



Public Works
Solid Waste Design Standards (Policy 1)
December 2022

Table of Contents

- I. INTRODUCTION 3
- II. SCOPE 3
- III. COMMERCIAL SUBMITTAL REQUIREMENTS 4
- IV. EXTERIOR ENCLOSURE DESIGN 5
- Table 1. Enclosure Design Specifications 5
- V. ACCESS REQUIREMENTS FOR EXTERIOR ENCLOSURES..... 6
- VI. INTERNAL SOLID WASTE ROOMS 8
- Table 2. Minimum Solid Waste Room Design Specifications..... 9
- VII. ALLEY SERVICE 10
- VIII. LARGE COMPACTORS AND ROLL-OFF CONTAINERS..... 10
- IX. RESIDENTIAL PROPERTIES AND SUBDIVISIONS..... 11
- X. WAIVERS AND APPEALS 11

I. INTRODUCTION

- a. This policy details requirements for commercial solid waste service and residential subdivisions, which will provide for the safe and efficient collection of solid waste materials. Public Works staff shall review and have final approval over safety factors and space requirements, including enclosure specifications, access to solid waste containers, and proper distance, height, and width clearances.

II. SCOPE

- a. This policy applies to all commercial properties within the City of Boise which use commercial solid waste containers and service with scheduled collection, and new residential subdivisions.
- b. Exterior solid waste enclosures are required for all new commercial solid waste service locations except those sites with an approved internal room for solid waste storage (Section V), alley collection (Section VI), or large compactors (Section VII).
- c. Residential subdivisions are required to provide adequate maneuvering space for the collection vehicle and staging space if residential cart service is being used (Section VIII).
- d. Multi-family residential properties with four (4) or more residential dwelling units will be considered commercial sites and utilize commercial solid waste service.
- e. Collection for commercial properties occurs 24 hours per day on days of available service. Multi-family or mixed-use sites are designated as commercial under these standards and therefore, may be collected at any time during the service window. Noise is created during collection, please take this under consideration when designing container location.
- f. Solid waste storage, screening, and staging plans will be required to be brought to current standards for:
 - i. Construction which impacts parking or driveway areas;
 - ii. Construction which restricts access to, modifies, or changes the location of an existing enclosure;
 - iii. Interior and exterior tenant improvements which change the use of the building.
- g. City of Boise Public Works staff have final approval on all compactor installations and can deny or require the use of compactors in projects that do not meet minimum Design Standard requirements.

III. COMMERCIAL SUBMITTAL REQUIREMENTS

- a. All submittals for commercial projects shall include a scale drawing of the site, clearly showing:
 - i. Lot lines;
 - ii. Existing and planned buildings;
 - iii. All existing and planned sidewalks, curb cuts, drives, parking spaces, landscaping, freestanding signs, posts, poles (e.g., streetlight, telephone and electric poles), overhead and underground utilities, and other structures that may affect collection;
 - iv. The location of all public rights-of-way, fire hydrants, sidewalks and public transportation stops on the premises and adjacent to the premises;
 - v. Adjacent structures, including distances to the nearest residential areas;
 - vi. Access roadways or drives intended for collection, ingress and egress, fire lanes, turnaround locations and vertical clearances; and
 - vii. Proposed path for the collection vehicles.
- b. For sites utilizing exterior solid waste enclosures, submittals shall include location and dimensions of all proposed solid waste enclosures and containers, and a detailed drawing of the proposed solid waste enclosure.
- c. For sites utilizing internal solid waste rooms, submittals shall include location and dimensions of the solid waste room and containers, and the location and dimensions of the staging area.
- d. For sites utilizing alleys or service drives, submittals shall include location of solid waste containers and dimensions of the alley or service drive.
- e. For sites utilizing individual carts for commercial service, submittals shall include labels showing the storage location of the containers and their staging area for day of service.
- f. For sites that do not require solid waste service, submittals shall include an explanation stating why solid waste will not be collected at this site and how any accumulated waste will be stored, handled and transported to a licensed disposal site.

IV. EXTERIOR ENCLOSURE DESIGN

Commercial properties where solid waste containers are stored in a walled structure located outside the building envelope, with one or more gates for access are considered exterior enclosures.

- a. The size of the enclosure will depend on what types of containers are to be utilized. The following table details the required enclosure specifications for various solid waste containers available from the city's contracted waste hauler (see Table 1 below, and Figures 1 through 4)

Table 1. Enclosure Design Specifications

Solid Waste Containers	Minimum Dimensions (interior)	Enclosure Gates/Doors	Surface Pad
One 3, 6, or 8-yard dumpster, and one grease container or up to two 95-gallon carts	16' X 12' with a 16'-wide gate opening	Must open at least 120 degrees, and have a mechanism to hold them in the open position	Minimum four-inch-thick reinforced concrete with an apron, sized to fit the enclosure
Two dumpsters: 3, 6, or 8-yard	18' X 12' with an 18'-wide gate opening	Must open at least 120 degrees, and have a mechanism to hold them in the open position	Minimum four-inch-thick reinforced concrete with an apron, sized to fit the enclosure
One 3, 6, or 8-yard dumpster and up to four 95-gallon carts	18' X 12' with an 18'-wide gate opening	Must open at least 120 degrees, and have a mechanism to hold them in the open position	Minimum four-inch-thick reinforced concrete with an apron, sized to fit the enclosure
Two 3, 6, or 8-yard dumpsters and up to four 95-gallon carts	18' X 16' deep, with additional 3' access door for cart service	Must open at least 120 degrees, and have a mechanism to hold them in the open position	Minimum four-inch-thick reinforced concrete with an apron, sized to fit the enclosure
Three dumpsters: 3, 6, or 8-yard	27' x 12' with a 27'-wide gate opening or 30' x 12' with one 18'-wide gate opening and one 12'-wide gate opening.	Must open at least 120 degrees, and have a mechanism to hold them in the open position	Minimum four-inch-thick reinforced concrete with an apron, sized to fit the enclosure
One or two 95-gallon carts	4' X 8'	4'-wide gate, or a three-sided enclosure with no gate	Paved and sized to fit enclosure
Three or four 95-gallon carts	8' X 8' or 4' X 16'	7'-wide gate, or a three-sided enclosure with no gate	Paved and sized to fit enclosure

- b. Multiple-dumpster enclosures designed with a partition or center gate post separating the dumpsters are treated as two separate enclosures for the purpose of determining minimum interior dimensions. For example, if a proposed enclosure contains two dumpsters with a separate gate opening for each container, they would be treated as separate single enclosures with 12'-wide gate openings required for each (see Figure 5 at end).
- c. Minimum 3'-wide pedestrian entrances are a preferred design feature of all solid waste enclosures. Multi-family residential or mixed-use properties (residential and commercial uses) utilizing 3-yard or larger containers must provide a minimum 3'-wide pedestrian entrance to the enclosure separate from the gate access used for the collection vehicle (see Figure 6 at end).
- d. Wheeled carts may also be stored inside a service area or garage and brought to the curb by building staff prior to scheduled collection. Carts must then be returned to their storage location within 24 hours by building staff.
- e. Solid waste enclosures may not be used for storage of any other materials except solid waste and all waste must be stored within the provided container(s).
- f. If bollards are placed inside the enclosure to protect the back wall, they must be located at least 9' back from the enclosure gate opening. Bollards cannot be placed within or near an enclosure in such a way as to restrict dimensions of the gate opening (see Figure 6 at end).
- g. Enclosures may not be covered or have a roof.
- h. Solid waste containers must be shielded from public view by a minimum 6' high fence or wall, and enclosure gate.

V. ACCESS REQUIREMENTS FOR EXTERIOR ENCLOSURES

- a. Enclosures must be located and configured so there is at least 50' of unobstructed access in front of the enclosure as measured from the center of the enclosure gates, extending to the width of the enclosure gates (see Figures 1 through 3 at end).
- b. The site plan must be designed so that backing movements of the collection vehicle do not exceed 70' in length, measured from the front of the enclosure to the edge of an intersecting drive aisle or paved area where the vehicle can turn around. Additionally, all backing must be in a straight line; vehicles cannot perform turning maneuvers while backing unless in an approved protected turnaround area.
- c. There must be at least 25' of overhead clearance above and 30' in front of all enclosures to avoid damage and interference while containers are being emptied.

- d. If the vehicle circulation plan does not allow collection vehicles forward access to a public street after collection, a paved hammerhead turnaround 15'-wide and 50'-long or a 70'-diameter cul-de-sac must be provided. Parking is not permitted in the cul-de-sac or turnaround area (see Figure 7 at end).
- e. Adequate maneuvering room for a collection vehicle with an overall approximate length of 35' and a 40' minimum outside turning radius must be provided. Separate site plans detailing the proposed collection vehicle drive path may be required for projects with limited paved maneuvering areas.
- f. All private roads, alleys, or service drives must provide an unobstructed path at least 15' high and 16' wide to allow for safe access to enclosures.
- g. The area 40' in front of the enclosure may not have a slope of greater than 4%.
- h. Access to enclosures must be maintained by the property owner by keeping path to the enclosure free of accumulating snow, parked cars, or debris.
- i. Enclosures located behind security gates or locked gates must be made accessible to the collection vehicles during service hours.
- j. The following cases require a legal agreement signed by all affected parties to be submitted to the Public Works Department, with one entity to be responsible for service billing:
 - i. Two or more adjacent properties opting to share a dumpster enclosure, where feasible and approved by Public Works staff.
 - ii. An enclosure with collection vehicle access located on an adjacent property with separate ownership.
- k. If a property has more than one enclosure in a designated area, enclosures must be placed in such a way that collection vehicles do not have to leave the site in order to service the enclosures (see Fig. 9). This can be achieved by:
 - i. Positioning the enclosures so that collection vehicles can remain on-site to service them. Or,
 - ii. Designing designated space for the collection vehicles to turn around on-site. See V.E. for the minimum dimensions for cul-de-sacs and hammerhead turnarounds.

VI. INTERNAL SOLID WASTE ROOMS

Commercial properties where solid waste containers are stored in an enclosed room within a building.

- a. All internal rooms (rooms within the building envelope) used for solid waste storage must:
 - i. Be located on surface level, or in underground or above ground-level garage areas, with adequate overhead clearances for the collection vehicle and container types.
 - ii. Provide an 8'-wide paved access ramp sloped towards the staging/service area or alley/service drive within 15' of the solid waste room exterior door. Access ramp may not have a slope greater than 4%. No curbs, rolled curbs, or pavement gaps may obstruct movement of containers to the street are permitted.
 - iii. Service containers are limited to 3-yard wheeled dumpsters or 95-gallon carts for service, or approved compactors where feasible.
 - iv. Provide a minimum of 15' overhead clearance. If containers are serviced within the building envelope, a minimum 25-foot overhead clearance must be provided.
 - v. Not be located within 20' of an intersection as measured from the center of the internal solid waste room door.
- b. If servicing solid waste room from a parking lot, private service drive, or public alley; Provide a staging/service area for the solid waste containers in front of the access ramp, with minimum dimensions of 20' along the curb and 9' out from the curb. This area must be marked with appropriate signage stating, "No parking or loading." Public Works staff shall have final approval on the location and design of this staging/service area.
- c. If there is no area to service containers on the property; Projects may be required to create a minimum 50' long and 14'-16' wide off-street loading zone for solid waste container collection/staging. (See figure 10)
- d. Required dimensions for solid waste rooms are detailed in the following table (Table 2).
- e. When alleyways have been vacated and/or the building envelope occupies the entire site, the city may require solid waste service be located within the building envelope, including access for collection vehicles.

Table 2. Minimum Solid Waste Room Design Specifications

Non-Residential Development Area*	Minimum Area of Solid Waste Room Including Recycling Space	Roll up Door Opening Dimension
0—5,000 square feet	192 square feet (16' X 12')	8ft wide door
5,001—20,000 square feet	256 square feet	10ft wide door
20,001—50,000 square feet	320 square feet	10ft wide door
50,001—100,000 square feet	480 square feet	12ft wide door
100,001—200,000 square feet	575 square feet	12ft wide door
200,001+	Every additional 25,000 square feet shall require an additional 72 square feet of storage space	16ft wide door
Multifamily Development Number of Units*	Minimum Area of Solid Waste Room Including Recycling Space	Roll up Door Opening Dimension
4-12 Dwelling Units	192 square feet (16 X 12)	8ft wide door
13-24 Dwelling Units	256 square feet	10ft wide door
25-50 Dwelling Units	320 square feet	10ft wide door
51-100 dwelling units	480 square feet plus 4 square feet for each additional unit above 50 units	12ft wide door
More than 100 dwelling units	680 square feet plus 4 square feet for each additional unit above 100 units.	12ft wide door or 16ft wide door to reduce depth of room

**If project is mixed-use, utilize Multifamily development minimum dimensions plus 50% of Non-Residential Development area minimums. Developments with Restaurant or Food Service uses may be required to have additional space up to 100% of Non-Residential minimum area.*

- f. For developments that utilize compactor units the required minimum storage space square footage may be reduced up to 25%.
- g. No other equipment or materials may be stored in solid waste rooms.
- h. Rooms that utilize compactor units or trash chutes must have at least one additional container for overflow.
- i. Internal solid waste rooms either opening into an alley or having a staging area in an alley must also be in compliance with Section VII (Alley Service) of this policy.
- j. If compactors are used the containers must be moved by the property owner to an accessible staging area on the property (or alley where applicable) for collection.

VII. ALLEY SERVICE

Commercial properties which border maintained alleys may utilize the alley as a solid waste collection location, provided the alley is accessible to collection vehicles and has through-access to streets at both ends.

- a. The alley must be clear and accessible along the entire length; collection vehicles will not back up when servicing solid waste containers.
- b. The container placement must provide clearance along the width of the alley so as to not block passage of vehicles. Containers cannot protrude into the alleyway more than a standard 3-yard dumpster.
- c. All solid waste containers must be stored along the property which they service.
- d. Enclosures are generally not required for alley service.
- e. Alley service is limited to 3-yard wheeled dumpsters, 95-gallon carts where feasible or approved compactors.

VIII. LARGE COMPACTORS AND ROLL-OFF CONTAINERS

Commercial service locations proposing the use of compactors with greater than 8-yards of capacity.

- a. Large Compactors and roll-off containers must be located in an accessible area (see Section IV) away from view of public street.
- b. Large Compactors and roll-off containers must be placed on a minimum 4-inch-thick reinforced concrete pad, with apron, sized to fit the compactor.
- c. Large Compactors and roll-off containers require 60' of clearance in front of the container.
- d. Any gates used to access the large compactor or roll-off container must open 120 degrees minimum and have wind stops.

IX. RESIDENTIAL PROPERTIES AND SUBDIVISIONS

Residential subdivisions where a separate set of carts is kept with each dwelling unit, to be serviced at the curb, alley, or service drive.

- a. The following are general requirements of residential subdivisions:
- b. All streets, alleys or service drives must be designed so that collection vehicles are not forced to back up at any time. A paved hammerhead turnaround 15' wide and 50' long may be provided for this purpose; parking is not permitted in the turn-around area (See Figure 7 at end).
- c. All developments utilizing residential service, including condominiums, town homes and patio homes, must provide a minimum of 15 feet of curb space per dwelling unit for the carts to be placed at the curb for collection or pay for carry-out service.
- d. Cul-de-sacs must have an unobstructed 70' minimum diameter.
- e. Alleys and service drives designated for solid waste collection shall be a minimum of 16' wide (curb-to-curb) with no parking permitted.
- f. Trees, streetlights, wiring and other overhead obstacles shall not impede solid waste collection and will be maintained to provide an 18' high clearance above the cart collection location(s).
- g. Designated parking areas shall not impede curbside solid waste collection; no parking is permitted in cul-de-sacs.
- h. Developers of gated subdivisions shall provide the solid waste hauler with access to the subdivision.
- i. Lots not accessible to collection vehicles, including flag lots, lots on dead-end streets and lots with private or shared driveways, must take their carts to the designated and accessible staging area for collection or pay for carry-out or premium carry-out service.
- j. A signed service agreement is required for solid waste service on private streets.
- k. If the above general requirements cannot be met, commercial service may be required.

X. WAIVERS AND APPEALS

- a. Any person may request a waiver of any provision of this policy.
- b. All waivers and appeals must be submitted the Public Works Department in writing.
- c. Reference Boise City Solid Waste Ordinance (Sec. 10-4-5-3 and 10-4-5-4) for the waivers and appeals process.