more units that generate two cubic yards of solid waste per week to have an organic waste recycling program.
Mandatory Commercial Recycling and Organics Bins (AB 827)	AB 827 requires businesses subject to AB 341 and AB 1826 to provide in-house recycling and organics containers (along with trash) to collect waste generated from products purchased and consumed on the premises. Containers must be labeled trash, recyclables, and organics. For sample signage, visit https://calrecycle.ca.gov/recycle/commercial/organics/prtoolkit/
Statewide Mandatory Organic Waste Collection (SB 1383)	Effective Jan. 1, 2022, all California businesses, multi-family complexes and residences are required to separate organic waste from trash and subscribe to an organics collection program per State law SB 1383. Organics consist of food scraps, compostable food-soiled paper and yard waste. SB 1383 was passed to divert more food waste and yard trimmings from our landfills to further reduce greenhouse gas emissions and slow climate change. For more information, visit CalRecycle at www.calrecycle.ca.gov/organics/slcp/. SB 1383 also requires contamination monitoring and an education and enforcement program to be in place to help customers recycle properly. Contamination occurs when non-acceptable items are placed in the wrong container. Contaminants can ruin an entire load of organics or recyclables and prevent these materials from going on to have a second life.

How to Establish a Successful Recycling and Organics Program

1. Make sure you have the proper level of service.
WM offers free onsite or virtual visits, assessments and technical assistance. Let our trained staff determine the correct container sizes and service levels to maximize diversion, ensure compliance and be cost effective. To request a service assessment, please call WM's Recycling Compliance Representative, James Delgado (951) 627-3447.

2. Train and educate employees, tenants, residents and customers to properly sort all waste.
WM can provide education and resources, like proper container setup and signage, to ensure materials are disposed of properly.

3. Sort waste into proper containers.
Materials should go into the correct container to avoid contamination. The "What Goes Where" chart on the reverse page offers a visual guide that can be posted near your containers for quick and easy reference. Visit business.wm.com/Banning for more information.

SB 1383: What is it?

The California State Legislature passed Senate Bill 1383 (SB 1383), which requires cities to reduce organic waste disposal by 75% by 2025. Effective January 1, 2022, all California businesses, multifamily complexes, and residences are required to sort food scraps and yard debris from trash and recycling into an organics cart.

Container Color Transition

California State Senate Bill (SB) 1383 requires collection containers to be uniform in color across the state by 2036. In the City of Banning, carts will be gradually transitioned to the new color scheme—recycling containers will have a blue lid, organic waste carts will have a green lid, and trash containers will have a black lid. We will make these changes gradually to minimize disruption to your service.

Recycling

Your gray cart [Old] or dark gray cart with a blue lid [New] is for recycling collection.

Organic Waste

Your green cart [Old] or dark gray cart with a green lid will be for organic waste collection.

Trash

Your burgundy cart [Old], or dark gray cart with a black lid [New] is for trash collection.

SB 1383 Cart Monitoring and Enforcement

The State adopted SB 1383 regulations requiring waste hauler to enact an enforcement program that monitors recycling carts for contamination. This program will assist to reduce contaminants, keeping organic waste streams clean, ensuring the organic material collected can be processed and composted.

Contamination happens when you place the wrong material in the wrong cart. Contaminants can damage processing equipment, harm employees, and turn other recyclables and organics into trash. Only place accepted materials in your recycling and organics carts so they can be made into new products.

Monitoring with WM Smart Truck℠ Technology will help comply with the SB 1383 requirements by photographing and recording the waste in the cart as it is being collected. If the Smart Truck finds an issue with your cart due to contamination or an overfilled, the following will take place.

Occurrences within a Calendar Year

1st and 2nd Incident

- Contaminated/Overfilled cart or bin will be serviced and Service Recipient will be notified of proper procedures for sorting Recyclable Materials or Organic Waste.

3rd and Subsequent Incidents

- Contaminated/Overfilled cart will be serviced and may be charged a contamination/overfilled fee of ($19.10).
- Contaminated/Overfilled bin will be serviced and may be charged a contamination/overfilled fee of ($89.64).
- Letter will contain photographic documentation of contaminated/overfilled cart.

WM will be working in partnership with the City of Banning to help you and the city achieve best recycling practices. You will be receiving additional information on how to avoid these contaminants and recycle better.

Organics | Recycling | Trash
Right Materials - Right Container - Know Which Container to Use, scan the QR Code.

WM Customer Care Center (800) 423-9986
business.wm.com/Banning