Solid Waste, Recyclables, & Organic Compostables Enclosure Design Standards

This is not a formal enclosure standard adopted by the Town of Paradise but is intended to help in the design of commercial and industrial facilities.

Northern Recycling & Waste Services
(530) 876-3340

I. COLLECTION AND STORAGE REQUIREMENTS

A. General

The Paradise Municipal Code (PMC) requires all businesses and multi-family complexes within the Town of Paradise to subscribe to solid waste, recycling and compostables service offered by the Town's Authorized Contractor unless they are exempted from those requirements **(PMC Section 8.08).** The service must adequately collect all MSW, recyclable materials and compostables that may be generated by a business or multi-family complex. MSW, recyclable materials and compostables must be separated into different containers and all containers must be properly stored in an enclosure that meets the building requirements and environmental/safety regulations listed in **Section III "Enclosure Design & Compliance Requirements"** of this document.

B. Commercial Businesses (Offices, Retail, Light Industrial)

State law requires all businesses to divert the recyclable materials they generate. Additionally, State law also requires commercial businesses to participate in a composting program to meet the goal of reducing 75% of organic waste in landfills by 2025. Therefore, all businesses must size enclosures to store all MSW, recyclables and compostables. Compostables include all food scraps & soiled paper from breakrooms and yard trimmings generated if they are not hauled away by a landscaper or left as mulch on the grass or on other landscaped or garden areas. Enclosures must have adequate space for the storage of all three streams.

C. Food Facilities

If a business stores, prepares, packages, serves, vends or otherwise provides food for human consumption it is considered a Food Facility. Food Facilities may include, but are not limited to restaurants, grocery stores, schools, nursing homes and hospitals. The Town of Paradise in the future will offer an environmentally beneficial commercial food composting collection program that collects compostables in 65-gallon carts with lids and special signage. All food scraps (fruit, vegetables, meat, fish, cheese, bread, pasta, coffee grounds, etc.) as well as soiled paper products are acceptable as compostables. The State of California now requires all commercial businesses to participate in a food scrap collection program (Public Resources Code §42649.8 et seq.).

All Food Facilities that generate compostables must provide adequate space within their enclosure(s) to accommodate 65-gallon compostables carts and comply with building requirements related to the storage of food. Per the Town and County of Butte, these enclosures require the installation of a roof. Detailed information about these requirements can be found in **Section III "Enclosure Design & Compliance Requirements"** If any future tenants will be, or may be, Food Facilities generating compostables the enclosure(s) must be designed to accommodate an adequate number of 65-gallon carts for storage of compostables. Additionally, Food Facilities that generate cooking oil/grease must provide adequate space in the enclosure(s) for a container designed specifically for the storage and collection of cooking oil and grease.

In addition to participating in a food scrap collection program, State law requires that all food generators participate in an organics recovery program with the goal of recovering 20% of edible food sent to landfills for human consumption.

D. Multi-Family Complexes

State law requires all multi-family complexes to divert recyclable materials they generate effective July 1, 2012 (Public Resources Code §41780.01) and capture all compostables. Therefore, all multi-family complexes must size enclosures to store MSW, recyclable materials and compostables. If yard trimmings are generated at a complex and are not hauled away by the landscaper or left as mulch on the grass or on other landscaped or garden areas, then the enclosure(s) must also have adequate space for storage of yard trimmings. See **Section II F. Determining Service Needs for Multi-Family Complexes**. If a complex is storing yard trimmings in the enclosure(s) it may be possible for the complex to participate in the residential co-collected yard trimmings and food scrap program offered by the Town's Authorized Contractor. Depending upon the size of the complex and the frequency of collection, this could save some space in the enclosure(s). Multi-family complex enclosures are not required to install a drain that is connected to the sanitary sewer or have an enclosure roof provided all containers have closed lids covering the material.

II. DETERMINING ENCLOSURE SIZE

A. Maximizing Collection Efficiency

- The automated collection trucks used by the Town's Authorized Contractor achieve maximum efficiency when the number of times the driver gets out of the truck is minimized. Properly designed enclosures allow the driver to "stab" the bin without physically moving it when bins are used for collection. Maximizing efficiencies help keep solid waste collection fees reasonable.
- Additionally, the collection system is most efficient and economical if trucks only need to service a site once per week. The goal is to size enclosures to be large enough to contain one-week's volume of MSW, recyclable materials and compostables when possible. It is also important to obtain sufficient service to prevent material from overflowing or being stored on the ground. Non-containerized debris will not be collected by the Town's Authorized Contractor.

B. User Convenience to Minimize Contamination of Recyclable Materials and Compostables

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

C. Indoor Solid Waste Storage

Some businesses prefer to store collection containers in a room or area that is permanently attached to the business. This is an acceptable method for the storage of all necessary collection containers. In addition to providing adequate space for all MSW, recyclable materials, compostables and cooking oil/grease that may be generated, all requirements found in **Section III "Enclosure Design & Compliance Requirements"** must be followed as well as any additional state and local codes related to indoor solid waste storage. These requirements include, but are not limited to, the installation of an approved automatic sprinkler system and gate access into the storage area.

D. Determining Service Needs for Commercial Businesses (Offices, Retail, Light Industrial)

In order to determine what type and how much service a business will need, the business must first determine the type of materials that will be generated by the business. The three primary service types that require separation into different containers are: MSW, recyclable materials, and compostables. Will the business generate all three categories of material? Keep in mind that most multi-family complexes and business properties have commercial landscapers who leave grass clippings on lawns or remove the yard trimmings. If this is the case, there is no need to make enough room for a yard trimmings cart. If a business is a Food Facility that will produce food scraps and other compostables please see Section D "Determining Service Needs for FOOD FACILITIES" to determine the enclosure sizing needs. Food Facilities must construct an enclosure that has a roof and must install a drain connected to the sanitary sewer. Specific details can be found in **Section III "Enclosure Design & Compliance Requirements"** of this document. Keep in mind that light industrial/commercial properties are required to have at least one enclosure sized for the collection of compostables. Additionally, in business complexes where tenants are specified and do include businesses that generate food, the nearest enclosure to the business that generates food shall be designed to meet standards for a Food Facility enclosure.

Table A will help determine the enclosure size needed based on the type and size of the business.

TABLE A (Municipal Solid Waste (MSW), Recyclable Materials & Compostables) Recommended Enclosure Size & Container Need by Building Use, Square Footage, and Estimated Weekly Generation				
Business / Land Use	**Square Footage**	**Estimated Weekly Generation***	**Enclosure Size Required (width x depth)**	**Sample Diagram****
Office, Retail, Industrial and General Commercial**	Less than 5,000 sq. ft.	2 cubic yards	11' x 6'	Exhibit A. Cart Enclosure***
	5,000-10,000 sq. ft.	4 cubic yards	17' x 7'	Exhibit B. Small Bin Enclosure (two 2-yd. bins)
	10,000-20,000 sq. ft.	8 cubic yards	17' x 8'	Exhibit C. Medium Bin Enclosure (two 4-yd. bins)
	over 20,000 sq. ft.	12 cubic yards or more	17' x 10'	Exhibit D. Large Bin Enclosure or multiple enclosures (two 6-yd. bins or >)

* Generation assumes 50% MSW and 50% recyclable materials with no compostables or yard trimmings (Assumes yard trimmings are removed by landscapers or mulched on-site)
** Sample diagrams for each of the MSW & recyclable materials enclosures are in Exhibits A-D
*** Cart-only service for generation beyond 2 cubic yards may require multiple pickups per week for businesses with limited space

E. Determining Service Needs for Food Facilities

The Town of Paradise, via its Authorized Contractor, will offer State required future weekly collection of 65-gallon food scrap/compostables carts. Collection service is most efficient and cost effective if the enclosure is built to hold one week's worth of material. The enclosure must be sized to hold all of the containers that a Food Facility requires, which will include containers for MSW, recyclable materials, compostables and a cooking oil/grease tank if the business generates oil and grease. Table B is a guideline to help determine weekly material generation from a Food Facility based on the size of the Food Facility, the quantity and type of containers needed for service, and the size of enclosure that is needed to house containers. Individual results may vary depending on preparation methods and materials, reuse of leftovers, and type of food service. When planning, keep in mind any seasonal changes and future business changes that may increase the amount of material generated, therefore increasing the number and/or size of containers required. Food Facilities such as nursing homes and hospitals require a waste assessment to accurately assess their needs.

Table B will help determine the enclosure size needed based on the size of the Food Facility:

TABLE B (Municipal Solid Waste (MSW), Recyclable Materials & Compostables) Recommended Enclosure Size & Container Need by Square Footage and Estimated Weekly Generation					
Business /Land Use	**Square Footage**	**Estimated Weekly Generation***	**Enclosure Size Required (width x depth)**	**Sample Diagram****	**Containers Required**
Food Facility **WITHOUT** Oil/Grease Tank	Less than 4,000 sq. ft.	2 cubic yards	9' x 10'	Exhibit E. Extra Small Food Enclosure	1, 95-gal MSW Cart 1, 95-gal Recyclable Materials Cart 3, 65-gal Compostables Carts
	4,000-8,000 sq. ft.	4 cubic yards	13' x 12'	Exhibit F. Small Food Enclosure	2, 95-gal MSW Carts 2, 95-gal Recyclable Materials Carts 6, 65-gal Compostables Carts
	8,000-16,000 sq. ft.	8 cubic yards	21' x 11'	Exhibit G. Medium Food Enclosure***	1, 2 yd. MSW Bin 1, 2 yd. Recyclable Materials Bin 4, 65-gal Compostables Carts 3X/wk.
	Over 16,000 sq. ft.	12 cubic yards or more	21' x 11'	Exhibit H. Large Food Enclosure***	1, 3 yd. MSW Bin 1, 3 yd. Recyclable Materials Bin 6, 65-gal Compostables Carts 3X/wk.
Food Facility **WITH** Oil/Grease Tank	Less than 4,000 sq. ft.	2 cubic yards	13' x 7'	Exhibit I. Extra Small Food/Oil Enclosure	1, 95-gal MSW Cart 1, 95-gal Recyclable Materials Cart 3, 65-gal Compostables Carts 1, 100-gal Oil/Grease Tank
	4,000-8,000 sq. ft.	4 cubic yards	20' x 10'	Exhibit J. Small Food/Oil Enclosure	2, 95-gal MSW Carts 2, 95-gal Recyclable Materials Carts 6, 65-gal Compostables Carts 1, 200-gal Oil/Grease Tank
	8,000-16,000 sq. ft.	8 cubic yards	21' x 11'	Exhibit K. Medium Food/Oil Enclosure***	1, 2 yd. MSW Bin 1, 2 yd. Recyclable Materials Bin 4, 65-gal Compostables Carts 3X/wk. 1, 200-gal Oil/Grease Tank
	Over 16,000 sq. ft.	12 cubic yards or more	21' x 12'	Exhibit L. Large Food/Oil Enclosure***	1, 3 yd. MSW Bin 1, 3 yd. Recyclable Materials Bin 6, 65-gal Compostables Carts 3X/wk. 1, 300-gal Oil/Grease Tank

* Generation assumes 25% MSW, 25% recyclable materials and 50% compostables
** Sample diagrams for each of the Food Facility enclosure types are in Exhibits E-L
*** Medium and Large Food Facility enclosures require twice a week collection of compostables carts

F. Determining Service Needs for Multi-Family Complexes

The Town of Paradise, via its Authorized Contractor, will offer State required future service to multi-family complexes including weekly collection of 65-gallon food scrap/compostables carts. Collection service is most efficient and cost effective if the enclosure is built to hold one week's worth of material. The enclosure must be sized to hold all of the containers that a multi-family complex requires, which will include containers for MSW, recyclable materials, yard trimmings (if needed) and compostables. Table C (MSW, Recyclable Material & Compostables generators) provide guidelines to help determine weekly material generation from multi-family complexes based on the number of residential units, the quantity and type of containers needed for service, and the size of enclosure that is needed to house containers. In some cases multiple enclosures may be needed for larger complexes to provide user convenience. Each enclosure must provide containers for the collection of all three material streams.

TABLE C

(Municipal Solid Waste (MSW), Recyclable Materials & Compostables)

Recommended Multi-Family Container Need by Number of Units & Estimated Weekly Generation

Number of Units	Estimated Weekly Generation*	Minimum Containers Required**
6-10 Units	4-6 cubic yards	2, 95-gal MSW Carts 4, 95-gal Recyclable Materials Carts 3, 65-gal Compostables Carts
11-20 Units	7-12 cubic yards	4, 95-gal Recyclable Materials Carts 1, 2-yd. MSW Bin 6, 65-gal Compostables Carts
21-30 Units	13-18 cubic yards	1, 3-yd MSW Bin 1, 4-yd Recyclables Bin 9, 65-gal Compostables Carts
31-40 Units	19-24 cubic yards	1, 4-yd MSW Bin 1, 6-yd Recyclables Bin 12, 65-gal Compostables Carts
Each Additional 20 Units	12 cubic yards	3, 95-gal MSW Carts (2X/wk.) 6, 95-gal Recyclable Materials Carts (2X/wk.) 3, 65-gal Compostables Carts (3X/wk.)

* Generation assumes 25% MSW, 50% recyclable materials & 25% compostables with no yard trimmings (Assumes yard trimmings are removed by landscapers or mulched on-site)

** Multiple weekly pickups may be required

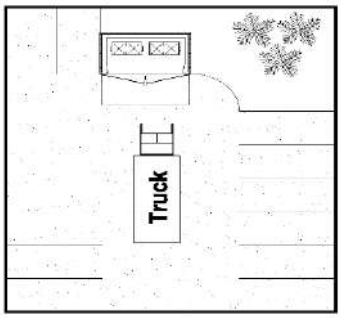
III. ENCLOSURE DESIGN AND COMPLIANCE REQUIREMENTS

I. Construction & Design

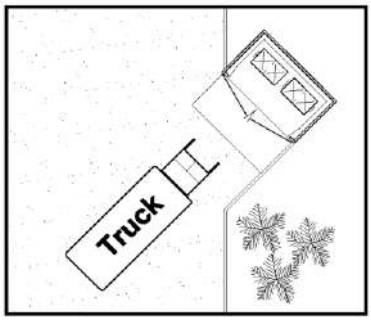
A. Location & Accessibility

1. All enclosures are required to have direct access for collection trucks. Direct access means the collection truck can drive directly at the bin or compactor, and insert the forks into the sides of the bin without the driver having to get out of the truck again (since the driver already must open the gate) to move the bin (See Diagram Below). A minimum straight approach of 50 feet is necessary to line up directly with bins and 75 feet is required for access to compactors and roll-off boxes. Angled direct access for bin service may be acceptable (with an angle of up to 30 degrees) if approved by the Compliance Official. An applicant may request such approval by submitting a written request with appropriate drawings to the Compliance Official.
2. Opening/closing gates or fences and locking/unlocking the bin lids are part of the driver's responsibility and are included as part of the service provided.

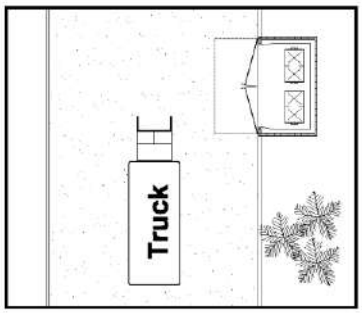
DIRECT ACCESS FOR BIN SERVICE (Preferred)



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



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



*May be acceptable for approved cart-only service.

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

- It is difficult and dangerous for a collection truck to back-up. Providing a turn around or separate exit that allows the truck to move forward rather than backwards is required. Maximum back-up distance is 50 feet for any maneuver and shall be in a straight line. A 75' distance is required for compactors or roll-off boxes.
- Containers shall not be placed in front of fire hydrants or equipment and no bin shall be placed within 5 feet of a combustible building wall, opening, or combustible roof eave line; and
- Enclosures shall not be installed behind parking spaces or landscaping.

B. Driveways

1. An asphalt or concrete driveway with 50 feet of straight, direct access that leads to and from the enclosures to bins and 75 feet for compactors and roll-off boxes is

required and shall be built in accordance with the Town Standard Plans and Specifications and be able to withstand trucks weighing up to 56,000 lbs. Gross Vehicle Weight (GVW).

C. Turning Radius Requirements & Truck Dimensions

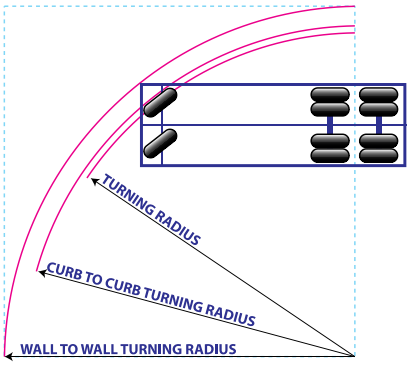
1. The turning radius shall be adequate for a 3-axle truck. Please detail this on all submitted plans.

COLLECTION TRUCK TURNING RADIUS AND DIMENSIONS FOR TOWN OF PARADISE SERVICE PROVIDER

COLLECTION TRUCK TURNING RADIUS:

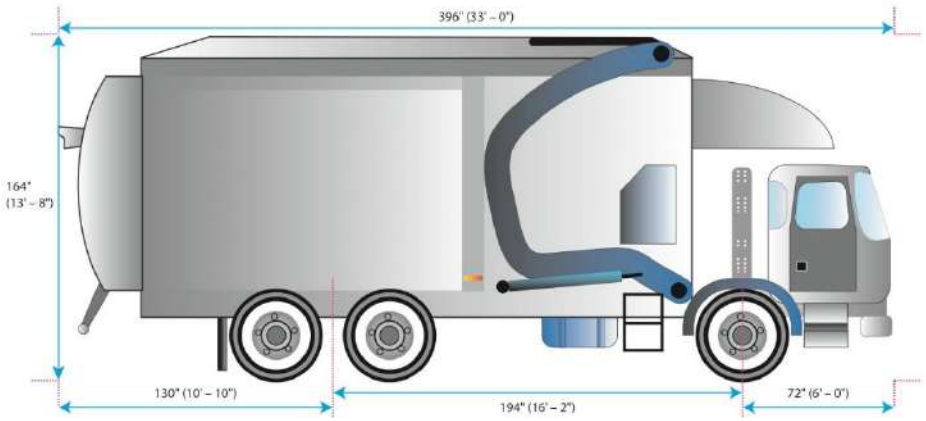
DESCRIPTION	RADIUS	DIAMETER
Turning	35’ - 0”	70’ - 0”
Curb to curb turning	36’ - 0”	72’ - 0”
Wall to wall turning	39’ - 0”	78’ - 0”

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



COLLECTION TRUCK DIMENSIONS:

DESCRIPTION	FEET/INCHES
Overall length	33’ - 0”
Bumper to front axle	6’ - 0”
Wheelbase (front axle to pivot point rear tandem axle)	16’ - 2”
Pivot point rear tandem axle to rear of vehicle	10’ - 10”
Height	13’ - 8”
Width (includes mirrors)	11’ - 0”
Steering lock angle - 25.2 degrees	N/A



D. Stress Concrete Apron

1. Apron surface shall be the same elevation as the enclosure pad threshold and the surrounding surfaces, with a slope of 1/8 inch (1% grade) per foot away from the enclosure pad; and,
2. To prevent damage to the asphalt paving by container impact, the enclosure shall be provided with an apron that extends a minimum of 8 feet from the enclosure pad and matches the width of the enclosure opening. This apron shall have a minimum sub-base of 4" of class 2 aggregate and shall consist of 3,000 psi concrete (six sack mix) or stronger, which is at least 6" thick with #4 rebar placed mid height at 12" on center each way. Alternatively, the builder shall provide evidence that construction specifications are engineered to withstand a minimum of 20,000 lbs. of direct downward force from a single truck axle.

E. Enclosure Concrete Pad

1. Enclosure pad shall be engineered to withstand up to 20,000 lbs. of direct force from a single truck axle.
2. Enclosure pad surface shall be the same elevation as the apron threshold.
3. Food Facility enclosures that have a drain connected must have a grade break line constructed on the open side at the inside edge of the wall with the slab sloping inwards on the inside of the structure and away from the structure on the outside.
4. The grade of all non Food Facility enclosure pads shall be flat such that no stormwater shall escape the enclosure if commingled with MSW.

F. Height Clearance of Enclosure Approach

1. In front of the enclosure, front loader collection trucks require at least 14 feet of vertical clearance over the entire approach to and from the enclosure to accommodate truck height, and 32 feet high just in front of the enclosure itself or wherever the bin will be emptied to accommodate the truck lifting the bins up to dump the contents.
2. Food Facility enclosures shall have a roof that has a height inside the enclosure of no less than 10 feet.

G. Interior

1. Enclosure size shall be determined in accordance with Exhibits A-M.2 .
2. The minimum interior dimension for an enclosure needed to house at least two (2) cubic yard bins is 17' X 7'. For cart-only service the minimum size is 11' X 6' to store one 95-gal MSW cart, one 65-gal compostables cart and two 95-gal recyclable materials carts. The smallest size enclosure for a Food Facility without an oil/grease tank is 9' X 10' to house one 95-gal cart for MSW, one 95-gal cart for recyclable materials and three 65-gal compostables carts. Interior dimensions will increase depending on the size, type and number of containers (See **Section II. Determining Enclosure Size** for recommended sizes.)
3. The enclosure shall be large enough to provide a 6" clearance from the back interior wall to all bins and/or compactors and a minimum of 16" or more to each side of any bin or compactor. Additionally, 36" of pedestrian accessibility is required to all containers. Bins without wheels shall be placed a maximum of 8" from the vehicle gate doors if the enclosure has a roof and 24" if the enclosure does not have a roof. All containers, including carts and oil/grease tanks must have a minimum of 3" between them. No clearance is required between the back enclosure wall and carts for cart service. Adding a wood or rubber bumper on the back wall to prevent damage to the enclosure during servicing of bins or compactors is required. Bollards or other permanent or semi-permanent structures shall not be used within the enclosure. These structures reduce useable interior container space and accessibility.

H. Wall Height

1. Enclosures require a minimum wall height of 6'.

I. Material

1. Generally, the material of the enclosure should match the exterior surface of the building. See the Design Guidelines from the Community Development Department with questions. The Town encourages compliance with the *Leadership in Energy and Environmental Design (LEED) New Construction and Major Renovations Standards for Storage and Collection of Recyclable Materials* or comparable *Build it Green* standards. (See Appendix B for more information.)

J. Gates/Pedestrian Doors

1. Two gates are required for enclosures. When the enclosure does not allow for two gates, it may necessitate a single gate. All gates shall open to 110 degrees, remain closed unless in use and be able to be secured open.

2. Gates shall be free standing with no center pole. A center pole may be included at the discretion of the Compliance Official. Required clearances shall be provided for direct access to bins.
3. Gates shall be chain link or metal with outside handles on each door and a slide latch to secure the doors.
4. Gated opening for ingress/egress of bins shall be a minimum of 17 feet wide with gate posts outside of this span to avoid reducing the enclosure opening.
5. Use bolts, not screws, to secure gate to the poles or walls.
6. 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. Bolt shall drop a minimum of 4 inches into the ground.
7. Enclosure shall be kept clean with all MSW, recyclable materials and compostables placed in the proper container.
8. A separate additional pedestrian entrance with a door (to reduce scavenging) is required from the back or the side for both non-residential facilities and residential multi-family complex developments.
9. The California Building Code requires the pedestrian entrance door to open with no more than 5 lbs. of force. The opening hardware should be lever type centered 34" – 44" above the finished surface and the bottom 10" of the gate shall have a smooth, uninterrupted surface to allow the gate to be opened by a wheelchair footrest without creating a trap or hazardous condition.

K. Signage

1. The area directly in front of the enclosure gates shall have "NO PARKING" painted on the ground. The letters shall be 18" in height. Additionally, "NO PARKING" signs shall either be installed permanently affixed to each gate, or painted on each gate 48" above ground level in letters no smaller than 6" in height. Further, a minimum 12" by 18" sign with a minimum 1" lettering indicating contact information for the property owner and/or management company responsible for maintenance of the enclosure area (name/phone number) shall be permanently affixed to one of the front gates of the enclosure.

L. Electrical

1. If a compactor will be used, the most efficient power source is a 480V triple phase outlet. Some compactors may run on a 220V double phase outlet. Smaller compactors, four yards or less, will run on a single phase 110V outlet, but will require a dedicated 20 amp circuit. Compactor specifications should be consulted prior to wiring of an electrical outlet.

M. Storage

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

EXHIBITS

Typical Enclosure Facility

Typical Enclosure Facility Notes

MSW, Recyclable Materials & Compostables Enclosures

Exhibit A: Cart Enclosure Layout
Exhibit B: Small Bin Enclosure Layout
Exhibit C: Medium Bin Enclosure Layout
Exhibit D: Large Bin Enclosure Layout

Food Facility Enclosures WITHOUT Oil/Grease Tank

Exhibit E: Extra Small Food Enclosure Layout
Exhibit F: Small Food Enclosure Layout
Exhibit G: Medium Food Enclosure Layout
Exhibit H: Large Food Enclosure Layout

Food Facility Enclosures WITH Oil/Grease Tank

Exhibit I: Extra Small Food/Oil Enclosure Layout
Exhibit J: Small Food/Oil Enclosure Layout
Exhibit K: Medium Food/Oil Enclosure Layout
Exhibit L: Large Food/Oil Enclosure Layout

Bin Enclosure Layout Without Roof

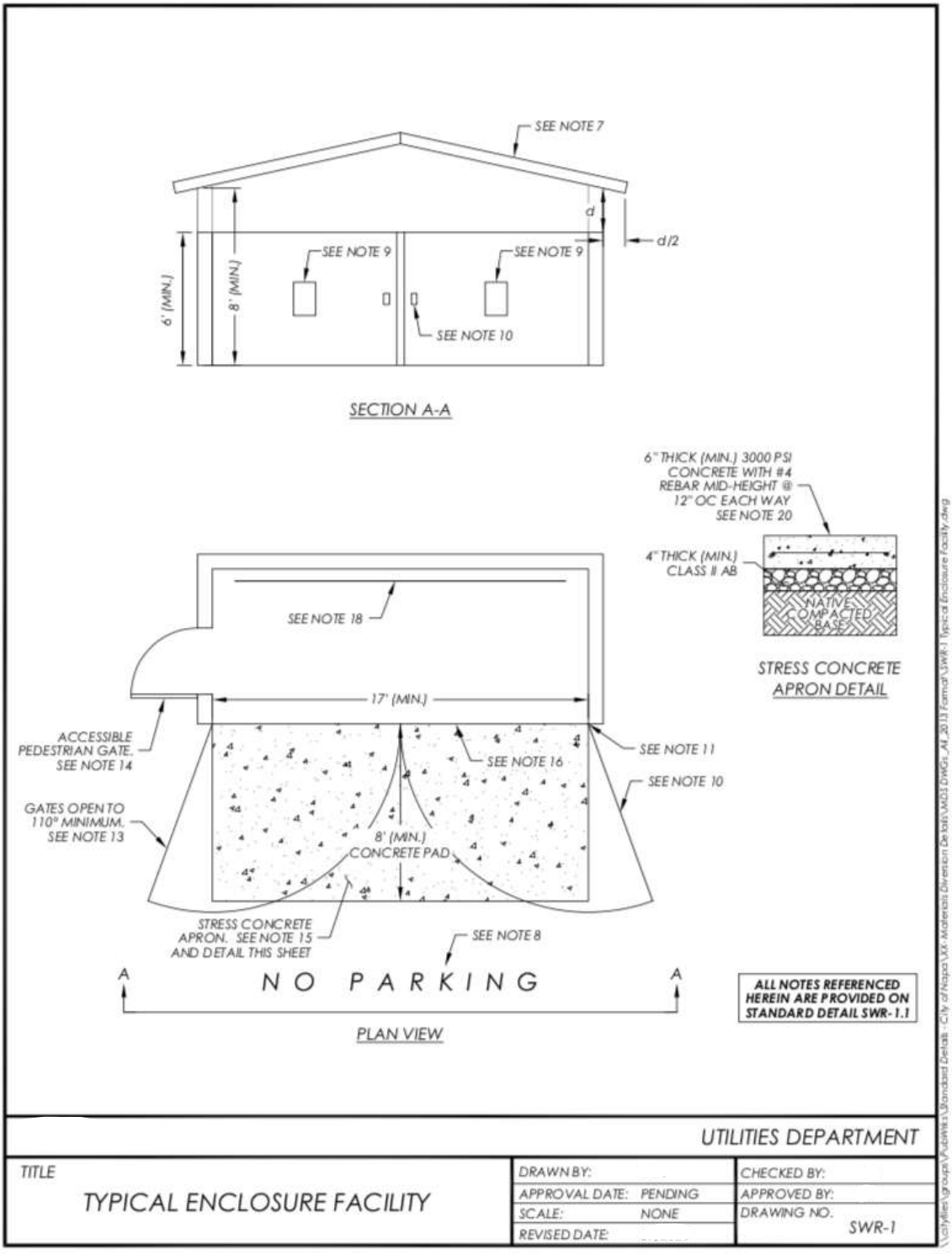
Bin Enclosure Layout With Roof

Enclosure Signage

Truck Access – Bin Collection

Collection Clearances (Roll-off Bins & Compactors)

Cart Service Clearances


SEE NOTE 7
d
d/2
SEE NOTE 9
SEE NOTE 9
SEE NOTE 10
6' (MIN.)
8' (MIN.)
SECTION A-A
6" THICK (MIN.) 3000 PSI CONCRETE WITH #4 REBAR MID-HEIGHT @ 12" OC EACH WAY SEE NOTE 20
4" THICK (MIN.) CLASS II AB
NATIVE COMPACTED BASE
STRESS CONCRETE APRON DETAIL
SEE NOTE 18
17' (MIN.)
ACCESSIBLE PEDESTRIAN GATE. SEE NOTE 14
SEE NOTE 16
SEE NOTE 11
SEE NOTE 10
GATES OPEN TO 110° MINIMUM. SEE NOTE 13
8' (MIN.) CONCRETE PAD
STRESS CONCRETE APRON. SEE NOTE 15 AND DETAIL THIS SHEET
SEE NOTE 8
A
NO PARKING
A
PLAN VIEW
ALL NOTES REFERENCED HEREIN ARE PROVIDED ON STANDARD DETAIL SWR-1.1
UTILITIES DEPARTMENT
TITLE
TYPICAL ENCLOSURE FACILITY
DRAWN BY:
CHECKED BY:
APPROVAL DATE: PENDING
APPROVED BY:
SCALE: NONE
DRAWING NO. SWR-1
REVISED DATE:

NOTES

1. CITY STD SWR-1A THROUGH SWR-1H ARE PROVIDED AS EXAMPLE LAYOUTS AND CAN BE MODIFIED TO SERVE INDIVIDUAL PROJECT NEEDS, HOWEVER, MINIMUM AND MAXIMUM DISTANCE REQUIREMENTS MUST BE MET AS NOTED.
2. SEE CITY STD. SWR-1A THROUGH SWR-1D FOR NON-FOOD FACILITY ENCLOSURE LAYOUTS.
3. SEE CITY STD. SWR-1E THROUGH SWR-1H FOR FOOD FACILITY ENCLOSURE LAYOUTS WITHOUT GREASE/OIL TANKS.
4. SEE CITY STD. SWR-1I THROUGH SWR-1L FOR FOOD FACILITY ENCLOSURE LAYOUTS WITH OIL/GREASE TANKS.
5. TRASH ENCLOSURES SHALL BE IN COMPLIANCE WITH STORM WATER QUALITY CONTROL ORDINANCE 8.36.00.
6. FOOD FACILITIES THAT GENERATE COOKING OIL AND GREASE FOR DISPOSAL MUST COLLECT OIL AND GREASE IN A SEPARATE CONTAINER DESIGNED SPECIFICALLY FOR THE COLLECTION OF THESE TWO ITEMS.
7. DISPOSAL OF OIL AND GREASE IN A MUNICIPAL SOLID WASTE COLLECTION CONTAINER IS NOT ALLOWED.
8. FOR FOOD FACILITY ENCLOSURES A ROOF SHALL BE PLACED ON THE TRASH ENCLOSURE. THE ROOF SHALL EXTEND PAST OPEN SIDES WITHOUT A GATE BY A DISTANCE EQUAL TO ½ THE HEIGHT OF THE OPENING (I.E. IF THE BOTTOM OF THE ROOF IS 2-FEET ABOVE THE TOP OF THE STRUCTURE WALL IT IS REQUIRED TO EXTEND 1-FOOT PAST THE OUTSIDE EDGE OF THE WALL). TO ALLOW GARBAGE TRUCKS TO ACCESS THE BINS, THE ROOF SHALL EXTEND 6-INCHES PAST THE OUTSIDE EDGE OF THE GATE (ON THE GATE SIDE OF THE STRUCTURE ONLY).
9. THE AREA DIRECTLY IN FRONT OF THE ENCLOSURE GATES SHALL HAVE "NO PARKING" PAINTED ON THE GROUND. THE LETTERS SHALL BE A MINIMUM OF 18-INCHES IN HEIGHT.
10. SEE CITY STD. SWR-2 FOR ENCLOSURE SIGNAGE REQUIREMENTS.
11. GATES TO BE SOLID METAL WITH OUTSIDE HANDLES ON EACH DOOR AND A SLIDE LATCH TO SECURE THE DOORS.
12. BOLTS, NOT SCREWS, SHALL BE USED TO SECURE GATE TO POLES OR WALLS.
13. PROVIDE MEANS TO SECURE GATE DOORS BOTH OPENED AND CLOSED, E.G. CANE BOLT WITH SLEEVE AND SLIDE LATCH BETWEEN DOORS AND SLEEVE IN PAVEMENT. THE BOLTS SHOULD BE A MINIMUM OF 1-INCH OR DOUBLE THE SIZE OF THE BOLT TO ALLOW FLEXIBILITY. BOLT DROP SHALL BE A MINIMUM OF 4-INCHES INTO THE GROUND. IF GATES WILL NEED TO CLEAR CURBS TO OPEN FULLY THE GATES SHALL BE MAXIMUM OF 8-INCHES ABOVE FINISHED GRADE.
14. GATES SHALL REMAIN CLOSED UNLESS IN USE AND MUST OPEN TO AT LEAST 110 DEGREES AND BE ABLE TO BE SECURED OPEN.
15. A SEPARATE PEDESTRIAN ENTRANCE WITH A DOOR IS REQUIRED FROM THE BACK OR THE SIDE FOR BOTH NON-RESIDENTIAL FACILITIES AND RESIDENTIAL MULTI-FAMILY COMPLEX DEVELOPMENTS.
16. STRESS CONCRETE APRON SHALL MATCH THE WIDTH OF THE ENCLOSURE OPENING AS SHOWN. THE APRON STRUCTURAL SECTION SHALL BE AS SHOWN OR EVIDENCE THAT CONSTRUCTION SPECIFICATIONS ARE ENGINEERED TO WITHSTAND A MINIMUM 20,000 LBS. OF DIRECT DOWNWARD FORCE FROM A SINGLE TRUCK AXLE SHALL BE PROVIDED. APRON SURFACE SHALL BE THE SAME ELEVATION AS THE ENCLOSURE PAD THRESHOLD AND THE SURROUNDING SURFACES. APRON SHALL EXTEND MINIMUM OF 8-FT FOR ENCLOSURES WITHOUT ROOFS AND 10-FT FOR ENCLOSURES WITH ROOFS.
17. FOR FOOD FACILITIES A GRADE BREAK LINE SHALL BE CONSTRUCTED ON THE INSIDE EDGE OF THE WALL WITH THE SLAB SLOPING INWARDS ON THE INSIDE OF THE STRUCTURE AND AWAY FROM THE STRUCTURE ON THE OUTSIDE.
18. FOR NON FOOD FACILITY ENCLOSURES THE GRADE OF ENCLOSURE PADS SHALL BE FLAT SUCH THAT NO STORMWATER SHALL ESCAPE THE ENCLOSURE IF COMMINGLED WITH MUNICIPAL SOLID WASTE.
19. WOOD OR RUBBER BUMPERS ALONG THE BACK WALL IS REQUIRED TO PREVENT DAMAGE TO THE ENCLOSURE DURING SERVICING OF BINS OR COMPACTORS.
20. IF LARGE-SIZED STATIONARY BINS ARE USED THE BIN MUST BE DIRECTLY ACCESSIBLE BY COLLECTION TRUCKS. SEE CITY STD. SWR-3 FOR TRUCK ACCESS REQUIREMENTS.
21. GATES SHALL BE FREE STANDING WITH NO CENTER POLE. A CENTER POLE MAY BE INCLUDED AT THE DISCRETION OF THE SOLID WASTE & RECYCLING DIVISION. REQUIRED CLEARANCES SHALL BE PROVIDED FOR DIRECT ACCESS TO BINS.
22. BOLLARDS OR OTHER PERMANENT OR SEMI-PERMANENT STRUCTURES SHALL NOT BE USED WITHIN THE ENCLOSURE. THESE STRUCTURES REDUCE THE USABLE INTERIOR CONTAINER SPACE AND ACCESSIBILITY.
23. **ALL ENCLOSURES SHALL MEET REQUIREMENTS AS OUTLINED IN THE SOLID WASTE, RECYCLABLE MATERIALS, AND COMPOSTABLES ENCLOSURE STANDARDS.** THE LAYOUTS SHOWN IN STD SWR-1A THROUGH SWR-1M ARE PROVIDED FOR GUIDANCE AND MAY NEED MODIFICATION BASED ON UNIQUE PROJECT SITE CHARACTERISTICS. ALL PROPOSED ENCLOSURES SHALL BE PROVIDED TO THE SOLID WASTE & RECYCLING DIVISION FOR REVIEW AND COMMENT.

UTILITIES DEPARTMENT

TITLE		
TYPICAL ENCLOSURE FACILITY NOTES	DRAWN BY:	CHECKED BY:
	APPROVAL DATE: PENDING	APPROVED BY:
	SCALE: NONE	DRAWING NO. SWR-1.1
	REVISED DATE:	

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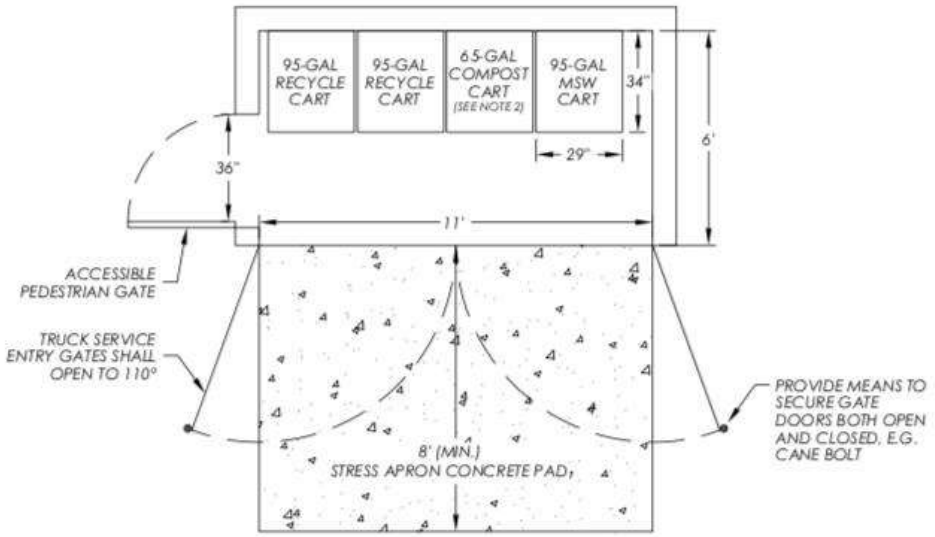


PLAN VIEW

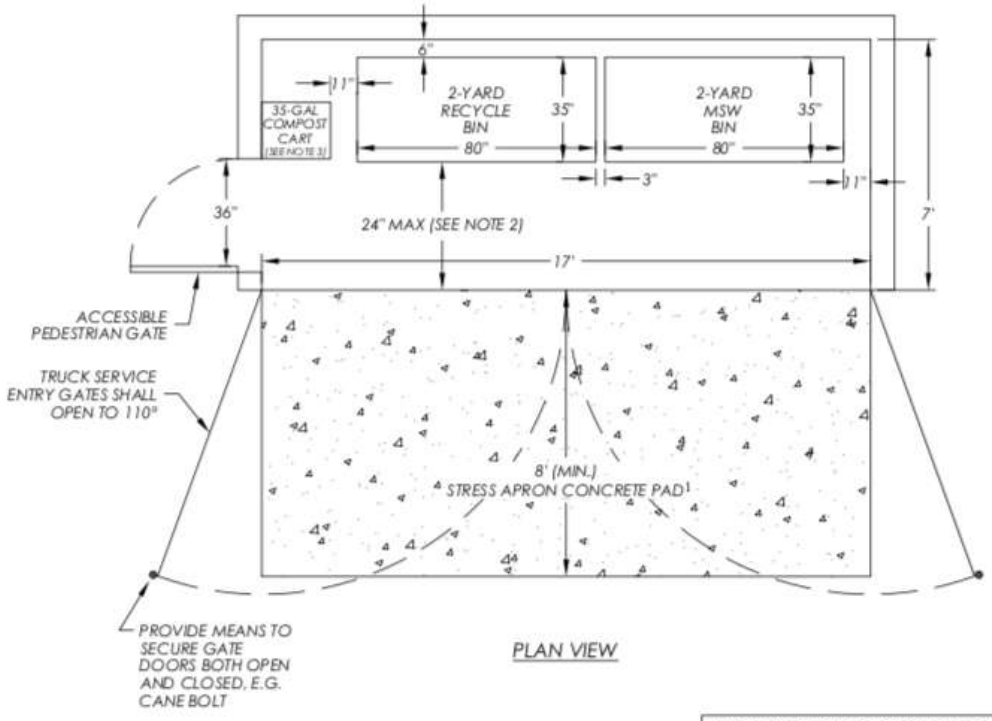
DETAIL PROVIDED TO SHOW GENERAL LAYOUT AND DIMENSIONS OF A CART ENCLOSURE. SEE DETAILS SWR-1 AND SWR-1.1 FOR ADDITIONAL ENCLOSURE INFORMATION AND NOTES.

NOTES

1. GRADE OF ENCLOSURE PADS SHALL BE FLAT SUCH THAT NO STORMWATER SHALL ESCAPE THE ENCLOSURE IF COMMINGLED WITH MUNICIPAL SOLID WASTE.
2. COMPOST COLLECTION WILL BE REQUIRED PER SB1383 EFFECTIVE JANUARY 2022.

UTILITIES DEPARTMENT

TITLE	DRAWN BY:	CHECKED BY:
CART ENCLOSURE LAYOUT (EXHIBIT A)	APPROVAL DATE: PENDING	APPROVED BY:
	SCALE: NONE	DRAWING NO. SWR-1A
	REVISED DATE:	



PLAN VIEW

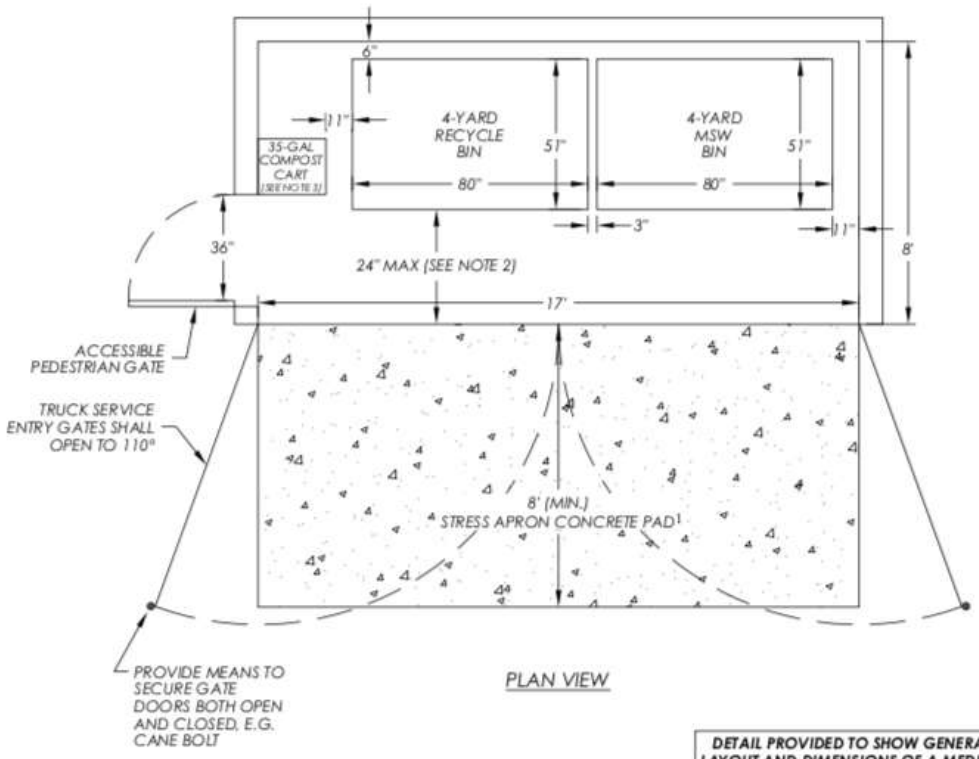
DETAIL PROVIDED TO SHOW GENERAL LAYOUT AND DIMENSIONS OF A SMALL BIN ENCLOSURE. SEE DETAILS SWR-1 AND SWR-1.1 FOR ADDITIONAL ENCLOSURE INFORMATION AND NOTES.

NOTES

1. GRADE OF ENCLOSURE PADS SHALL BE FLAT SUCH THAT NO STORMWATER SHALL ESCAPE THE ENCLOSURE IF COMMINGLED WITH MUNICIPAL SOLID WASTE.
2. FOR ENCLOSURES WITH NO ROOF. FOR ENCLOSURES WITH ROOF BINS SHALL BE PLACED MAXIMUM 8" FROM VEHICLE ACCESS DOORWAY. ENCLOSURES WITH ROOFS SHALL ACCOUNT FOR VERTICAL CLEARANCES REQUIRED FOR OPENING LIDS OF BINS WITHIN ENCLOSURE.
3. COMPOST COLLECTION WILL BE REQUIRED PER SB1383 EFFECTIVE JANUARY 2022.

UTILITIES DEPARTMENT

TITLE	DRAWN BY:	CHECKED BY:
SMALL BIN ENCLOSURE LAYOUT (EXHIBIT B)	APPROVAL DATE: PENDING	APPROVED BY:
	SCALE: NONE	DRAWING NO. SWR-1B
	REVISED DATE:	



PLAN VIEW

DETAIL PROVIDED TO SHOW GENERAL LAYOUT AND DIMENSIONS OF A MEDIUM BIN ENCLOSURE. SEE DETAILS SWR-1 AND SWR-1.1 FOR ADDITIONAL ENCLOSURE INFORMATION AND NOTES.

NOTES

1. GRADE OF ENCLOSURE PADS SHALL BE FLAT SUCH THAT NO STORMWATER SHALL ESCAPE THE ENCLOSURE IF COMMINGLED WITH MUNICIPAL SOLID WASTE.
2. FOR ENCLOSURES WITH NO ROOF. FOR ENCLOSURES WITH ROOF BINS SHALL BE PLACED MAXIMUM 8" FROM VEHICLE ACCESS DOORWAY. ENCLOSURES WITH ROOFS SHALL ACCOUNT FOR VERTICAL CLEARANCES REQUIRED FOR OPENING LIDS OF BINS WITHIN ENCLOSURE.
3. COMPOST COLLECTION WILL BE REQUIRED PER SB1383 EFFECTIVE JANUARY 2022.

UTILITIES DEPARTMENT

TITLE	DRAWN BY:	CHECKED BY:
MEDIUM BIN ENCLOSURE LAYOUT (EXHIBIT C)	APPROVAL DATE: PENDING	APPROVED BY:
	SCALE: NONE	DRAWING NO. SWR-1C
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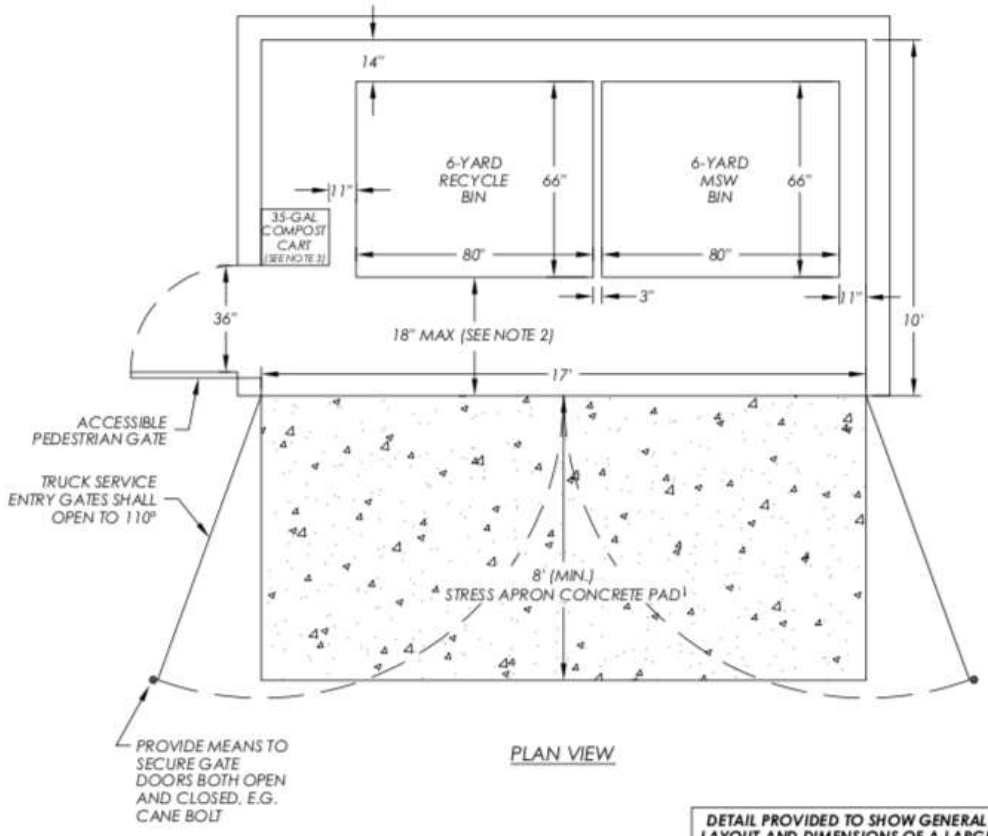

PLAN VIEW

DETAIL PROVIDED TO SHOW GENERAL LAYOUT AND DIMENSIONS OF A LARGE BIN ENCLOSURE. SEE DETAILS SWR-1 AND SWR-1.1 FOR ADDITIONAL ENCLOSURE INFORMATION AND NOTES.

NOTES

1. GRADE OF ENCLOSURE PADS SHALL BE FLAT SUCH THAT NO STORMWATER SHALL ESCAPE THE ENCLOSURE IF COMMINGLED WITH MUNICIPAL SOLID WASTE.
2. FOR ENCLOSURES WITH NO ROOF, FOR ENCLOSURES WITH ROOF BINS SHALL BE PLACED MAXIMUM 8" FROM VEHICLE ACCESS DOORWAY. ENCLOSURES WITH ROOFS SHALL ACCOUNT FOR VERTICAL CLEARANCES REQUIRED FOR OPENING LIDS OF BINS WITHIN ENCLOSURE.
3. COMPOST COLLECTION WILL BE REQUIRED PER SB1383 EFFECTIVE JANUARY 2022.

UTILITIES DEPARTMENT

TITLE	DRAWN BY:	CHECKED BY:
LARGE BIN ENCLOSURE LAYOUT (EXHIBIT D)	APPROVAL DATE: PENDING	APPROVED BY:
	SCALE: NONE	DRAWING NO. SWR-1D
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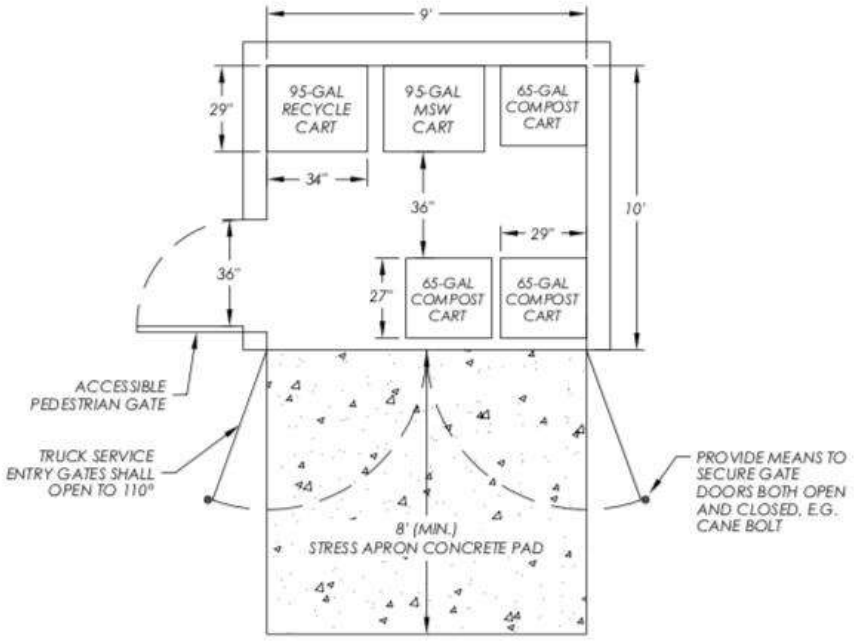

PLAN VIEW

DETAIL PROVIDED TO SHOW GENERAL LAYOUT AND DIMENSIONS OF AN EXTRA SMALL FOOD ENCLOSURE. SEE DETAILS SWR-1 AND SWR-1.1 FOR ADDITIONAL ENCLOSURE INFORMATION AND NOTES.

NOTES

1. DRAIN CONNECTIO.
2. COMPOST COLLECTION WILL BE REQUIRED PER SB1383 EFFECTIVE JANUARY 2022.

UTILITIES DEPARTMENT

TITLE	DRAWN BY:	CHECKED BY:
EXTRA SMALL FOOD ENCLOSURE LAYOUT (EXHIBIT E)	APPROVAL DATE: PENDING	APPROVED BY:
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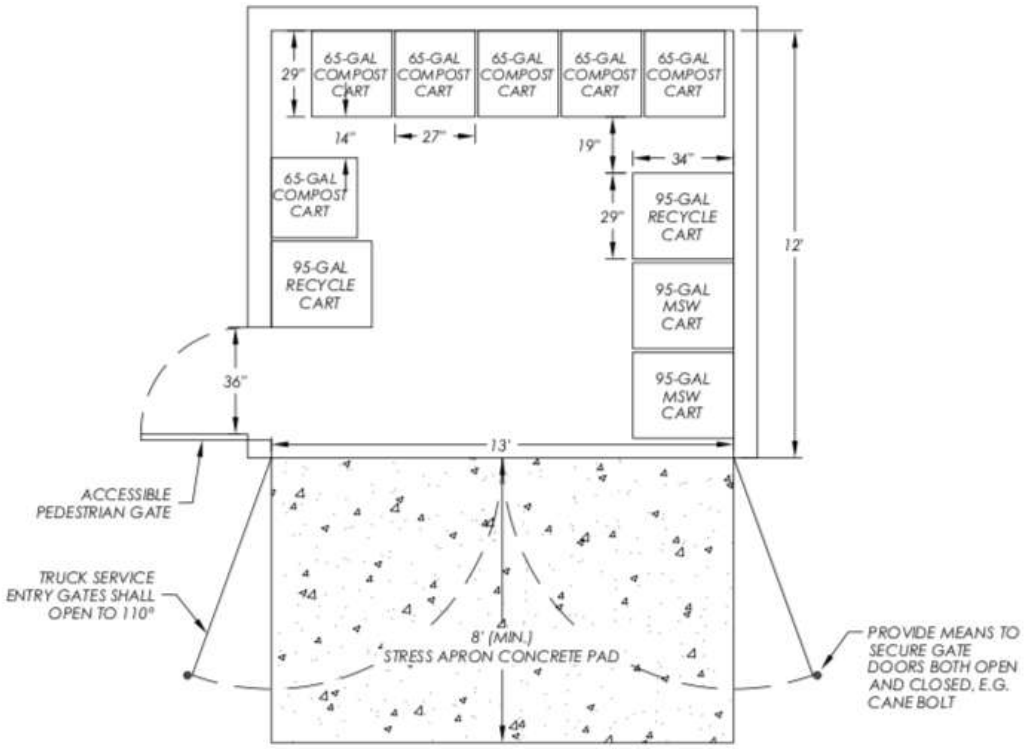

PLAN VIEW

DETAIL PROVIDED TO SHOW GENERAL LAYOUT AND DIMENSIONS OF A SMALL FOOD ENCLOSURE. SEE DETAILS SWR-1 AND SWR-1.1 FOR ADDITIONAL ENCLOSURE INFORMATION AND NOTES.

NOTES

1. DRAIN CONNECTION

UTILITIES DEPARTMENT

TITLE	DRAWN BY:	CHECKED BY:
SMALL FOOD ENCLOSURE LAYOUT (EXHIBIT F)	APPROVAL DATE: PENDING	APPROVED BY:
	SCALE: NONE	DRAWING NO. SWR-1F
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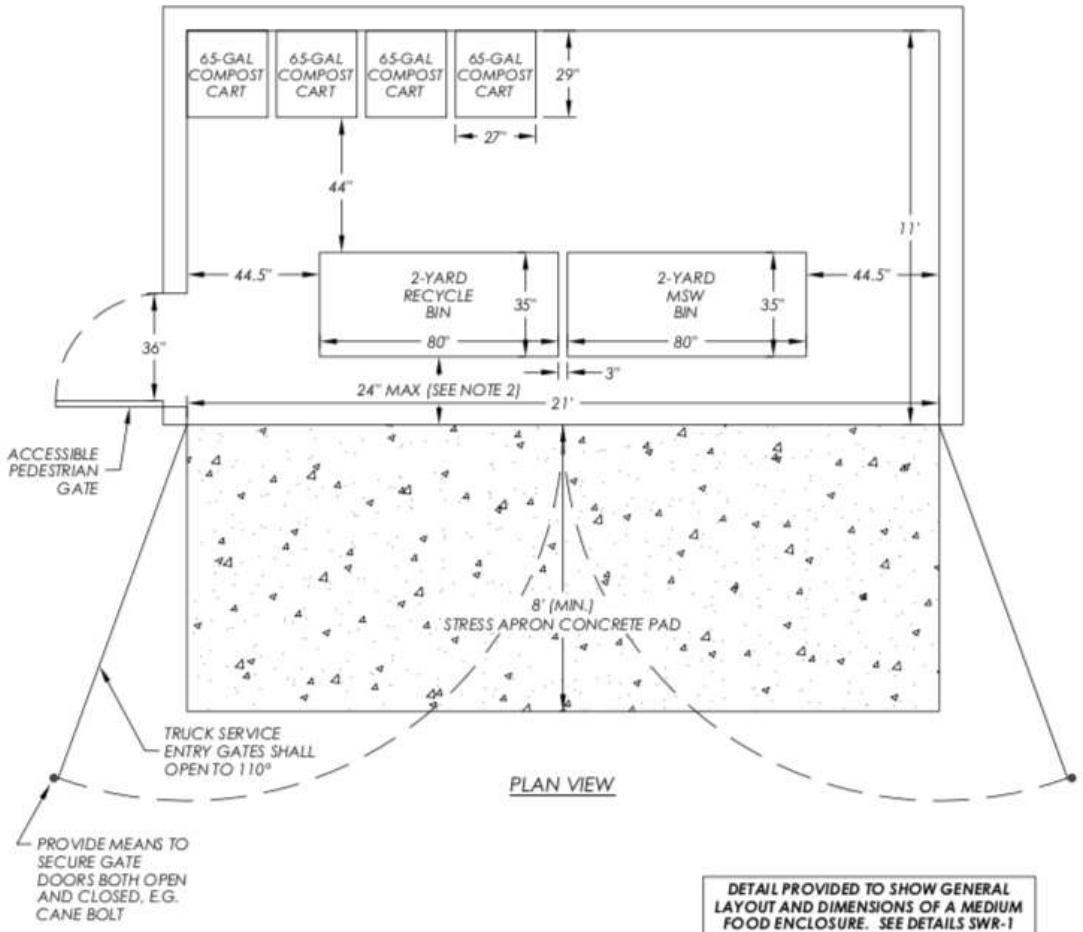


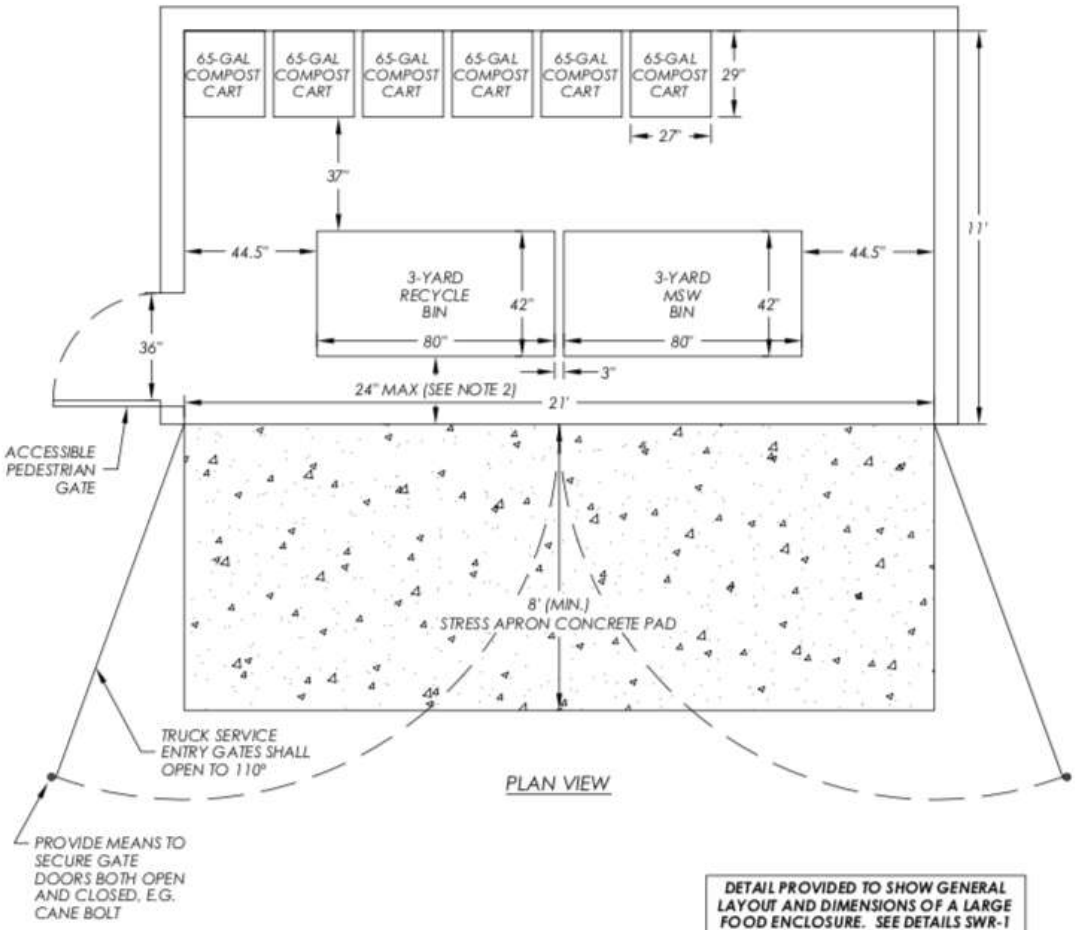
DETAIL PROVIDED TO SHOW GENERAL LAYOUT AND DIMENSIONS OF A MEDIUM FOOD ENCLOSURE. SEE DETAILS SWR-1 AND SWR-1.1 FOR ADDITIONAL ENCLOSURE INFORMATION AND NOTES.

NOTES

1. GRADE OF ENCLOSURE PADS SHALL BE FLAT SUCH THAT NO STORMWATER SHALL ESCAPE THE ENCLOSURE IF COMMINGLED WITH MUNICIPAL SOLID WASTE.
2. FOR ENCLOSURES WITH NO ROOF. FOR ENCLOSURES WITH ROOF BINS SHALL BE PLACED MAXIMUM 8" FROM VEHICLE ACCESS DOORWAY. ENCLOSURES WITH ROOFS SHALL ACCOUNT FOR VERTICAL CLEARANCES REQUIRED FOR OPENING LIDS OF BINS WITHIN ENCLOSURE.

UTILITIES DEPARTMENT

TITLE	DRAWN BY:	CHECKED BY:
MEDIUM FOOD ENCLOSURE LAYOUT (EXHIBIT G)	APPROVAL DATE: PENDING	APPROVED BY:
	SCALE: NONE	DRAWING NO. SWR-1G
	REVISED DATE:	



DETAIL PROVIDED TO SHOW GENERAL LAYOUT AND DIMENSIONS OF A LARGE FOOD ENCLOSURE. SEE DETAILS SWR-1 AND SWR-1.1 FOR ADDITIONAL ENCLOSURE INFORMATION AND NOTES.

NOTES

1. GRADE OF ENCLOSURE PADS SHALL BE FLAT SUCH THAT NO STORMWATER SHALL ESCAPE THE ENCLOSURE IF COMMINGLED WITH MUNICIPAL SOLID WASTE.
2. FOR ENCLOSURES WITH NO ROOF. FOR ENCLOSURES WITH ROOF BINS SHALL BE PLACED MAXIMUM 8" FROM VEHICLE ACCESS DOORWAY. ENCLOSURES WITH ROOFS SHALL ACCOUNT FOR VERTICAL CLEARANCES REQUIRED FOR OPENING LIDS OF BINS WITHIN ENCLOSURE.

UTILITIES DEPARTMENT

TITLE	DRAWN BY:	CHECKED BY:
LARGE FOOD ENCLOSURE LAYOUT (EXHIBIT H)	APPROVAL DATE: PENDING	APPROVED BY:
	SCALE: NONE	DRAWING NO. SWR-1H
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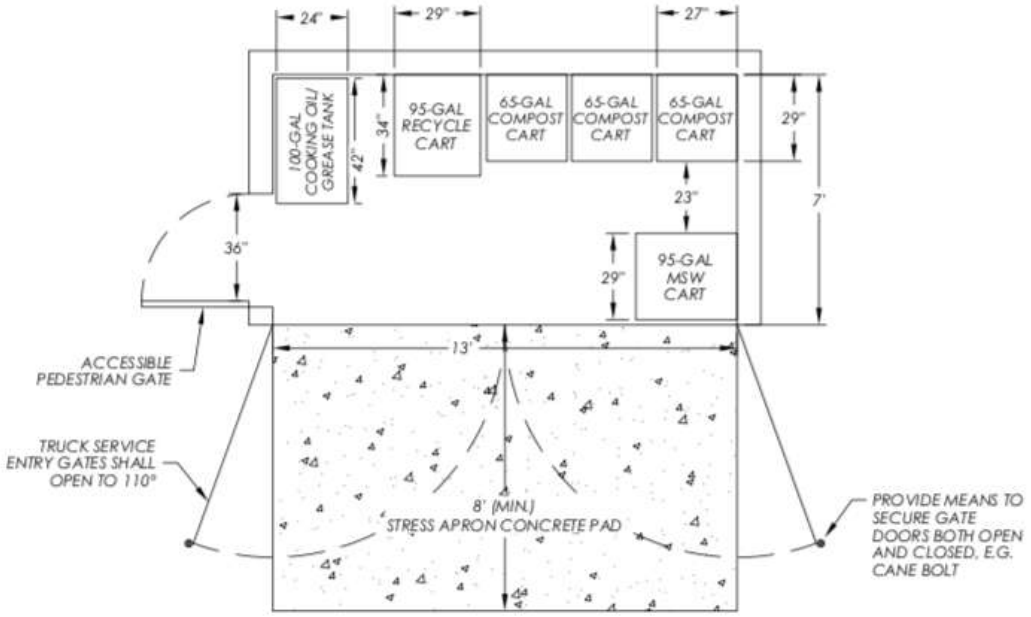
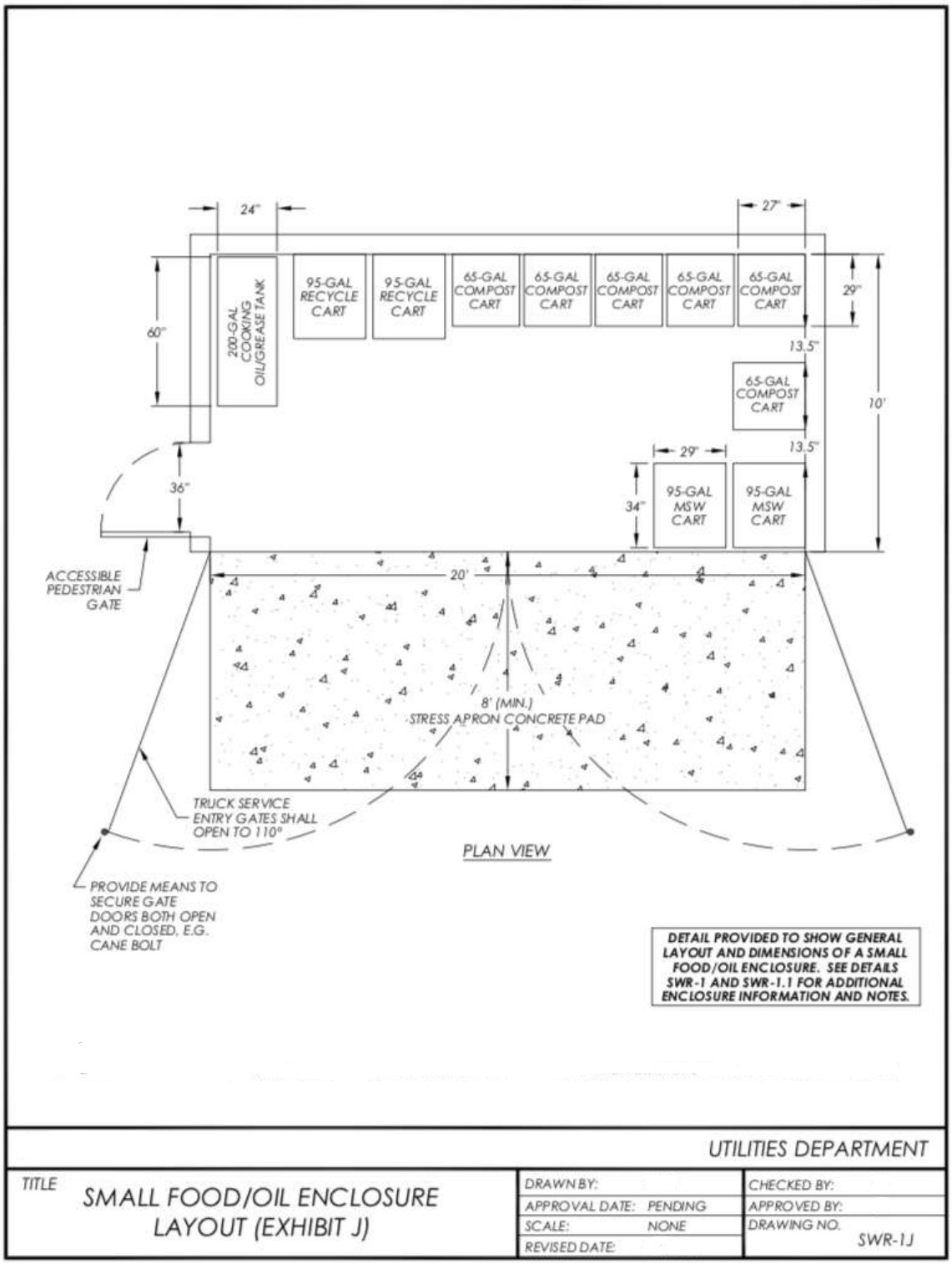


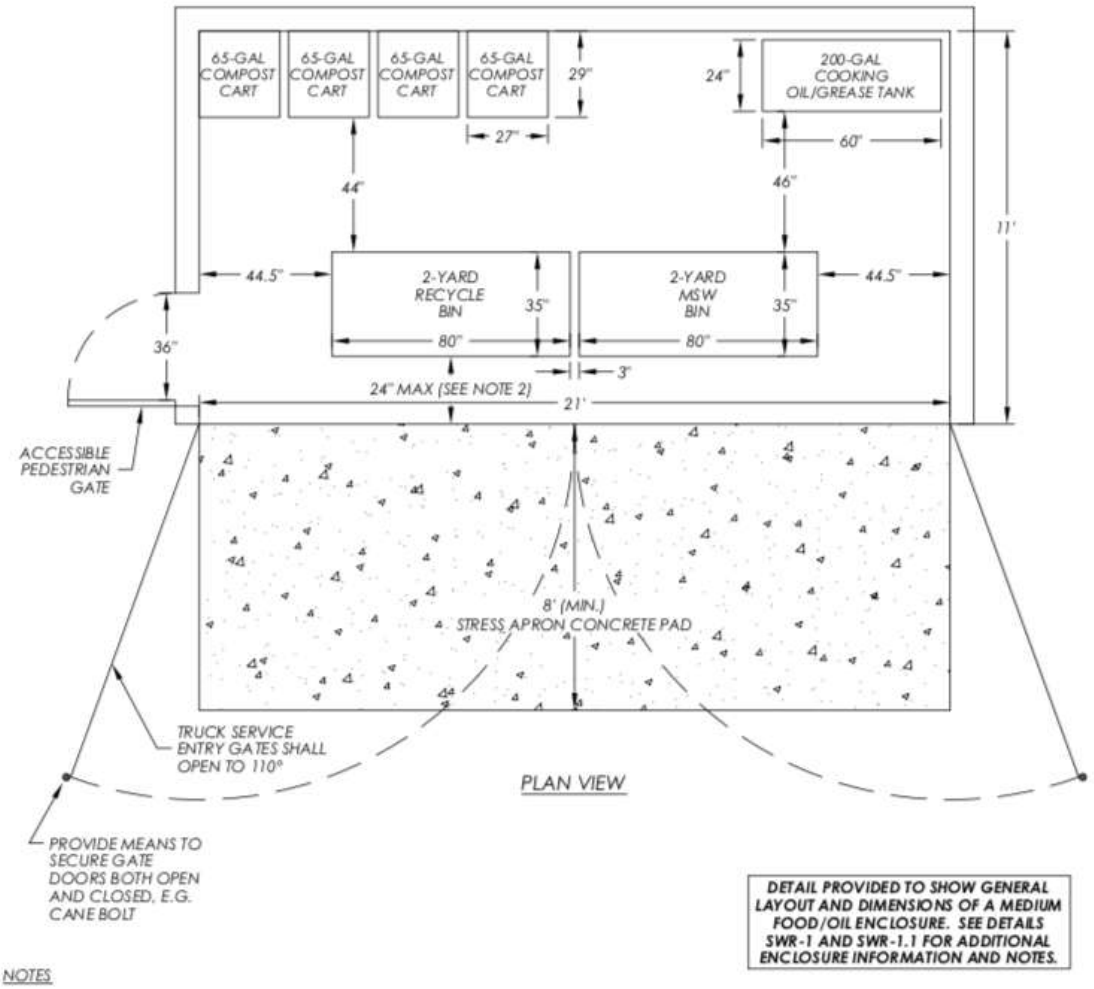
PLAN VIEW

DETAIL PROVIDED TO SHOW GENERAL LAYOUT AND DIMENSIONS OF AN EXTRA SMALL FOOD/OIL ENCLOSURE. SEE DETAILS SWR-1 AND SWR-1.1 FOR ADDITIONAL ENCLOSURE INFORMATION AND NOTES.

UTILITIES DEPARTMENT

TITLE	DRAWN BY:	CHECKED BY:
EXTRA SMALL FOOD/OIL ENCLOSURE LAYOUT (EXHIBIT I)	APPROVAL DATE: PENDING	APPROVED BY:
	SCALE: NONE	DRAWING NO. SWR-11
	REVISED DATE:	


24"
27"
200-GAL COOKING OIL/GREASE TANK
95-GAL RECYCLE CART
95-GAL RECYCLE CART
65-GAL COMPOST CART
65-GAL COMPOST CART
65-GAL COMPOST CART
65-GAL COMPOST CART
65-GAL COMPOST CART
60"
29"
13.5"
65-GAL COMPOST CART
10'
29"
13.5"
36"
34"
95-GAL MSW CART
95-GAL MSW CART
ACCESSIBLE PEDESTRIAN GATE
20'
8' (MIN.) STRESS APRON CONCRETE PAD
TRUCK SERVICE ENTRY GATES SHALL OPEN TO 110°
PLAN VIEW
PROVIDE MEANS TO SECURE GATE DOORS BOTH OPEN AND CLOSED, E.G. CANE BOLT
DETAIL PROVIDED TO SHOW GENERAL LAYOUT AND DIMENSIONS OF A SMALL FOOD/OIL ENCLOSURE. SEE DETAILS SWR-1 AND SWR-1.1 FOR ADDITIONAL ENCLOSURE INFORMATION AND NOTES.
UTILITIES DEPARTMENT
TITLE
SMALL FOOD/OIL ENCLOSURE LAYOUT (EXHIBIT J)
DRAWN BY:
APPROVAL DATE: PENDING
SCALE: NONE
REVISED DATE:
CHECKED BY:
APPROVED BY:
DRAWING NO. SWR-1J



DETAIL PROVIDED TO SHOW GENERAL LAYOUT AND DIMENSIONS OF A MEDIUM FOOD/OIL ENCLOSURE. SEE DETAILS SWR-1 AND SWR-1.1 FOR ADDITIONAL ENCLOSURE INFORMATION AND NOTES.

NOTES

1. GRADE OF ENCLOSURE PADS SHALL BE FLAT SUCH THAT NO STORMWATER SHALL ESCAPE THE ENCLOSURE IF COMMINGLED WITH MUNICIPAL SOLID WASTE.
2. FOR ENCLOSURES WITH NO ROOF. FOR ENCLOSURES WITH ROOF BINS SHALL BE PLACED MAXIMUM 8" FROM VEHICLE ACCESS DOORWAY. ENCLOSURES WITH ROOFS SHALL ACCOUNT FOR VERTICAL CLEARANCES REQUIRED FOR OPENING LIDS OF BINS WITHIN ENCLOSURE.

UTILITIES DEPARTMENT

TITLE	DRAWN BY:	CHECKED BY:
MEDIUM FOOD/OIL ENCLOSURE LAYOUT (EXHIBIT K)	APPROVAL DATE: PENDING	APPROVED BY:
	SCALE: NONE	DRAWING NO. SWR-1K
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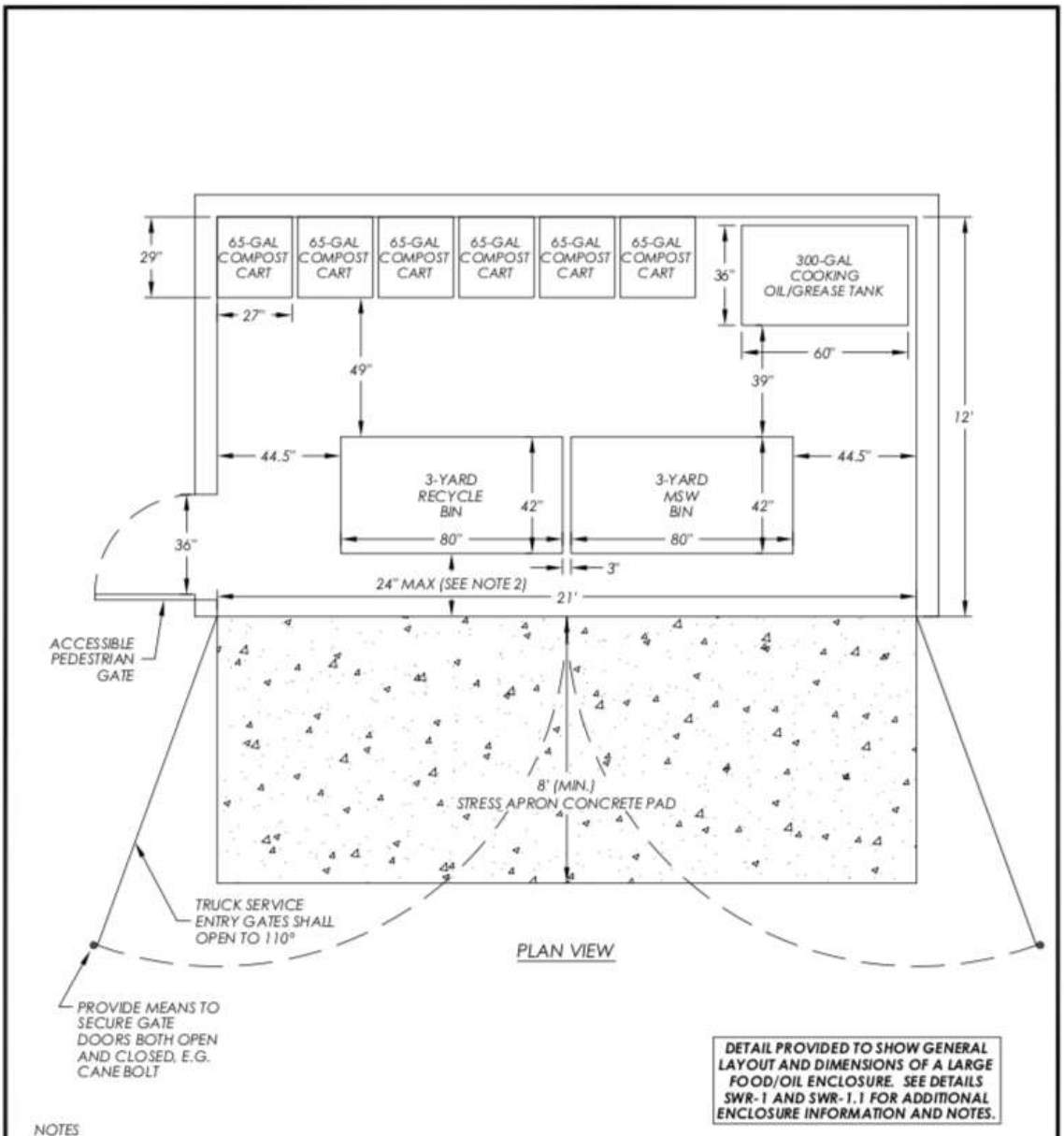
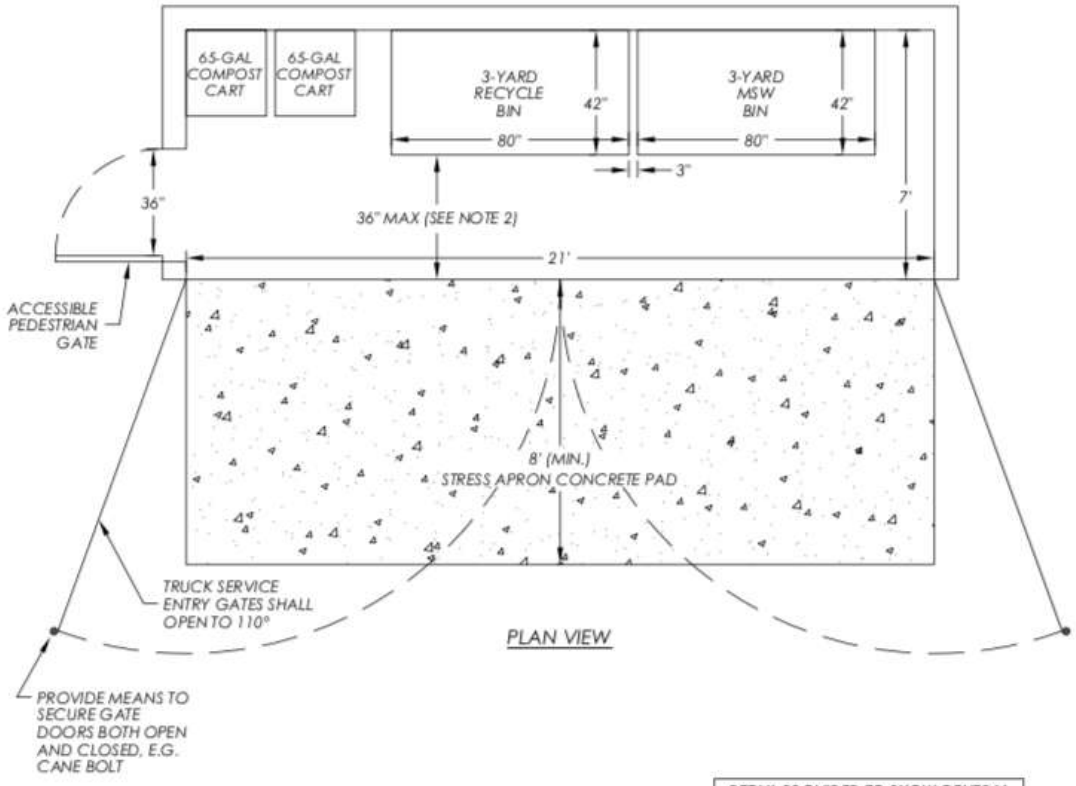


NOTES

1. GRADE OF ENCLOSURE PADS SHALL BE FLAT SUCH THAT NO STORMWATER SHALL ESCAPE THE ENCLOSURE IF COMMINGLED WITH MUNICIPAL SOLID WASTE.
2. FOR ENCLOSURES WITH NO ROOF, FOR ENCLOSURES WITH ROOF BINS SHALL BE PLACED MAXIMUM 8" FROM VEHICLE ACCESS DOORWAY. ENCLOSURES WITH ROOFS SHALL ACCOUNT FOR VERTICAL CLEARANCES REQUIRED FOR OPENING LIDS OF BINS WITHIN ENCLOSURE.

UTILITIES DEPARTMENT

TITLE	DRAWN BY:	CHECKED BY:
LARGE FOOD/OIL ENCLOSURE LAYOUT (EXHIBIT L)	APPROVAL DATE: PENDING	APPROVED BY:
	SCALE: NONE	DRAWING NO. SWR-1L
	REVISED DATE:	



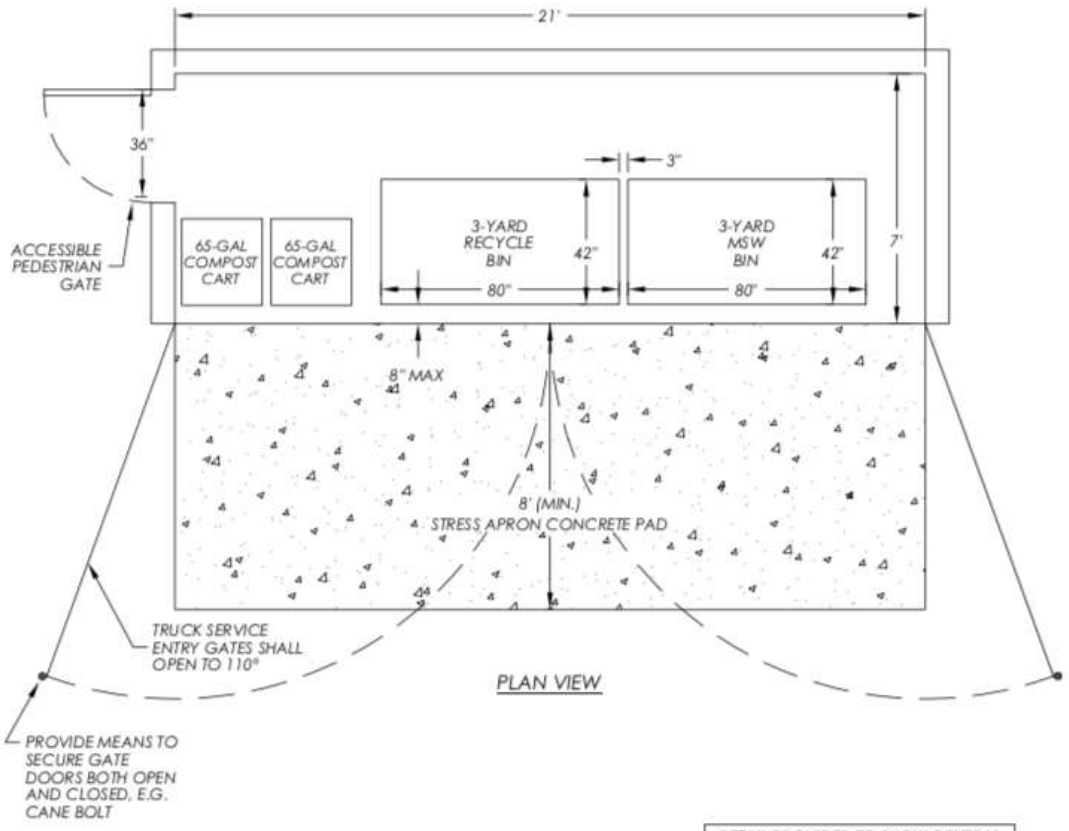
DETAIL PROVIDED TO SHOW GENERAL LAYOUT AND DIMENSIONS OF A SMALL BIN ENCLOSURE. SEE DETAILS SWR-1 AND SWR-1.1 FOR ADDITIONAL ENCLOSURE INFORMATION AND NOTES.

NOTES

1. GRADE OF ENCLOSURE PADS SHALL BE FLAT SUCH THAT NO STORMWATER SHALL ESCAPE THE ENCLOSURE IF COMMINGLED WITH MUNICIPAL SOLID WASTE.
2. FOR ENCLOSURES WITH NO ROOF. FOR ENCLOSURES WITH ROOF, SEE CITY STD. SWR-1M.2, BINS SHALL BE PLACED MAXIMUM 8" FROM VEHICLE ACCESS DOORWAY. ENCLOSURES WITH ROOFS SHALL ACCOUNT FOR VERTICAL CLEARANCES REQUIRED FOR OPENING LIDS OF BINS WITHIN ENCLOSURE.

UTILITIES DEPARTMENT

TITLE	DRAWN BY:	CHECKED BY:
BIN PLACEMENT WITHOUT ROOF	APPROVAL DATE: PENDING	APPROVED BY:
	SCALE: NONE	DRAWING NO. SWR-1M
	REVISED DATE:	



DETAIL PROVIDED TO SHOW GENERAL LAYOUT AND DIMENSIONS OF A SMALL BIN ENCLOSURE. SEE DETAILS SWR-1 AND SWR-1.1 FOR ADDITIONAL ENCLOSURE INFORMATION AND NOTES.

NOTES

1. GRADE OF ENCLOSURE PADS SHALL BE FLAT SUCH THAT NO STORMWATER SHALL ESCAPE THE ENCLOSURE IF COMMINGLED WITH MUNICIPAL SOLID WASTE.
2. ENCLOSURES WITH ROOFS SHALL ACCOUNT FOR VERTICAL CLEARANCES REQUIRED FOR OPENING LIDS OF BINS WITHIN ENCLOSURE.

UTILITIES DEPARTMENT

TITLE	DRAWN BY:	CHECKED BY:
BIN PLACEMENT WITH ROOF	APPROVAL DATE: PENDING	APPROVED BY:
	SCALE: NONE	DRAWING NO. SWR-1N
	REVISED DATE:	

NO PARKING SIGN

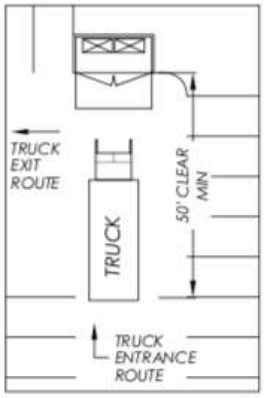
PROPERTY OWNER CONTACT SIGN

NOTES

1. "NO PARKING" SIGNS SHALL EITHER BE INSTALLED PERMANENTLY AFFIXED TO EACH GATE OR PAINTED ON EACH GATE IN LETTERS NO SMALLER THAN 6-INCHES IN HEIGHT.
2. A MINIMUM 12-INCH BY 18-INCH SIGN WITH A MINIMUM 1-INCH LETTERING INDICATED CONTACT INFORMATION FOR THE PROPERTY OWNER AND/OR MANAGEMENT COMPANY RESPONSIBLE FOR MAINTENANCE OF THE ENCLOSURE AREA (NAME/PHONE NUMBER) SHALL BE PERMANENTLY AFFIXED TO ONE OF THE FRONT GATES OF THE ENCLOSURE.
3. SIGNS ARE TO BE MAINTAINED BY THE PROPERTY OWNER.
4. SIGNS ARE TO BE POSTED SO THE BOTTOM OF THE SIGN IS A MINIMUM OF 48-INCHES ABOVE GROUND LEVEL.

UTILITIES DEPARTMENT

TITLE	DRAWN BY:	CHECKED BY:
ENCLOSURE SIGNAGE	APPROVAL DATE: PENDING	APPROVED BY:
	SCALE: NONE	DRAWING NO. SWR-2
	REVISED DATE:	



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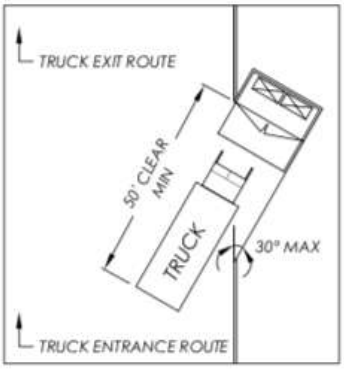


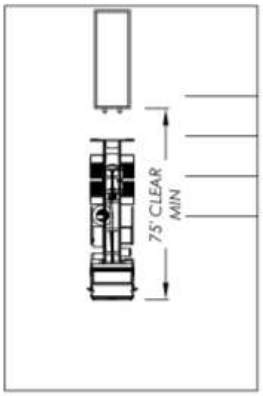
ACCEPTABLE ANGLED ACCESS

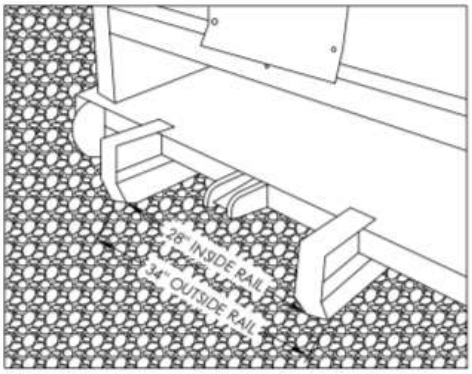
NOTES

1. MINIMUM REQUIRED DRIVE APPROACH AREA SHALL PROVIDE CLEAR ACCESS FOR GARBAGE TRUCKS. SEE CITY STANDARD DETAIL SWR-4 FOR COLLECTION CLEARANCES.
2. A MINIMUM OF 50 FEET IS REQUIRED FOR ACCESS TO TRASH ENCLOSURE BINS. A MINIMUM OF 75 FEET IS REQUIRED FOR ACCESS TO COMPACTORS AND ROLL-OFF BOXES. SEE CITY STANDARD DETAIL SWR-4 FOR COLLECTION CLEARANCES.
3. ACCESS AREA TO ENCLOSURE SHALL BE CAPABLE OF WITHSTANDING VEHICLE WEIGHTS EXCEEDING 60,000 POUNDS.
4. THE TURNING RADIUS SHALL BE ADEQUATE FOR A 3-AXLE TRUCK. A DETAIL OF THE TURNING RADIUS SHALL BE PROVIDED ON PLANS SUBMITTED.

UTILITIES DEPARTMENT

TITLE	DRAWN BY:	CHECKED BY:
TRUCK ACCESS - BIN COLLECTION	APPROVAL DATE: PENDING	APPROVED BY:
	SCALE: NONE	DRAWING NO. SWR-3
	REVISED DATE:	





REQUIRED CLEARANCES FOR ROLL-OFF VEHICLE	
DESCRIPTION	DIMENSION
VERTICAL (APPROACH & EXIT)	14-FEET HIGH
VERTICAL (RAILS RAISED)	25-FEET HIGH
LATERAL	10-FEET LONG
SERVICE AREA LENGTH (DIRECT APPROACH)	75-FEET LONG

ROLL-OFF CONTAINERS

REQUIRED CLEARANCES FOR COMPACTORS	
DESCRIPTION	DIMENSION
VERTICAL (APPROACH & EXIT)	14-FEET HIGH
VERTICAL (RAILS RAISED)	25-FEET HIGH
SERVICE AREA LENGTH (DIRECT APPROACH)	75-FEET LONG
LATERAL	2-FEET AROUND COMPACTOR

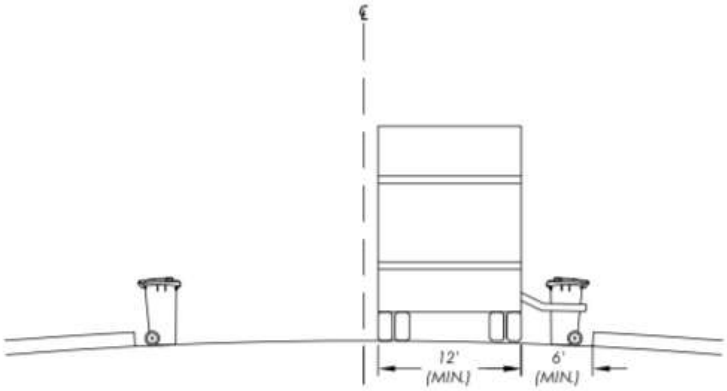
COMPACTORS

NOTES

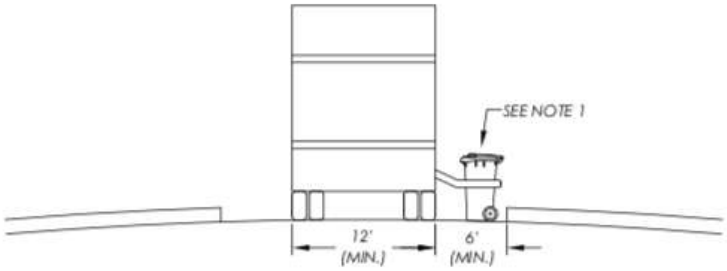
1. A MINIMUM OF 50 FEET IS REQUIRED FOR ACCESS TO TRASH ENCLOSURE BINS. A MINIMUM OF 75 FEET IS REQUIRED FOR ACCESS TO COMPACTORS AND ROLL-OFF CONTAINERS.
2. ROLL-OFF BOX COLLECTION LOCATED AT A LOADING DOCK MUST HAVE BUMPER PADS INSTALLED TO AVOID UNDUE DOCK DAMAGE FROM THE HEAVY CONTAINER.
3. ROLL-OFF CONTAINERS SHALL BE PLACED ON A LEVEL SURFACE.
4. CONTACT THE CITY'S AUTHORIZED CONTRACTOR AT (707) 255-5200 FOR AN ON SITE PLACEMENT INSPECTION AND BEFORE INSTALLING ANY LOADING DOCK BUMPER RAILS.
5. ALL COMPACTORS MUST HAVE 28 INCHES INSIDE RAIL DIMENSIONS AND 34 INCHES EXTERIOR RAIL DIMENSIONS.
6. COMPACTORS MAY REQUIRE AN ELECTRICAL OUTLET.
7. COMPACTORS MUST BE LEAK PROOF TO PREVENT DISCHARGE INTO THE CITY'S STORM DRAIN SYSTEM.
8. CONTACT THE CITY'S AUTHORIZED CONTRACTOR AT (707) 255-5200 PRIOR TO PURCHASING, RENTING, OR INSTALLING A COMPACTOR TO ENSURE SERVICING COMPATIBILITY WITH HAULING VEHICLES.
9. COMPACTORS PLACED INSIDE A BUILDING SHALL PROVIDE MINIMUM CLEARANCES AS OUTLINED ABOVE.

UTILITIES DEPARTMENT

TITLE	DRAWN BY:	CHECKED BY:
COLLECTION CLEARANCES (ROLL-OFF BINS & COMPACTOR)	APPROVAL DATE: PENDING	APPROVED BY:
	SCALE: NONE	DRAWING NO. SWR-4
	REVISED DATE:	



TWO-WAY STREETS



ONE-WAY STREETS

NOTES

1. ONE-WAY STREETS WITH CART SERVICING SHALL BE A MINIMUM OF 18-FEET WIDE AND ALLOW SERVICING ON THE RIGHT SIDE OF THE ROADWAY.
2. CARTS SHOULD NOT OBSTRUCT BIKE LANES OR SIDEWALKS.
3. SPACE SHALL BE PROVIDED TO ALLOW PLACEMENT OF CARTS AT LEAST TWO FEET AWAY FROM OTHER CARTS AND FOUR TO SIX FEET FROM OTHER OBJECTS (E.G. CARS, TREES).

UTILITIES DEPARTMENT

TITLE	DRAWN BY:	CHECKED BY:
CART SERVICE CLEARANCES	APPROVAL DATE: PENDING	APPROVED BY:
	SCALE: NONE	DRAWING NO. SWR-5
	REVISED DATE:	

APPENDIX A- MSW, RECYCLABLE MATERIALS & COMPOSTABLES CONTAINERS

The Town's Authorized Contractor provides collection service and containers. Customers have the option of using carts, bins, roll-off boxes and/or compactors for the collection of MSW and recyclable materials. 65-gal carts are utilized for compostables. The Contractor provides all containers with the only exception being that businesses can use their own compactors provided they are compatible with the Authorized Contractor's fleet of automated collection vehicles.

Cart Collection

Three cart sizes are available for the storage of recyclable materials (blue carts) and MSW (black carts). Commercially collected compostables utilize 65-gallon (green) carts. Cart service may be an excellent option for low-volume generators or for businesses with limited space such as downtown Napa locations. Carts are easily maneuverable in alleys and small enclosures. The chart below lists the dimensions for the various sized carts that are available.

A 95-gallon recyclable materials cart, 65-gallon compostables cart & 35-gallon MSW cart are shown above (from left to right)

Cart Dimensions					
Cart Size	**1 cubic yard equivalent to:**	**Height**	**Width**	**Depth**	**Footprint (rounded)**
35 gallons	6 carts	39"	19"	23"	3 sq. ft.
65 gallons	3 carts	42"	27"	29"	5 sq. ft.
95 gallons	2 carts	47"	29"	34"	6 sq. ft.

Front-load Bin Collection

Commercial bins for MSW and recyclable materials come in sizes ranging from 1 1/2 cubic yards to 6 cubic yards. Sizes 1 1/2 cubic yards to 4 cubic yards are equipped with wheels for maneuvering, while 6 cubic yard bins are stationary (no wheels).

6-yd bins are not available with wheels

If a large-sized stationary bin without wheels is used, the bin MUST be directly accessible by collection trucks and be placed a maximum of 8" from vehicle gate doors if the enclosure has a roof and a maximum of 24" if the enclosure does not have a roof. The chart below lists the dimensions for each front-load bin available.

Front-Load Container Dimensions				
Bin Size	**Height**	**Depth**	**Length***	**Footprint (rounded)**
1 ½ cubic yards	43"	30"	80"	15 sq. ft.
2 cubic yards	50"	35"	80"	18 sq. ft.
3 cubic yards	59"	42"	80"	21 sq. ft.
4 cubic yards	65"	51"	80"	26 sq. ft.
6 cubic yards	69"	66"	80"	33 sq. ft.

*Cart to Bin Capacity (How many carts fit in a bin?)	
# of 95-gal Carts	**Bin Size**
3 carts =	1.5 cubic yards
4 carts =	2 cubic yards
6 carts =	3 cubic yards
8 carts =	4 cubic yards
12 carts =	6 cubic yards

* The 80" includes 8" to overall length of front-load bins to include 4" pockets on each side.

*Above chart demonstrates capacity only and does not indicate that carts and bins will take up the same amount of enclosure space. Refer to sizing charts for container dimensions.

Roll-off Box Collection

Roll-off boxes are available in four sizes (10, 20, 30 & 40 cubic yards.). This type of container is most frequently used at construction sites, but is also designed for high volume users. They may be placed directly behind a building where space is available or at a loading dock to allow loading from above. If it will be placed at a loading dock, bumper pads must be installed to avoid undue dock damage from the heavy container.

Roll-off containers must be placed on a level surface. If placed on an incline, roll-away protection is required. A 75' minimum is required.

Please contact the Town's Authorized Contractor at (530)876-3340 for an onsite placement inspection and before installing any loading dock bumper rails.

The chart below lists the required clearances for roll-off vehicles & container dimensions:

Required Clearances for Roll-Off Vehicle	
Vertical (Approach & Exit)	14' high
Vertical (Rails raised w/bin)	25' high
Lateral	10' wide
Service Area Length (direct approach w/bin)	75' long

Roll-Off Container Dimensions				
Size	**Height**	**Width**	**Length**	**Footprint**
10 cubic yards	4'	8'	14'	112 sq. ft.
20 cubic yards	6'	8'	18'	144 sq. ft.
30 cubic yards	7'	8'	20'	160 sq. ft.
40 cubic yards	8'	8'	22'	176 sq. ft.

Compactor Collection

Businesses may choose to utilize their own compactor to reduce volume before transport and to minimize scavenging. For improved efficiency, a compactor should be used in place of a debris box when one location requires a 6 cubic yard bin that needs to be emptied more than 3 days per week. Larger sized compactors require a roll-off truck to be emptied. The entire unit must be picked up with a roll-off truck and be taken away. A container will not be available for 1-2 hours during this time. Some smaller compactors (4 cubic yards and smaller) can be emptied on-site using a front load truck so the unit does not have to leave the property.

All compactors must have inside rail dimensions of 28", exterior rail dimensions of 34" and a direct approach of 75'.

Additionally, most require a 220V double phase electrical outlet. If a business is using a compactor for compostables, it must be leak proof to prevent discharge into the Town's storm drain system. Please contact the Town's Authorized Contractor at (530) 876-3340 before purchasing, renting or installing a compactor to ensure servicing compatibility with hauling vehicles.

Keep in mind that compactors are large pieces of equipment that need to have adequate space for both the receiver and the compaction equipment. The chart below provides the clearances required for compactors.

Required Clearances for Compactors	
Vertical (Approach & Exit)	14' high
Vertical (Rails raised w/compactor)	25' high
Lateral	2' around compactor
Service Area Length	75' long

Compactors vary in size depending on the capacity and manufacturer. The preceding charts list the capacity and approximate dimensions of various sized compactors that are available. It is important to obtain actual dimensions from the manufacturer or vendor. Additionally, keep in mind that compostables are very liquid in content and cannot be loaded above the compactor blade of the hopper. This means the actual capacity for compostables is less than the size of the compactor.

Front Load Truck Emptied Compactor Dimensions*			
Compactor Size	**Height**	**Width**	**Depth**
2 cubic yards	8.5'	8'	5'
3 cubic yards	7'	8'	7'
4 cubic yards	8'	8'	9'

*Dimensions listed are approximate. Exact specifications of the unit should be obtained from the manufacturer or vendor to determine enclosure dimensions.

Vertical Compactors such as the one shown above are excellent for small spaces and require a front load truck to empty.

Roll-off Truck Emptied Compactor Dimensions*			
Compactor Size	**Height**	**Width**	**Length**
6 cubic yards	8’	8’	12’
10 cubic yards	8’	8’	14’
15 cubic yards	8’	8’	17’
20 cubic yards	8’	8’	20’

* Dimensions listed are approximate. Exact specifications of the unit should be obtained from the manufacturer or vendor to determine enclosure dimensions.

Roll-off compactors are required for compactors over 6 yards.

Cooking Oil/Grease Collection Containers

Food Facilities that generate cooking oil and grease for disposal must collect oil and grease in a separate container designed specifically for the collection of these two items. Disposal of oil and grease in a MSW collection container is not allowed. Many Food Facilities contract with a commercial oil and grease management company that will provide an exterior collection

container. Since the container must be housed within the enclosure, the container size must be considered when determining the size of the enclosure. Below is a chart listing the most common sizes of cooking oil/grease containers.

Oil/Grease Container Dimensions*			
Container Size	**Height**	**Width**	**Depth**
42 gallon (eco tub)	30”	20”	24”
55 gallon (eco tub)	31”	19”	30”
78 gallon (eco tub)	30”	26”	31”
55 gallon (drum)	34”	23” diameter	
100 gallon	36”	24”	42”
200 gallon	36”	24”	60”
300 gallon	36”	36”	60”

* Exact specifications of the oil/grease container should be obtained from the manufacturer or vendor.

An Eco-tub is an option for businesses that generate a small amount of cooking oil/grease

Cooking oil/grease containers are available in sizes as large as 300 gallons