

**PRELIMINARY
WASTE MANAGEMENT PLAN
FOR THE
COLLECTION AT CACTUS PROJECT**

Lead Agency

City of San Diego
1222 First Avenue
San Diego, CA 92101

Prepared By:

T&B Planning, Inc.
8690 Aero Drive, Suite 115 PBM 383
San Diego, CA 92123



May 21, 2024

Table of Contents

1.0	Introduction	2
2.0	Project Description	3
3.0	Applicable Regulatory Requirements.....	5
3.1	State Regulations	5
3.1.1	California Solid Waste Integrated Waste Management Act (AB 939, 1989).....	5
3.1.2	Waste Management (AB 1594).....	5
3.1.3	Waste Reuse and Recycling Act (AB 1327).....	6
3.1.4	2019 California Green Building Standards Code.....	6
3.1.5	Short-Lived Climate Pollutants (SLCP): Organic Waste Methane Emissions Reductions (SB 1383).....	6
3.2	Local Regulations	7
3.2.1	City of San Diego Zero Waste Plan: Road to Zero Waste, Next Stop 75%	7
3.2.2	The Whitebook: Standard Specifications for Public Works Construction.....	7
3.2.3	City of San Diego Ordinance No. O-19420 & O-19694 (Municipal Code Chapter 6, Article 6, Division 6).....	7
3.2.4	City of San Diego Ordinance No. O-19678 (Municipal Code Chapter 6, Article 6, Division 7).....	7
3.2.5	Municipal Code Chapter 14, Article 2, Division 8	8
4.0	Construction Waste	8
4.1	On-Site Grading.....	9
4.2	Building Construction.....	9
5.0	Operational Waste	11
5.1	Operational Solid Waste	11
5.2	Waste Reduction, Recycling, and Diversion Measures.....	11
5.3	Change in Waste Generation Compared to Existing Conditions.....	12
5.4	Waste Reduction, Recycling, and Diversion Measures.....	12
5.5	Landscaping, Green Waste, and Organics Recycling.....	13
6.0	Conclusion.....	14
7.0	Waste Reduction, Recycling, and Diversion Measures.....	14
8.0	References	19

1.0 INTRODUCTION

The purpose of this Waste Management Plan (WMP) for the Collection at Cactus Project (Project) in the City of San Diego (City) is to identify potential impacts of the Project on solid waste services and if necessary, identify mitigation measures to reduce these impacts to less-than-significant levels. This Project shall strive for a goal of 75 percent of waste reduction for construction and demolition debris, consistent with the requirements of Chapter 6, Article 6, Division 6 of the Municipal Code and City policies regarding waste reduction and recycling. The Project shall also divert waste generated during occupancy in accordance with City policies regarding waste reduction and recycling.

This WMP addresses site demolition, building construction, and occupancy of the Project. This WMP addresses the projected amount of waste that could be generated by the Project based on current City generation rates and estimates; waste reduction goals; and recommended techniques to achieve the waste reduction goals, such as recycling.

The City has established thresholds of significance for cumulative and direct impacts related to solid waste generation. Projects that include the construction, demolition and/or renovation of 40,000 square feet or more of building space may generate sufficient waste (approximately 60 tons) to have a potentially cumulatively significant impact on solid waste facilities. Additionally, projects that include the construction, demolition, or renovation of 1,000,000 square feet or more of building space may generate 1,500 tons of waste or more and are considered to have direct impacts on solid waste facilities. The Project as proposed exceeds the cumulatively significant impact threshold.

Because the Collection at Cactus Project exceeds the thresholds for solid waste generation, this WMP has been prepared to mitigate the direct and cumulative impacts of this Project by addressing the following elements for the demolition, construction, and occupancy phases of the Project as applicable:

- Tons of waste anticipated to be generated;
- Material type of waste to be generated;
- Source separation techniques for waste generated;
- How materials will be reused on-site;
- Name and location of recycling, reuse, and landfill facilities where recyclables and waste will be taken if not reused on-site;
- A “buy recycled” program;
- How the Project will aim to reduce the generation of construction/demolition debris;
- A plan of how waste reduction and recycling goals will be communicated to subcontractors; and
- A timeline for each of the three main phases of the Project (demolition, construction, and occupancy).

2.0 PROJECT DESCRIPTION

The 39.62-acre Project site is located generally at the northeast intersection of Cactus Road and Airway Road within the Central Village Specific Plan (CVSP) in the Otay Mesa area of the City of San Diego and is shown on Figure 1, *Aerial Photograph*. The Project proposes the development of 962 multi-family residential units on approximately 29.37 acres, a public park on approximately 3.5 acres, 17,452 square feet (s.f.) of leasing and amenity space, five detention basins, and associated utilities and improvements. The proposed land use is consistent with the existing land use designation applied to the site by the CVSP. Table 1, *Development Summary*, provides a summary of the land uses proposed on-site. The Project currently proposes a Vesting Tentative Map (VTM) and a Neighborhood Development Permit (NDP), which would be processed prior to construction.

Table 1 Development Summary

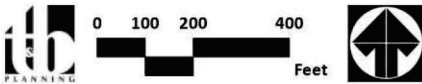
Proposed Land Use	Corresponding CVSP Planning Area Numbers	Acres
Medium to Medium-High Mixed Use	10	5.49
Medium Density Multi-Family	11	8.41
Medium Density Multi-Family	12	9.01
Medium to Medium-High Multi-Family	13	6.46
Park	17	3.50
TOTAL:		32.87

This WMP evaluates all components of the Project, including waste that would be generated with construction and occupancy of the proposed uses on-site.

Under existing conditions, the Project site is vacant and does not generate any waste. The Project would include grading of 38.0 acres of the Project site, and 16,541 cubic yards (cy) of cut and 59,387 cy of fill, with 42,846 cy import of soil materials.



Source(s): Esri, Nearmap Imagery (January 2024), PDC (01-26-2024)



Aerial Photograph

3.0 APPLICABLE REGULATORY REQUIREMENTS

The following is a brief description of the state and local environmental laws and related regulations related to solid waste.

3.1 State Regulations

3.1.1 California Solid Waste Integrated Waste Management Act (AB 939, 1989)

The California Integrated Waste Management Act was enacted by the California Legislature in 1989 with the goal of reducing dependence on landfills for the disposal of solid waste and to ensure an effective and coordinated system for the safe management of all solid waste generated within the state. Assembly Bill (AB) 939 mandated a reduction in the amount of solid waste disposed of by jurisdictions and required diversion goals of 25% by 1995 and 50% by the year 2000. The Integrated Waste Management Act established a hierarchy of preferred waste management practices, which include (1) source reduction, (2) recycling and composting, and (3) environmentally safe disposal by transformation or landfilling. It addresses all aspects related to solid waste regulation, including the details regarding the lead enforcement agency's requirements and responsibilities; the permit process, including inspections and denials of permits; enforcement; and site clean-up and maintenance. It requires that each county prepare a countywide integrated waste management plan that is reviewed at least once every 5 years to assure that waste management practices remain consistent with the practices defined in the California Public Resources Code. In 2013, AB 341 increased the waste diversion target to 75% by 2020.

3.1.2 Waste Management (AB 1594)

"Alternative daily cover" (ADC) is cover material other than earthen material placed on the surface of the active face of a municipal solid waste landfill at the end of each operating day to control vectors, fires, odors, blowing litter, and scavenging. CalRecycle has approved 11 ADC material types that can currently be reported as diversion: ash and cement kiln dust, treated auto shredder waste, construction and demolition waste, compost, green material, contaminated sediment, sludge, and shredded tires. Generally, these materials must be processed so that they do not allow gaps in the exposed landfill face (CalRecycle 2015a).

Pursuant to California Public Resources Code Section 41781.3 and AB 1594, beginning January 1, 2020, the use of green material as ADC will not constitute diversion through recycling and will be considered disposal. "Green material" is defined as any plant material that is either separated at the point of generation, or separated at a centralized facility that employs methods to minimize contamination. Green material includes, but is not limited to, yard trimmings, untreated wood wastes, paper products, and natural fiber products. Green material does not include treated wood waste, mixed demolition or mixed construction debris, or manure and plant waste from the food processing industry, alone or blended with soil. As of August 1, 2018, local jurisdictions are required to include information in an annual report on how the local jurisdiction intends to address the diversion requirements and divert green material that is being used as ADC. A jurisdiction that does not meet certain diversion requirements as a result of not being able to claim diversion for the use of green material as ADC

would be required to identify and address, in an annual report, barriers to recycling green material and, if sufficient capacity at facilities that recycle green material is not expected to be operational before a certain date, to include a plan to address those barriers.

3.1.3 Waste Reuse and Recycling Act (AB 1327)

The Waste Reuse and Recycling Act (WRRRA) required the CIWMB to approve a model ordinance for adoption by any local government for the transfer, receipt, storage, and loading of recyclable materials in development projects by March 1, 1993. The WRRRA also required local agencies to adopt a local ordinance by September 1, 1993 or allow the model ordinance to take effect. The WRRRA requires all development projects that are commercial, industrial, institutional, or marina in nature and where solid waste is collected and loaded, to provide an adequate area for collecting and loading recyclable materials over the lifetime of the project. The area is required to be provided before building permits are issued. (CalRecycle, 2018b)

3.1.4 2019 California Green Building Standards Code

California Code of Regulations, Title 24, Part 11 is referred to as the California Green Building Standards Code (CALGreen Code). CALGreen went into effect in January 2011. The most recently approved update to Cal Green became effective January 1, 2020, and is applicable to the planning, design, operation, construction, use, and occupancy of newly constructed buildings and structures throughout the State of California. The purpose of the CALGreen Code is to “improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental air quality.” The CALGreen Code is not intended to substitute or be identified as meeting the certification requirements of any green building program that is not established and adopted by the California Building Standards Commission (CBSC). Section 5.408.1 of the CALGreen Code requires that 65 percent of construction and demolition waste be diverted from landfills and that 100 percent of trees, stumps, rocks, and associated vegetation and soils resulting from land clearing shall be reused or recycled. For a phased project, such material may be stockpiled on-site until the storage site is developed. Unless otherwise noted in the regulation, all newly constructed buildings in California are subject of the requirements of the CALGreen Code.

3.1.5 Short-Lived Climate Pollutants (SLCP): Organic Waste Methane Emissions Reductions (SB 1383)

In September 2016, Governor Brown signed into law SB 1383 (Lara, Chapter 395, Statutes of 2016), establishing methane emissions reduction targets in a statewide effort to reduce emissions of short-lived climate pollutants (SLCP) in various sectors of California's economy. The new law codifies the California Air Resources Board's Short-Lived Climate Pollutant Reduction Strategy PDF download, established pursuant to SB 605 (Lara, Chapter 523, Statutes of 2014), to achieve reductions in the statewide emissions of short-lived climate pollutants. Actions to reduce short-lived climate pollutants are essential to address the many impacts of climate change on human health, especially in California's most at-risk communities, and on the environment.

As it pertains to CalRecycle, SB 1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. The law grants CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that not less than 20 percent of currently disposed edible food is recovered for human consumption by 2025. The provisions of SB 1383 will go into effect on January 1, 2022.

3.2 Local Regulations

3.2.1 City of San Diego Zero Waste Plan: Road to Zero Waste, Next Stop 75%

State of California regulations for solid waste (California Public Resources Code, Section 41700 et seq.) require that each region have a plan with adequate capacity to manage or dispose of solid waste for at least 15 years into the future. The City of San Diego's Zero Waste Plan (City of San Diego 2015b) establishes goals to target 75% diversion by 2020, 90% diversion by 2035, and "zero" by 2040 and outlines potential diversion strategies to help the City achieve these goals.

3.2.2 The Whitebook: Standard Specifications for Public Works Construction

The City created the Whitebook (City of San Diego 2015c), a supplement which takes precedence over the specification language contained in the "Greenbook." Standard Specifications for Public Works Construction (Public Works Standards 2015), and addresses the unique conditions in the City that are not addressed in the Greenbook. Specifically, Part 1 - General Provisions (A), Section 7-21 addresses construction and demolition waste management.

3.2.3 City of San Diego Ordinance No. O-19420 & O-19694 (Municipal Code Chapter 6, Article 6, Division 6)

Starting on July 1, 2008, all new construction projects are required to pay a refundable solid waste deposit on construction waste. This ordinance requires the applicant to do the following:

- All applicants for a Building Permit or a Demolition/Removal Permit shall submit a properly completed Waste Management Form Part I with the Building Permit or Demolition/Removal Permit application, in accordance with the requirements set forth in the Land Development Manual.
- All applicants shall pay a refundable deposit at the time the Building Permit or Demolition/Removal Permit is issued.
- No Building Permit or Demolition/Removal Permit shall be issued unless the applicant has submitted a properly completed Waste Management Form Part I and paid the required deposit.

3.2.4 City of San Diego Ordinance No. O-19678 (Municipal Code Chapter 6, Article 6, Division 7)

Starting on December 20, 2007, commercial facilities which receive solid waste collection service from a Franchisee shall participate in a recycling program by separating recyclable materials from other solid waste and depositing the recyclable materials in the recycling container provided by the

Franchisee or Recyclable Materials Collector. The recycling services required by Section § 66.0706 of the San Diego Municipal code shall include, at a minimum, all of the following:

- 1) collection of recyclable materials at least two times per month;
- 2) collection of plastic bottles and jars, paper, newspaper, metal containers, cardboard, and glass containers;
- 3) utilization of recycling receptacles which comply with the standards in the Container and Signage Guidelines established by the Department;
- 4) designated recycling collection and storage areas; and
- 5) signage on all recycling receptacles, containers, shuts, and/or enclosures which complies with the standards described in the Container and Signage Guidelines by the Department.

Additionally, for commercial facilities, the responsible person shall ensure that occupants are educated about recycling services as follows:

- 1) Information, including the types of recyclable materials accepted, the location of recycling containers, and the occupant's responsibility to recycle pursuant to Chapter 6, Article 6 Division 7 of the San Diego Municipal Code, shall be distributed to all occupants annually;
- 2) All new occupants shall be given information and instructions upon occupancy; and
- 3) All occupants shall be given information and instructions upon any change in recycling service to the commercial facility.

3.2.5 Municipal Code Chapter 14, Article 2, Division 8

Municipal Code Chapter 14 Article 2 Division 8 sets forth the general regulations for refuse and recyclable materials storage for residential and commercial development. These sections include guidelines for the size of material storage areas based on the number of residential dwelling units and non-residential commercial square footage; location of material storages areas; and screening of material storage areas. (City of San Diego, 2009)

4.0 CONSTRUCTION WASTE

During construction of the Project, solid waste requiring landfill disposal would be required. The solid waste generated would primarily consist of discarded materials and packaging generated by the construction process. Construction debris would be separated on-site into material-specific containers to facilitate reuse and recycling and to increase the efficiency of waste reclamation and/or would be collected by a contracted waste hauler and separated at an off-site waste collection facility. Separation of materials at the construction site is necessary in order to ensure appropriate waste diversion rate, minimize costs associated with transportation and disposal, and facilitate compliance with the C&D ordinance. The types of construction waste anticipated to be generated include:

- Asphalt and concrete

- Brick/Masonry/Tile
- Cabinets/Doors/Fixtures
- Cardboard
- Carpet, padding/foam
- Ceiling Tile
- Drywall
- Landscape debris
- Mixed C&D material
- Roofing Materials
- Scrap metal
- Stucco
- Unpainted wood and pallets
- Garbage/Trash

Materials to be recycled would be redirected to appropriate recipients selected from the City of San Diego Environmental Services Department’s (ESD) directory of facilities that recycle construction materials, scrap metal, and yard waste.

4.1 On-Site Grading

The Project anticipates 16,541 cy of cut and 59,387 cy of fill would be required on site. Thus, 42,846 cy import of soil would be required, and there would be no export of dirt from the Project site during the grading phase of the Project. Therefore, the grading phase of the Project would not generate waste.

Other anticipated waste associated with grading operations includes negligible amounts of trash generated by contractors working on-site.

Existing vegetation would also be removed as part of the grading process (clearing and grubbing) and would be processed and recycled 100% at a suitable green waste recycling facility. No vegetation would be sent to the landfill.

4.2 Building Construction

Construction of the Project would occur in one phase. The City of San Diego ESD requires projects to estimate tonnage of expected construction waste. The City’s *Guidelines for a Waste Management Plan* estimates a solid waste generation rate of three pounds per square foot during the construction phase of the project (City of San Diego, 2013, p. 10). The Project proposes 298,774 square feet (s.f.) of building area in Planning Area (PA) 10, 418,412 s.f. of building area in PA 11, 464,606 s.f. of building area in PA 12, and 359,987 s.f. of building area in PA 13. In total, the Project would involve the construction of 1,541,779 s.f. of building area. As shown below, 1,541,779 s.f. of construction would result in the generation of approximately 2,312.7 tons of building construction waste.

Construction Waste Calculation:

$$1,541,779 \text{ sf} \quad \times \quad \frac{3\text{lbs}}{\text{sf}} \quad \times \quad \frac{.0005 \text{ tons}}{\text{lb}} \quad = \quad 2,312.7 \text{ tons of Building Construction Waste}$$

Approximately 2,312.7 tons of construction waste is the initial estimate used for purposes of preparing this WMP until construction documents have been prepared and a contractor has been hired who can more accurately compute the expected waste in total quantity and by type. For planning purposes, the contractors shall source separate the waste materials generated according to what is shown in Table 2, *Project Waste Generation - Construction*, below.

Table 2 Project Waste Generation - Construction

Material Type	Estimated Waste Quantity (tons)	Handling¹	Diversion Rate (%)	Estimated Diversion (tons)	Estimated Disposal (tons)
Clean Wood (forming and framing lumber)	57.83	Miramar Greenery	100	57.83	0
Metals (pipes, rebar, finishing, steel, aluminum, copper, brass, stainless steel)	578.21	SA Recycling	100	578.21	0
Blocks, Bricks	370.02	Vulcan Carol Canyon Landfill and Recycle Site	100	370.02	0
Asphalt, Concrete	693.81	Vulcan Carol Canyon Landfill and Recycle Site	100	693.81	0
Trash (treated wood)	57.83	EDCO Recovery and Buy Back Center	0	0	57.83
Mixed Debris (insulation, vinyl, doors, floor tile, plastic pipes, film, broken glass, drywall)	462.54	Otay C&D /Inert Debris Processing Facility	75	354.41	108.13
Cardboard	46.23	SANCO Resource Recovery & Buy Back Center	100	46.23	0
Carpet/Carpet Padding	46.23	DFS Flooring	100	10.45	0
TOTAL	2,312.7		84.3%	2,146.74	165.96

1. Handling Facilities were selected from the City of San Diego “2024 Certified Construction and Demolition (C&D) Recycling Facility Directory” (City of San Diego, 2024)

Based on the information shown in Table 2, the Project would divert approximately 84.3% of construction-related waste from the landfill, which exceeds the 75% waste reduction requirement for construction and demolition debris as required by the City’s Municipal Code. Additionally, as required by Municipal Code Chapter 6, Article 6, Division 6, the Project would be required to submit a properly completed Waste Management Form Part I and pay a refundable solid waste deposit on construction waste.

5.0 OPERATIONAL WASTE

Construction of new structures occurs as a one-time waste generation event. Tenant/owner occupancy requires an on-going plan to manage waste disposal to meet the waste reduction goals established by the City and State. It should be noted that the Project proposes development of 962 dwelling units totaling 1,541,779 s.f. of building area.

5.1 Operational Solid Waste

Table 3, *Minimum Exterior and Recyclable Material Storage Areas for the Project*, shows the anticipated refuse and recyclable storage requirement based on the requirements of the City’s municipal plan. As shown below in Table 3, the Project will require a minimum of 1,845.12 s.f. of refuse storage area, 1,845.12 s.f. of organic waste storage area, 1,845.12 s.f. of recyclable material storage area, and a total of 5,535.36 s.f. of storage areas.

Table 3 Minimum Exterior and Recyclable Material Storage Areas for the Project

Land Use	Dwelling Units/Gross Floor Area	Minimum Refuse Storage Area (square feet)	Minimum Organic Waste Storage Area (square feet)	Minimum Recyclable Material Storage Area (square feet)	Total Minimum Storage Area (square feet)
Residential	962 DU	1,845.12	1,845.12	1,845.12	5,535.36

DU = Dwelling Units; s.f. = square feet

1. Minimum refuse, organic waste, and recyclables storage rates obtained from City of San Diego Municipal Code Table 142-08B, which requires the provision of 385 plus 48 s.f. for every 25 dwelling units above 201 of refuse, organic and recyclable storage areas.

The Project will include the construction and operation of 962 multi-family residential dwelling units. The Project is located within the Otay Mesa Community Plan area. The Otay Mesa Community Plan Update Environmental Impact Report (EIR) utilized a generation rate of 7.8 pounds/unit/day for residential uses. (City of San Diego, 2014, Table 5.14-2).

Approximately 1,369.41 tons of waste will be generated per year by the Project under operational conditions, as calculated below.

Residential Waste Calculation:

$$962 \text{ units} \times \frac{7.8 \text{ lbs/unit}}{\text{Day}} \times \frac{365 \text{ days}}{\text{year}} \times \frac{.0005 \text{ tons}}{\text{lb}} = 1,369.407 \text{ tons per year}$$

5.2 Waste Reduction, Recycling, and Diversion Measures

On-site recycling services shall be provided to the Project. Residents of the Project that receive solid waste collection service shall participate in a recycling program by separating recyclable materials from other solid waste and depositing the recyclable materials in the recycling container provided for each resident/tenant. Recycling services are required by Chapter 6, Article 6, Division 7 of the City of San Diego Municipal Code.

Based on current requirements, these services shall include the following:

- Collection of recyclable materials as frequently as necessary to meet demand;
- Collection of plastic bottles and jars, paper, newspaper, metal containers, cardboard, and glass containers;
- Collection of other recyclable materials for which markets exist, such as scrap metal, wood pallets;
- Collection of food waste for recycling by composting, where available (prior to issuance of building and occupancy permits, the Project proponent will meet with representatives from ESD to ensure that their educational materials and haulers can comply with the requirements for this service);
- Use of recycling receptacles or containers that comply with the standards in the Container and Signage Guidelines established by ESD;
- Designated recycling collection and storage areas;
- Signage on all recycling receptacles, containers, chutes, and/or enclosures in compliance with the standards described in the Container and Signage Guidelines established by ESD.

As required by Sections 66.0706 and 66.0707 of the City's Municipal Code, the building management or other designated personnel shall ensure that occupants are educated about the recycling services as follows:

- Information, including the types of recyclable materials accepted, the location of recycling containers, and the occupants' responsibility to recycle shall be distributed to all occupants annually;
- All tenants shall be given information and instructions upon occupancy; and
- All tenants shall be given information and instructions upon any change in recycling service to the Project area.

5.3 Change in Waste Generation Compared to Existing Conditions

Under existing conditions, the site is vacant and does not contain existing buildings. Thus, the Project would result in a net increase in approximately 1,369.41 tons of waste per year compared to existing conditions. In accordance with AB 939 and City Municipal Code Chapter 6, Article 6, Division 7, the Project would be required to divert approximately 50% of operation-related waste from the landfill. Thus, approximately 875.5 tons of waste would be disposed in the landfill and approximately 875.5 tons of waste would be diverted from the landfill.

5.4 Waste Reduction, Recycling, and Diversion Measures

On-site recycling services shall be provided to the Project. Tenants of the Project that receive solid waste collection service shall participate in a recycling program by separating recyclable materials

from other solid waste and depositing the recyclable materials in the recycling container provided on-site. Recycling services are required by Chapter 6, Article 6, Division 7 of the City of San Diego Municipal Code. Based on current requirements, these services shall include the following:

- Collection of recyclable materials as frequently as necessary to meet demand;
- Collection of plastic bottles and jars, paper, newspaper, metal containers, cardboard, and glass containers;
- Collection of other recyclable materials for which markets exist, such as scrap metal, wood pallets;
- Collection of food waste for recycling by composting, where available (prior to issuance of building and occupancy permits, the Project proponent will meet with representatives from ESD to ensure that their educational materials and haulers can comply with the requirements for this service);
- Use of recycling receptacles or containers that comply with the standards in the Container and Signage Guidelines established by ESD;
- Designated recycling collection and storage areas;
- Signage on all recycling receptacles, containers, chutes, and/or enclosures in compliance with the standards described in the Container and Signage Guidelines established by ESD.

As required by Section 66.0706 of the City's Municipal Code, the responsible person shall ensure that occupants are educated about the recycling services as follows:

- Information, including the types of recyclable materials accepted, the location of recycling containers, and the person's responsibility to recycle, shall be distributed to all occupants, employees, and contractors annually;
- All occupants shall be given information and instructions upon occupancy; and
- All occupants shall be given information and instructions upon any change in recycling service to the Project area.

5.5 Landscaping, Green Waste, and Organics Recycling

Plant material selection shall be guided by the Landscape Design Standards and Policies contained in Section 2.5.3 of the CVSP, which is applicable to the Project site. Plant materials including in the CVSP's plant palette were selected to encourage long-term sustainability without the use of excessive water or pesticides and fertilizers. Irrigation of these areas shall be guided by the Irrigation and Water Conservation Policies contained in Section 2.5.3.8 of the CVSP. Irrigation, where practical, shall utilize reclaimed water applied via drip, bubblers, and spray irrigation to avoid overwatering in all planting areas. Landscape maintenance shall include the collection of green waste and disposal of green waste at recycling centers that accept green waste. This will help further reduce the waste generated by developments within the Project during the occupancy phase.

The Project is subject to comply with SB 1383 and the City of San Diego's Organic Waste Recycling Program. Residences will be required to collect food scraps, food-soiled paper, and yard trimmings in compliance with the City's Recycling Ordinance.

6.0 CONCLUSION

The City of San Diego Development Services Department is requiring that this preliminary WMP be prepared and submitted to the City of San Diego's ESD because the Project exceeds the significance thresholds for solid waste disposal. Because the Project is in the Neighborhood Development Permit phase, this is only a preliminary plan, which specifies the intent to meet the requirements and goals of the Public Resources Code and City plans and ordinances.

To ensure impacts are mitigated to below a level of significance, the Project Applicant has prepared this WMP which explains and provides directions as to how to appropriately implement salvage and recycling activities for the Project. This WMP shall be implemented to the fullest degree of accuracy and efficiency. Additionally, the Project would be required to adhere to the CALGreen Code and City ordinances, including the Construction and Demolition Debris Diversion Deposit Program, the City's Recycling Ordinance, and the Refuse and Recyclable Materials Storages Regulations. The WMP for the Project is designed to implement and adhere to all City ordinances and regulations with regard to waste management.

7.0 WASTE REDUCTION, RECYCLING, AND DIVERSION MEASURES

The following measures are proposed to mitigate the direct and cumulative solid waste impacts to below a level of significance.

1. Prior to initiation of any grading or construction activities, the Applicant shall designate one person or agency connected with the Project to act as Solid Waste Management Coordinator. The Solid Waste Management Coordinator's responsibility is to work with all contractors and subcontractors to ensure material separation and coordination proper disposal and diversion of waste generated. The Solid Waste Management Coordinator will help ensure all diversion practices outlined in this WMP are upheld and communicate goals to all contractors involved efficiently. The responsibilities of the Solid Waste Management Coordinator, include, but are not limited to, the following:
 - Review the Solid Waste Management Plan;
 - Coordinate and oversee salvage operations;
 - Review and update procedures as needed for material separation and verify availability of containers and bins needed to avoid delays;
 - Review and update procedures for periodic solid waste collection and transportation to recycling and disposing facilities; and

-
- The authority to stop work orders if proper procedures aren't being followed.
2. Prior to initiation of any grading or construction activities, the Solid Waste Coordinator shall conduct a Contractor Education Program presentation to ensure all Project personnel are trained regarding content and requirements of this WMP. The Solid Waste Coordinator shall ensure the following waste management procedures are implemented:
 - Solid Waste Management Coordinator shall be responsible for educating contractors and subcontractors regarding waste management plan requirements and ensuring that contractors and subcontractors carry out the measures described in the WMP.
 - Solid Waste Management Coordinator shall ensure ESD attendance at a pre-construction meeting and ensure compliance with segregation requirements, and verification of recycled content in base materials.
 - Recycling areas shall be clearly identified with large signs, approved by ESD, and sufficient amounts of material-specific bins shall be provided for necessary segregation.
 - Recycling bins shall be placed in areas that are readily accessible to contractors/subcontractors and in areas that will minimize misuse or contamination by employees and the public.
 - Solid Waste Management Coordinator shall be responsible for ensuring that contamination rates in bins remain below 5 percent by weight of the bin.
 3. The Project contractors shall perform daily inspections of the construction site to ensure compliance with the requirements of the WMP and all other applicable laws and ordinances. Daily inspections shall include verifying the availability and number of dumpsters based on the amount of debris being generated, correct labeling of dumpsters, proper sorting and segregation materials, and salvaging of excess materials. The Project contractors shall report the results of the daily site inspections to the Solid Waste Management Coordinator
 4. Prior to the issuance of any construction permits, the Solid Waste Coordinator shall ensure ESD's attendance at a pre-construction meeting. The Solid Waste Coordinator shall ensure that (1) the proposed approach to contractor education is approved, (2) the written specifications for base materials, concrete pavers, decomposed granite, and mulch are approved, (3) the C&D Ordinance deposit has been paid, (4) an appropriate diversion rate (from the Waste Management Plan) has been included on all construction permits and documents, including the C&D deposit form, and (5) that the ESD inspector approves the separate waste containers, signage, and hauling contract(s) for the following materials:
 - Drywall
 - Concrete
 - Clean Wood
 - Scrap Metal
 - Polystyrene
 - Roofing

- Cardboard
- Trash

The Project will achieve the 75 percent goal of construction waste to be diverted and/or recycled. The Project shall implement environmentally sound waste management by salvaging material such as steel, copper, other metals, and equipment; and reusing material such as concrete, steel, and asphalt. The Project shall recycle, salvage, and reuse materials and then divert materials to a landfill. These bins shall be clearly labeled, located in areas to avoid contamination, and regularly inspected by the Solid Waste Management Coordinator to remove contaminants. These materials will be either reused in the building construction process, or taken to designated recycling facilities which have been certified by the City of San Diego and have a diversion rate of 100%.

5. Prior to the issuance of any building permit, the Mitigation Monitoring Coordinator (MMC) shall verify that all of the requirements of the Refuse and Recyclable Materials Storage Regulations and all of the requirements of the Waste Management Plan are shown and noted on the appropriate construction documents. All requirements, notes, and graphics shall be in substantial conformance with the conditions and exhibits of the associated discretionary approval.

- The construction documents shall include a Waste Management Plan. Notification shall be sent to the following:

MMC Environmental Review Specialist Development Services Department
9601 Ridgehaven Court
Suite 220, MS 1102 B
San Diego, CA 92123
(619) 980-1236

Environmental Services Department (ESD)
9601 Ridgehaven Court
Suite 210, MS 1102 A
San Diego, CA 92123
(858) 573-1236

6. Prior to the issuance of building permits, the Project Applicant shall be required to submit written evidence to the MMC that the final Construction Report has been approved by the MMC and the (ESD). The Construction Report will be required to include the following information:

- The actual construction waste generated and diverted from the Project;
- The construction waste reduction percentage achieved; and
- How the construction waste reduction percentage goal was achieved.

7. Prior to the issuance of building permits, the Project Applicant shall provide evidence to a representative of the City's ESD that the following measures as described in this report have been successfully implemented:
- Adequate storage area has been provided as consistent with the City's Storage Ordinance,
 - Hauler(s) has been retained to provide recyclable materials collection, and
 - Education materials for building tenants/owners have been prepared as required per the City's Recycling Ordinance.

With implementation of the above-listed mitigation measures, impacts are mitigated to a level considered less than significant. The following Table 4, *Calculated Diversion Rate*, summarizes the waste impacts and the waste reduction goals for each project phase.

Table 4 Calculated Diversion Rate

Phase/Type	Estimated Tons Generated	Handling	Diversion Rate	Estimated Tons Diverted	Estimated Tons Disposed
Construction:					
New Construction Per Table 2	2,312.7	Source Separation/Recycling as Identified per Material in Table 2	84.3%	2,146.74	165.96
Total for Demolition and Construction Phase	2,312.7				
Occupancy:					
Net Solid Waste Generation	1,369.41	Compliance with Recycling Ordinance	50%	684.71	684.71
Total for Occupancy Phase:	1,369.41		50%	684.71	684.71

8.0 REFERENCES

<u>Cited As:</u>	<u>Citation:</u>
(CalRecycle, 2018a)	CalRecycle, 2018. <i>History of California Solid Waste Law, 1985-1989</i> (website). July 27, 2018. Available online: http://www.calrecycle.ca.gov/laws/legislation/calhist/1985to1989.htm .
(CalRecycle, 2018b)	CalRecycle, 2018. <i>History of California Solid Waste Law, 1990-1994</i> (website). July 27, 2018. Available online: http://www.calrecycle.ca.gov/Laws/Legislation/calhist/1990to1994.htm .
(City of San Diego, 2009)	City of San Diego. 2009. <i>Article 2: General Development Regulations, Division 8: Refuse and Recyclable Materials Storage Regulations</i> . December 2009. Available online: https://docs.sandiego.gov/municode/MuniCodeChapter14/Ch14Article02Division08.pdf .
(City of San Diego, 2013)	City of San Diego. 2013. <i>California Environmental Quality Act Guidelines for a Waste Management Plan</i> . June 2013. Available online: https://www.sandiego.gov/sites/default/files/legacy/environmental-services/pdf/recycling/wmpguidelines.pdf
(City of San Diego, 2014)	City of San Diego, 2014. <i>Otay Mesa Community Plan Update Environmental Impact Report</i> . March 2014. Available online: https://www.sandiego.gov/sites/default/files/otay_mesa_cmnty_plan_update_final-central_village_cpa.pdf
(City of San Diego, 2016a)	City of San Diego. 2016. <i>Article 6: Collection, Transportation and Disposal of Refuse and Solid Waste, Division 6: Construction and Demolition Debris Diversion Deposit Program</i> . September 2016. Available online: https://docs.sandiego.gov/municode/MuniCodeChapter06/Ch06Article06Division06.pdf .
(City of San Diego, 2016b)	City of San Diego. 2016. <i>City of San Diego Construction & Demolition (C&D) Debris Conversion Rate Table</i> . June 6, 2016. Available online: https://www.sandiego.gov/sites/default/files/material_conversion_table_6.8.16_0.xls .

- (City of San Diego, 2018) City of San Diego. 2018. *Article 6: Collection, Transportation and Disposal of Refuse and Solid Waste, Division 7: Recycling Ordinance*. March 2018. Available online:
<https://docs.sandiego.gov/municode/MuniCodeChapter06/Ch06Art06Division07.pdf>.
- (City of San Diego, 2024) City of San Diego, 2024. *2024 Certified Construction & Demolition (C&D) Recycling Facility Directory*. January 2024. Available online:
<https://www.sandiego.gov/sites/default/files/certified-cd-recycling-facility-directory.pdf>.