

## **SECTION 2400 – SOLID WASTE**

### **2401 SCOPE**

This division governs all design, work, and materials required for the installation of solid waste refuse and recycling containers and their associated enclosures.

### **2402 GENERAL**

#### **A. General Considerations**

1. Refuse containers are serviced by large, heavy trucks. These trucks must be driven to the location of the container. The customer bears full responsibility for the privately-owned lot and driveway strength. The City is not responsible for damage to pavement resulting from truck or container weight.
2. It is highly recommended that contact be made with the Solid Waste supervisors prior to building the enclosure so they can assist in determining the type of service best suited to each location. They would like to help avoid future problems for the customer and for the Solid Waste Division. The Solid Waste Division phone number is: (785) 832-3062.
3. Approach lanes to the container sites must provide 22 feet of unobstructed width and overhead clearance to 21 feet.
4. Removal of snow and ice to permit safe approach to the container is the customer's responsibility. This is a particular problem if the approach is not level. It is the customer's responsibility to remove snow and ice from within enclosures and from approaches to enclosures.
5. It is impossible to plan refuse collection service for a particular site on the assumption that the collection vehicle will arrive when traffic or parking lot loads are light. Leave safe maneuvering room around and approaching the container enclosure.
6. Enclosures are designed for trash and recycling dumpsters ONLY. Plan for other appropriate locations for grease bins and other items or make the necessary adjustments to the enclosure to accommodate other items such as grease bins so the solid waste service will not be impeded, and that equipment and personnel is not at risk.

#### **B. Equipment Type**

##### **1. Front Load**

Front load trucks are not highly maneuverable. They are operated by one-person crew and have very limited visibility directly behind the truck. These limitations should be considered when selecting sites for containers to prevent property damage and injury. Front load containers are not equipped with wheels; therefore, these containers cannot be moved except by use of the refuse collection truck or other heavy equipment. These containers range in sizes. 2, 3, 4, 6, 8, 10 yard

## 2. Rear Load

Rear loaders containers used by the City are equipped with four, non-locking, swivel casters so they can be moved with relative ease to the hook-up points at the back of the collection vehicle or to and from other points on the customer's property as desired. This freedom of movement imposes certain constraints on the design of container sites, pads, and enclosures. Empty containers weights vary from 350 pounds to over 600 pounds. When full, they may weigh well over 1000 pounds. They must be moved into pick-up position by two crew members. These containers range in sizes. 2, 3 yard.

### 2403 SITE REQUIREMENTS

1. The container must sit on a hard surface. A minimum of 8" thick KCMMB 4K Concrete-Fiber reinforced or #4 bars at 18" center (maximum) is recommended. The pad must be either at the same level as the collection vehicle or a shallow grade ramp from the surface of the pad to the lot or street level must be provided. Container pads must be level, or nearly so, to facilitate movement by the crew.
2. The collection truck must be on a level or nearly level plane when connecting to the container due to the fixed height of the attachment point. Collection crews will not be able to lift containers to and from curb height, over bumper blocks, or pull them through soft dirt, mud, snow, ice, or gravel. Container pads or enclosure floors must have a hard surface.
3. The approach to the container site should provide a concrete pad 8" thick KCMMB 4K Concrete-Fiber reinforced or #4 bars at 18" center (maximum) from the container front or enclosure entrance out to an instance of 20 feet so that the truck wheels are adequately supported during the dump process.
4. The area over the container and for 20 feet in front of the container must be clear of overhead obstructions to a height of 21 feet.
5. Provisions must be made to prevent the container from moving from its intended site when unattended. Wind, animals, children, adults, or other factors may cause the container to roll and cause damage to other property or cause personal injury. Methods commonly used to confine the container include chains, bumper blocks, enclosures, etc. Placing a stick under a wheel is not sufficient. Customers are responsible for any damage or injuries resulting from the customer's failure to provide proper container restraint methods.
6. Gates, if provided, must be devised so that they can be latched in the closed position and so they can be secured in the fully open position while the collection vehicle is entering and leaving the enclosure entrance. Gates may be required if the enclosure is visible from the street.
7. All enclosures must have a minimum of two bollards per container along the inside of the back wall to prevent the container from being pushed into the wall. The front-loading collection system

imposes severe visibility limitations on the driver while he is connecting and disconnecting the container and while maneuvering the truck with the container on the pick-up forks. Operating in hours of darkness or adverse weather further aggravates this limitation. The bollards should 6" diameter heavy steel posts set in concrete at 6" from the back wall. The height of each post should be 4' to 6'

8. Containers which will not be in an enclosure but will be placed near a building wall or fence must be provided bollards as described above.

## 2404 ENCLOSURE REQUIREMENTS

### A. General

1. A clear working area of 36" minimum is needed on all sides of the container.
2. Enclosure entrance must be kept clear and unobstructed minimum width of 22 feet.
3. Where gates are required on enclosures, a minimum width of 22 feet openings between gate posts are necessary.
4. Enclosure walls must be protected from impact with the container.
5. All enclosures must have one bollard per container along the inside of the back wall to prevent the container from being pushed into the wall.
6. All enclosures must be protected from impact with the container by the provision of either:
  - a. Properly placed bollards around the inside of the enclosure; OR
  - b. A striker board, or reinforcement boards around the inside of the enclosure, 2" x 8" minimum, centered 49.5" above the enclosure floor.

### B. Enclosures with two containers

1. Minimum Inside Dimensions
  - a. Width = 22 feet
  - b. Depth = 13 feet
  - c. Height = 7 feet
2. For each additional container required for service level add 11 feet of width to the enclosure