WASTE MANAGEMENT PLAN

Clairemont Village Apartments Project 3001 through 3089 Clairemont Drive

Submitted to:

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1.0 INTRODUCTION

HWL Planning & Engineering (HWL), on behalf of Clairemont Village Quad LLC (Client), has prepared this Waste Management Plan (WMP) for the Clairemont Village Apartments Project (project) in the City of San Diego (City) to analyze the solid waste impacts that are anticipated during the construction and operation of the project. Our objective is to provide acceptable mitigating measures to potential impacts of the Clairemont Village Apartments that will produce negligible effects on solid waste services. In accordance with Assembly Bill 341, the goal is to reduce the tons of disposed wasted to 60 tons or less, or to provide diversion of 75 percent or more.

1.1 EXISTING CONDITIONS

The project is located at 3001 through 3089 Clairemont Drive in San Diego (APN 425-680-09 and 425-680-10). The 12.96-acre Clairemont Village Shopping Center is bounded by multifamily residences to the north, Cowley Way to the east, Field Street to the south, Burgener Boulevard to the southwest, and Clairemont Drive to the northwest. The site location is displayed in Figure 1: Project Location Map.

The Project site has a General Plan land use designation of Commercial Employment, Retail, and Services (Community Commercial), and is part of the Clairemont Mesa Community. The Clairemont Mesa Community Plan designates the total 12.96-acre site as within Community Plan Implementation Overlay Zone (CPIOZ) - Type B. The property is zoned CC-1-3 which permits residential development at a density of 1 unit per 1500 SF of lot area (SDMC Section 131.0531 Table 131-05E). This would allow for up to 376 units on the 12.96-acre property.

1.2 PROPOSED PROJECT

The project will entail redevelopment of a small portion of the existing shopping center into a 314,901-square-foot, 224-unit, 5-story multi-family residential apartment project over 2 levels of parking. Approximately 342 parking spaces would be provided within the parking garage consisting of one partially below-grade level and one at-grade level of the structure. In addition, there are 43 retail parking spaces to be shared with residents and their guests between the hours of 6 PM and 9 AM. Therefore, 385 parking spaces will be provided for residential use. There are two points of entry to the apartment parking garage located on-site off Field Street and Cowley Way. The project will include demolition of approximately 3,770 square feet (SF) of retail commercial space, leaving 120,313 SF of existing community retail. Figure 2 and Figure 3 detail the project site plan. For purposes of this WMP, the project will also include demolition of approximately 106,035 SF of surface parking, curb islands, and related improvements.





Figure 1: Location Map















1.2 PURPOSE OF THE WASTE MANAGEMENT PLAN

This WMP has been developed to address the phases of site development that will require proper waste management: the Demolition Phase, Grading Phase, Construction Phase, and Occupancy Phase (post-construction). For each phase, this WMP addresses the projected amount of waste that could be generated by the project based on City generation rates and estimates; waste reduction goals; and recommended techniques to achieve the waste reduction goals, such as reducing, reusing, and recycling. Waste disposal sites, recycling methods, and opportunities may change from those available today; however, it is not expected that waste diversion and disposal sites listed in this WMP would change by the time the project is anticipated to begin construction.

The direct impact threshold of significance for projects in the City of San Diego is 1,500 tons of waste per year, which would likely occur when developments are over 1 million SF. Projects that generate more than 60 tons of waste per year would have the potential to result in a cumulative impact on solid waste services and are required to prepare a WMP to demonstrate how the project would reduce solid waste impacts to below a level of significance.

The disposal sites and recycling facilities designated in this plan, or alternate facilities listed on the Environmental Services Department's (ESD) website that achieved a comparable diversion rate, shall be used during project development. A facility (or facilities) substituted must not affect the overall diversion rate of the project. More specifically, for each project phase, the WMP includes the following:

- Tons of waste anticipated to be generated.
- Material/type and amount of waste anticipated to be diverted.
- Project features that would reduce the amount of waste generated.
- Project features that would divert or limit the generation of waste.
- Source separation techniques for waste generated.
- How materials shall be reused on-site.
- Name and location of recycling, reuse, or landfill facilities where waste shall be taken.

2.0 REGULATORY FRAMEWORK

2.1 State

2.1.1 CALIFORNIA INTEGRATED WASTE MANAGEMENT ACT (ASSEMBLY BILL 939)

In 1989, the California Legislature passed Assembly Bill (AB) 939: Integrated Waste Management Act, which mandated that all cities reduce waste disposed in landfills from generators withing their borders by 50 percent by the year 2000. AB 939 required all local governments to prepare a Source Reduction and Recycling Element, which incorporates waste management policies and programs to achieve the mandated waste reduction. Since 2004, the City of San Diego has diverted more than 50 percent of its generated waste stream from disposal.

2.1.2 SOLID WASTE DISPOSAL MEASUREMENT ACT (SENATE BILL 1016)

In 2008, Senate Bill (SB) 1016 was chaptered. Known as the Solid Waste Disposal Measurement Act, SB 1016 maintained the 50 percent diversion requirement of AB 939, but changed to a disposal-based measurement system, expressed as the 50 Percent Equivalent Per Capita Disposal Target. This built upon AB 939 by implementing a simplified and timelier indicator of jurisdiction performance that focuses on reported disposal at Board-permitted disposal facilities. This established a goal of not recycling more but disposing of less.

2.1.3 CALIFORNIA SOLID WASTE: DIVERSION (ASSEMBLY BILL 341)

AB 341, adopted in 2011, amended AB 939 by making a legislative declaration that it is the policy goal of the State of California that not less than 75 percent of solid waste generated be reduced, recycled, or composted by the year 2020. While a policy goal may not be legally enforceable, city and/or county ordinances and other mechanisms make AB 341 provisions enforceable within their jurisdictions. AB 341 also required a business (defined to include a commercial or public entity) that generates more than eight cubic yards of commercial solid waste per week or is a multifamily residential dwelling of five units or more to arrange for recycling services, starting July 1, 2012.

2.1.4 SHORT-LIVED CLIMATE POLLUTANTS (SLCP): ORGANIC WASTE METHANE EMISSIONS REDUCTIONS (SENATE BILL 1383)

In September 2016, Governor Brown signed into law SB 1383, establishing methane emissions reduction targets in a statewide effort to reduce emissions, or 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, established pursuant to SB 605, to achieve reductions in the statement emissions to short-lived climate pollutants. Actions to reduce short-lived climate pollutants are essential to address the many impacts to climate change on human health, especially in California's most at-risk communities, and on the environment.

SB 1383 went into effect on January 1, 2022 and requires the reduction of organic waste disposed of in landfills. Organic waste is food scraps and food-soiled paper from kitchens and food operations, yard waste such as garden and landscape waste, organic textiles and carpets, and wood waste. The target goal is to collect and divert at least 50 percent, and up to 75 percent (beginning in 2025), of organic waste from project sites to recycling and composting facilities.

2.2 LOCAL

2.2.1 CITY OF SAN DIEGO GENERAL PLAN

The City of San Diego General Plan Public Facilities, Services, and Safety Element contains goals and policies related to the provision of public services within its city limits. Applicable policies include those listed below.

2.2.2 CITY OF SAN DIEGO ZERO WASTE PLAN: ROAD TO ZERO WASTE, NEXT STOP 75 PERCENT

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 establishes goals to target 75 percent diversion by 2020, 90 percent diversion by 2035, and "zero" by 2040 and outlines potential diversion strategies to help the City achieve these goals.

2.2.3 CITY OF SAN DIEGO MUNICIPAL CODE

The City is required to divert at least 50 percent of its solid waste from landfill disposal through source reduction, recycling, composting, and transformation and it is the policy goal of the State that not less than 75 percent of solid waste generated be reduced, recycled, or composted. The City has enacted codes and policies aimed at helping the City to achieve this diversion level, including the Refuse and Recyclable Materials Storage Regulations (Municipal Code Chapter 14, Article 2 Division 8), Recycling Ordinance (Municipal Code Chapter 6, Article 6, Division 7), and the Construction and Demolition (C & D) Debris Deposit Ordinance (Municipal Code Chapter 6, Article 6, Division 6). These statutes designate refuse and recycling space allocation requirements for on-site refuse and recyclable material storage requirements, diversion of construction and demolition debris regulations, and diversion of recyclable materials generated from residential and commercial facilities.

2.2.4 CALIFORNIA ENVIRONMENTAL QUALITY ACT

The City of San Diego California Environmental Quality Act (CEQA) Significance Determination Thresholds (City of San Diego, 2016a) have established a threshold of 40,000 SF of renovation, demolition, or construction as generating sufficient waste (e.g., 60 tons) to have a potentially cumulative significant impact on solid waste services. According to the City's CEQA Significance Determination Thresholds, projects that are 1,000,000 SF or more generating sufficient waste (e.g., 1,500 tons) have potentially significant direct impacts on solid waste services and facilities.

2.2.3 CITY REDUCTION STRATEGIES

RECYCLING ORDINANCE

The City Recycling Ordinance is found in Municipal Code Section 66.0701 et. seq. It requires the provision of recycling service for all single-family residences; and commercial facilities and multifamily residences with service for four cubic yards or more. In addition, the ordinance requires development of educational materials to ensure occupants are informed about the City's ordinance and recycling services including information on types of recyclable materials accepted.

ORGANIC WASTE COLLECTION

Starting in 2022, the City and City-certified private waste haulers will expand organic waste collection services for residents and businesses. Food and yard waste collected will be recycled using:

- Composting facilities that make soil amendments, materials that are added to soil to change and improve it.
- Anaerobic digestion facilities, technology and microorganisms break down organic waste in closed spaces where there is no oxygen and create renewable natural gas.

SB 1383 requires extensive procedural changes and significant coordination amongst various stakeholders. The City of San Diego is in the process of developing collection operations, amending agreements with non-exclusive franchise haulers, amending the City's Municipal Code, enacting building requirements, preparing enforcement responsibilities, and strategizing public education and outreach efforts. Participation in the new organic waste recycling program is vital and will help protect California's environment and economy from the impacts of climate change.

CONSTRUCTION AND DEMOLITION (C&D) DEBRIS DIVERSION DEPOSIT PROGRAM

The C&D Debris Diversion Deposit Program (SDMC Section 66.0601 et seq.) applies to all applicants for building, demolition, and removal permits. This ordinance requires that the applicant post a deposit (Table 1: C&D Debris Deposit Table). The deposit is not returned until the applicant demonstrates that a minimum amount of the material generated has been diverted from disposal in landfills.

Building Category	Sq. Ft. Subject Ordinance*	Deposit per Sq. Ft.	Range of Deposits
Residential New Construction, Non- residential Alterations, Demolition	1,000-100,000	\$0.40	\$400-\$40,000
Non-Residential New Construction	1,000-50,000	\$0.20	\$200-\$10,000
	Flat Rate		
Residential Alterations	1,000-6,999ª	-	\$1,000
Source: City 2016b *Sg. Ft. = square feet: Deposit amounts are a	applied to the entire area(s) where y	work will be perfor	med and are calculated

Table 1: C&D Debris Deposit Table

*Sq. Ft. = square feet; Deposit amounts are applied to the entire area(s) where work will be performed and are calculated based on square footage.

Mixed construction debris recycling facilities in San Diego are evaluated quarterly to determine how much of the throughput is recycled, and how much is a "residual" material requiring disposal. Facilities that accept mixed debris typically achieve a 50 to 70 percent or less diversion rate. Single materials recyclers, such as metal recyclers, often achieve a nearly 100 percent diversion rate. When comingled materials are sent to a mixed facility, the 75 percent diversion goal established by AB 341 will not be met. Depending on the project, and to ensure that the overall diversion goal is attained, some materials must often be separated and trucked to facilities with higher diversion rates, such as aggregate and metal recyclers.

In San Diego County there are three large solid waste landfills, Miramar, Sycamore, and Otay. Two of the three landfills, Miramar and Sycamore, are located within the City of San Diego. The City of San Diego operates Miramar, while the other two large landfills are operated by a company locally known as Allied, and nationally known as Republic.

3.0 DEMOLITION, GRADING, & CONSTRUCTION WASTE GENERATED

The project is expected to obtain entitlements in 2022 and construction permits near the end of 2023, with construction beginning in January 2024 and ending in 2026. Occupancy would occur in phases beginning in 2026. Construction practices will comply with federal, State, and local regulations regarding handling of building materials to ensure waste minimization requirements are met.

Different land uses generate different amounts of solid waste. For example, a car rental agency generates a different type and volume of waste than does a fast-food restaurant. Some government agencies provide waste generation numbers specific to Standard Industrial Classification (SIC) codes. However, even within SIC codes, waste generation rates and composition may vary.

Because waste management is a costly service, efficient managers closely estimate waste generation, and take steps to reduce waste at its source. When specific information is available regarding waste generation, this information may be used in Waste Management Plans, provided the rates are within accepted standards. However, when managers/project proponents do not know specifics about waste generation rates, estimates may be used. As a rule of thumb, three or more pounds per square foot of waste are generated during demolition, construction, and also per year during ongoing use of a site (i.e., operation).

3.1 DEMOLITION

The demolition phase of this project will include the demolition and removal of 3,770 SF of existing retail building and 106,035 SF of surface parking, curb islands, and related improvements. Approximately 2,990 tons of waste is expected to be generated during demolition. Approximately 2,920 tons, or 98 percent, of demolition material will be recycled, while approximately 70 tons, or 2 percent, of debris will be disposed in a landfill, to include non-usable materials and miscellaneous trash. Table 2: Clairemont Village Apartments Project Waste Generation – Demolition, summarizes the type and amount of demolition materials, as well as diversion/disposal totals.

 Table 2: Clairemont Village Apartments Project Waste Generation – Demolition

Material Type	Estimated Waste Quantity (tons) Handling		Estimated Diversion (tons)	Estimated Disposal (tons)
Asphalt and Concrete	2,749	Hanson Aggregates 9229 Harris Plant Road San Diego, CA 92126 (100% Diversion)	2,749	0
Brick/Masonry/Tile	97	Vulcan Carroll Canyon Landfill and Recycle Site 10051 Black Mountain Road San Diego, CA 92126 (100% diversion)	97	0
Drywall	35	EDCO Station Transfer and Buy Back Center 8184 Commercial Street La Mesa, CA 91942 (70% diversion)	24.5	10.5
Floor Tile	6	Otay C&D/Inert Debris Processing Facility 1700 Maxwell Road Chula Vista, CA 91913 (76% diversion)	4.5	1.5
Misc. Building Materials	21	Vulcan Carroll Canyon Landfill and Recycle Site 10051 Black Mountain Road San Diego, CA 92126 (100% diversion)	21	0
Landscape Materials	24	Miramar Greenery 5180 Convoy Street San Diego, CA 92111 (100% Diversion)	24	0
Garbage/Trash (2% of total minus trash)	58	Miramar Landfill 5180 Convoy Street San Diego, CA 92111 (0% Diversion)	0	58
Total (%)	2,990 (100%)		2,920 (98%)	70 (2%)

3.2 GRADING

The proposed project will involve grading of the previously disturbed site. Based on the project Grading Plan, the project will require approximately 29,000 cubic yards of cut and 3,000 cubic yards of fill. Approximately 26,000 cubic yards of material will be exported and brought to Hanson Aggregates for recycling/handling; no material is anticipated to be imported.

3.3 CONSTRUCTION

Construction activities will generate packaging materials and unpainted wood, including wood pallets, and other miscellaneous debris. Construction debris will be separated on-site into material-specific containers to facilitate reuse and recycling and to increase the efficiency of waste reclamation and/or will be collected by a contracted waste hauler and separated at a facility.

Source separation of materials at the construction site is essential to (1) ensure appropriate waste diversion rate, (2) minimize costs associated with transportation of disposal, and (3) facilitate compliance with the C&D ordinance.

As a rule of thumb, three or more pounds per square foot of solid waste are generated during construction (City of San Diego, 2013). City guidance states that if more specific information on waste generation is not available, the total amount of waste can be equally distributed between the types of waste expected (City of San Diego, 2013). Overall construction materials quantities are calculated based on City guidance as follows:

314,901 square feet x
$$\frac{3 pounds}{square foot}$$
 x $\frac{1 ton}{2,000 pounds}$ = ± 472 tons

Table 3: Clairemont Village Apartments Project Waste Generation – Construction, is included below to summarize the types of waste generated, the approximate amount of each waste type diverted, and the approximate overall amount remaining to be disposed of in landfills. Construction waste processing facilities that may be used for the construction phase include, but are not limited to, those facilities listed. Because certified diversion rates and authorized facilities are updated quarterly and the decision on which facility will be contracted for waste hauling will be made at the time of construction, the developer reserves the right to select any authorized facility if the facility is City-certified to meet minimum diversion requirements. Construction debris will be separated on-site into material-specific containers, corresponding to the material types in Table 3, to facilitate reuse and recycling and to increase the efficiency of waste reclamation.

 Table 3: Clairemont Village Apartments Project Waste Generation – Construction

Material Type	Estimated Waste Quantity (tons) Handling		Estimated Diversion (tons)	Estimated Disposal (tons)
Asphalt and Concrete	472	Hanson Aggregates 9229 Harris Plant Road San Diego, CA 92126 (100% Diversion)	472	0
Brick/Masonry/Tile	472	Vulcan Carroll Canyon Landfill and Recycle Site 10051 Black Mountain Road San Diego, CA 92126 (100% diversion)	472	0
Drywall	472	EDCO Station Transfer and Buy Back Center 8184 Commercial Street La Mesa, CA 91942 (70% diversion)	330	142
Floor Tile	472	Otay C&D/Inert Debris Processing Facility 1700 Maxwell Road Chula Vista, CA 91913 (76% diversion)	359	113
Misc. Building Materials	472	Vulcan Carroll Canyon Landfill and Recycle Site 10051 Black Mountain Road San Diego, CA 92126 (100% diversion)	472	0
Landscape Materials (10% of total)	47.2	Miramar Greenery 5180 Convoy Street San Diego, CA 92111 (100% Diversion)	47.2	0
Garbage/Trash (5% of total)	24	Miramar Landfill 5180 Convoy Street San Diego, CA 92111 (0% Diversion)	0	24
Total (%)			2152.2 (88%)	279 (12%)

In accordance with State diversion targets, a minimum of 75 percent of construction materials must be recycled. Materials to be recycled would be redirected to appropriate recipients selected from ESD's directory of facilities that recycle construction materials, scrap metal, and yard waste. As demonstrated, approximately 88 percent, of the construction materials waste generated by the project is expected to be diverted from landfills.

4.0 OPERATIONS WASTE GENERATED

While the construction phase for the project 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. The project will comply with the City's Recycling Ordinance. In addition, SB 1383 requires the reduction of organic waste disposed of in landfills. Organic waste is comprised of food scraps and food-soiled paper from kitchens and food operations and yard waste such as garden and landscape waste, organic textiles and carpet and wood waste. Solid waste, including organic and green waste collection will be provided by a private hauler.

EXTERIOR REFUSE AND RECYCLABLE MATERIAL STORAGE AREA REQUIREMENTS

Since the project site includes both existing commercial and new residential development, exterior refuse, organic waste, and recyclable material storage areas will be provided in accordance with City regulations per Chapter 14, Article 2, Division 8: Refuse, Organic Waste, and Recyclable Material Storage Regulations §142.0810, §142.0820, §142.0830, and §142.0831.

Table 4: Minimum Material Storage Areas for Residential and Non-Residential Development, shows the required amount of refuse, organic waste, and recyclable storage areas applicable to the project.

Number of Dwelling Units	Minimum Refuse Storage Area (sf)	Minimum Organic Waste Storage Area (sf) Storage Area (sf)		Total Minimum Storage Area (sf)
201+	384 plus 48 for every 25 dwelling units above 201	384 plus 48 for every 25 dwelling units above 201	384 plus 48 for every 25 dwelling units above 201	1,152 plus 144 for every 25 dwelling units above 201
Gross Floor Area Per Development (sf)	Minimum Refuse Storage Area (sf)	Minimum Organic Waste Storage Area (sf)	Minimum Recyclable Material Storage Area (sf)	Total Minimum Storage Area (sf)
50,001-75,000	144	144	144	432
Source: Adapted from		•		

Table 4: Minimum Material Storage Areas for Residential and Non-Residential Development

2022.

The proposed residential development would include 224 units. The project is required to provide 1,152 square feet of storage area plus 144 square feet of storage area for every 25 dwelling units above 201. The project is required to provide a minimum of 1,296 SF of space for refuse, organic waste, and recyclable material storage area for the residential development.

As shown in Table 5: Clairemont Village Apartments Project Waste Generation – Occupancy Phase, the expected generated waste from the project, when fully occupied, will be approximately 269 tons per year. In accordance with existing State and local regulations, approximately 202 tons, or 75 percent, of the waste will be diverted each year beginning with occupancy anticipated in 2026. Therefore, approximately 68 tons, or 25 percent, of waste will require disposal in a landfill.

Land Use	Units	Waste Generation Rate per Year per Unit	Total Waste Generated (tons/year)	Estimated Waste Diverted ¹ (tons/year)	Estimated Waste Disposed (tons/year)
Residential	224 Units	1.2 tons	269	202	68
¹ Based on goal of 75 percent diversion. AB 341 charged CalRecycle with responsibility for ensuring that the State is diverting at least 75 percent of solid waste that is generated within the State by 2020. The target goal of SB 1383 is to collect and divert at least 50 percent, and up to 75 percent (by 2025), of organic waste from project sites to recycling and compositing					

Table 5: Clairemont Village Apartments Project Waste Generation – Occupancy Phase

Residents will bring their trash and recycling to trash chute locations on each level (5 levels total, 2 chute locations per level). The 10 trash chute rooms total 500 square feet. The trash and recycling chutes lead to two separate trash termination rooms on the ground level. One termination room is 275 square feet, the other is 633 square feet. The trash termination rooms, and the chute rooms total approximately 1,408 square feet. On pickup days, the bins from the trash termination rooms will be towed to a designated on-site trash staging area, where they will be picked up by trash hauler trucks. The outdoor, on-site trash staging area will be approximately 800 square feet. Solid waste and recycling are anticipated to be picked up three times per week. The bins will then be returned to the trash termination rooms. The residential project will therefore provide a total of 2,208 square feet of resident trash storage area, more than double the required 1,296 square feet.

Containers for food waste will be provided in the trash and recycling chute locations on each level. Food waste containers will be collected from each level once a day and taken to the trash termination rooms for compilation and short-term storage prior to final collection by an appropriate, city-certified food waste hauler. See Figure 4: Detail Waste Storage and Management Areas for details.

The Clairemont Village Commercial Center building square footage currently totals 124,083 square feet. With the proposed demolition of 3,770 square feet from the commercial center, there would be 120,313 square feet of commercial building space. Four of the facilities, Starbucks, Carl's Jr., Rite Aid, and Sprouts, totaling 64,496 square feet, maintain their own independent trash receptacles and enclosure space and would be subtracted from the total

facilities.

required trash enclosure square footage. Therefore, 55,817 square feet of commercial space should be accounted for in the calculation of Minimum Exterior Refuse, Organic Waste, and Recyclable Material Storage Areas for Nonresidential Development. The commercial center is required to provide 432 SF of storage area for this square footage under City requirements.

The center currently provides 351 SF of storage area for this square footage. An additional 81 SF of storage area is needed to bring the commercial center into compliance with SDMC §142.0830. The proposed outdoor refuse storage/collection staging area to service the residential project totals 800 SF. The additional 81 SF of storage area needed for the commercial portion of the site can easily be accommodated in coordination with the residential portion of the site. Therefore, both the proposed residential project and the existing and remaining commercial center will follow SDMC §142.08 regulations. See Figure 5: Waste Storage Areas for Total Site for details.



Figure 4: Detail Waste Storage and Management Areas







Figure 5: Waste Storage Areas for Total Site



5.0 WASTE REDUCTION RECOMMENDATIONS

5.1 DEMOLITION WASTE REDUCTION

Approximately 2,990 tons of waste is expected to be generated during demolition. Approximately 98 percent, of demolition material will be diverted from landfills, including trees, concrete, asphalt, and curb and gutter. No project-specific demolition waste reduction recommendations are necessary.

5.2 GRADING WASTE REDUCTION

Approximately 26,000 cubic yards of material will be exported and brought to Hanson Aggregates for recycling/handling; no material is anticipated to be imported. Excavated dirt will be required to be diverted by the contractor to other locations resulting in 100 percent diversion from landfill waste disposal. No project-specific grading waste reduction is necessary.

5.3 CONSTRUCTION WASTE REDUCTION

In accordance with State diversion targets, a minimum of 75 percent of construction materials will be recycled. Materials to be recycled would be redirected to appropriate recipients selected from ESD's directory of facilities that recycle construction materials, scrap metal, and yard waste. As demonstrated in Table 3, approximately 88 percent, of the construction materials generated by the project are expected to be diverted from landfills.

To support the anticipated diversion rate of 88 percent, standard construction waste management strategies utilized for this project may include, but not be limited to:

- To the extent practical, either post-consumer recycled, or pre-consumer recycled materials will be used.
- Construction debris will be separated on-site into material-specific containers to facilitate reuse and recycling and to increase the efficiency of waste reclamation and/or will be collected by a contracted waste hauler and separated at a facility.
- Contractors and subcontractors should be provided with the Final WMP.
- Proper language should be included in contractor contracts requiring compliance with the recycling plan.
- Recycling, salvage, reuse, and disposal options should be determined prior to ground disturbance activities.
- Onsite storage space availability should be evaluated for different recycling strategies, i.e., on-site, source separation and/or mixed C&D recycling, prior to ground disturbance activities
- Maximum recycling at the job site should be implemented through contractors and subcontractors Reuse!

- Materials that can be reused can be donated to charities and nonprofit agencies, to the extent feasible.
- Advertisements can be placed in local newspapers or websites announcing salvageable and reusable materials for sale or donation.
- Haulers should be chosen based on their responsiveness to recycling plan.
- Certified Recycling Facilities should be chosen based on fees and geographic proximity to job site.
- Job site recycling areas should be clearly identified with large signs.
- Recycling bins should be placed in areas that will minimize misuse or contamination by construction workers.

To facilitate management of construction materials, the developer shall identify one person or agency connected with the proposed development to act as Solid Waste Management Coordinator (SWMC), whose responsibility it becomes to work with all contractors and subcontractors to ensure material separation and coordinate proper disposal and diversion of waste generated. The SWMC would ensure that all contractors and subcontractors are educated and trained to follow City waste diversion regulations and that procedures for waste reduction and recycling efforts are implemented. Specific responsibilities of the SWMC would include the following:

- Review the WMP at the preconstruction meeting, including the SWMC responsibilities.
- Distribute the WMP to all contractors when they first begin work on-site and when training workers, subcontractors, and suppliers on proper waste management procedures applicable to the project.
- Work with the contractors to estimate the quantities of each type of material that would be salvaged, recycled, or disposed of as waste, then assist in documentation.
- Use detailed material estimates to reduce risk of unplanned and potentially wasteful material cuts.
- Review and enforce procedures for source-separated receptacles. Containers of various sizes shall:
 - Be placed in readily accessible areas that will minimize misuse or contamination.
 - Be clearly labeled with a list of acceptable and unacceptable materials, the same as the materials recycled at the receiving material recovery facility or recycling processor.
 - Contain no more than 10 percent non-recyclable materials, by volume.
 - Be inspected daily to remove contaminants and evaluate discarded material for reuse on-site.
- Review and enforce procedures for transportation of materials to appropriate recipients selected from ESD's directory of facilities that recycle C&D materials.

- Ensure removal of C&D waste materials from the project site at least once every week to ensure no over-topping of containers. The accumulation and burning of onsite construction, demolition, and land-clearing waste materials will be prohibited.
- Document the return or reuse of excess materials and packaging to enhance the diversion rate.
- Coordinate implementation of a "buy recycled" program for green construction products, including incorporating mulch and compost into the landscaping.
- Coordinate implementation of solid waste mitigation with other requirements such as storm water requirements, which may include specifications such as the placement of bins to minimize the possibility of runoff contamination.

The SWMC would ensure that the project meets the following state law and City municipal code requirements. Adjustments would be made as needed to maintain conformance:

- The City's C&D Debris Diversion Deposit Program, which requires a refundable deposit based on the tonnage of the expected recyclable waste materials as part of the building permit requirements (City of San Diego 2008).
- The City's Recycling Ordinance, which requires that collection of recyclable materials is provided (City of San Diego 2022b).
- The City's Storage Ordinance, which requires that areas for recyclable material collection must be provided (City of San Diego 2022c).
- The name and contact information of the waste contractor provided to ESD at least 10 days prior to the start of any work and updated within 5 days of any changes.

Prior to issuance of any certificate of occupancy/tentative certificate of occupancy, the site operator shall invite a representative of the City ESD to:

- Inspect and approve storage areas that have been provided consistent with the City's Storage Ordinance; and
- Ensure that a hauler has been retained to provide recyclable materials collection, and, if applicable, landscape waste collection; and
- Inspect and approve education materials for building tenants/owners that are required pursuant to the City's Recycling Ordinance.

5.4 OPERATIONS WASTE REDUCTION

As shown in Table 5: Clairemont Village Apartments Project Waste Generation – Occupancy Phase, the expected solid waste, recycling, and food waste generation per year from the project, when fully occupied, will be approximately 269 tons. Approximately 202 tons, or 75 percent, of the waste is expected to be diverted each year. Therefore, approximately 68 tons of waste will require disposal in a landfill. This exceeds the City's CEQA thresholds of 60 tons per year for a potentially cumulative significant impact and further waste reduction is necessary during occupancy of the project.

5.4.1 WASTE REDUCTION THROUGH RECYCLING

On-site recycling services shall be provided to all residents. Residents 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 the occupants. Recycling services are required by Section 66.0707 of the City of San Diego Land Development Code. Based on current requirements, these services shall include the following:

- Continuous assessment of new technologies for recycling, composting, cogeneration, and disposal to maximize efficient use of resources and environmental protection.
- 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 (see discussion below).
- Utilization of recycling receptacles or containers which comply with the standards in the Container and Signage Guidelines established by the City of San Diego ESD.
- Designated recycling collection and storage areas.
- Signage on all recycling receptacles, containers, chutes, and/or enclosures which complies with the standards described in the Container and Signage Guidelines established by the City of San Diego ESD.

As required by Section 66.0707 of the City of San Diego Land Development 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 new occupants shall be given information and instructions upon occupancy.
- All occupants shall be given information and instructions upon any change in recycling service to the facility.

5.4.2 LANDSCAPING AND GREEN WASTE REDUCTION

The project landscaping plan proposes various sustainable practices that would be implemented on the project site to reduce waste generated from landscaping. Plant material selection will be guided by the macro- and micro-climate characteristics of the project site and surrounding region to encourage long-term sustainability without the excessive use of water, pesticides, and fertilizers. Irrigation of these areas will utilize reclaimed water applied via low precipitation rate spray heads, drip emitters, or other highly efficient systems. Landscape maintenance would include the collection of green waste and recycling of green waste at recycling centers that accept green waste. This will help reduce the landscaping and green waste generated by the project during the occupancy phase.

5.4.3 FOOD WASTE REDUCTION

The project will mitigate the amount of organic waste that is transported to the landfill from the developed project site to comply with SB 1383. The target goal is to collect and divert at least 75 percent of organic waste from the developed project site to the recycling and composting facilities of the Miramar Landfill. As described above, bins for food waste will be provided on each level in the trash and recycling chute locations. Food waste bins will be collected from each level once a day and taken to the trash termination rooms for compilation and short-term storage prior to final collection by an appropriate, city-certified food waste hauler.

Similar to educating occupants on recycling benefits and opportunities, the building management or other designated personnel shall ensure that occupants are educated about the available food waste reduction services as follows:

- Information, including the types of food waste materials accepted, the location of food waste collection bins, and the occupants' responsibility to separate food waste from other trash and recyclables shall be distributed to all occupants annually.
- All new occupants shall be given information and instructions upon occupancy.
- All occupants shall be given information and instructions upon any change in the food waste collection process for the facility.

6.0 CONCLUSIONS

The City of San Diego Development Services Department is requiring that this WMP be prepared and submitted to the City of San Diego's ESD to assure that the overall waste produced is reduced sufficiently to comply with waste reduction targets established in the Public Resources Code. This WMP will be implemented to the fullest degree of accuracy and efficiency. Additionally, the project will be required to adhere to City ordinances, including the Construction and Demolition Debris Diversion Deposit Program, the City's Recycling Ordinance, Organic Waste Collection requirements, and the Refuse and Recyclable Materials Storages Regulations. The WMP plan for the project is designed to implement and adhere to all City ordinance and regulations with regards to waste management. The recommendations in the WMP help ensure that significant cumulative impacts relative to solid waste generation would be avoided.

7.0 References

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