



Development Services Design Guidelines Solid Waste & Recycling Design Considerations

Solid waste and recycling design considerations for commercial or multi-unit residential housing include:

Space Required and Enclosure Basics

- Adequate space allocation for interior and exterior garbage, recycling, food waste, waste oil, yard debris, hazardous waste, or biohazard collection containers. Minimum **recycling** space allocation is established by *Federal Way Revised Code* (FWRC) 19.125.150 (page 3). Note that this typically makes up only about $\frac{1}{3}$ of the combined space needed for solid waste and recycling containers combined.
- In general, per unit services costs are lower for larger containers emptied less frequently. Sites that do not allow ample space for containers will tend to have higher service costs over the long term.
- Basic solid waste and recycling services can be accommodated within a single enclosure with clear interior dimensions measuring 10 feet deep by 20 feet across. A two-door swing-open or roll-open gate should span the front of the enclosure. When gate doors are opened, no structure or hardware should remain above grade across the enclosure opening. Gate pins/holes are preferred for holding gates in both closed and open positions to ease service access and maximize the life of gate hardware.
- Sites may require a larger enclosure, or multiple enclosures, to accommodate on-site user access and/or additional waste types and containers.
- Plan for user access to interior waste and recycling storage areas/containers, and convenient access to exterior containers screened by enclosure(s).

Vehicle and Service Access

- Plan for unobstructed enclosure ingress and egress for service vehicles, preferably in-line with enclosure openings. Allow appropriate turning radii for service vehicles, and minimize potential “blind spots” during entry and while backing. Please see diagrams (pages 5 & 6) for typical clearances.

Screening Specifications for Enclosures

- Consider landscaping, setbacks and screening requirements, based on FWRC 19.125.040(4) & (5) (page 4).

Large Scale Projects and On-Site Waste Compaction

- Note that larger-scale commercial or multi-unit housing developments may see long-term savings from the use of on-site waste compaction equipment. Planning elements for this equipment includes larger enclosure dimensions, defined overhead clearances, power utility access, and drainage management.

For grocery stores, restaurants, or multi-family facilities, “Self-Contained” waste compactors are preferred over “Stationary” or “Break Away” compactors. Compactors may need to be covered and connected to the sanitary sewer, since compacted wet wastes can cause leakage and surface water nuisances.

- Mixed-use developments may also benefit from on-site waste compaction equipment. Additional mixed-use development considerations include:
 1. Designated chutes and/or internal facility maintenance areas or services for tenant use;
 2. Movement of wastes and recycling items from interior units to collection areas; and
 3. Enabling access by business tenants and/or residents to exterior waste and recycling enclosure(s).

Help with many design parameters related to service access is available via the city’s contracted solid waste services provider, Waste Management – South Sound. Please contact:

Dian Young
WM - South Sound Route Manager
253.804.6815 – desk / 206.786.4530 – cell
dyoung15@wm.com

OR

Rob Van Orsow
City of Federal Way Public Works Department
Solid Waste & Recycling Division
253-835-2770
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Federal Way Revised Code (FWRC)

Title 19, Excerpts

19.125.150 Garbage and recycling receptacles – Placement and screening

(1) *Storage area.* Storage areas for garbage and recycling receptacles for material generated on site shall be required to be incorporated into the designs for multifamily, commercial and institutional buildings constructed after January 1, 1993.

(2) *Exemptions.* The following structures are exempt from the requirements of this section:

(a) Multifamily dwellings that will be served by curbside collection at each unit.

(b) Storage receptacles for detached dwelling units, parks or construction sites.

(c) Structural alterations or increases in gross floor area to existing nonconforming structures which do not meet the threshold levels described in Chapter 19.30 FWRC.

(3) *Storage area defined.* Storage areas shall include the areas containing receptacles served by collection equipment and may also include interim on-site storage areas used to aggregate material prior to delivering it to the collection storage area.

(4) *Location.* Except as specified in subsection (b) of this section, garbage and recycling receptacles, including underground facilities:

(a) May not be located in required yards;

(b) May not be located in buffer areas required by or under this Code; and

(c) Must be screened according to FWRC 19.125.010 et al.

(5) *Security and accessibility.* The following provision shall apply to all recyclable storage areas which contain receptacles served by commercial collection equipment.

(a) The storage area for recycling receptacles shall be located adjacent to the garbage storage area. The enclosures shall be easily accessible to users occupying the site. If the space is located within a structure, collection equipment must have an adequate vertical clearance and an adequate turning radius to ensure access and ease of ingress and egress.

(b) Storage areas shall not interfere with the primary use of the site. The area shall be located so that collection of materials by trucks shall interfere with pedestrian or vehicular movement to the minimum extent possible. The storage area shall not be located in areas incompatible with noise, odor and increased pedestrian and vehicle traffic.

(6) *Design guidelines; general.* The following provisions shall apply to all storage area designs:

(a) *Design and architectural compatibility.* The design of the storage area should be consistent with the architectural design of the primary structure(s) on the site. Storage areas shall be built on a flat and level area of a minimum of 50 feet from and at the same grade as the truck access area.

(b) *Enclosure and landscaping.* All outdoor trash enclosures for garbage and recycling receptacles shall be screened according to FWRC 19.125.040(4) and (5). Gate openings should be at least 12 feet wide if garbage and/or recycling drop boxes are used. In all other cases, gates shall be of sufficient width to allow access by recycling collectors and equipment. The landscaping shall be designed so as not to impede access to the storage area.

(c) *Signage.* Enclosure signs should be in conformance with Chapter 19.140 FWRC and shall not exceed two square feet per sign face. The containers for recycling and garbage should be identified using clearly visible signs.

(d) *Weather protection.* Storage containers shall be protected from weather damage by using containers that are largely weather-proof or by covering the storage area. Roofed storage areas must be accessible to haulers and collection equipment.

(7) *Space requirements.* The following minimum space requirements for recycling storage areas shall be incorporated into the design of all buildings:

(a) *Multifamily:* 1.5 square feet per unit, with a minimum of 65 square feet.

(b) *General commercial:* Three square feet of storage space, with a maximum of 1,000 square feet, for every 1,000 square feet gross floor area, with a minimum of 65 square feet.

(c) *Retail:* Five square feet of storage space, with a maximum of 1,000 square feet, for every 1,000 square feet gross floor area, with a minimum of 65 square feet.

(d) *Educational and institutional:* Two square feet of storage space, with a maximum of 1,000 square feet, for every 1,000 square feet gross floor area, with a minimum of 65 square feet.

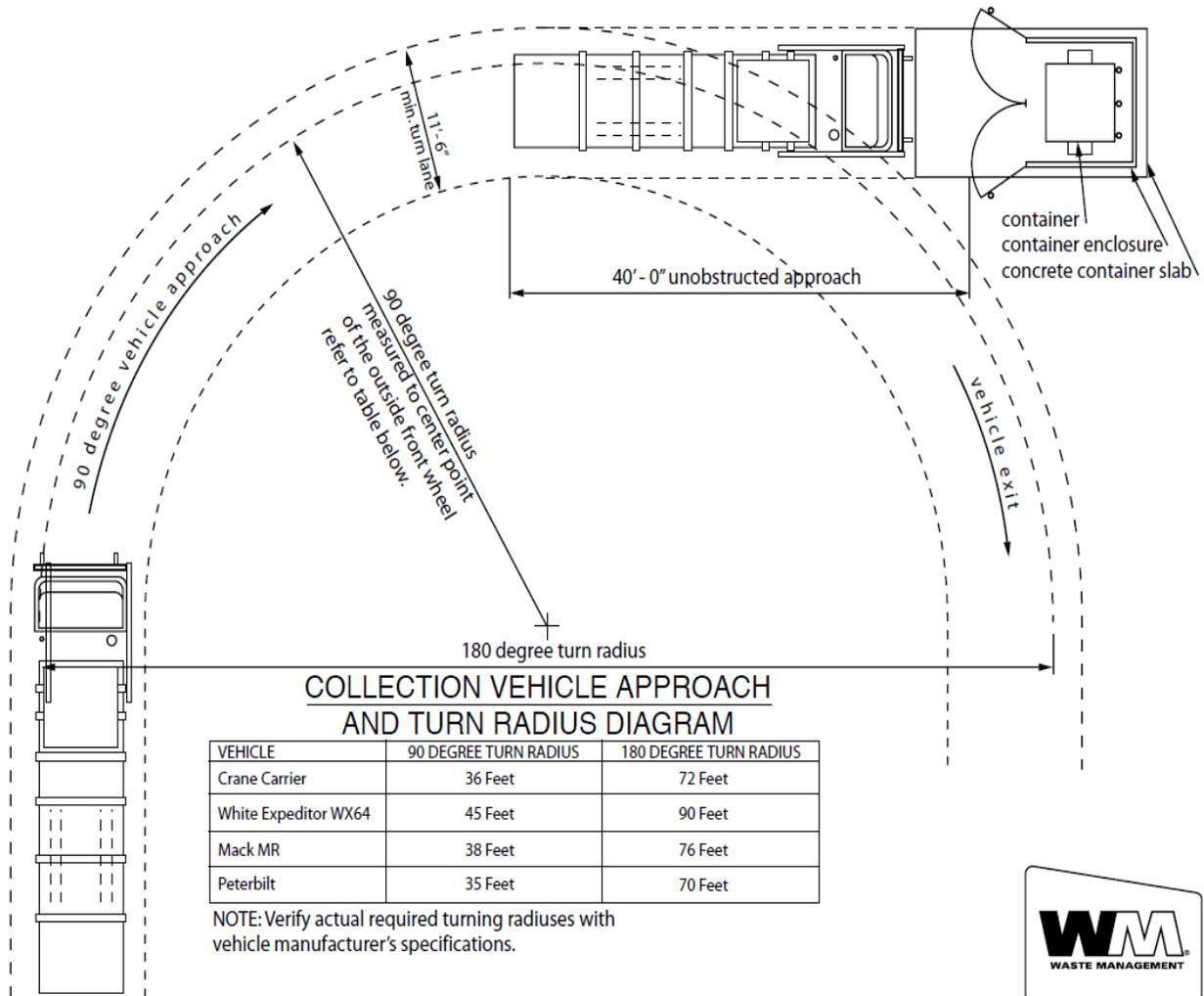
(Ord. No. 93-170, § 5, 4-20-93; Ord. No. 92-158, § 3, 12-15-92; Ord. No. 90-43, § 2(115.45), 2-27-90. Code 2001 § 22-949.)

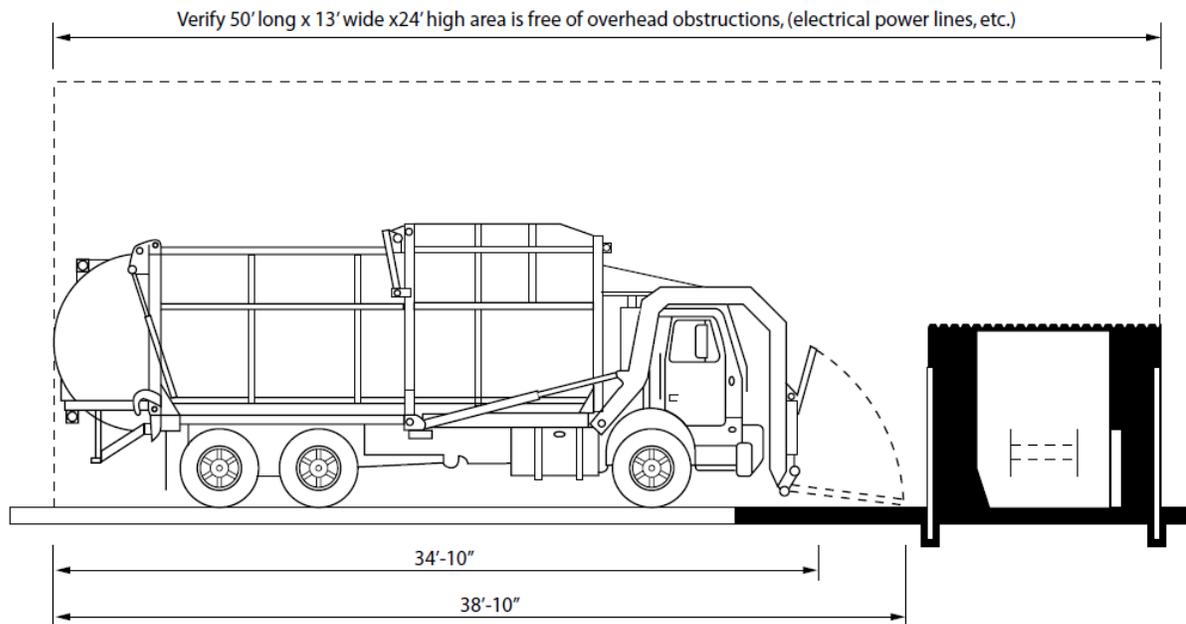
Cross reference: Solid waste, FWRC Title 11, Division II.

19.125.040 General landscaping requirements – All zones (*excerpt*)

(4) All trash enclosures shall be screened from abutting properties and/or public rights-of-way by a 100 percent sight-obscuring fence or wall and appropriate landscape screen.

(5) Type III landscaping, defined in FWRC 19.125.050(3), shall be placed outside of sight-obscuring fences abutting public rights-of-way and/or easements unless determined by the director of community development that such arrangement would be detrimental to the stated purpose of this article.





SIDE VIEW

NOTE: Vehicle shown is a standard 40 cu. yd. front end loading collection truck. Actual Dimensions will differ based on truck Manufacturer

