APPENDIX I. Solid Waste Management Plan



Waste Management Plan

ARE Science Village

City of San Diego, California

June 2022



This page intentionally left blank

Waste Management Plan

ARE Science Village

City of San Diego, California

- Prepared for: Alexandria Real Estate 10996 Torreyana Rd, San Diego, California 92121 Contact: Neil Hyytinen Phone: (858) 610-5420 Email: nhyytinen@hechtsolberg.com
- Prepared by: Michael Baker International 9755 Clairemont Mesa Boulevard, Suite 100 San Diego, California 92124 Contact: Bob Stark, AICP Phone: (858) 614-5000 Email: bstark@mbakerintl.com

June 2022

This page intentionally left blank

TABLE OF CONTENTS

E	ecutive Summary	L
1	Introduction	2
	1.1 Project Location	2
	1.2 Environmental Setting/Existing Conditions	2
	1.3 Project Description	2
2	Regulatory Framework)
	2.1 State Regulations)
	2.2 City of San Diego Regulations)
3	Waste Management Plan Implementation13	3
	3.1 Waste Management Plan	3
	3.2 Solid Waste Management Coordinator13	3
4	Site Development15	5
	4.1 Demolition15	5
	4.2 Grading	7
	4.3 Construction	7
	4.4 Waste Diversion)
5	Occupancy-Operational Waste21	L
	5.1 Waste Generation	L
	5.2 Waste Reduction Measures	L
	5.3 Exterior Storage	2
	5.4 Organic Waste Recycling	3
6	Waste Diversion Measures24	ł
	6.1 CONSTRUCTION WASTE MANAGEMENT COORDINATION AND OVERSIGHT	1
	6.2 CONSTRUCTION WASTE REDUCTION, DIVERSION COMPLIANCE, AND VERIFICATION	5
	6.3 OPERATIONAL WASTE MANAGEMENT AND DIVERSION MEASURES	7

7	Conclusion	
8	References	
	8.1 List of Preparers	
	8.2 Documents	

LIST OF TABLES

Table 1. Construction & Demolition Debris Deposit Program	12
Table 2. Dimensions of Existing Structures	15
Table 3. Project Waste Generation - Demolition	15
Table 4. Project Waste Generation - Construction	18
Table 5. Estimated Annual Waste Generation During Occupancy	21
Table 6. Estimated Waste Diversion During Occupancy	21
Table 7. Minimum Exterior Refuse and Recyclable Material Storage Areas for Nonresidential Dev	velopment
	22

LIST OF EXHIBITS

Exhibit 1	Regional Vicinity	3
Exhibit 2	Site Vicinity	5
Exhibit 3	Site Plan	7

LISTOFATTACHMENTS

Attachment A: Construction and Demolition Recycling Facility Directory

Attachment B: Commercial Organics Recycling Program



EXECUTIVESUMMARY

The purpose of this Waste Management Plan (WMP) is to estimate the amount of waste that would be generated by the ARE Science Village Project ("project" or "proposed project") during demolition, grading, construction, and occupancy so that sufficient measures can be implemented to recycle, reduce, or reuse the waste instead of sending it into landfills. The goal of this WMP is to identify sufficient measures to reduce potential impacts on solid waste services, in accordance with state and local regulations.

The project site is generally located west of Interstate 805 and north of State Route 52, at 9363, 9373, and 9393 Towne Center Drive, in the City of San Diego, California. Specifically, the approximately 3.97-acre project site is located at the northeast corner of Towne Centre Drive and Executive Drive. The project site is developed and surrounded by a variety of land uses, such as light industrial, scientific/clinical research, medical, and general office uses. The proposed project generally consists of the demolition of the existing on-site buildings totaling approximately 137,400 square feet (sq. ft.) and the redevelopment of the site with approximately 369,878 sq. ft. of nixed-use research, retail, and office uses across two buildings. The project would consist of approximately 310,416 sq. ft. of scientific research and development (R&D) uses and 59,462 sq. ft. are planned as accessory/amenity space. The accessory/amenity space is expected to consist of a 7,655 sq. ft. market, 563 sq. ft. food and beverage space, 23,397 sq. ft. fitness center, and 27,847 sq. ft. conference space(s). Additionally, three levels of subterranean parking with approximately 938 parking spaces are proposed. Access to the parking garage would be located along Towne Centre Drive and Executive Drive (see <u>Exhibit 3</u>, <u>Site Plan</u>).

This WMP details waste diversion measures, such as implementation of a recycling program during operations, that would reduce potentially cumulative solid waste impacts to less than significant levels (see <u>Section 6</u>, <u>Waste Diversion Measures</u>). Since this WMP is designed to adhere to all state and City ordinances and regulations with regard to waste management, the proposed project would not result in significant impacts if this WMP is properly implemented.



INTRODUCTION

1.1 PROJECT LOCATION

The project site is generally located west of Interstate 805 (I-805) and north of State Route 52 in the City of San Diego; refer to <u>Exhibit 1</u>, <u>Regional Vicinity</u>. Specifically, the approximately 3.97-acre project site is located at 9363, 9373, and 9393 Towne Centre Drive, at the northeast corner of Towne Centre Drive and Executive Drive in the University Towne Center; refer to <u>Exhibit 2</u>, <u>Site Vicinity</u>. The site is located within the University Community Plan Area. Regional access to the project area is provided via I-805 approximately one mile to the east and I-5 approximately two miles to the west.

1.2 ENVIRONMENTAL SETTING/EXISTING CONDITIONS

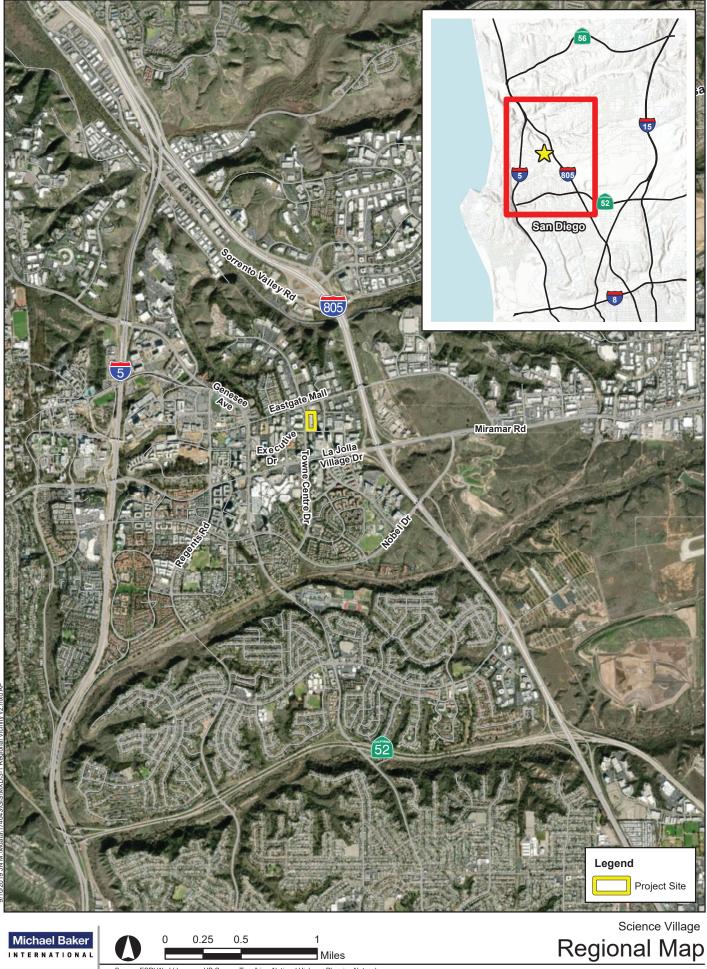
The area surrounding the project site is highly developed and urbanized with a variety of land uses, such as light industrial, scientific/clinical research, medical, and general office uses. Open space uses are located approximately 0.6 miles to the east beyond I-805. Commercial uses are immediately adjacent to the west and south. The University of California, San Diego campus is located farther west. Additionally, residential uses are located approximately 0.2 miles to the southwest.

The existing site includes several office buildings constructed in 1989 connected below grade by one level of subterranean parking. Surface parking exists is provided on the roof of the subterranean parking level.

1.3 PROJECT DESCRIPTION

Alexandria Real Estate Equities (applicant) proposes to redevelop an existing commercial site. The proposed project generally consists of the demolition of existing on-site buildings totaling approximately 137,400 square feet (sq. ft.) and redevelopment of the site with approximately 369,878 sq. ft. of mixed-use research, retail, and office uses across two buildings. The project would consist of approximately 310,416 sq. ft. of scientific research and development (R&D) uses and 59,462 sq. ft. are planned as accessory/amenity space. The accessory/amenity space is expected to consist of a 7,655 sq. ft. market, 563 sq. ft. food and beverage space, 23,397 sq. ft. fitness center, and 27,847 sq. ft. conference space(s). Additionally, three levels of subterranean parking with approximately 938 parking spaces are proposed. Access to the parking garage would be located along Towne Centre Drive and Executive Drive (see Exhibit 3, Site Plan).





This page intentionally left blank



400

Feet

Michael Baker



0

100

200

Science Village

This page intentionally left blank

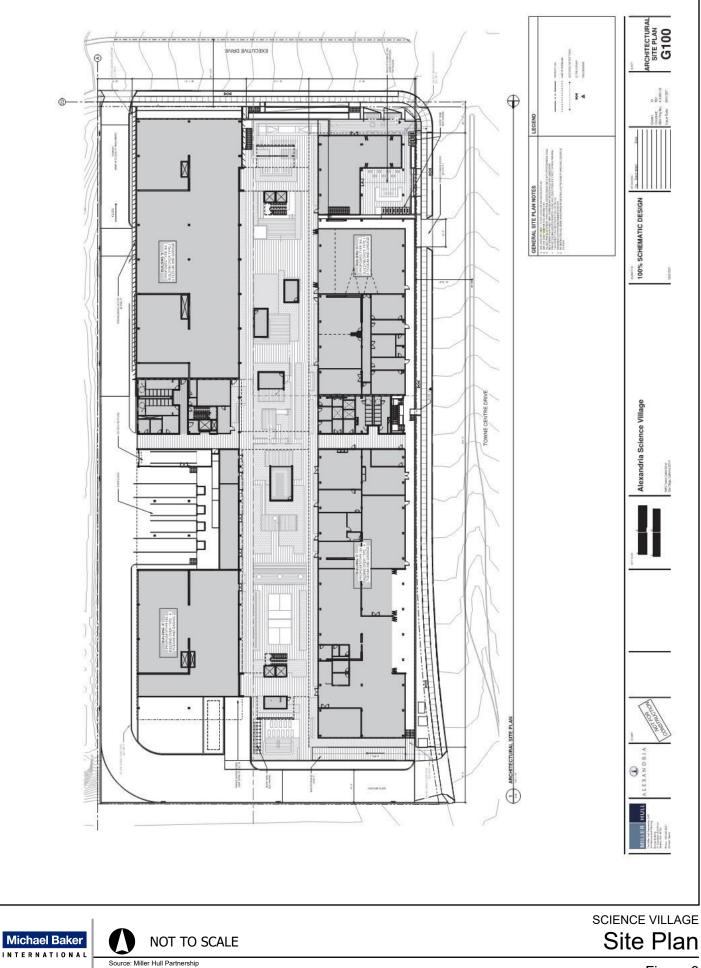


Figure 3

This page intentionally left blank

2 REGULATORY FRAMEWORK

2.1 STATE REGULATIONS

The Integrated Waste Management Act (Assembly Bill 939, 1989), requires that all local governments divert at least 50 percent of waste from landfills. All local governments are required to prepare a Source Reduction and Recycling Element, which must achieve the mandated waste diversion through source reduction, recycling, and composting. The law allows for 10 percent of the reduction to occur through energy transformation if certain conditions are met. Under the law, the reduction, recycling, and energy transformation diversion strategies are ranked in order of effectiveness:

- First source reduction includes using a reusable bag, making double-sided copies, or employing other measures that stops waste at the source.
- Secondary measures include recycling and composting. Because these measures often have transportation and processing impacts, they are considered less preferable than source reduction.
- In the Public Resources Code, various methods of transformation for energy production are limited to 10 percent of the total waste reduction target.

In 2008, Senate Bill (SB) 1016 transitioned the California Integrated Waste Management Board's (CIWMB) waste diversion accounting system to a per capita system. This law maintains the 50 percent target of AB 939, but provides a simplified indicator of jurisdiction performance. SB 1016 also established that compliance with the law be measured by the reduction of waste requiring disposal.

AB 341: Jobs and Recycling, chaptered in 2011, further requires that CalRecycle examine strategies and provide recommendations that would allow for 75 percent of solid waste diversion. The bill also requires certain businesses and multifamily housing developments to provide recycling services to residents and tenants.

In September 2016, Governor Edmund Brown Jr. set methane emissions reduction targets for California (SB 1383 Lara, Chapter 395, Statutes of 2016) in a statewide effort to reduce emissions of short-lived climate pollutants (SLCP). The targets must:

- Reduce organic waste disposal 50% by 2020 and 75% by 2025.
- Rescue for people to eat at least 20% of currently disposed surplus food by 2025.

2.2 CITY OF SAN DIEGO REGULATIONS

CITY OF SAN DIEGO SIGNIFICANCE DETERMINATION THRESHOLDS

The following applicable thresholds have been used in this analysis for identifying significant noise impacts applicable to the project:

1. Would the proposed project have an effect upon, or result in a need for new or altered solid waste facilities?



Cumulative Impacts

1. Projects that include the construction, demolition, and/or renovation of 40,000 square feet or more of building space may generate approximately 60 tons of waste or more, and are considered to have cumulative impacts on solid waste facilities.

• While all projects are required to comply with the City's waste management ordinances, cumulative impacts are mitigated by the implementation of a project specific Waste Management Plan which reduces solid waste impacts to below a level of significance.

Direct Impacts

1. Projects that include the construction, demolition, or renovation of 1,000,000 square feet or more of building space may generate approximately 1,500 tons of waste or more and are considered to have direct impacts on solid waste facilities.

- Direct impacts result from the generation of large amounts of waste which stresses existing facilities. Waste management planning is based on a steady rate of waste generation and doesn't assume increased waste generation due to growth.
- While all projects are required to comply with the City's waste management ordinances, direct and cumulative impacts are mitigated by the implementation of project-specific Waste Management Plans which may reduce solid waste impacts to below a level of significance.
- For projects over 1,000,000 square feet, a significant direct and cumulative solid waste impact would result if the compliance with the City's ordinances and the Waste Management Plan fail to reduce the impacts of such projects to below a level of significance and/or if a Waste Management Plan for the project is not prepared and conceptually approved by the Environmental Services Department prior to distribution of the draft environmental document for public review.

WASTE MANAGEMENT PLAN

If the project would exceed the significance threshold for solid waste generation, a Waste Management Plan must be prepared by the applicant, conceptually approved by the Environmental Services Department (ESD) and discussed in the environmental document. The Plan must be implemented by the applicant and address the demolition, construction, and occupancy phases of the project as applicable to include the following:

- a. A timeline for each of the three main phases of the project (demolition, construction, and occupancy).
- b. Tons of waste anticipated to be generated (demolition, construction, and occupancy).
- c. Type of waste to be generated (demolition, construction, and occupancy).
- d. Describe how the project will reduce the generation of construction and demolition (C & D) debris
- e. Describe how the C & D materials will be reused on-site
- f. Include the name and location of recycling, reuse, and landfill facilities where recyclables and waste will be taken if not reused on-site



- g. Describe how the C&D waste will be source separated if a mixed C&D facility is not used for recycling
- h. Describe how the waste reduction and recycling goals will be communicated to subcontractors
- i. Describe how a "buy recycled" program for green construction products, including mulch and compost will be incorporated into the project.
- j. Describe how the Refuse and Recyclable Materials Storage Regulations (LDC Chapter 14, Article 2 Division 8) will be incorporated into design of building's waste storage area
- k. Describe how compliance with the Recycling Ordinance (Municipal Code Chapter 6, Article 6, Division 7) will be incorporated in the operational phase
- I. Describe any International Standards of Operation (ISO), or other certification, if any.

CITY OF SAN DIEGO MUNCIPAL CODE

The City of San Diego adopted Section 142.08 of the San Diego Municipal Code, Refuse and Recyclable Materials Storage Regulations, in 1997. The ordinance encourages recyclable materials to be diverted from landfill disposal to meet the requirements of the City Council and the state of California. Section 142.08 requires permanent, on-site recyclable collection facilities for the collection of refuse and recyclable material, to encourage recycling of solid waste in applicable developments.

The City of San Diego adopted a recycling ordinance in 2007, which is found in Municipal Code Section 66.0701 et seq. The ordinance requires plastic and glass bottles and jars, paper, newspaper, metal containers and cardboard to be recycled at private residences, commercial buildings, and special events requiring a City permit. It also 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.

The ordinance also requires that educational materials are provided to residents, so they are informed about the City's ordinance and recycling services, including information on types of recyclable materials accepted under the City program.

Under the Recycling Ordinance, Municipal Code Section 142.0830 states:

"(a) All new nonresidential development, or additions to existing commercial or industrial development where the gross floor area would be increased by 30 percent or more, shall provide at least one exterior refuse and recyclable material storage area for each building. The total storage area requirement is based on the gross floor area of the nonresidential buildings on the premises...and includes the sum of all nonresidential refuse and recyclable material storage areas.

(b) Where a development includes residential as part of a mixed-use project, the development shall provide refuse and recyclable material storage for the residential portion of the project in accordance with Table 142-08B, in addition to the storage areas required by Table 142-08C [as shown in Table 2] for the nonresidential development."

Per the provisions of the City's Construction and Demolition (C&D) Debris Diversion Deposit Ordinance as amended in 2016, this project requires diversion of at least 75 percent of waste by recycling, reusing, or donating usable materials. The project applicant must also provide a refundable C&D debris recycling deposit as part of the demolition permit process (<u>Table 1</u>, <u>Construction & Demolition Debris Deposit</u>



<u>Program</u>). The City established a threshold of 40,000 square feet of development as generating sufficient waste (60 tons) to potentially result in a cumulatively significant impact on solid waste services. As the proposed project would exceed 40,000 sq. ft. of development and the 60-ton threshold (refer to <u>Section 5.2</u>), this Waste Management Plan (WMP) has been prepared to identify mitigation measures to reduce this potential cumulative impact to below a level of significance for both construction and operational waste generation.

TABLE 1. CONSTRUCTION & DEMOLITION DEBRIS DEPOSIT PROGRAM					
	Deposit/	Minimum Sq. Ft.	Maximum Sq. Ft.	Range of	
Deposit Types	Sq. Ft	Subject to Ordinance	Subject to Ordinance	Deposits	
Residential New Construction,	\$0.40	1,000	100,000	\$400-	
Nonresidential Alterations,				\$40,000	
Demolition					
Nonresidential New Construction	\$0.20	1,000	50,000	\$200-	
				\$40,000	
Flat Rate					
Residential Alterations*	\$1,000	1,000	6,999	\$1,000	
*					

TABLE 1. CONSTRUCTION & DEMOLITION DEBRIS DEPOSIT PROGRAM

*Residential alterations 7,000 square feet and greater in size; hotels are considered nonresidential alterations.



3 WASTE MANAGEMENT PLAN IMPLEMENTATION

3.1 WASTE MANAGEMENT PLAN

The purpose of this WMP is to estimate the amount of waste that would be generated by the proposed project so that sufficient measures can be implemented to recycle, reduce, or reuse the waste instead of sending it into landfills. This WMP consists of two sections: the site development phase (demolition, grading, and construction) and the occupancy-operational phase (post-construction).

This WMP includes the following general information known at the time the WMP was prepared:

- Waste generation estimates for all phases of the project.
- Identification of types of waste materials generated.
- Name and location of waste handling facilities that would be used for the proposed project.
- Identification of measures to be implemented to recycle, reduce, or reuse waste material.
- Method for communicating waste reduction and recycling goals to contractors and tenants.
- Description of the role and responsibility of the Solid Waste Management Coordinator (SWMC).

3.2 SOLID WASTE MANAGEMENT COORDINATOR

To meet the goals and requirements of this WMP, a Solid Waste Management Coordinator (SWMC) would be assigned to monitor and enforce on-site waste reduction and recycling efforts. The SWMC would train the contractor(s), staff, and tenants on the proper waste management guidelines and procedures outlined in the WMP. The SWMC would ensure compliance with the San Diego Municipal Code, Recycling Ordinance, and Recyclable Materials Storage Regulations. The SWMC would record the recycling and diversion rates for both project phases (site development and occupancy-operational) to ensure that all project goals and requirements are met, such as the goal to recycle 75 percent of the demolition and construction waste materials. The SWMC would have the authority to issue stop work orders if proper procedures are not being followed.

Responsibilities of the SWMC include, but are not limited to, the following:

- Review and understand the components and requirements of the WMP.
- Distribute the WMP to all involved parties on the first day of work on-site and during trainings.
- Work with contractor(s) to estimate quantities of each type of material that would be salvaged, recycled, or disposed of as waste, then assist contractor(s) with documentation.
- 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 approved recycling and disposal facilities (see <u>Attachment A</u>).



- Document the return or reuse of excessive materials to enhance diversion rate.
- Coordinate a "Buy Recycled" program that aims to increase the use of green construction.
- Coordinate solid waste reduction efforts with other requirements, such as stormwater requirements, to create synergy in the waste/pollution reduction efforts.
- Ensure that waste materials are removed from the project site at least once a week to void overflow of waste containers.
- Enforce the prohibition of on-site accumulation and burning of waste materials.

The SWMC would perform daily inspections of the construction site to ensure compliance with the requirements of the WMP and all other applicable laws and ordinances. All contracts with contractor(s) or subcontractor(s) shall include language that identifies the amount of waste material from C&D activities that would be recycled or reused. The SWMC would be responsible for educating contractors and subcontractors regarding WMP requirements and ensuring that contractors and subcontractors carry out the measures described in the WMP. The SWMC would coordinate with the City's Environmental Services Department (ESD) to ensure compliance with all waste-related regulations. Coordination shall include regular communication and invitations to inspect the work site. An ESD representative would be invited to attend each preconstruction meeting of each phase of the development.

The SWMC would ensure that the project meets the following local regulations:

- City of San Diego's Construction & Demolition Debris Diversion Deposit Program
- City of San Diego's Recycling Ordinance
- City of San Diego's Storage Ordinance

Additionally, the SWMC would ensure that the ESD is provided the name and contact information of the waste contractor(s) at least 10 days prior to the start of on-site work.



SITE DEVELOPMENT 4

DEMOLITION 4.1

Demolition of the three existing buildings on-site is anticipated to take approximately five months. The demolition phase would include the removal of the existing office buildings, underground parking, aboveground asphalt parking, walkways, landscaping, and other on-site features. Demolition would be accomplished with cranes, dozers, and other heavy equipment. Waste materials would be loaded onto large trucks using small cranes, forklifts, and other construction equipment as needed. Demolition equipment would be delivered to the site on low-bed trucks unless the equipment can be driven to the site (e.g., on boom trucks). On-site vegetation would be removed where necessary. The size of the three buildings are listed in Table 2, Dimensions of Existing Structures.

TABLE 2. DIMENSIONS OF EXISTING STRUCTURES							
Width Length Height							
Building 1	124'	235′	45'				
Building 2	110'	290'	45'				
Building 3	110'	235′	45'				

According to the 2019 Certified Construction & Demolition Recycling Facility Directory, the diversion rate for listed materials shall be considered 100 percent, except mixed C&D debris, which update quarterly. The total diversion rate for the demolition phase based on total quantity of materials is anticipated to be 96%. A summary of the types of waste generated, the amount of each waste type diverted, and the overall amount remaining to be disposed of in landfills is shown in Table 3, Project Waste Generation-Demolition.

Table 3. Project Waste Generation- Demolition Material Type	Estimated Waste Quantity (tons)	Handling ¹	Estimated Diversion (tons)	Estim <i>a</i> ted Disposal (tons)
Asphalt & Concrete	5,325	Hanson Aggregates 9229 Harris Plant Road San Diego, CA 92126 (100% Diversion)	5,325	-
Brick/Masonry/Tile	315	Vulcan Carroll Canyon Landfill and Recycle Site 10051 Black Mountain Road San Diego, CA 92126 (100% Diversion)	315	-
Cabinets, Doors, Fixtures, Windows (Glass)	150	Habitat for Humanity Restore 8108 Mercury Court San Diego, CA 92111 (100% Diversion)	150	-
Cardboard	5	EDCO Station Transfer and Buy Back Center	5	-

TABLE 3. PROJECT WASTE GENERATION - DEMOLITION



Table 3. Project Waste Generation- Demolition Material Type	Estimated Waste Quantity (tons)	Handling ¹	Estimated Diversion (tons)	Estimated Disposal (tons)
		8184 Commercial Street La Mesa, CA 91942		
		(100% Diversion)		
Carpet, Padding/Foam	30	DFS Flooring 10178 Willow Creek Road San Diego, CA 92131 (100% Diversion)	30	-
Ceiling Tile	20	IMS Recycling Services 2740 Boston Avenue San Diego, CA 92113 (100% Diversion)	20	-
Drywall	315	EDCO Station Transfer and Buy Back Center 8184 Commercial Street La Mesa, CA 91942 (100% Diversion)	220	-
Landscape Debris	150	Miramar Greenery 5180 Convoy Street San Diego, CA 92111 (100% diversion) (100% Diversion)	150	-
Mixed C&D Debris	2,625	EDCO CDI Recycling & Buy Back Center 224 S. Las Posas Rd San Marcos, CA 92078 (89% Diversion)	2,336	289
Mixed Inerts	-	-	-	-
Roofing Materials	15	EED Recycling 8725 Miramar Place San Diego, CA 92121 (100% Diversion)	15	-
Scrap Metal	175	IMS Recycling Services 2740 Boston Avenue San Diego, CA 92113 (100% Diversion)	175	-
Stucco	180	EDCO Station Transfer and Buy Back Center 8184 Commercial Street La Mesa, CA 91942 (100% Diversion)	180	-
Unpainted Wood & Pallets	50	Otay C&D/Inert Debris Processing Facility 1700 Maxwell Road Chula Vista, CA 91913 (100% Diversion)	50	-

Table 3. Project Waste Generation- Demolition Material Type	Estimated Waste Quantity (tons)	Handling ¹	Estimated Diversion (tons)	Estimated Disposal (tons)
Landscape Materials	175	Miramar Greenery 5180 Convoy Street San Diego, CA 92111 (100% Diversion)	175	-
Garbage/Trash	10	Miramar Landfill 5180 Convoy Street San Diego, CA 92111 (100% Diversion)	-	10
Other	25	-	25	-
TOTAL	9,565		9,266	299

Notes: Volume of materials are based on specific site conditions.

1. City of San Diego ESD 2019 Certified C&D Recycling Facility Directory (see Attachment A).

4.2 GRADING

As the subject site is fairly level, project grading is expected to be minor; no mass grading is required or proposed. It is anticipated that necessary earthwork would require a total cut of approximately 315,000 cubic yards (c.y.), mainly to accommodate the 3 levels of subterranean parking, and a total fill of approximately 100 c.y. Therefore, approximately 314,900 c.y. of soil would require export to an off-site location. As is typical with such export operations, it is anticipated that the earthwork subcontractor would be responsible for securing a local site that would accept the export soils. This may be another project site that the subcontractor is actively working on that requires fill soil for construction, or another site owner with whom the subcontractor may broker an arrangement to accept the soil. Due to certain restrictions or limitations typical of landfill operations relative to the disposal of soils, it is not anticipated (nor preferred) that export from the project site be disposed of at a local landfill.

Grading would be accomplished with scrapers, motor graders, water trucks, dozers, and compaction equipment. Building materials would be off-loaded and installed using small cranes, boom trucks, forklifts, rubber-tired loaders, rubber-tired backhoes, and other small to medium-sized construction equipment as needed. Construction equipment would be delivered to the site on low-bed trucks unless the equipment can be driven to the site (e.g., on boom trucks). Existing on-site vegetation would be removed where necessary to allow for construction of the proposed development. According to the 2019 Certified Construction & Demolition Recycling Facility Directory, the diversion rate for listed materials shall be considered 100 percent, except mixed C&D debris, which update quarterly. The total diversion rate for the grading phase based on total quantity of materials is anticipated to be 100%.

4.3 CONSTRUCTION

Construction of the proposed project is anticipated to take approximately 34 months. Building materials would be off-loaded and installed using small cranes, boom trucks, forklifts, rubber-tired loaders, rubber-tired backhoes, and other small- to medium-sized construction equipment as needed. Construction equipment would be delivered to the site on low-bed trucks unless the equipment can be driven to the site (e.g., on boom trucks).

Construction activities would generate packaging materials and unpainted wood, including wood pallets, asphalt and concrete, glass, cabinets and doors, tile, metal, and other miscellaneous debris. Construction debris would be separated on material-specific waste containers on-site to facilitate reuse and recycling and increase the efficiency of waste reclamation and/or would be collected by a contracted waste hauler and separated at the facility. Source separation of materials at the construction site would ensure the appropriate waste diversion rate, minimize costs associated with transportation and disposal, and facilitate compliance with the C&D ordinance.

A minimum of 75 percent of construction materials would be recycled to meet state diversion requirements. Materials to be recycled would be redirected to appropriate recipients selected from the ESD's directory of facilities that recycle construction materials, scrap metal, and other waste.

As mentioned in <u>Section 3.2</u>, above, the developer shall identify one person or agency connected with the proposed development to act as the SWMC, whose responsibility it would be to work with all contractors and subcontractors to ensure material separation and coordinate proper disposal and diversion of waste generated. The SWMC would help ensure all diversion practices outlined in this WMP are upheld and efficiently communicate goals to all contractors involved (see <u>Section 3.2</u> for more information on the responsibilities of the SWMC).

According to the 2019 Certified Construction & Demolition Recycling Facility Directory, the diversion rate for listed materials shall be considered 100 percent, except mixed C&D debris, which update quarterly. The total diversion rate for the construction phase based on total quantity of materials is anticipated to be 99%. A summary of the types of waste generated, the amount of each waste type diverted, and the overall amount remaining to be disposed of in landfills is shown in <u>Table 4</u>, <u>Project Waste Generation-Construction</u>.

	Estimated Waste Quantity		Estimated Diversion	Estimated Disposal
Material Type	(tons)	Handling ¹	(tons)	(tons)
Asphalt & Concrete	1,100	Hanson Aggregates 9229 Harris Plant Road San Diego, CA 92126 (100% Diversion)	1,100	-
		Vulcan Carroll Canyon		
Brick/Masonry/Tile	75	Landfill and Recycle Site 10051 Black Mountain Road San Diego, CA 92126 (100% Diversion)	75	-
Cabinets, Doors, Fixtures, Windows (Glass)	30	Habitat for Humanity Restore 8108 Mercury Court San Diego, CA 92111 (100% Diversion)	30	-

TABLE 4. PROJECT WASTE GENERATION - CONSTRUCTION



Material Type	Estimated Waste Quantity (tons)	Handling ¹	Estimated Diversion (tons)	Estimated Disposal (tons)
Cardboard	10	EDCO Station Transfer and Buy Back Center 8184 Commercial Street La Mesa, CA 91942 (100% Diversion)	10	-
Carpet, Padding/Foam	5	DFS Flooring 10178 Willow Creek Road San Diego, CA 92131 (100% Diversion)	5	-
Ceiling Tile	3	IMS Recycling Services 2740 Boston Avenue San Diego, CA 92113 (100% Diversion)	3	-
Drywall	55	EDCO Station Transfer and Buy Back Center 8184 Commercial Street La Mesa, CA 91942 (70% Diversion)	38.5	16.5
Landscape Debris	40	Miramar Greenery 5180 Convoy Street San Diego, CA 92111 (100% diversion) (100% Diversion)	40	-
Mixed C&D Debris	475	EDCO CDI Recycling & Buy Back Center 224 S. Las Posas Rd San Marcos, CA 92078 (89% Diversion)	422.75	52.25
Mixed Inerts	-	-	-	-
Roofing Materials	3	EED Recycling 8725 Miramar Place San Diego, CA 92121 (100% Diversion)	3	-
Scrap Metal	20	IMS Recycling Services 2740 Boston Avenue San Diego, CA 92113 (100% Diversion)	20	-
Stucco	25	EDCO Station Transfer and Buy Back Center 8184 Commercial Street La Mesa, CA 91942 (100% Diversion)	25	-



Material Type	Estimated Waste Quantity (tons)	Handling ¹	Estimated Diversion (tons)	Estimated Disposal (tons)
Unpainted Wood & Pallets	45	Otay C&D/Inert Debris Processing Facility 1700 Maxwell Road Chula Vista, CA 91913 (100% Diversion)	45	-
Landscape Materials	25	Miramar Greenery 5180 Convoy Street San Diego, CA 92111 (100% Diversion)	25	-
Clean Fill Dirt	345,000²	Vulcan Carol Canyon Landfill and Recycle Site 10051 Black Mountain Road San Diego, CA 92126 (100% Diversion)	345,000	-
Garbage/Trash	5	Miramar Landfill 5180 Convoy Street San Diego, CA 92111 (0% Diversion)	-	5
Other	15	-	15	-
TOTAL	346,931		346,862.25	68.75

Notes: Volume of materials are based on specific site conditions.

1. City of San Diego ESD 2019 Certified C&D Recycling Facility Directory (see Attachment A).

2. One cubic yard of soil = approximately 2,200 pounds, or 1.1 tons. 1.1 tons x 314,000 cubic yards = 345,400 tons.

4.4 WASTE DIVERSION

Waste diversion would generally be conducted through source separation rather than mixed debris diversion. With mixed debris diversion, all material waste is disposed of in a single container for transport to a mixed C&D recycling facility. Source-separated diversion separates waste materials on-site prior to transport to appropriate facilities that accept the specific material, a process that achieves a greater rate of material diversion than mixed debris diversion.

Recyclable waste material would be separated on-site into material-specific containers and diverted to an approved recycler selected from the ESD's directory of facilities (<u>see Attachment A</u>). The majority of waste would be handled at facilities other than landfills to achieve the waste reduction target of 75 percent.

With implementation of the diversion procedures outlined above, it is estimated that 75 percent of waste generated during the site development would be diverted to appropriate facilities for reuse. The remaining amount of construction waste, mainly drywall, would be disposed of in the landfill.



5 OCCUPANCY-OPERATIONAL WASTE

5.1 WASTE GENERATION

According to the City's current waste generation factors, the annual generation rate during occupancy of the proposed project would be approximately 459 tons, as shown in <u>Table 5</u>, <u>Estimated Annual Waste</u> <u>Generation During Occupancy</u>.

Land Use	Generation Designation ¹	Size (sq. ft.)	Annual Generation Rate ¹ (pounds per 1,000 sq. ft.)	Annual Waste Generated (tons)
Scientific Research and Development	Office	369,878	1.24	459

TABLE 5. ESTIMATED ANNUAL WASTE GENERATION DURING OCCUPANCY

¹ Cal Recycle, Waste Disposal and Diversion Findings for Selected Industry Groups (2006).

5.2 WASTE REDUCTION MEASURES

According to the City of San Diego Zero Waste Plan, most recycling programs achieve at least a 40 percent rate of diversion. The Zero Waste Plan also states that commercial rates can often be significantly higher than the 40 percent rate of diversion.

For this WMP, 50 and 75 percent rates of diversion were considered to estimate total waste generation for the proposed project in conformance with applicable state waste reduction requirements over future years. As shown in <u>Table 6, Estimated Waste Diversion During Occupancy</u>, waste anticipated to be diverted during the occupancy phase would be approximately 184 tons per year out of an estimated total of 459 tons generated during initial project operations, with the remaining 275 tons per year being disposed of in a landfill. Waste diversion would be increased by year 2025 to approximately 344 tons per year out of an estimated total of 459 tons generated total of 459 tons generated to meet applicable waste reduction requirements, with the remaining 115 tons per year disposed of in a landfill.

TABLE OF ESTIMATED WASTE DIVERSION DOWING OCCOTANCE							
Land Use	Annual Waste Generated (tons)	Year	Diversion Factor	Annual Waste Diverted (tons)	Annual Waste Disposed (tons)		
Scientific	459	2020	50%	184	275		
Research and Development	459	2025	75%	344	115		

TABLE 6. ESTIMATED WASTE DIVERSION DURING OCCUPANCY

Based on the calculations above, the project would result in a considerable contribution to a cumulatively significant solid waste impact because the project would exceed the City's threshold of 60 tons per year for a project that is above 40,000 sq. ft. in size. However, the implementation of additional sustainability measures and a recycling program would raise the diversion factor. Therefore, impacts are adequately reduced to a less than significant level (see Section 6, Waste Diversion Measures).



5.3 EXTERIOR STORAGE

The WMP follows the City's Municipal Code on-site refuse and recyclable material storage space requirements (LDC Chapter 14, Article 2 Division 8). The table below shows the exterior storage area requirements for nonresidential developments. As the project would include a total of 369,878 sq. ft. of nonresidential uses, the proposed project would be required to provide a minimum of 650 square feet refuse storage area and a minimum of 650 square feet recyclable material storage area for a total of approximately 1,300 square feet minimum exterior refuse and recyclable material storage area. ft. The site plan would be updated to satisfy this requirement. The required refuse and recyclable material storage area would adequately accommodate the approximately 459 tons of expected waste generated per year from the project.

Gross Floor Area Per Development (Sq. ft)	Minimum Refuse Storage Area Per Development (Sq. ft)	Minimum Recyclable Material Storage Area Per Development (Sq. ft)	Total Minimum Area Per Development (Sq. ft)
0-5,000	12	12	24
5,000-10,000	24	24	48
10,001-25,000	48	48	96
25,001-50,000	96	96	192
50,001-75,000	144	144	244
75,001-100,000	192	192	384
100,000+	192 plus 48 sq. ft. for every 25,000 sq. ft. of building area above 100,001	192 plus 48 sq. ft. for every 25,000 sq. ft. of building area above 100,001	384 plus 96 sq. ft. for every 25,000 sq. ft. of building area above 100,001
Project Total	650	650	1,300

TABLE 7. MINIMUM EXTERIOR REFUSE AND RECYCLABLE MATERIAL STORAGE AREAS FOR NONRESIDENTIAL DEVELOPMENT

Source: City of San Diego Municipal Code, Chapter 14, Article 2, Division 8: Refuse and Recyclable Material Storage Regulations, §142.0830, Table 142-08C.

On-site recycling services shall be provided to all tenants of the proposed project. Appropriate recyclable containers for different recyclable materials would be provided on-site to encourage and facilitate an adequate recycling program. Section 66.0707 of the City of San Diego Land Development Code requires that recycling services 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, and food waste, as determined by the Director, with collection of such recyclable materials required beginning on the 181st day after the City gives public notice thereof by placing a display advertisement of at least one-eighth page in a newspaper of general daily circulation within the City and posting a notice including such recyclable materials on a list maintained on the Department's website.



- Use 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.

Section 66.0707 of the City of San Diego Land Development Code also requires that the building management or other designated personnel shall ensure that occupants are educated about the recycling services as follows:

- Information, including about the types of recyclable materials accepted, the location of recycling containers, and the occupant's 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 commercial facility.

5.4 ORGANIC WASTE RECYCLING

The proposed project would contain landscaped areas that would have to be maintained periodically. Green waste generated by ongoing landscaping and landscape maintenance activities shall be source-separated by the landscaping contractor and diverted to Miramar Greenery (see <u>Attachment A</u>).

Additionally, the proposed project would comply with the requirements of SB 1383, Short-Lived Climate Pollutant Reductant Strategy, that established requirements to reduce methane emissions statewide to reduce emissions of short-lived climate pollutants (SLCP). Specifically, 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. Refer to the measures outlined in <u>Section 6.3</u>, <u>Operational Waste Management and Diversion Measures</u>. Therefore, the proposed project would implement an on-site organic waste recycling system that is consistent with the requirements of SB 1383.



6 WASTE DIVERSION MEASURES

To mitigate potential impacts to landfills from project site development and occupancy, the Applicant would implement the following waste diversion measures (WDM) that would reduce impacts during all aspects of project demolition, clearing, grading, construction, and operations. Mandatory compliance with these measures shall be included in all project contractor agreements, clearly reflected on project plans, and verifiable by City ESD staff through written submittals and/or site inspections as described below.

6.1 CONSTRUCTION WASTE MANAGEMENT COORDINATION AND OVERSIGHT

CONTRACTOR AGREEMENTS AND CITY COORDINATION

All WDM described herein shall be included as part of contractor agreements and clearly reflected on project plans identifying activities required to be undertaken during clearing, grading, and construction. These measures shall also be provided in checklist format to City ESD staff prior to the initiation of any activities identified in the WMP. ESD staff shall be allowed access to the project site, project plans, and contractor education program meetings and materials (described below) to verify conformance with these measures.

DESIGNATION OF A SOLID WASTE MANAGEMENT COORDINATOR

As described in <u>Section 3.2</u>, above, the Applicant shall designate a SWMC for the property with the authority to provide guidelines and procedures for contractor(s) and staff to implement waste reduction and recycling efforts prior to initiation of any construction, clearing, grading, or grubbing activities on-site. The SWMC would be responsible for the following:

- Prepare a Contractor Education Program on the waste separation and diversion/disposal procedures specified in this WMP. The Contractor Education Program shall contain, at a minimum, the following information:
 - Written and visual description of each waste type required to be source-separated;
 - Written and graphic description of how each waste type must be treated prior to and during source separation;
 - Direction on which waste types go to mixed-debris facilities;
 - o Direction on which waste types go to Miramar Landfill;
 - o Direction on materials requiring special handling, such as hazardous materials;
 - \circ Contact for designated contractor in case of questions or emergency;
 - o Contact at City ESD in case of questions or emergency; and
 - Phone number, address, and telephone contact information for each contracted hauler and disposal/diversion facility to be utilized.
- Ensure the correct number and signage of bins, as specified in this WMP.
- Ensure a maximum 5 percent contamination by different waste types/non-recyclable materials by weight in the bins.
- Ensure no overtopping of bins occurs.



- Work with contractor(s) to refine estimated quantities of each type of material that would be recycled, reused, or disposed of as waste, then assist contractor(s) with documentation of that waste through receipts at each recycling and landfill facility identified in this WMP, or as otherwise agreed to by ESD staff.
- Issue stop work orders if procedures and standards specified in this WMP are not being followed/met.
- Coordinate with ESD and/or Mitigation Monitoring staff, including regular communication and invitations to the work site, and ensure appropriate staff members are involved at every stage.
- Ensure ESD staff attendance at the contractor education meeting and pre-construction meetings of each phase of the development.

CONTRACTOR WASTE MANAGEMENT TRAINING

The SWMC or an ESD-approved contractor designee shall carry out Contractor Education Program presentations ensuring all project personnel are trained regarding content and requirements of this WMP. Prior to beginning work on any portion of the project, each member of the team, including all workers, subcontractors, and suppliers, shall be provided with a copy of the WMP, and undergo training on proper waste management procedures applicable to the project.

- The SMWC, or ESD-approved Contractor-designee shall carry out contractor waste management training presentations for each new group or individual hired, contracted, or assigned to work on the project.
- The SMWC and/or Contractor-designee shall ensure that each person working on the project has completed the waste management training by maintaining a written log to be signed and dated by each trainee upon completion of the training program. Copies of this written log, along with a list of all applicable personnel, shall be provided to City ESD staff for verification during each phase of project activities.

DAILY SITE INSPECTIONS BY CONTRACTOR(S)

The project contractor(s) shall conduct daily inspections of the construction site to ensure compliance with the requirements of this WMP and with all other applicable laws and ordinances. Daily inspections shall include verifying the availability and number of dumpsters based on amount of debris being generated, verifying trash and recycled materials dumpsters are correctly labeled, ensuring proper sorting and segregation of materials, and ensuring excess materials are properly salvaged. The project contractor(s) shall report the results of the daily site inspections to the SWMC.

CITY VERIFICATION

The Applicant shall ensure a representative of the City's ESD attends pre-construction meetings prior to clearing, grading, and construction to ensure that the following items are verified:

- Material segregation, recycling, and reuse is occurring per the WMP;
- Soil is being transported to an appropriate facility for reuse;
- Grubbed materials are sent to a suitable green waste recycling facility;

- Contract documents have appropriate estimates and constraints to avoid "overbuying" construction materials;
- Contract documents specify methods to achieve five percent post-consumer content goal;
- Contamination levels (i.e., different waste types/non-recyclable materials) do not exceed five percent by weight;
- An appropriate diversion rate (as specified in this WMP) has been included on the deposit form;
- Contract documents specify agreements for each recyclable/reusable material type to be taken to an appropriate recycling/reuse facility, as specified in this WMP; and
- Minimum exterior refuse and recyclable material storage areas have been incorporated into project plans, as a requirement of the City of San Diego Storage Ordinance (Municipal Code Section 142.0801 et. seq.).

6.2 CONSTRUCTION WASTE REDUCTION, DIVERSION COMPLIANCE, AND VERIFICATION

IDENTIFICATION, SEPARATION, AND DIVERSION OF RECYCLABLE/REUSABLE MATERIALS

The Applicant shall ensure that:

- Throughout project activities, waste materials shall be source-separated on-site into the appropriate recycling bin, if applicable, based on materials type. Common recyclable materials that are likely to occur on-site include, but are not limited to, the following:
 - Mixed C&D (wood, dirt, concrete, drywall, brick, metals, rock, asphalt, tile, cardboard)
 - o Metals
 - Concrete/Asphalt
 - Brick/Masonry
 - \circ Wood
 - o Drywall
 - Carpet/Carpet padding
 - o Green waste
- The on-site recycling bins would be subject to the following requirements:
 - Containers shall be clearly labeled, with a list of acceptable and unacceptable materials. The list of acceptable materials must be the same as the materials recycled at the receiving material recovery facility or recycling processor.
 - The collection containers for recyclable grading/land-clearing and construction waste shall contain no more than five percent non-recyclable materials, by weight.
 - Regular visual inspections of dumpsters and recycling bins shall be conducted to remove contaminants.
 - Recycling areas shall be clearly identified with large signs. Lists of acceptable and unacceptable materials shall be posted on recycling bins and throughout the project site and all recycled material signage shall be visible on at least two sides of haul containers.
 - Recycling bins shall be placed in areas that would be readily accessible and would minimize misuse or contamination. The SWMC shall be responsible for these efforts and



they shall be reviewed at pre-construction meetings and/or during contractor education meetings, if conducted separately.

 Recyclable and/or reusable waste materials collected in source-separated bins shall be diverted to recycling/reuse facilities as designated in Tables 4 through 6 of this WMP, or to another facility listed on the City's Certified Construction & Demolition Recycling Facility Directory, should the designated facilities not be available.

SOURCE REDUCTION MEASURES

Project contractors and subcontractors, in cooperation with the SWMC and ESD staff, as applicable, shall coordinate to minimize the over-purchasing of construction materials to lower the amount of materials taken to recycling and disposal facilities. The project shall minimize over-purchasing through purchase of pre-cut materials, whenever feasible. The following steps shall be undertaken:

- Detailed material estimates shall be used to reduce risk of unplanned and potentially wasteful material cuts.
- Contractor and subcontractor material purchasing agreements shall include a waste reduction
 provision requesting that: materials and equipment be delivered in packaging made of recyclable
 material; vendors reduce the amount of packaging; packaging be taken back by vendors for reuse
 or recycling; and vendors take back all unused product. Contracts containing this language shall
 be made available to ESD staff during ESD site visits for inspection.
- Post-consumer content products shall be employed in the design and construction of the new
 facilities with the goal of achieving five percent post-consumer content materials. Efforts to use
 post-consumer content may include using products manufactured with post-consumer content
 materials (i.e., products that were bought, used, and recycled by consumers), such as natural
 textiles, aggregate, or concrete. Receipts demonstrating post-consumer content shall be provided
 to ESD staff at or prior to the pre-construction meetings.
- Prior to submittal, final project plans shall indicate the anticipated source and quantity of materials to be reused on-site, and the source, quantity, and percentage of post-consumer content waste products anticipated to be utilized for project construction.
- Contractors shall include the anticipated source and quantity of post-consumer content products proposed for reuse or purchase in their project bid.
- Final project plans inclusive of the information above shall be provided to ESD for verification.

6.3 OPERATIONAL WASTE MANAGEMENT AND DIVERSION MEASURES

The Applicant shall undertake and/or shall specify in contract language and/or sales/lease agreements with any tenant, operator, and/or future owner, a list of recycling requirements with which the Applicant or future tenants, operators, and/or owners shall be obligated to comply, including, but not limited to, the following:

- Recycling areas shall be clearly identified with large signs.
- Lists of acceptable and unacceptable materials shall be posted on recycling bins.
- All recycled material signage shall be visible on at least two sides of recycling containers.



- Recycling bins shall be placed in areas that would be readily accessible and would minimize misuse or contamination.
- Prepare and distribute recycling educational materials for inspection by ESD prior to certificate of occupancy.
- After materials are approved, distribute to all project site owners/occupants.
- Green waste generated by ongoing landscaping and landscape maintenance activities shall be source-separated by the landscaping contractor and diverted to Miramar Greenery.
- Comply with the requirements of SB 1383 by 2022.

Prior to issuance of any certificate of occupancy/tentative certificate of occupancy, the Applicant 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;
- 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.

As stated previously, SB 1383 establishes targets to achieve a 50 percent reduction in the level of statewide disposal of organic waste from the 2014 level by 2020, and a 75 percent reduction by 2025. As such, once implemented, the project would be required to conform with such reduction requirements for the disposal of organic waste generated on-site. To comply with SB 1383, the project would implement the following measures:

- The project would require ongoing landscaping, landscape maintenance, and brush management over the life of the project.
- Drought-tolerant plants would be used to reduce the amount of green waste produced.
- Green waste generated by ongoing landscaping and landscape maintenance activities shall be source-separated by the landscaping contractor and diverted to Miramar Greenery.
- The project applicant shall contract with the waste hauler serving the project site (EDCO Disposal) to comply with current and future requirements for organic recycling. The applicant would implement measures consistent with EDCO's Organics Recycling Program to collect food scraps (fruit, vegetables, meat, bones, dairy, egg shells, etc.) and food-soiled paper (e.g., napkins, tea bags, paper plates, coffee filters, etc.) and/or landscape waste commingled together in designated organics containers; refer to <u>Attachment B</u>, <u>Commercial Organics Recycling Program</u>, for additional details. As part of the Organics Recycling Program, the project applicant would work with EDCO to identify specific bin types for on-site use in collecting and disposing of such organic material. As the contracted waste disposal provider, EDCO would be responsible for ensuring the proper transport and off-site disposal of organic and food waste generated by the project at a facility that accepts such materials (e.g., EDCO's Anaerobic Digestion Facility in San Diego County).



The ongoing WMP measures discussed in <u>Section 6</u>, <u>Waste Diversion Measures</u>, would include a means for handling landscaping and other organic waste materials. With implementation of the measures described above, the proposed project would be consistent with the requirements of SB 1383.

7 CONCLUSION

During site development, waste would be separated by material type and sent to the appropriate facility. Total waste diversion rate by phase is as follows: Demolition (96%), Grading (100%), and Construction (96%). Based on these calculations, the total waste diversion rate for the entire site development phase of the proposed project is anticipated to be 99 percent, which would surpass the 75 percent diversion rate requirement set by the City. The remaining amount of construction waste, mainly construction and demolition debris, would be disposed of in a landfill.

During the occupancy-operational phase, the project would result in a considerable contribution to a cumulative solid waste impact because the project would exceed the City's threshold of 60 tons per year for a project that is above 40,000 sq. ft. in size. However, the implementation of additional sustainability measures and a recycling program, including the collection of organic materials to meet regulatory disposal reduction requirements, would reduce the project's contribution to the cumulative impact to a less than considerable level (see Section 6, Waste Diversion Measures).

As part of the of waste diversion measures described in <u>Section 6</u>, a SWMC would be assigned to monitor and enforce on-site waste reduction and recycling efforts. The SWMC would train the contractor(s), staff, and tenants on the proper waste management guidelines and procedures outlined in the WMP. The SWMC would ensure compliance with the San Diego Municipal Code, Recycling Ordinance, and Recyclable Materials Storage Regulations, as well as applicable state regulations. The SWMC would record the recycling and diversion rates for both project phases (site development and occupancy-operational) to ensure that all project goals and requirements are met, such as the goal to recycle 75 percent of the waste materials. The SWMC would have the authority to issue stop work orders if proper procedures are not being followed.

The SWMC would ensure that the goals and requirements of this WMP are fully implemented. As this WMP is designed to adhere to all applicable state and City ordinances and regulations with regard to waste management, the proposed project would not result in a significant impact if this WMP is properly implemented.



8 REFERENCES

8.1 LIST OF PREPARERS

Michael Baker International

9755 Clairemont Mesa Boulevard San Diego, California 92124 Bob Stark, AICP, Project Manager Nicole Marotz, AICP, Senior Environmental Planner Garett Peterson, Environmental Planning Associate Aaron Barrall, Planning Associate

8.2 DOCUMENTS

- CalRecycle, Waste Disposal and Diversion Findings for Selected Industry Groups, Page 12, June 2006. Website. Accessed September 18, 2021.
- City of San Diego, California Environmental Quality Act Significance Determination Thresholds, July 2016. Website. Accessed September 18, 2021.
- City of San Diego, City of San Diego General Plan, March 10, 2008. Accessed September 18, 2021.
- City of San Diego, Municipal Code. Website. https://www.sandiego.gov/cityclerk/officialdocs/municipal-code. Accessed September 18, 2021.
- City of San Diego, Construction and Demolition Debris Diversion Deposit Program. San Diego Municipal Code, Chapter 6, Article 6, Division 6. Amended June 22, 2016. Accessed September 18, 2019.
- City of San Diego, Recycling Ordinance. San Diego Municipal Code, Chapter 6, Article 6, Division 7. November 20, 2007. Accessed September 18, 2021.
- City of San Diego, Environmental Services, Construction & Demolition (C&D) Recycling. Website. Accessed September 18, 2019. https://www.sandiego.gov/environmentalservices/recycling/cd#targetText=New%20C%26D%20Debris%20Diversion%20Requirement,will %20remain%20at%2050%20percent.

City of San Diego, CEQA Waste Management Plan Information Bulletin. Accessed September 18, 2021.

City of San Diego, Guidelines for a Waste Management Plan. Accessed September 18, 2021.



This page intentionally left blank

Michael Baker

Attachment A: Construction and Demolition Recycling Facility Directory This page intentionally left blank



2019 Certified Construction & Demolition (C&D) Recycling Facility Directory

These facilities are certified by the City of San Diego to accept materials listed in each category. Hazardous materials are not accepted. The diversion rate for these materials shall be considered 100 percent, except mixed C&D debris, which update quarterly. The City is not responsible for changes in facility information. Please call ahead to confirm details such as accepted materials, days and hours of operation, limitations on vehicle types, and cost. For more information visit: www.recyclingworks.com.

*Transfer Stations offer both recycling and trash disposal																		
services. In order to receive recycling credit, you must:																		
-Notify the weighmaster your load is subject to the City of San				nse							e							
Diego C&D Ordinance.				Re					E		/ast							
-If your load is mixed Construction and Demolition (C&D) debris,				for					elai		≥ u			es				
ensure it is coded correctly on the receipt. Tickets coded as	bris	ete	농	ials			20		orce		ree		ics	xtui			sk	
"MSW, trash or refuse" will receive 0% credit.	De		/Ro	Iter			ding		e/P(Ľ	a/G		last	t Fi		s	Bloc	
-Ensure the project address and Permit number are added to the	&D	<u></u>	с <mark>у</mark>	Σ	p		ado	<u>le</u>	Ē	I Di	00		e le	igh.		hert	E L	
receipt.	Mixed C&D Debris	Asphalt/Concrete	Brick/Block/Rock	Building Materials for Reuse	Cardboard	et	Carpet Padding	Ceiling Tile	Ceramic Tile/Porcelain	Clean Fill Dirt	Clean Wood/Green Waste	Drywall	Industrial Plastics	Lamps/Light Fixtures	_	Mixed Inerts	Styrofoam Blocks	~
Please note: Miramar Landfill and other landfills DO NOT	lixe	h ds	ič	uild	ard	Carpet	arp	eilir	era	lear	lear	Ň	npi	me	Metal	lixe	tyrc	Trash
<u>recycle mixed C&D debris.</u>	2	◄	B	B	Ű	Ö	Ö	Ö	Ŭ	С	σ	D	5	Ľ	Ν	2	SI	F
EDCO Recovery & Transfer																		
3660 Dalbergia St, San Diego, CA 92113	68%											•						•
619-234-7774 <u>www.edcodisposal.com</u>																		
EDCO Station Transfer Station & Buy Back Center																		
8184 Commercial St, La Mesa, CA 91942	68%				•							•			•			•
619-466-3355 <u>www.edcodisposal.com</u>																		
EDCO CDI Recycling & Buy Back Center																		
224 S. Las Posas Rd, San Marcos, CA 92078	88%				•										•			•
760-744-2700 <u>www.edcodisposal.com</u>																		
Escondido Resource Recovery																		
1044 W. Washington Ave, Escondido	68%																	
760-745-3203 www.edcodisposal.com																		
Fallbrook Transfer Station & Buy Back Center																		
550 W. Aviation Rd, Fallbrook, CA 92028	68%				•										٠			•
760-728-6114 www.edcodisposal.com																		
Otay C&D/Inert Debris Processing Facility																		
1700 Maxwell Rd, Chula Vista, CA 91913	72%																	
619-421-3773 <u>www.sd.disposal.com</u>																		
Ramona Transfer Station & Buy Back Center																		
324 Maple St, Ramona, CA 92065	68%				•										•			•
760-789-0516 www.edcodisposal.com																		
SANCO Resource Recovery & Buy Back Center																		
6750 Federal Blvd, Lemon Grove, CA 91945	68%				•										•			
619-287-5696 www.edcodisposal.com																		
Allan Company																		
6733 Consolidated Wy, San Diego, CA 92121					•										•			
858-578-9300 www.allancompany.com/facilities																		
Allan Company Miramar Recycling																		
5165 Convoy St, San Diego, CA 92111					•										•			
858-268-8971 www.allancompany.com/facilities																		
Armstrong World Industries, Inc.																		
300 S. Myrida St, Pensacola, FL 32505																		
877-276-7876 (Press 1, Then 8)								•										
www.armstrong.com/commceilingsna																		
CMS Recycling Inc.																		
1428 West Mission Rd, Escondido, CA 92029					•										•			
760-741-6300 www.cmsmetals.com																		
DFS Flooring																		
10178 Willow Creek Rd, San Diego, CA 92131						•	•											
858-630-5200 www.dfsflooring.com																		
===1				I				I										

*Transfer Stations offer both recycling and trash disposal																		
services. In order to receive recycling credit, you must:																		
				e														
-Notify the weighmaster your load is subject to the City of San				sna							te							
Diego C&D Ordinance.				r Re					.c		Vas							
-If your load is mixed Construction and Demolition (C&D) debris,	(0			Building Materials for Reuse					Ceramic Tile/Porcelain		Clean Wood/Green Waste			res				
ensure it is coded correctly on the receipt. Tickets coded as	Mixed C&D Debris	Asphalt/Concrete	ъ	ials			50		20		ree		<u>ic</u>	Lamps/Light Fixtures			<u>- 2</u>	
" <i>MSW, trash or refuse</i> " will receive 0% credit.	Pe	ی تو	/Ro	iter			ling		e/e	ť	J/G		ast	t Fi		s	<u></u>	
-Ensure the project address and Permit number are added to the	D ⁸	l S	ock/	Ма	P		adc	ile	Ē	ΪD	ö		I PI	igh:		ert	Ē	
receipt.	D D	∎t∕	'Blc	Bu	oa	r.	it P	ВТ	ы	Fil	Š	lle	tria	s/L	_	ЧL	foal	
Please note: Miramar Landfill and other landfills DO NOT	ixe	Å	Brick/Block/Rock	ildi	Cardboard	Carpet	Carpet Padding	Ceiling Tile	rar	Clean Fill Dirt	ean	Drywall	ndustrial Plastics	dm	Metal	Mixed Inerts	Styrofoam Blocks	Trash
recycle mixed C&D debris.	Ξ	As	Bri	Bu	S	Ca	പ്	പ	ပီ	ບັ	Ŭ	þ	Ĕ	Lai	Ň	ΪΣ	Sf.	Tra
Escondido Materials																		
500 N. Tulip St, Escondido, CA 92025		•																
760-432-4690 <u>www.weirasphalt.com</u>																		
Habitat for Humanity ReStore																		
8101 Mercury Ct, San Diego, CA 92108				•														
619-516-5267 <u>www.sandiegohabitat.org</u>																-		
Hanson Aggregates – Hollister St																		
389 Hollister St, San Diego, CA 92154		•																
858-974-3849		L																
Hanson Aggregates West – Lakeside Plant																		
12560 Highway 67, Lakeside, CA 92040		•																
858-547-2141																		
Hanson Aggregates West – Miramar																		
9229 Harris Plant Rd, San Diego, CA 92126		•																
858-974-3849																		
HVAC Exchange																		
2675 Faivre St, Chula Vista, CA 91911															•			
619-423-1564 <u>www.hvacx.com</u>																-		
Inland Pacific Resource Recovery																		
12650 Slaughterhouse Canyon Rd, Lakeside, CA 92040											•							
619-390-1418 <u>www.iprrgreen.com</u>																		
Los Angeles Fiber Company																		
4920 S. Boyle Ave, Vernon, CA 90058						•	•											
323-589-5637 <u>www.lafiber.com</u>																		
Miramar Greenery, City of San Diego																		
5180 Convoy St, San Diego, CA 92111											•							
858-694-7000 www.miramargreenery.com																		
Moody's																		
3210 Oceanside Blvd, Oceanside, CA 92056		•														•		
760-433-3316 www.moodyselcorazonrecycling.com																		
Planet Recycling																		
187 Mace St, Chula Vista, CA 91911																		
						·												
888-258-7755 <u>www.planetrecyclingphoenix.com</u>																		
RAMCO																		
8354 Nelson Way, Escondido, CA 92026		•																
760-205-1797 <u>www.ramco.us.com</u>																		
Reclaimed Aggregates Chula Vista																		
855 Energy Way, Chula Vista, CA 91913		•														•		
619-656-1836																		
Robertson's Ready Mix																		
2094 Willow Glen Dr, El Cajon, CA 92019		•								•						•		
619-593-1856 <u>www.rrmca.com</u>																		
Rockridge Crushing																		
12485 Highway 67, Lakeside, CA 92040		•																
619-324-6570																		
SA Recycling																		
3055 Commercial St, San Diego, CA 92113															•			
619-238-6740 <u>www.sarecycling.com</u>]		

*Transfer Stations offer both recycling and trash disposal services. In order to receive recycling credit, you must: -Notify the weighmaster your load is subject to the City of San Diego C&D Ordinance. -If your load is mixed Construction and Demolition (C&D) debris, ensure it is coded correctly on the receipt. Tickets coded as "MSW, trash or refuse" will receive 0% credit. -Ensure the project address and Permit number are added to the receipt. Please note: Miramar Landfill and other landfills DO NOT recycle mixed C&D debris.	Mixed C&D Debris	Asphalt/Concrete	Brick/Block/Rock	Building Materials for Reuse	Cardboard	Carpet	Carpet Padding	Ceiling Tile	Ceramic Tile/Porcelain	Clean Fill Dirt	Clean Wood/Green Waste	Drywall	Industrial Plastics	Lamps/Light Fixtures	Metal	Mixed Inerts	Styrofoam Blocks	Trash
SA Recycling 1211 S. 32 nd St, San Diego, CA 92113 619-234-6691 www.sarecycling.com															•			
SCOR Industries 2321 South Willow Ave, Bloomington, CA 92316 909-820-5046 www.scorindustries.com		•	•		•				•		•	•	•		•	•		
Terra Bella Nursery 302 Hollister St, San Diego, CA 92154 619-585-1118 www.terrabellanursery.com										•	•							
Vulcan Carol Canyon Landfill and Recycle Site 10051 Black Mountain Rd, San Diego, CA 92126 858-530-9465 www.vulcanmaterials.com		•	•							•						•		
Vulcan Materials Company 2275 Hard Rock Rd, Chula Vista, CA 91913 858-530-9472 www.vulcanmaterials.com		•																
Vulcan Otay Asphalt Recycle Center 7522 Paseo de la Fuente, San Diego, CA 92154 619-571-1945 <u>www.vulcanmaterials.com</u>		•																

Michael Baker

Attachment B: Commercial Organics Recycling Program This page intentionally left blank

Commercial Organics Recycling is Coming!

EDCO

edcodisposal.com "We'll Take Care of It"



EDCO's New Organics Recycling Program will Collect Food Scraps and/or Landscape Waste Commingled Together in a Designated Organics Container

organics RECYCLING





Separating organics - food scraps and landscape waste - helps our environment.













Coming Soon, Organics Recycling!

EDCO's New Organics Recycling Program Collects Food Scraps Separately or Mixed Together with Landscape Waste in a Green Organics Container

Organic Waste



Organic waste is a renewable natural resource. It mainly comes from yard and kitchen waste from homes, and food waste and scraps from industrial and commercial operations.

Mandatory recycling of organic waste is the next step to achieving California's Zero Waste goals. EDCO constructed the first state-of-the-art, advanced technology Anaerobic Digestion (AD) Facility in San Diego County, capable of producing

renewable natural gas that will serve the needs of the region.

AD is an efficient and environmentally sustainable technology that can make a significant contribution to the management of organic waste in California. Capturing and reducing the amount of methane released into the atmosphere is critical in ensuring a safe and healthy environment for ourselves and future generations.



Why Recycle Food Waste?

Organic waste accounts for over 40% of the material in California's waste stream. Organic material cannot break down when buried in a landfill, as it would in nature or in a compost pile. Instead, it decomposes without oxygen, releasing methane gas into the atmosphere. Organic material (food scraps and yard waste) will soon be recycled when placed in green carts and then transported to EDCO's AD Facility, once completed, where it will break down and convert into renewable natural gas and fertilizer.

EDCO's Anaerobic Digestion Video

To learn more about EDCO's new AD Facility and how it will significantly impact the future of organic waste, please visit our website at **edcodisposal.com** and watch our informative video located in our Resource Center tab on the home page and click on Videos!

EDCO's Anaerobic Digestion Facility



EDCO's Anaerobic Digestion Facility

Since 1967, family owned and operated EDCO has had a long-standing commitment to reducing impacts on the environment through innovation. EDCO's state-of-the-art AD Facility began serving customers in early 2021, assisting customers to be in full compliance with state mandates and keeping us *On the Road to Zero Waste*.

AD is the natural process in which microorganisms break down organic materials such as food waste, green waste, fats, oils and greases. AD happens in

closed spaces where there is no oxygen, and once completed, converts organic material into Renewable Natural Gas (RNG) and fertilizer.

Recycling organics will be easy and convenient with EDCO's commingled organics recycling program. EDCO will expand source-separated green waste collection to include the recycling of food waste. The service will allow customers to place food scraps separately in a container, or in the same container as green waste. EDCO's AD Facility will be a foundation for customers to achieve State mandates which are directly related to recycling organics in California.



California State Mandates

recovered for human consumption by 2025.

With mandatory recycling deadlines on the horizon, the EDCO AD facility will allow cities to meet compliance mandates including AB 1826, AB 827, AB 1594, and SB 1383, which are directly related to organic recycling in the State of California.

AB 1826
 Requires businesses that generate organic waste to arrange for recycling services for that waste, and for jurisdictions to implement a recycling program to divert organic waste from businesses subject to the law, as well as report to the State of California on their progress in implementing an organic waste recycling program.
 AB 827
 Requires commercial generators subject to AB 1826 to provide customers with recycling containers inside their place of business for the convenience of recycling.
 AB 1594
 As of January 1, 2020, the use of green material as alternative daily landfill cover (ADC) will no longer constitute diversion through recycling and will instead be considered disposal.
 SB 1383
 SB 1383

establishes an additional target that not less than 20% of currently disposed edible food is

QUESTIONS? Please visit our website at edcodisposal.com or call (619) 287-7555.

What Will Go in the Organics Container?



Organic waste (also referred to as organics), which includes food waste, off-spec or manufactured by-prodcuts from food manufacturing, distribution, or retail, green waste, landscape and pruning waste, non-hazardous wood waste, and food-soiled paper waste, can be placed separately or commingled in an organics container.

Below are just a few examples of what will be able to be placed in your organics container.

Food Scraps

Fruit, vegetables, meat, bones, dairy, egg shells, prepared food



Yard Waste Plants, leaves, branches, grass





Food-Soiled Paper

Napkins, tea bags, paper plates, coffee filters





Get the Most Out of Organics Recycling

EDCO is committed to assisting businesses and multifamily properties implement organics recycling. EDCO will provide free, onsite visits to help you comply with the state's mandatory recycling requirements, which would also include a review of your current trash and recycling services, and help determine the best organics program for you. When EDCO's organics recycling program is implemented, high-volume generators may reduce trash container sizes and/or collection frequency by diverting organic materials into designated organics containers.



What Can You do Now?

San Diego Food System Alliance is leading an initiative across San Diego County to reduce food waste and increase food donation to people. By visiting their website, at <u>sdfsa.org/savethefoodsd/</u>, customers can find information on food recovery throughout the county, food donation guides, and resources.







6670 Federal Blvd..• Lemon Grove, CA. 91945



The EPA estimates that more food reaches landfills than any other single material in our everyday trash, constituting 22 percent of discarded municipal solid waste. Adding food waste to EDCO's Organics Recycling Program will help reduce the amount of organic waste going to landfills and lower Green House Gas (GHG) emissions released into our environment.

Questions?

Email us at csrlg@edcodisposal.com, visit our website, edcodisposal.com, text a message to (619) 202-8365, or call us at (619) 287-7555.

Michael Baker