

March 12, 2026

TO: Members of the Facility and Plan Review Subcommittee  
Los Angeles County Solid Waste Management Committee/  
Integrated Waste Management Task Force

FROM: Michael Harmon, Staff *MH*

**STAFF REPORT  
FOURTH QUARTER 2025 VEGETATION PROJECT STATUS REPORT  
AT SUNSHINE CANYON CITY/COUNTY LANDFILL**

Republic Services, Inc. (Republic) submitted the Fourth Quarter 2025 Vegetation Project Status Report for the Sunshine Canyon City/County Landfill, received on January 31, 2026. The Status Report is a requirement of Conditional Use Permit Condition 44A, and Los Angeles City Condition [Q] C8 of Ordinance Number 172933, and Condition 18B of the Finding of Conformance granted to the landfill by the Task Force on December 18, 2008. This report presents the progress of the site's landscaping and revegetation activities for the fourth quarter of 2025.

Hydroseeding Activities

- An additional 9 acres were hydroseeded in the upper north-facing slope of CC3B and CC3A during the fourth quarter of 2025.

City Side South Sage Pilot Project Area - Deck C / Lower Deck

- Deck C native vegetation is actively coming out of dormancy much earlier than in 2024. The Ventura Coastal Sage Scrub (VCSS) habitat is healthy, and the canopies are closing in on each other with densely vegetated areas and open gaps where previous weed infestations existed, and native VCSS were mistakenly removed.
- Native shrub and plant species, such as Wild Ryegrass and California Sunflower, were the most prevalent on the lower deck.
- Due to warmer climate and heavy rains that took place between third and fourth quarters of 2025, a significant increase in non-native plant growth was also observed.
- During the third quarter, a quarterly weed control program was recommended with efforts being concentrated between February to April to suppress non-native plant growth. Weed abatement took place during the fourth quarter of 2025. Efforts were made to educate landscaping staff on properly identifying and differentiating native and non-native plants so that the native herbaceous species are not impacted.

City Side South - Deck B Area / Middle Deck

- The abundance of rainfall in December triggered new growth of the following weed species: Shortpod Mustard, and Stinkwort. Slenderleaf Iceplant has been flourishing on the deck over the last few years and has come out of the drought dormancy stage.

- Weed growth is anticipated in the spring of 2026 following rainfall through the winter of 2026.
- Dominate native cover in Deck B included fourwing, saltbush, brittlebush, big saltbush, broom baccharis, California buckwheat, California sagebrush, coastal goldernbush, and hairy yerba santa.
- Non-native herbaceous species such as red brome, tocalote, short-podded mustard, and slender iceplant were observed.
- California Pepper Trees and Tamarix continue to be recommended for removal to prevent possible overturn and cap damage during high wind events.
- The scalped Creeping Rye Grass allowed non-native species to grow through exposed soils. California Stinkwort has established and begun to spread. Chemical treatment may be recommended in this area to combat the invasive plant growth.
- Due to high and moderate winds, litter was observed on the deck. Litter removal is recommended.

#### City Side Sage Mitigation Area – Deck A

- The recently graded areas on the deck saw improved drainage during the rainstorms observed in fourth quarter of 2025. This area will be part of the revegetation plot and is expected to start after the first heavy rains to allow the soil to properly leach. This is anticipated to begin during the first quarter of 2026.

#### County Sage Mitigation Area

- No revegetation activities were conducted at this area for the fourth quarter of 2025.

#### Big Cone Douglas Fir Tree Mitigation and Coastal Live Oak

- Plans to replenish Douglas Fir Tree mitigation bank include:
  - Seeds were potted and are currently in the process of germination during the fourth quarter of 2025.
  - After saplings are viable, they will be transplanted at the mitigation site. Planting is anticipated in Fall 2026.

January 30, 2026

Mr. David Nguyen  
County of Los Angeles, Department of Public Works  
900 South Fremont Avenue  
Alhambra, CA 91803-1331

Subject: Sunshine Canyon Landfill, Quarterly Vegetation Report  
Fourth Quarter 2025 Vegetation Report

Mr. Nguyen,

This report has been prepared in accordance with the following:

- Condition 18B of the Finding of Conformance
- Condition 44A of the Condition Use Permit (CUP)
- Los Angeles City Condition [Q] C.8 of the Ordinance No. 172,933

This report presents the progress of the site's landscaping and revegetation activities for the fourth quarter of 2025. The intent of these reports is to provide detailed information regarding the site's efforts related to vegetation including vegetation of interim and permanent slopes and activities conducted for the on-site sage mitigation areas.

Architerra Design Group continues to assist site personnel in evaluating current site conditions relating to vegetation and provide recommendations for future efforts. This report includes their assessment of the pilot sage vegetation area as well as recommendations for this area. Architerra's evaluation is in addition to the required quarterly monitoring performed by our consulting biologist.

#### 1.0 Interim Slopes

For the purposes of this report, interim slopes are those defined as slope areas where no activities have taken place for 180 days or longer. CUP Condition 44A requires "a temporary hydroseed vegetation cover on any slope or landfill area that is projected to be inactive for a period of greater than 180 days".

## 1.1 Hydroseeding Activities

Based on the results of the trial project completed in August 2017, a 57-acre vegetative cover project using the approved seed mix was completed in mid-December 2017. Additionally, the site completed hydroseeding approximately 155 acres; application of the approved seed mix was completed during 2019. The increase in hydroseeding application is a result of our normal winterization efforts along with slope revegetation as a result of the Saddle Ridge Fire that impacted Sylmar, CA on October 2019. An additional 9 acres was hydroseeded in the upper north-facing slope of CC3B and CC3A during the fourth quarter of 2025. These areas continue to have successful vegetation growth.

## 2.0 Permanent Slopes

Permanent slopes are defined as those where no landfilling activities will be conducted in the future.

As part of our Saddle Ridge Fire recovery efforts both the City and County permanent slopes of the landfill had hydroseed applied as necessary. This application of hydroseed was completed for soil stabilization purposes.

## 3.0 Non-Permanent Cut Slopes

Prior quarterly vegetation reports have illustrated one area above the front terminal sedimentation basin and one area near the temporary bypass road as “non-permanent cut slopes”. An evaluation of these areas has been conducted and it has been determined that these areas are “permanent slopes” because no landfilling activities will be conducted against these slopes in the future.

## 4.0 Activities Conducted in Sage Mitigation Areas – 4Q2025

During the fourth quarter of 2025, the following activities were conducted in the sage mitigation areas at the landfill.

### 4.1 City South Sage Pilot Project Area – Deck C

The lower Deck C mitigation project area was impacted by the Saddle Ridge fire in October 2019. As noted in Rincon’s (formerly JMA) City-Side Sage Mitigation Area Lower Deck report a substantial amount of the lower deck was burned or scorched. However, in previous reports they note that because this was an established site, they expect natural re-establishment of the native vegetation within the first two to three years. Rincon has noted a substantial amount of regrowth has occurred following the fire and included the most prevalent natives such as California Sunflower, Saltbush, Horseweed, and pockets of Wild Ryegrass. Rincon also noted that native and non-native plant cover has increased between third and fourth quarter monitoring.

As reported previously, Architerra Design Group indicates that there has been an abundance of Venturan CSS species germinating and crown-sprouting since the fire. The species following the rebound include Purple Sage, Coast Sunflower, White Sage, Creeping Wild Rye, Deerweed, Black Sage, and Mexican Elderberry. Surprisingly there are also new species from the original seed mix are now sprouting up in decent numbers and included in the list below:

- Purple Sage (*Salvia leucophylla*)
- Coast Sunflower (*Encelia californica*)
- White Sage (*Salvia apiana*)
- Creeping Wild Rye (*Leymus triticoides*)
- Deerweed (*Lotus scoparius*)
- Black Sage (*Salvia mellifera*)
- Mexican Elderberry (*Sambucus mexicana*)
- Scarlet Bugler (*Penstemon centranthifolia*)
- Telegraph Weed (*Heterotheca grandiflora*)
- Monkey Flower (*Mimulus aurantiacus*)
- Smooth-Leaf Yerba Santa (*Eriodictyon trichocalyx*)
- Thicketleaf Yerba Santa (*Eriodictyon crassifolium*)
- Sunflower (*Helianthus annuus*)
- California Bush Sunflower (*Encelia californica*)
- California Sagebrush (*Artemisia californica*)
- California Buckwheat (*Eriogonum fasciculatum*)
- Quail Bush (*Atriplex lentiformis*)
- Four-Wing Saltbush (*Atriplex canescens*)
- Cattle Spinach (*Atriplex polycarpa*)
- Spinescale (*Atriplex spinifera*)
- Toyon (*Heteromeles arbutifolia*)
- Foothill Needlegrass (*Nassella lepida*)
- Coyote Bush (*Baccharis pilularis*)
- Showy Penstemon (*Penstemon spectabilis*)
- Wright's Cudweed (*Pseudognaphalium microcephalum*)
- White Horehound (*Marrubium vulgare*) Non-Native
- Australian Saltbush (*Atriplex semibaccata*) Non-Native

As reported from Architerra, the abundance of historic level rains last two winters and the summer 2023 storm Hillary has assisted in the emergence of many of the Venturan CSS Species. Many of these species were observed coming out of their dormancy much earlier than in previous years. Overall, the native habitat appears healthy and has grown dense canopies. Unfortunately, however, due to the warmer climate and the heavy rains that took place between Q3 and Q4 of 2025, a significant increase in non-native plant growth was also observed.

A quarterly weed control program was recommended with efforts being concentrated between February to April to suppress non-native plant growth. Some weed abatement did take place during Q4 of 2025. Efforts were made to educate

landscaping groups on properly identifying and differentiating native and non-native plants so that the native herbaceous species are not impacted.

#### 4.2 City South Deck B

The Deck B sage mitigation project began on April 9, 2018 and planting was completed by the end of the fourth quarter 2018. Soil samples indicated low pH and high salinity, as a result Deck B underwent a leaching schedule. Additional soil amendments and resampling were completed before planting began, which took place during the fourth quarter 2018. Pacific Restoration Group, Inc (PRG) has been working with Architerra for the completion of project. A summary of the progress is included in Attachment 3. The northwest portion of the Middle Deck burned during the Saddle Ridge Fire in October 2019. Architerra Design Group (ADG) indicated previously Deck B was doing quite well and there was minimal weed growth occurring with the exception of Shortpod Mustard and Slenderleaf Iceplant. These species continue to see limited growth, but are anticipated to see further growth in the spring of 2026 following the rainfall through the winter of 2026.

During Ricon's observation of Deck B, dominant native cover included fourwing saltbush (*Atriplex canescens*), brittlebush (*Encelia farinosa*), big saltbush (*Atriplex lentiformis*), broom baccharis (*Baccharis sarothroides*), California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), coastal goldenbush (*Isocoma menziesii*), and hairy yerba santa (*Eriodictyon trichocalyx*). Dominant herbaceous species include non-native red brome (*Bromus rubens*), tocalote (*Centaurea melitensis*), short podded mustard (*Hirschfeldia incana*), and slender iceplant (*Mesembryanthemum nodiflorum*).

Revegetation efforts have been successful in the establishment of the Venturan Coastal Sage Scrub habitat and evidence of species and age diversity and resprouting of larger species. Architerra also noted Deck B site is similar to those found on Deck C in the growth of the VCSS. The VCSS continues to grow and close off the canopy in several areas. Deck B is also dominated by California Buckwheat (*Eriogonum fasciculatum*). Downslopes have been track walked and vegetation on the down slopes have been removed. The Creeping Rye Grass previously scalped in this area has allowed non-native species to grow to do exposed soils. Maintenance crews have been educated to distinguish natives versus non-native species. Invasive Slenderleaf Iceplant (*Mesembryanthemum nodiflorum*) has gone dormant in the area, however, California Stinkwort (*Dittrichia graveolens*) has established itself on the deck and has begun to spread. Chemical treatment may be needed in this area to combat this invasive plant growth.

Overall, there is a good species diversity on this deck and planting is responding well with vigorous growth. It was also noted numerous California Pepper Trees (*Schinus molle*) and Saltcedar (*Tamarisk sp.*) should be removed.

### 4.3 City South Deck A

In December 2022, Conversations with Architerra were started to discuss a plan to address the potential mitigation plans for Deck A. An onsite meeting occurred during May 2023 for an initial assessment of Deck A and determine what will need to be done.

Prior to any mitigation efforts, soil was placed in a large area affected by subsidence and graded for proper drainage. This occurred in June and July 2023 and in quarter three 2025, mitigation plans have commenced to address the area. Low lying areas were identified and filled in with soil during Q3 of 2025.

The Deck A sage mitigation restarted during Q3 of 2025. These mitigation efforts commenced with grading work to the deck. This grading activity was completed to fill a couple of low spots resulting from subsidence which led to ponding during the winter of 2024. These graded areas saw improved drainage during the rainstorms observed in quarter four 2025. The recently graded area will be part of the initial revegetation plot and is expected to start after the first heavy rains to allow the soil to properly leach. This is anticipated to begin during the first quarter of 2026.

### 4.4 County Sage Mitigation Area

The County sage mitigation area is located on the western side of the County portion of Sunshine Canyon Landfill (Drawing 1). As noted in the first quarter Rincon County-Side Sage Mitigation Area Report the upper half of the mitigation site was burned in the Saddle Ridge fire in October of 2019. No revegetation activities were conducted in this area during the fourth quarter of 2025, and as noted in multiple Rincon progress reports, the conditions in this mitigation area have remained unchanged for some time. Rincon notes in their attached 2025 fourth quarter vegetation report that this area remains problematic for establishment of vegetation due to barren soils. However, the southeastern portion of the plot is moderately covered with native and non-native vegetation, and some small patches of vegetation have begun to establish a presence in the northern-central area. Soil samples from this location indicate low pH, high salinity, and Boron present in native soils.

## 5.0 Assessments of Sage Mitigation Areas

Assessments of the site's sage mitigation areas are conducted by a qualified biologist on a quarterly basis. The following sections present a summary of the recommendations for the sage mitigation areas from Rincon (City and County sage mitigation areas) and Architerra (City South Sage Pilot Project Area (Deck C) and Middle Deck (Deck B) and the proposed actions in response to the recommendations.

### 5.1 Rincon Recommendations for City Sage Mitigation Areas

Rincon’s progress reports for the City Sage Mitigation Areas for the fourth quarter of 2025 are provided in Attachment 1. These reports include recommendations based on the assessments. Table 1 presents a summary of these recommendations and the proposed actions.

- The booster pump and power that was destroyed in the Saddleridge Fire will need to be replaced for irrigation to deck A. Architerra’s initial recommendation is to get a team on site to walk the deck and determine best strategy moving forwards to tackle the approximately 25 acres. This has been delayed to late 2026.

**Table 1 – Rincon Recommendations and Proposed Actions – City Sage Mitigation Areas, Fourth Quarter 2025**

| AREA   |   | RECOMMENDATION   | PROPOSED ACTION  |
|--|---|--|--|
| Lower, Middle, and Upper Decks (Decks C, B, and A) | 1 | Weed Control – Implement a year-round weed control program to control non-native species.                            | A weed control program is already in place on Deck C and B as part of the pilot project and will continue. A weed control program on A will be implemented along with the mitigation plans for these areas.                                      |
| Lower, Middle Decks (Decks C, B)                   | 2 | Irrigation – Reinstall irrigation system if drought conditions continue to the areas to alleviate stress on regrowth | Even with above average rainfall this winter, supplemental irrigation systems may be reinstalled to promote germination and growth of native plants if signs of desiccation appear. We will continue to evaluate and proceed as warranted.       |
| Lower, Middle, and Upper Decks (Decks C, B, and A) | 3 | Prohibit Access – Continue to prohibit vehicle access to mitigation areas.   | Repairs to the T-post fencing will be made as needed.  |
| Upper Deck (Deck A)                                | 3 | Improve root zone and soil conditions  | This will be addressed when the plans for Deck A is developed. Actions were taken to address improving the root zone in Decks B & C; it is expected that similar actions will be incorporated into the plans for Deck A.                         |
| Upper Deck (Deck A)                                | 4 | Plant natives in areas dominated with non-natives  | This will be addressed when the plans for Deck A are developed. Various planting methods were used for the construction of the pilot project on Decks B & C; it is expected that similar actions will be incorporated into the plans for Deck A. |
| Upper Deck (Deck A)                                | 5 | Reseeding – apply native seeds during the rainy season after soil mounds have been established                       | Deck A was partially regraded to fill in ponding locations. Reseeding is anticipated in late 2026  |

Rincon also recommended that a monitoring biologist should be present during weed control activities or the native plants should be flagged to ensure only non-native species are removed. A monitoring biologist will be consulted prior to any weed control activities to ensure native plants are protected.

Architerra and Rincon continue to provide support to the Oakridge maintenance personnel to assist in removal of the invasive weeds on both Deck B and C. Architerra has pointed out some of the more aggressive weeds that have flourished since the Saddle Ridge Fire. Architerra provided them with images of the invasive weeds to help identify and target these invasive species. Oakridge Landscape have been diligently removing Russian Thistle, Wild Oat, Shortpod Mustard, Red Brome Grass, False Barley, Tree Tobacco, and Yellow Star Thistle that took hold in the burned barren areas.

### 5.2 Rincon Recommendations for County Sage Mitigation Area

Table 2 presents a summary of the recommendations proposed by Rincon based on the assessment of the County Sage Mitigation Area and the proposed actions. Please refer to the full recommendations in the Rincon reports in Attachment 2.

**Table 2 – Rincon Recommendations and Proposed Actions – County Sage Mitigation Area, Fourth Quarter 2025**

| AREA                        | RECOMMENDATION  | PROPOSED ACTION   |
|-----------------------------|---|---|
| County Sage Mitigation Area | 1<br>Create benches to control soil erosion and improve soil conditions to improve plant establishment and seed dispersal | Rincon and ADG continue to evaluate recommendations from the County Task Force and UltraSystems.      |
| County Sage Mitigation Area | 2<br>Reseed and plant container plants  | A trail test pilot plan will be discussed with California Native shrubs.                              |
| County Sage Mitigation Area | 3<br>Use soil amendments  | A trial test plot would need to be developed. This recommendation will be considered at a later date. |

|                             |   |   |  |
|-----------------------------|---|---|--|
| County Sage Mitigation Area | 5 | Signage – Install signage indicating revegetation efforts.                | Due to the slopes, stormwater channel and overall difficulty to access this area, personnel are limited to access this area. |
| County Sage Mitigation Area | 6 | Weed Control – Continue weeding as needed on a quarterly basis.           | Personnel continues to evaluate the current status.  |
| County Sage Mitigation Area | 7 | Prohibit Access – continue to prohibit vehicle access to mitigation deck. | Upper entrance has a locked gate, no further action is required.   |

### 5.3 Architerra Inspection for City South Sage Mitigation Pilot Project Area – Fourth Quarter 2025

The inspection report is included in Attachment 3 along with photos of the area taken at the photo stations.

### 5.4 Quarterly Assessment of City South Sage Pilot Project Area

The methodology for assessment of the City South Sage Pilot Project Area developed by Rincon (formerly JMA) was included in the first quarter 2015 Vegetation Report. The evaluation report for the fourth quarter of 2025 based on this methodology is included in Attachment 4 and Attachment 5 for Deck C and Deck B, respectively. Concerns for the county-side stability for soil erosion have been addressed with the filling in of low-lying areas throughout the decks with soil. The recent rain events through December have shown that the filling and grading of these areas have been successful in minimizing erosion and ponding.

## 6.0 Status of Other Vegetated Areas

### Big Cone Douglas Fir Tree Mitigation

As reported in the vegetation report for the first quarter of 2015, 200 Big Cone Douglas fir tree saplings were planted the third week of March 2015. These big cone Douglas fir pine trees continue to be monitored and maintenance activities were conducted in this mitigation area for 2022 and into the future.

A meeting with Rincon biologist was conducted on November 18, 2022 at the Big Cone Mitigation area. We will begin to work with local nurseries to help replace and replant some of the existing dead big cone pine and canyon oak. We are also evaluating a new location for planting more big cone pines and canyon oak in this area, and finally to establish healthy big cone pine and canyon oak in a timely established schedule. Plans to replenish the mitigation bank will be continued from seed collection in quarter two 2025 and quarter three 2025. During quarter four 2025 seeds were potted and are currently in the process of

germination. Once saplings are viable, they will be planted in the mitigation area on site. This planting is anticipated in the fall of 2026.

### PM10 Berm

Republic Services hosted an Adopt-A-Tree event for employees and their family members. On Saturday, November 14<sup>th</sup>, 2020, at 2:00 pm, Fourteen (14) Coast Live Oak trees were planted in critical areas of the PM10 Berm that was damaged during the Saddleridge Fire. Architerra and JMA (i.e. Rincon) assisted in the planting efforts with their expertise and knowledge of tree growth and ideal planting locations.



### Front Entrance Toe Berm

The proposed project involves the development of a landfill termination berm and construction of a roadway. There were 20 coast live oak trees surveyed within the project footprint by Rincon and project leads. One of the oak trees was dead, and all of them would be removed by the project activities. There are currently 48 coast live oak trees in the landfill's mitigation bank. As noted, the 20 coast live oak trees would be removed by the proposed project, therefore at a mitigation ratio of 2:1, a total of 40 coast live oak trees will be deducted from the landfill's oak tree mitigation bank, leaving 4 oak trees remaining in the bank for future removals at the landfill, if needed. A report detailing the survey is located in Attachment 6.

### Donation to Local Community

As part of community outreach, a rancher in the area asked if he could plant some oak trees on his ranch nearby, and Sunshine Canyon agreed it would be a great idea. Thereafter on September 9<sup>th</sup> 2021, twenty-two (22) coast live oaks and two sycamores were donated from the Sunshine Canyon nursery and given to the rancher. The rancher mentioned the oak trees shall provide shade for his livestock and beautify the surrounding private property and was very pleased with the trees.

In April 2025, the site gave away 33 Live Oak and Coastal Scrub Oaks to the City of Los Angeles to be planted at local parks.



Please do not hesitate to contact me at (818) 923-4816 if you have any questions.

Regards,

*Andrew Asaro*

Andrew Asaro

Environmental Specialist

Sunshine Canyon Landfill

Cc: Mr. George Kasikarin, SCL LEA

Mr. David Thompson, SCL LEA

Ms. Tiffany Butler, City of Los Angeles, Department of City Planning

Ms. Devon Zatorski, City of Los Angeles Department of City Planning

Ms. Jason Valencia, City of Los Angeles, Department of City Planning

Mr. Enrique Casas, Los Angeles Regional Water Quality Control Board

Mr. Alex Fitchmun, County of Los Angeles, Department of Public Works  
Mr. Edgar De La Torre, County of Los Angeles, Department of Regional Planning  
Mr. Phillip Chen, County of Los Angeles, Department of Regional Planning  
Mr. Steven Jareb, County of Los Angeles, Department of Regional Planning  
Mr. Wayde Hunter, SCL CAC  
Mr. Jim Aidukus, UltraSystems  
County DPW Landfill Unit

***Attachments***

- |              |   |
|--------------|---|
| Attachment 1 | Rincon Progress Report, 4Q2025 City-Side Sage Mitigation Area   |
| Attachment 2 | Rincon Progress Report, 4Q2025 County-Side Sage Mitigation Area   |
| Attachment 3 | Architerra Design Group, Field Observation Report, South City Sage Mitigation Pilot Project – 4Q2025 with Photo Log |
| Attachment 4 | Rincon Quarterly Monitoring Report - Coastal Sage Scrub Deck C Pilot Study, 4Q2025                                  |
| Attachment 5 | Rincon Quarterly Monitoring Report - Coastal Sage Scrub Deck B Pilot Study, 4Q2025                                  |
| Attachment 6 | Rincon Sunshine Canyon Landfill Ultimate Entry Improvement Project, Oak Tree Survey Report                          |

***Drawing***

- |           |                                     |
|-----------|-------------------------------------|
| Drawing 1 | Site Vegetation Status and Activity |
|-----------|-------------------------------------|



**ATTACHMENT 1**



January 9, 2026  
Project No: 21-11086

Andrew Asaro  
Environmental Specialist  
Republic Services  
14747 San Fernando Road  
Sylmar, California 91342  
Via email: [AAsaro@republicservices.com](mailto:AAsaro@republicservices.com)

**Subject: Qualitative Monitoring Report for the City-Side Sage Mitigation Area – 4<sup>th</sup> Quarter  
2025 Sunshine Canyon Landfill, Sylmar, California**

Dear Mr. Asaro,

On December 30, 2025, Rincon Consultants performed the fourth quarter qualitative monitoring of 2025 for the Republic Services City-Side Sage Mitigation Area. This report qualitatively documents the current conditions of the City-Side Sage Mitigation Area with regards to the Landfill's coastal sage scrub restoration efforts. The City-Side Sage Mitigation Area consists of the Lower Deck, Middle Deck, and Upper Deck (including slope between middle and upper decks), which are discussed in detail below.

## **General Conditions**

### **Lower Deck**

In 2014, the Landfill initiated a pilot study at the Lower Deck (Deck C) to assess three different seeding applications of native species that included hand broadcasting, imprinting, and hydroseeding. Some container plants were also planted at the Lower Deck, but in low quantities. Germination, establishment, and natural recruitment of native plants ensued; however, the Lower Deck and surrounding area burned during the Saddleridge Fire in October 2019. The fire burned a substantial amount of the Lower Deck, scorching some of the vegetation entirely and partially burning some of the vegetation. The fire also burned the irrigation system, and the vegetation has been without supplemental water ever since.

The Lower Deck appears to have fully recovered from the fire, as evidenced by germination from the seed bank in the soil and resprouting of below- and above-ground plant parts. The most prevalent native plant species observed within the Lower Deck in the fourth quarter of 2025 were California sunflower (*Encelia californica*), big saltbush (*Atriplex lentiformis*), allscale saltbush (*Atriplex polycarpa*), and beardless wild rye (*Elymus triticoides*). Immediately following the Saddleridge Fire, areas that were previously dominated with saltbush species were largely replaced by mats of non-native grasses such as red brome (*Bromus rubens*), ripgut brome (*Bromus diandrus*), foxtail barley (*Hordeum murinum*), and non-native forbs such as redstem filaree (*Erodium cicutarium*). Native shrub species have resprouted and are fully re-established, and have shown signs of continuous growth since the fire. Seedlings of native shrub species have germinated from seed in the seed bank, indicating that a sustainable shrubland vegetation community has established in the Lower Deck. Due to this increased shrub establishment, non-native forbs have decreased in cover as they have been outcompeted. Beardless wild rye, a native grass species, has shown a moderate amount of recovery from previous weeding activities (i.e., weed whipping) performed by landfill staff in fall 2024.



Between the third and fourth quarter of 2025, non-native annual plant species have germinated in moderate quantities as a result of recent winter rainfall events that occurred between November and December 2025, thereby showing an increase in abundance and cover in the Lower Deck. This species is intermixed with non-native forbs and grasses and is easy to misidentify as a non-native grass species. Non-native plant species cover is anticipated to increase throughout the winter and spring months of 2026. The majority of non-native vegetation observed at the Lower Deck in the fourth quarter of 2025 consisted of non-native annual grass germinants (e.g., red brome, ripgut brome, and foxtail barley), short podded mustard (*Hirschfeldia incana*), and tocalote (*Centaurea melitensis*).

## Middle Deck

In 2019, the Landfill initiated a pilot study at the Middle Deck (Deck B) to assess germination and establishment rates (e.g., percent cover) of soil imprinting and broadcast seeding methods. Some container plants were also planted at the Middle Deck, but in low quantities. Germination and establishment of native plants ensued; however, there was not much evidence of natural recruitment due to the short timeframe from when the deck was seeded to when it burned during the Saddleridge Fire, which also decimated the irrigation system.

Native vegetation observed at the Middle Deck during the fourth quarter of 2025 consisted of woody species such as brittlebush (*Encelia farinosa*), California sunflower (*Encelia californica*), big saltbush, California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), coastal goldenbush (*Isocoma menziesii*), coyote brush (*Baccharis pilularis*), and herbaceous species such as beardless wild rye. Native shrub species diversity in the Middle Deck is generally greater than that observed in the Lower and Upper Decks. Of all the observed native species, brittlebush, big saltbush, California sagebrush, and California buckwheat are in the greatest abundance. The native shrub species were primarily in their vegetative state.

Non-native plants are in moderate abundance throughout the Middle Deck. Dominant non-native plants observed include exotic forbs such as short podded mustard, tocalote, and small flowered iceplant (*Mesembryanthemum nodiflorum*). These species were observed in their vegetative state during the fourth quarter of 2025. Small flowered iceplant has decreased in cover between 2024 and 2025 likely a result of decreased rainfall during the 2024 wet season. Non-native plants are anticipated to increase throughout winter and spring of 2026 as a result of increased water availability from winter precipitation events.

## Upper Deck

Overall, the Upper Deck (Deck A) continues to be sparsely covered with native vegetation due to compacted and poor soil conditions. However, in the southern-center of the Upper Deck, vegetation cover is higher than in other areas and includes native species such as California buckwheat, as well as non-native species such as red brome and short podded mustard. The presence of vegetation in the southern-center portion of the Upper Deck generally demonstrates that the soils in this area are suitable for supporting vegetation, both native and exotic. However, the soils elsewhere on the Upper Deck appear to be heavily compacted and gravelly, and vegetation coverage in these areas is sparse. Evidence of previous seeding is no longer discernible within the portions of the Upper Deck where plant establishment is visibly poor.

Non-native herbaceous species that dominate the southern-central portion of the Upper Deck currently include red brome, short podded mustard, and tocalote. California buckwheat is the most dominant native perennial woody plant species on the Upper Deck, and is currently in its vegetative state.



However, as described in previous monitoring reports, overall natural recruitment of native plant species within the Upper Deck is low due to poor and dry soil conditions.

**Table 1 Summary of Observations in the Lower, Middle, and Upper Decks in Quarter 4, 2025**

| Location    | Native Plant Vegetation |  |                          |                                | Exotic Plant Vegetation |                    |                    |
|-------------|-------------------------|--|--------------------------|--------------------------------|-------------------------|--------------------|--------------------|
|             | Native Plant Cover      | Plant Health Issues                      | Height of Native Species | Native Species Richness        | Phenological State      | Exotic Plant Cover | Phenological State |
| Lower Deck  | Moderate-High           | Competition from non-native forb species | 12-72 inches             | Shrubs: Moderate<br>Herbs: Low | Vegetative              | Moderate           | Vegetative         |
| Middle Deck | Moderate                | Competition from non-native forb species | 12-72 inches             | Shrubs: Moderate<br>Herbs: Low | Vegetative              | Moderate           | Vegetative         |
| Upper Deck  | Low                     | Poor soils                               | 12-36 inches             | Shrubs: Low<br>Herbs: Low      | Vegetative              | High               | Vegetative         |

## Recommendations

### Lower and Middle Decks

#### Weed Control

- Implement a year-round weed control program to control non-native species. The weed control program should incorporate both chemical and mechanical control practices and should be initiated in the late winter to early spring prior to seed set, which typically occurs between the months of February and April. This will prevent further dispersal of exotic plants.
- Following weed control, any dead material harboring seeds should be removed to an off-site location to the extent feasible. Dense areas covered with red brome, ripgut brome, foxtail barley, and short podded mustard should be controlled by removing flowers and immature seeds heads before they drop. These areas should be reseeded with native herbaceous species that are known to grow well in the Lower and Middle decks, such as beardless wild rye and yarrow (*Achillea millefolium*).
- A qualified biologist should be present during weed control activities or flag the native plants that should remain prior to weed control activities to ensure only non-native species are removed and to minimize damage to native plant species to the greatest extent feasible. If a contractor is responsible for weed control, the contractor should verify with the Landfill that all personnel are experienced in native and non-native plant identification.
- Weeding is best performed just before, or at the onset of flowering, but before seed set. If seeds are already present, additional care should be taken to remove the plants with the seeds attached, or the seeds should be removed from the plants prior to the plant removal. A consistent weed abatement schedule will reduce the potential for non-natives to set seed. Soil disturbance should be limited by hand weeding, wherever possible, and weeds should be disposed of off-site to avoid any reinfestation through reseeding or from plant propagules. If hand weeding is not possible, the monitoring biologist should be consulted regarding the appropriate method of weed removal. For

example, using mechanical equipment to remove flowers and immature seed heads may be appropriate where dense mats of non-native grasses have established. If there continues to be high incidence of weed infestation, weed control may need to be increased to every four to six weeks. Otherwise, weeds should continue to be monitored and controlled on a quarterly basis.

### **Irrigation**

- The irrigation systems in the Lower and Middle decks were burned during the Saddleridge Fire in October 2019. The vegetation has been without supplemental water ever since. Supplemental irrigation may be necessary if native plants show signs of desiccation stress, which is typically brought about by consecutive drought years. If indicators of drought stress are observed, it is recommended that the irrigation system within the Lower and Middle decks are re-installed to promote germination and growth of native plant species. So far, the 2025-2026 winter season has shown trends of above average rainfall for the season.

### **Prohibit Access**

- Continue to prohibit vehicle access to mitigation areas.

### **Upper Deck**

#### **Improve Root Zone and Soil Conditions**

- Continue to investigate ways to improve the soil layer to increase the root penetration and saturation zone to enable plant growth in heavily compacted areas. Consider applying soil in random undulations or uneven mounds to improve soil porosity and filtration and to control soluble salts from leaching from existing layer.
- Prior to seeding (broadcast, hydroseeding, or imprinting) of native species, incorporate a soil amendment or mulch with high organic content by tilling it into the top 12 inches of the existing compacted soils to improve soil texture, drainage, porosity, and aerobic conditions. If an organic mulch or soil amendment is not feasible or available, incorporate available soil from borrow sites within the landfill that have the appropriate soil properties, so long as these borrowed soils have been determined to not have toxic conditions, such as boron or high salinity, and lack a non-native seed bank.

#### **Plant Natives in Areas Dominated with Non-Natives**

- The vegetated areas on the Upper Deck that are currently dominated with non-native annual species have decent soil-texture conditions. These areas are less compacted than adjacent areas that are gravelly and mostly devoid of vegetation. In general, the soil texture within the vegetated areas with non-native vegetation is friable down to approximately 8-12 inches in depth. Various planting methods (i.e., planting container plants and hydroseeding) may be used to re-establish native plants on the Upper Deck where non-natives currently dominate.

### **Reseeding**

- Following the application of soil mounds as previously described, apply native seed (by means of broadcast seeding, hydroseeding or drilling) during the rainy season, between December and March, or prior to a forecasted rain event.



## Weed Control

- Implement a year-round weed control program to control non-native species. The weed control program should incorporate both chemical and mechanical control practices. Following weed control, any dead material harboring seeds should be removed to an off-site location to the extent feasible.
- A qualified biologist should be present during weed control activities or flag the native plants that should remain prior to weed control activities to ensure only non-native species are removed and to minimize damage to native plant species to the greatest extent feasible. A biologist should verify that the weed removal methodology does not encourage re-colonizing of non-native plant species.
- Weeding is best performed just before, or at the onset of flowering, but before seed set. If seeds are already present, additional care should be taken to remove the plants with the seeds attached, or the seeds should be removed from the plants prior to the plant removal. A consistent weed abatement schedule will reduce the potential for non-natives to set seed. Soil disturbance should be limited by hand weeding, wherever possible, and weeds should be disposed of off-site to avoid any reinfestation through reseeding or from plant propagules. If hand weeding is not possible, the monitoring biologist should be consulted regarding the appropriate method of weed removal. For example, using mechanical equipment to remove flowers and immature seed heads may be appropriate where dense mats of non-native grasses have established. If there continues to be high incidence of weed infestation, weed control frequency may need to be increased. Otherwise, weeds should continue to be monitored and controlled on a quarterly basis.

## Prohibit Access

- Continue to prohibit vehicle access to mitigation areas.

Thank you for the opportunity to work with you on this important project. Please contact Kyle Gern if you have questions concerning the contents of this report. He may be reached by telephone at 805-844-1492, or by email at [kgern@rinconconsultants.com](mailto:kgern@rinconconsultants.com).

Sincerely,  
**Rincon Consultants, Inc.**

Kyle Gern  
Biologist

## Attachments

- Attachment 1 Figure 1 Photograph Locations
- Attachment 2 Site Photographs

# **Attachment 1**

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Figure 1 Photograph Locations

Figure 1 Photograph Locations



Imagery provided by Microsoft Bing and its licensors © 2023.  
 Photo Locations have been georeferenced and are approximate locations.

21-11086 B10  
 Fig. 2 City Sage - Photo Locations

# **Attachment 2**

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Site Photographs



**Photograph 1.** Facing west at Lower Deck. View of eastern limits dominated by saltbush species (*Atriplex* spp.) and California sunflower (December 30, 2025).



**Photograph 2.** Lower Deck from western boundary (December 30, 2025).



**Photograph 3.** Facing east at the Middle Deck from western boundary (December 30, 2025).



**Photograph 4.** Facing west at the easterly-facing slope located between the Middle and Upper decks. The vegetation on the slopes between the Middle and Upper deck is dominated by California buckwheat and non-native annual grasses (December 30, 2025).



**Photograph 5.** Facing northeast at the Upper Deck. This area is compacted and gravelly and continues to be problematic for supporting vegetation. Non-native annual grasses and forbs, and California buckwheat shrubs are evident in the background (December 30, 2025).



**Photograph 6.** Facing southwest at the Upper Deck. This area is primarily dominated by California buckwheat, wild oats, brome grasses, and short podded mustard (December 30, 2025).



**Photograph 7.** Facing southeast at the western portion of the Upper Deck. This area is dominated by short podded mustard, Australian saltbush, and California buckwheat (December 30, 2025).

**ATTACHMENT 2**



January 9, 2026  
Project No: 21-11086

Andrew Asaro  
Environmental Specialist  
Republic Services  
14747 San Fernando Road  
Sylmar, California 91342  
Via email: AAsaro@republicservices.com

**Subject: Qualitative Monitoring Report for the County-Side Sage Mitigation Area – 4<sup>th</sup> Quarter  
2025 Sunshine Canyon Landfill, Sylmar, California**

Dear Mr. Asaro,

On December 30, 2025, Rincon Consultants conducted the fourth quarter qualitative monitoring of 2025 for the County-Side Sage Mitigation Area (mitigation area). This report documents the current conditions of the mitigation area.

## **General Conditions**

### **Hydroseeded Areas**

Germination and plant growth from hydroseeding that occurred several years ago is not discernible in some portions of the mitigation area. Areas that are moderately covered with native and non-native vegetation are concentrated in the southeastern portion of the mitigation area. The northern and upper portions of the mitigation area continue to be barren and problematic for establishment of vegetation, primarily because of highly eroded soils, steep slopes, and boron-toxic soils (see *Recommendations* section). However, there are some small patches of vegetation that have established in the northern-central portion of the mitigation area and include shrubs such as California buckwheat (*Eriogonum fasciculatum*), deerweed (*Acmispon glaber*), and California sagebrush (*Artemisia californica*).

Native plant coverage is similar to the previous quarterly monitoring reports. The southern half of the mitigation area has relatively good coverage of native species, mostly California buckwheat and California sunflower (*Encelia californica*), which were in their vegetative state during the fourth quarter of 2025. Established laurel sumac (*Malosma laurina*) individuals are present as well. Native vegetation coverage is assumed to be a direct result of seeding; however, some natural recruitment of native plant species is apparent based on the various sizes of shrubs and the presence of shrub seedlings in the understory of mature shrubs. Due to rocky (hydrophobic) soil conditions, soil erosion and boron-toxic soils on the northern-half and upper portions of the mitigation area, minimal plant growth is present in these areas. In addition, the lack of plant establishment in these areas has resulted in development of erosional features, which have become more prominent following heavy rainfall events between 2022 and 2025.

Annual non-native grasses and forbs currently dominate the understory and serve as ground cover in most of the vegetated areas. Brome grasses (*Bromus* spp.), wild oats (*Avena fatua*), short podded mustard (*Hirschfeldia incana*), Russian thistle (*Salsola tragus*), and tocalote (*Centaurea melitensis*) are the most dominant non-native species present and comprise approximately 15 to 25 percent of the total cover. Annual non-native cover is anticipated to increase throughout the winter and spring months of 2026 as a result of increased water availability.



California buckwheat is currently the most dominant native species, with California sagebrush and California sunflower present as sub-dominants. Native species contribute approximately 75 to 80 percent of the vegetation cover in areas where vegetation is present. Other less dominant native species observed include golden bush (*Ericameria linearifolia*), coyote brush (*Baccharis pilularis*), black sage (*Salvia mellifera*), deerweed, and laurel sumac.

## Seed Mix Areas

Like the hydroseeded areas, germination and plant growth from the seed mix areas that occurred several years ago is not discernible. As described in previous monitoring reports, a substantial portion of the mitigation area continues to be bare and problematic, which has inhibited the establishment and growth of vegetation. However, in areas where vegetation is present, there is a moderate coverage of native species (e.g., California buckwheat and California sunflower).

As described in the *Hydroseeded Areas* discussion above, a moderate cover of native plants exists within vegetated areas in the southeastern portion of the mitigation area, and annual non-native grasses and forbs currently dominate the understory.

## Native Plant Conditions

The plant cover rating indicated below in Table 1 applies where vegetation is dominant in the southeastern portion of the mitigation area. Vegetation cover is moderate in the southeastern portion of the mitigation area and sparse along the upper slopes where rocky and eroded soil conditions occur, and in the northern portion of the mitigation area due to problematic soil conditions. As a result, most of the northern and upper portions of the mitigation area continue to have minimal coverage. Native vegetation coverage is moderate (approximately 75 to 80 percent) in vegetated areas and non-native plant cover is relatively low. Bare areas and non-native annual grasses are intermixed; however, the northern and upper areas continue to be mostly bare where erosion and rocks are present.

California buckwheat is dominant and California sunflower is sub-dominant. Establishment of vegetation is problematic due to rocky soils with poor soil structure, and boron toxicity has made plant growth (i.e., seed germination and recruitment) difficult. The species richness is low to medium within vegetated areas; however, species richness is considerably low when considering the entire mitigation area.

## Exotic Plant Conditions

Annual non-native weed species consist primarily of brome grasses, wild oats, and mustards, which were primarily germinating, an early vegetative state, during the fourth quarter of 2025, and opportunistically present in moderate amounts, which aligns with their natural growth. Russian thistle, a late-season plant species, is currently fruiting. Non-native plant cover is anticipated to increase throughout the winter and early spring months of 2026 as a result of increased water availability.



**Table 1 Summary of Native and Exotic Plant Cover in the County-Side Sage Mitigation Area in Quarter 4, 2025**

| Location                         | Native Plant Vegetation |                     |                          |                         |                    | Exotic Plant Vegetation |                    |
|----------------------------------|-------------------------|---------------------|--------------------------|-------------------------|--------------------|-------------------------|--------------------|
|                                  | Native Plant Cover      | Plant Health Issues | Height of Native Species | Native Species Richness | Phenological State | Exotic Plant Cover      | Phenological State |
| County-Side Sage Mitigation Area | Moderate                | Poor soils, erosion | 12-60 inches             | Medium                  | Vegetative         | Moderate                | Vegetative         |

## Recommendations

The following recommendations within the mitigation area are suggested based upon the field survey performed in the fourth quarter of 2025.

- **Create Benches.** Consider creation of several benches throughout the mitigation area to control soil erosion and to improve soil conditions to improve plant establishment and seed dispersal. This technique has been widely used on steep slopes and in areas where soil erosion is problematic. This technique also allows for opportunities to introduce a high-quality soil layer above the poor soils that exist.
- **Reseed and Plant Container Plants with Irrigation.** If creation of benches is feasible, planting methods should include hydroseeding, broadcast seeding, and/or imprinting no more than 10 days prior to a forecasted rain event, unless an irrigation system is installed. Planting with container plants with supplemental irrigation should also be considered.
- **Use Soil Amendments.** Incorporate a soil amendment or mulch with high organic content in select areas as determined by a restoration specialist.
- **Signage.** Install signs indicating that the area is undergoing revegetation.
- **Weed Control.** Continue weed control program on a quarterly basis.
- **Prohibit Access.** Prohibit equipment access to mitigation area.

Thank you for the opportunity to work with you on this important project. Please contact Kyle Gern if you have questions concerning the contents of this report. He may be reached by telephone at (805) 844-1492, or by email at [kgern@rinconconsultants.com](mailto:kgern@rinconconsultants.com).

Sincerely,  
Rincon Consultants, Inc.

Kyle Gern  
Biologist

## Attachments

- Attachment 1 Figure 1 Photograph Locations
- Attachment 2 Site Photographs

# **Attachment 1**

---

Figure 1 Photograph Locations

Figure 1 Photograph Locations



# **Attachment 2**

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Site Photographs



**Photograph 1.** Facing southwest at the County-Side Sage Mitigation Area (foreground), and the surrounding slope outside the mitigation area (background) (December 30, 2025).



**Photograph 2.** Facing northwest at the northern portion of the County-Side Sage Mitigation Area where plant growth has been problematic due to poor soil conditions (December 30, 2025).

**ATTACHMENT 3**





**ARCHITERRA DESIGN GROUP**

**FIELD OBSERVATION REPORT**

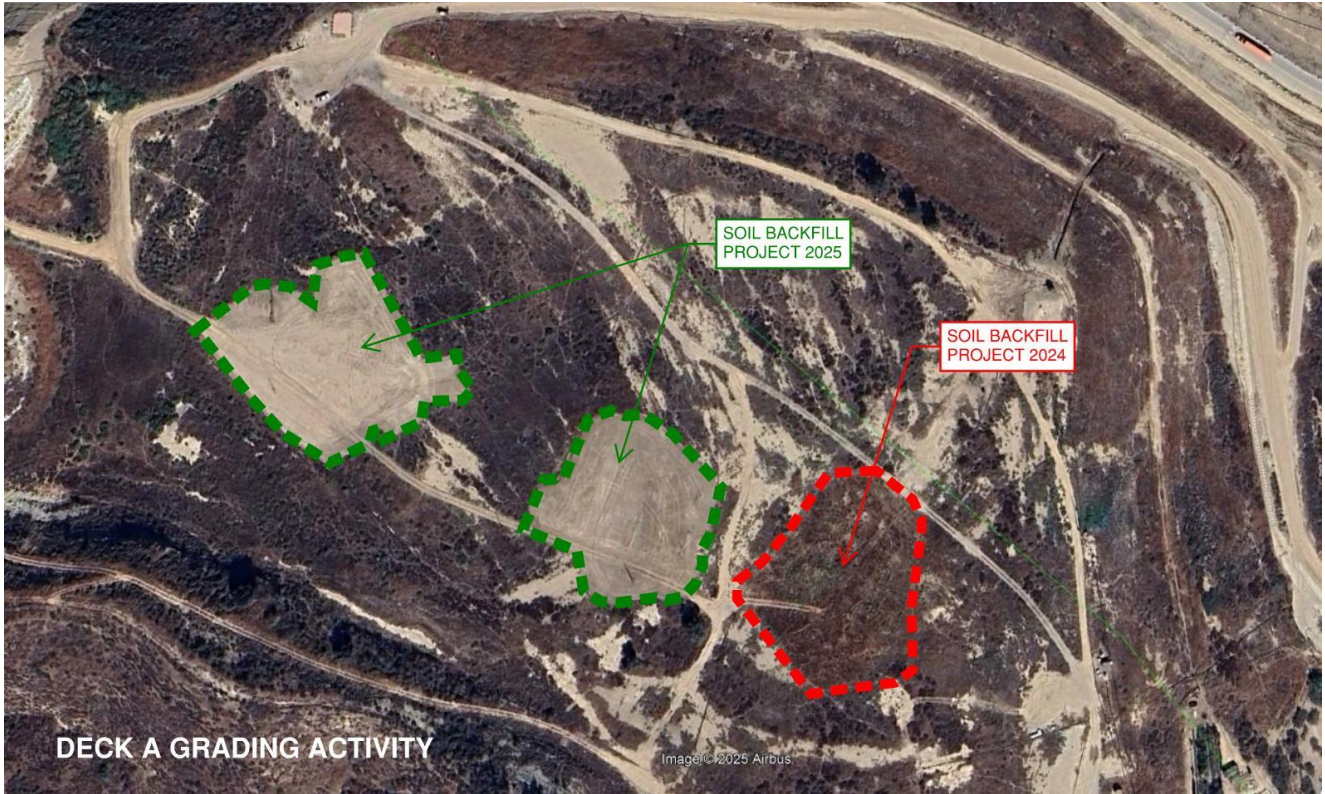
|                                  |   |
|----------------------------------|---|
| DATE OF VISIT:                   | 12/18/25                                |
| <b>PROJECT:</b>                  | <b>Sunshine Canyon Mitigation Sites</b> |
| PROJECT NUMBER:                  | 1214                                    |
| PROJECT MANAGER:                 | Gregg Denson                            |
| SITE INSPECTION #:               |   |
| PURPOSE OF VISIT:                | Review site conditions/Photo Catalog    |
| TIME OF SITE VISIT:              | 10:30am                                 |
| WEATHER/TEMPERATURE:             | Clear 55° - Wind 5-10 mph               |
| ESTIMATED % COMPLETED:           | 100%                                    |
| CONFORMANCE WITH SCHEDULE (+, -) |   |

|                   |  |
|-------------------|--|
| WORK IN PROGRESS: | Weed abatement / Monitoring Period /Construction Observation |
| PRESENT ON SITE:  | Gregg Denson   |

A site visit walk and evaluation has been completed to review the Venturan CSS vegetation establishment on Decks A, B, and C. Additional items noted during the site visit are as follows:

**City-Side Sage Mitigation (Deck A):**

- Last summer multiple locations on Deck A were filled in where subsidence occurred and ponding of winter rains existed. Republic Services repaired these areas providing positive drainage from these locations. These areas are mostly barren and/or have some invasive weed growth established. Invasive species include: Shortpod Mustard (*Hirschfeldia incana*), Russian Thistle (*Salsola* ssp.), Horseweed (*Erigeron canadensis*), Tree Tobacco (*Nicotiana glauca*), Yellow Star Thistle (*Centaurea solstitialis*), Common Sowthistle (*Sonchus oleraceus*), Buttonweed (*Althaea officinalis*), Red-Stem Filaree (*Erodium cicutarium*), and Red Brome (*Bromus madritensis* ssp. *rubens*).



Deck A looking south (December 2025)

**City-Side Sage Mitigation (Trial Site Deck B):**

- Due to the high winds on the previous day and moderate winds during my visit, the decks are loaded with trash debris. Trash should be collected and deposited of and removed from the decks.
- The abundance of rainfall in December has triggered the new growth of the following weed species: Shortpod Mustard (*Hirschfeldia incana*), and Stinkwort (*Dittrichia graveolens*). Slenderleaf Iceplant (*Mesembryanthemum nodiflorum*) has been flourishing on the deck over the last few years and has come out of the

drought dormancy stage. This invasive groundcover actively grows during the wet season of the year.

- Large Tamarix and California Pepper Trees that were documented for removal in past reports remain on Deck B. These trees need to be removed to prevent the possibility of overturn and cap damage during high wind events.



Slenderleaf Iceplant (*Mesembryanthemum nodiflorum*)



Thriving portions of Venturan Coastal Sage Scrub vegetation on Deck B



Mature invasive California Pepper Trees on Deck B



Invasive Tamarisk on Deck B



Invasive California Pepper Tree (*Schinis molle*) near gas well previously noted for removal (right)



Juvenile California Buckwheat (*Eriogonum fasciculatum*) at Deck B area

**City-Side Sage Mitigation (Trial Site Deck C):**

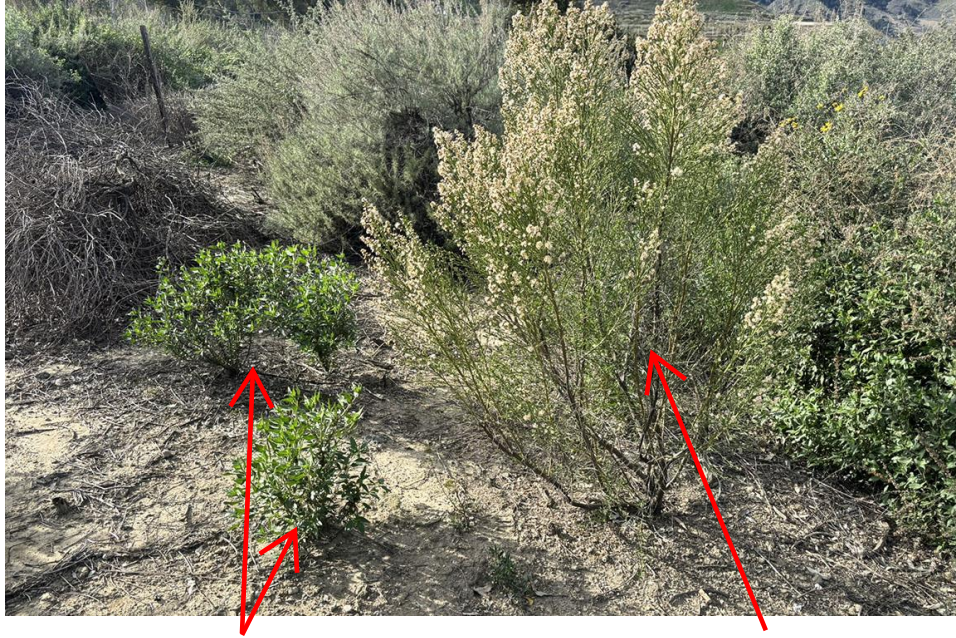
- Deck C native vegetation is actively coming out of dormancy much earlier than in 2024. The Venturan Coastal Sage Scrub habitat is healthy and the canopies are closing in on each other with densely vegetated areas and open gaps where previous weed infestations existed, and native VCSS were mistakenly removed.



Black Sage (*Salvia mellifera*) and blooming Coyote Bush (*Baccharis pilularis*)



Wild Creeping Rye Grass (*Leymus triticoides*) emerges where previously scalped



Smaller Coast Sunflower (*Encelia californica*) and Coyote Bush on Deck C

- Deck C areas where were previously cleared of weeds are now showing significant weed growth due to the precipitation and warmer weather in January. The maintenance contractor will need to take aggressive actions to minimize weed growth of the following species during this normal rainfall pattern: Shortpod Mustard (*Hirschfeldia incana*), Russian Thistle (*Salsola* ssp.), Horseweed (*Erigeron canadensis*), Tree Tobacco (*Nicotiana glauca*), Yellow Star Thistle (*Centaurea solstitialis*), Common Sowthistle (*Sonchus oleraceus*), Buttonweed (*Althaea officinalis*), Red-Stem Filaree (*Erodium cicutarium*), Red Brome (*Bromus madritensis* ssp. *rubens*). These species should be removed prior to flowering and seed disbursement.



Juvenile Coast Sunflower (*Encelia californica*) amongst large patches of Shortpod Mustard (*Hirschfeldia incana*) on west side of Deck C



California Sagebrush (*Artemisia californica*) amongst large patches of Shortpod Mustard on east side of Deck C



Native Deerweed grows out of Shortpod Mustard on Deck C



Shortpod Mustard emerging (left) and invasive Eucalyptus species on east side of Deck. Removals should be focused on these weed species and careful removal of the Eucalyptus Tree which now is approaching 20' in height



Debris remnants of Coast Sunflower mistakenly cut back in summer of 2025



Native Saltbush seedlings spouting at backside of straw wattle on Deck C



Invasive Wild Tobacco on Deck C

Signed: Gregg Denson

Date: 1/21/26

DISTRIBUTION

Republic Services



Contractor



President (Gregg Denson)



Other \_\_\_\_\_





**Photo Station #1 - December 2024 (North)**



**Photo Station #1 - December 2025 (West)**



**Photo Station #1 - December 2024 (East)**



**Photo Station #1 - December 2025 (East)**



**Photo Station #1 - December 2024 (West)**



**Photo Station #1 - December 2025 (West)**



**Photo Station #2 - December 2024 (North)**



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**Photo Station #7 - December 2024 (South)**



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**Photo Station #8 - December 2025 (West)**



**Photo Station #9 - December 2024 (East)**



**Photo Station #9 - December 2025 (East)**



**Photo Station #9 - December 2024 (South)**



**Photo Station #9 - December 2025 (South)**



**Photo Station #9 - December 2024 (West)**



**Photo Station #9 - December 2025 (West)**

**ATTACHMENT 4**



January 9, 2026  
Project No: 21-11086

Andrew Asaro  
Environmental Specialist  
Republic Services  
14747 San Fernando Road  
Sylmar, California 91342  
Via email: [AAsaro@republicservices.com](mailto:AAsaro@republicservices.com)

**Subject: Coastal Sage Scrub City South C Trial Plot 4<sup>th</sup> Quarter 2025 Monitoring Report,  
Sunshine Canyon Landfill**

Dear Mr. Asaro,

This monitoring report has been prepared by Rincon Consultants (Rincon) to inform Republic Services on the status of coastal sage scrub restoration at the Sunshine Canyon Landfill located at 14747 San Fernando Road, Sylmar, California 91342. Specifically, this report serves to document the abundance of vegetation at the Coastal Sage Scrub City South C Trial Plot in the fourth quarter of 2025.

## Methods

On December 30, 2025, Rincon monitored the Coastal Sage Scrub City South C Trial Plot (trial plot) at the Sunshine Canyon Landfill, which constitutes the fourth quarter of monitoring for 2025. The sample methodology generally followed the *Methodology for Monitoring Percent Cover and Species Richness within Each Seeded Application Method on the Coastal Sage Scrub Pilot Project at the Sunshine Canyon Landfill* (JMA, April 23, 2014). Quadrat sampling of the Coastal Sage Scrub City South C Trial Plot consists of four 50-meter squared quadrats that are randomly sampled within each of the following three seeded areas: hydroseed, imprint, and hand broadcast. The 12 quadrats sampled were randomly selected prior to the first initial monitoring event from a grid that was placed over the entire trial plot, and each quadrat was given a letter (A-L) and delineated in the field with wooden stakes (Attachment 1).

As shown in Attachment 1, three different seeding methods were used as follows:

- Hydroseed (Quadrats A, B, C, and D)
- Imprint (Quadrats E, F, G, and H)
- Hand broadcast (Quadrats I, J, K, and L)

## Absolute Cover

The following qualitative data was collected in each quadrat to determine the absolute cover of native and non-native herbaceous and woody species:

- **Percent basal cover (shrubs).** Visual estimate of the amount of basal cover within each quadrat for all shrub species.
- **Percent basal cover (herbs).** Visual estimate of the amount of basal cover within each quadrat for all herb species.
- **Percent bare ground.** Visual estimate of the amount of available bare ground with no vegetation, but suitable for plant growth.



- **Percent rock or other.** Visual estimate of the amount of unavailable ground for supporting plant growth. Inhibitors generally included rocks and boulders, irrigation lines and valve boxes, and mulch.
- **Percent canopy.** Visual estimate of the percent canopy of each shrub and herbaceous species.
- **Photographs.** A photograph was taken from the southwest corner (facing northeast) of each quadrat.

## Percent Cover

The following quantitative data was collected in each quadrat to determine the percent cover of native and non-native species.

- **Point intercept method.** Sampling began at the southwest corner of each quadrat and continued around the quadrat in a clockwise direction. The species located precisely at every meter point was tallied, including areas of bare ground, rock and other.

## Field Results

Below are the average data collected for each planting method.

### Absolute Cover (Qualitative)

#### Hydroseed – Quadrats A, B, C, and D (Average)

- Percent basal cover (shrubs) – 18%
- Percent basal cover (herbs) – 5%
- Percent bare ground – 9%
- Percent rock or other – 0%
- Percent canopy (shrubs) – 83%
- Percent canopy (herbs) – 9%

#### Imprint – Quadrats E, F, G, and H (Average)

- Percent basal cover (shrubs) – 25%
- Percent basal cover (herbs) – 4%
- Percent bare ground – 11%
- Percent rock or other – 0%
- Percent canopy (shrubs) – 84%
- Percent canopy (herbs) – 7%

#### Hand broadcast – Quadrats I, J, K, and L (Average)

- Percent basal cover (shrubs) – 13%
- Percent basal cover (herbs) – 19%
- Percent bare ground – 5%
- Percent rock or other – 0%



- Percent canopy (shrubs) – 57%
- Percent canopy (herbs) – 39%

### Percent Cover (Quantitative)

The representation of each species within a quadrat was estimated by broad cover classes (<1%, 1-5%, 5-25%, 25-50%, 50-75%, and >75%). The percent cover of each species based upon the point intercept method is presented in Table 1 through Table 3.

**Table 1 Hydroseed – Quadrats A, B, C, and D (Average)**

| Species                        | Plot A         |               | Plot B         |               | Plot C         |               | Plot D         |                                      |            |
|--------------------------------|----------------|---------------|----------------|---------------|----------------|---------------|----------------|--------------------------------------|------------|
|                                | Number of Hits | Percent Cover | Number of Hits | Percent Cover | Number of Hits | Percent Cover | Number of Hits | Percent Cover                        |            |
| <b>Native Shrubs</b>           |                |               |                |               |                |               |                |                                      |            |
| <i>Atriplex canescens</i>      | 1              | 2%            | 8              | 16%           | 5              | 10%           |                |                                      |            |
| <i>Atriplex lentiformis</i>    | 7              | 14%           | 5              | 10%           | 8              | 16%           | 14             | 28%                                  |            |
| <i>Atriplex polycarpa</i>      |                |               | 7              | 14%           | 5              | 10%           |                |                                      |            |
| <i>Encelia californica</i>     | 31             | 62%           | 15             | 30%           | 22             | 44%           | 23             | 46%                                  |            |
| <b>Native Herbs</b>            |                |               |                |               |                |               |                |                                      |            |
| <i>Elymus triticoides</i>      |                |               | 5              | 10%           |                |               |                |                                      |            |
| <b>Non-Native Herbs</b>        |                |               |                |               |                |               |                |                                      |            |
| <i>Bromus diandrus</i>         |                |               |                |               |                |               | 1              | 2%                                   |            |
| <i>Centaurea melitensis</i>    |                |               | 5              | 10%           | 6              | 12%           | 3              | 6%                                   |            |
| <i>Hirschfeldia incana</i>     |                |               | 3              | 6%            |                |               | 4              | 8%                                   |            |
| <i>Medicago polymorpha</i>     |                |               | 1              | 2%            |                |               |                |                                      |            |
| <b>Bare ground</b>             | <b>11</b>      | <b>22%</b>    | <b>1</b>       | <b>2%</b>     | <b>4</b>       | <b>8%</b>     | <b>5</b>       | <b>10%</b>                           |            |
|                                |                |               |                |               |                |               |                | <b>A,B,C,D<br/>Percent<br/>Cover</b> |            |
| Percent Cover Native Shrub     |                | <b>78%</b>    |                | <b>70%</b>    |                | <b>80%</b>    |                | <b>74%</b>                           | <b>76%</b> |
| Percent Cover Native Herb      |                | <b>0%</b>     |                | <b>10%</b>    |                | <b>0%</b>     |                | <b>0%</b>                            | <b>3%</b>  |
| Percent Cover Non-Native Shrub |                | <b>0%</b>     |                | <b>0%</b>     |                | <b>0%</b>     |                | <b>0%</b>                            | <b>0%</b>  |
| Percent Cover Non-Native Herb  |                | <b>0%</b>     |                | <b>18%</b>    |                | <b>12%</b>    |                | <b>16%</b>                           | <b>12%</b> |
| Percent Bare Ground            |                | <b>22%</b>    |                | <b>2%</b>     |                | <b>8%</b>     |                | <b>10%</b>                           | <b>11%</b> |



**Table 2 Imprint – Quadrats E, F, G, and H (Average)**

| Species                        | Plot E         |               | Plot F         |               | Plot G         |                                  | Plot H         |               |
|--------------------------------|----------------|---------------|----------------|---------------|----------------|----------------------------------|----------------|---------------|
|                                | Number of Hits | Percent Cover | Number of Hits | Percent Cover | Number of Hits | Percent Cover                    | Number of Hits | Percent Cover |
| <b>Native Shrubs</b>           |                |               |                |               |                |                                  |                |               |
| <i>Artemisia californica</i>   |                |               |                |               |                |                                  | 1              | 2%            |
| <i>Atriplex canescens</i>      |                |               | 7              | 14%           | 1              | 2%                               | 8              | 16%           |
| <i>Atriplex lentiformis</i>    |                |               | 2              | 4%            | 6              | 12%                              |                |               |
| <i>Atriplex polycarpa</i>      |                |               | 3              | 6%            |                |                                  |                |               |
| <i>Encelia californica</i>     | 40             | 80%           | 28             | 56%           | 32             | 64%                              | 36             | 72%           |
| <i>Salvia mellifera</i>        |                |               |                |               |                |                                  | 1              | 2%            |
| <b>Non-Native Herbs</b>        |                |               |                |               |                |                                  |                |               |
| <i>Hirschfeldia incana</i>     |                |               | 7              | 14%           |                |                                  | 1              | 2%            |
| <b>Bare ground</b>             | <b>10</b>      | <b>20%</b>    | <b>3</b>       | <b>6%</b>     | <b>11</b>      | <b>22%</b>                       | <b>3</b>       | <b>6%</b>     |
|                                |                | <b>Plot E</b> | <b>Plot F</b>  | <b>Plot G</b> | <b>Plot H</b>  | <b>E,F,G,H<br/>Percent Cover</b> |                |               |
| Percent Cover Native Shrub     |                | <b>80%</b>    | <b>80%</b>     | <b>78%</b>    | <b>92%</b>     | <b>83%</b>                       |                |               |
| Percent Cover Native Herb      |                | <b>0%</b>     | <b>0%</b>      | <b>0%</b>     | <b>0%</b>      | <b>0%</b>                        |                |               |
| Percent Cover Non-Native Shrub |                | <b>0%</b>     | <b>0%</b>      | <b>0%</b>     | <b>0%</b>      | <b>0%</b>                        |                |               |
| Percent Cover Non-Native Herb  |                | <b>0%</b>     | <b>14%</b>     | <b>0%</b>     | <b>2%</b>      | <b>4%</b>                        |                |               |
| Percent Bare Ground            |                | <b>20%</b>    | <b>6%</b>      | <b>22%</b>    | <b>6%</b>      | <b>14%</b>                       |                |               |

**Table 3 Hand Broadcast – Quadrats I, J, K, and L (Average)**

| Species                        | Plot I         |               | Plot J         |               | Plot K         |                                  | Plot L         |               |
|--------------------------------|----------------|---------------|----------------|---------------|----------------|----------------------------------|----------------|---------------|
|                                | Number of Hits | Percent Cover | Number of Hits | Percent Cover | Number of Hits | Percent Cover                    | Number of Hits | Percent Cover |
| <b>Native Shrubs</b>           |                |               |                |               |                |                                  |                |               |
| <i>Artemisia californica</i>   |                |               | 4              | 8%            |                |                                  |                |               |
| <i>Atriplex canescens</i>      |                |               |                |               |                |                                  | 8              | 16%           |
| <i>Atriplex lentiformis</i>    | 4              | 8%            | 15             | 30%           |                |                                  |                |               |
| <i>Baccharis pilularis</i>     |                |               |                |               |                |                                  | 5              | 10%           |
| <i>Encelia californica</i>     | 37             | 74%           | 18             | 36%           |                |                                  | 20             | 40%           |
| <b>Native Herbs</b>            |                |               |                |               |                |                                  |                |               |
| <i>Elymus triticoides</i>      |                |               |                |               | 17             | 34%                              | 1              | 2%            |
| <b>Non-Native Herbs</b>        |                |               |                |               |                |                                  |                |               |
| <i>Centaurea melitensis</i>    |                |               | 9              | 18%           | 23             | 46%                              | 4              | 8%            |
| <i>Erodium cicutarium</i>      |                |               | 3              | 6%            |                |                                  |                |               |
| <i>Hirschfeldia incana</i>     |                |               |                |               | 2              | 4%                               | 5              | 10%           |
| <b>Bare ground</b>             | <b>9</b>       | <b>18%</b>    | <b>1</b>       | <b>2%</b>     | <b>8</b>       | <b>16%</b>                       | <b>7</b>       | <b>14%</b>    |
|                                |                | <b>Plot I</b> | <b>Plot J</b>  | <b>Plot K</b> | <b>Plot L</b>  | <b>I,J,K,L<br/>Percent Cover</b> |                |               |
| Percent Cover Native Shrub     |                | <b>82%</b>    | <b>74%</b>     | <b>0%</b>     | <b>66%</b>     | <b>56%</b>                       |                |               |
| Percent Cover Native Herb      |                | <b>0%</b>     | <b>0%</b>      | <b>34%</b>    | <b>2%</b>      | <b>9%</b>                        |                |               |
| Percent Cover Non-Native Shrub |                | <b>0%</b>     | <b>0%</b>      | <b>0%</b>     | <b>0%</b>      | <b>0%</b>                        |                |               |
| Percent Cover Non-Native Herb  |                | <b>0%</b>     | <b>24%</b>     | <b>50%</b>    | <b>18%</b>     | <b>23%</b>                       |                |               |
| Percent Bare Ground            |                | <b>18%</b>    | <b>2%</b>      | <b>16%</b>    | <b>14%</b>     | <b>13%</b>                       |                |               |



## Discussion

Table 4 provides a summary of the vegetation cover of shrubs and herbs, including areas of bare ground.

**Table 4 Summary of Vegetation Cover for Each Planting Method at the Coastal Sage Scrub City South C Trial Plot**

|                     | Hydroseed<br>(Quadrats A, B, C, and D) |              | Imprint<br>(Quadrats E, F, G, and H) |              | Hand Broadcast<br>(Quadrats I, J, K, and L) |              |
|---------------------|--|--------------|--------------------------------------|--------------|---|--------------|
|                     | Qualitative                            | Quantitative | Qualitative                          | Quantitative | Qualitative                                 | Quantitative |
| Percent Cover Shrub | 83%                                    | 76%          | 84%                                  | 83%          | 57%   | 56%          |
| Percent Cover Herb  | 9%                                     | 15%          | 7%                                   | 4%           | 39%   | 34%          |
| Percent Bare Ground | 9%                                     | 11%          | 11%                                  | 14%          | 5%  | 13%          |

Native shrub species account for the majority of the vegetative cover in the trial plot. Shrub species observed in the trial plot include fourwing saltbush (*Atriplex canescens*), allscale saltbush (*Atriplex polycarpa*), big saltbush (*Atriplex lentiformis*), coyote brush (*Baccharis pilularis*), California sunflower (*Encelia californica*), California sagebrush (*Artemisia californica*), and black sage (*Salvia mellifera*). California sunflower was the most dominant shrub species across all treatment areas in the trial plot.

The average quantitative percent cover of native shrub species in the fourth quarter of 2025 is 76 percent within the hydroseed quadrats, 83 percent within the imprint quadrats, and 56 percent within the hand broadcast quadrats (Tables 1-3). Native shrub quantitative percent cover has increased across all treatment types between the third and fourth quarter of 2025. During the third quarter monitoring visit of 2025, some native shrubs (e.g., California sunflower) appeared to be cut to the base of their stem, thereby decreasing their canopy cover within the plots. However, during the fourth quarter monitoring visit, it was observed that these shrubs had vegetative regrowth, which likely contributed to the increase in native shrub cover within the plots. Most shrub species within the trial plot were vegetative during the fourth quarter of 2025. Some California sunflower shrubs were observed in flower, while all other shrubs were in their vegetative state. Beardless wild rye (*Elymus triticoides*), a native grass species that was trimmed during weed management efforts in 2024, has shown an increase in overall cover from the third quarter of 2025.

Non-native plant cover has increased within the trial plot between the third and fourth quarter of 2025. The most prominent non-native plant species observed in the fourth quarter of 2025 included short podded mustard (*Hirschfeldia incana*) and tocalote (*Centaurea melitensis*). The majority of the late-season non-native plant species (e.g., Russian thistle [*Salsola tragus*]) have senesced. Non-native plant species cover is expected to continue to increase throughout winter and spring months of 2026 as a result of increased water availability as the wet season progresses. Total non-native herbaceous cover currently has an average of 12 percent within the hydroseed quadrats (up from 6 percent in the third quarter of 2025), 4 percent within the imprint quadrats (up from 0 percent in the third quarter of 2025), and 25 percent (up from 4 percent in the third quarter of 2025) within the hand broadcast quadrats (Tables 1-3).



## Recommendations

### Successional Growth and Weed Control

Wildfires in Southern California have become more common in recent years and have impacted the native landscape, including established restoration sites. Non-native weed control is essential in establishing post-fire restoration sites and is recommended by such organizations as the California Department of Fish and Wildlife Service and the California Society of Ecological Restoration. Successional regrowth of herbaceous non-native species is to be expected within the first two to three years following a wildfire. Native shrubs are expected to recover over a longer period through germination of existing seed within the topsoil and basal growth from charred plants. Native shrubs have shown notable growth following the fire and appear to be well established in the trial plot.

Successional growth of herbaceous species is also important, as native herbaceous species provide natural erosion of topsoil. To control the spread non-native herbaceous species such as tocalote, red brome, and short podded mustard, and minimize competition with native herbaceous and woody species for water, nutrients, and sunlight, weed maintenance should occur no less than every four months, and special attention should be afforded to minimizing impacts to native grasses that may appear to be non-native (e.g., beardless wild rye), native seedlings, and native shrub resprouts. Weed maintenance should be scheduled to maximize removal of non-native species prior to seed set, which typically occurs in spring between the months of February and April, but may also occur throughout the growing season based upon precipitation events.

### Supplemental Irrigation

While Southern California received above-average rainfall in the winter of 2023 and spring of 2024, it received below average rainfall in the winter of 2024 and spring of 2025. Supplemental irrigation is a valuable restoration technique to promote establishment of native vegetation, particularly during the dry months of the year (i.e., summer and fall). If native herbaceous vegetation continues to be sparse throughout the trial plot, and/or if native shrubs senesce or show indicators of drought stress, the irrigation system within the trial plot should be re-installed to increase water availability and promote seed germination and establishment of native vegetation.

Thank you for the opportunity to work with you on this important project. Please contact Kyle Gern if you have questions concerning the contents of this report. He may be reached by telephone at (805) 844-1492, or by email at [kgern@rinconconsultants.com](mailto:kgern@rinconconsultants.com).

Sincerely,  
**Rincon Consultants, Inc.**

Kyle Gern  
Biologist

### Attachments

- Attachment 1 Deck C Revegetation Area Quadrat Layout and Planting Plan
- Attachment 2 Representative Site Photographs



## **References**

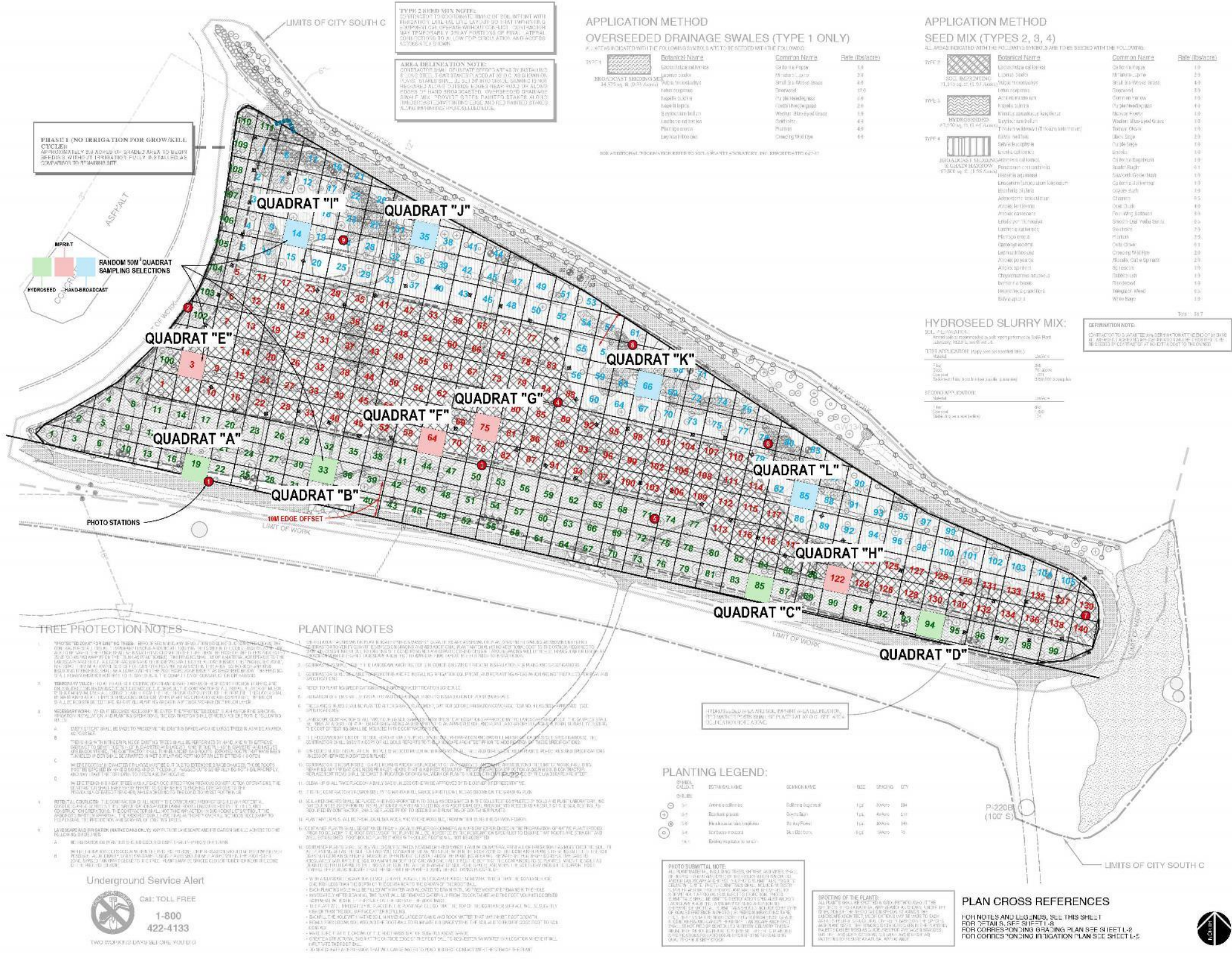
John Minch and Associates, Inc. (JMA). 2014. Methodology for Monitoring Percent Cover and Species Richness within Each Seeded Application Method on the Coastal Sage Scrub Pilot Project at the Sunshine Canyon Landfill.

# **Attachment 1**

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Deck C Revegetation Area Quadrat Layout and Planting Plan

### Deck C Revegetation Area Quadrat Layout and Planting Plan



## **Attachment 2**

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Photographs of Sample Plots



**Photograph 1.** Quadrat A facing northeast from southwest corner (December 30, 2025).



**Photograph 2.** Quadrat B facing northeast from southwest corner (December 30, 2025).



**Photograph 3.** Quadrat C facing northeast from southwest corner (December 30, 2025).



**Photograph 4.** Quadrat D facing northeast from southwest corner (December 30, 2025).



**Photograph 5.** Quadrat E facing northeast from southwest corner (December 30, 2025).



**Photograph 6.** Quadrat F facing northeast from southwest corner (December 30, 2025).



**Photograph 7.** Quadrat G facing northeast from southwest corner (December 30, 2025).



**Photograph 8.** Quadrat H facing northeast from southwest corner (December 30, 2025).



**Photograph 9.** Quadrat I facing northeast from southwest corner (December 30, 2025).



**Photograph 10.** Quadrat J facing northeast from southwest corner (December 30, 2025).



**Photograph 11.** Quadrat K facing northeast from southwest corner (December 30, 2025).



**Photograph 12.** Quadrat L facing northeast from southwest corner (December 30, 2025).

**ATTACHMENT 5**



January 9, 2026  
Project No: 21-11086

Andrew Asaro  
Environmental Specialist  
Republic Services  
14747 San Fernando Road  
Sylmar, California 91342  
Via email: [AAsaro@republicservices.com](mailto:AAsaro@republicservices.com)

**Subject: Coastal Sage Scrub City South B Trial Plot 4<sup>th</sup> Quarter 2025 Monitoring Report,  
Sunshine Canyon Landfill**

Dear Mr. Asaro,

This monitoring report has been prepared by Rincon Consultants (Rincon) to inform Republic Services on the status of coastal sage scrub restoration at the Sunshine Canyon Landfill located at 14747 San Fernando Road, Sylmar, California 91342. Specifically, this letter report serves to document the abundance of vegetation at the Coastal Sage Scrub City South B Trial Plot in the fourth quarter of 2025.

## Methods

On December 30, 2025, Rincon monitored the Coastal Sage Scrub City South B Trial Plot (trial plot) at the Sunshine Canyon Landfill, which constitutes the fourth quarter of monitoring for 2025. The sample methodology generally followed the *Methodology for Monitoring Percent Cover and Species Richness within Each Seeded Application Method on the Coastal Sage Scrub Pilot Project at the Sunshine Canyon Landfill* (JMA, April 23, 2014). Quadrat sampling of the revegetation area consists of nine 50-meter square quadrats that are randomly located throughout the revegetation area. The quadrats were randomly selected prior to the first initial monitoring event from a grid that was placed over the entire trial plot, and each quadrat was given a letter (A-I) and delineated in the field with wooden stakes. As shown in Attachment 1, five different planting methods were used as follows:

- Soil imprinting with hand broadcast overseeded drainage swales (Quadrats A and G)
- Soil imprinting (Quadrats B, F, and H)
- Broadcast seeding (Quadrat C)
- Broadcast seeding with soil imprinting (Quadrats D and I)
- Soil imprinting and hand broadcast (Quadrat E)

## Absolute Cover

The following qualitative data was collected in each quadrat to determine the absolute cover of native and non-native herbaceous and woody species:

- **Percent basal cover (shrubs).** Visual estimate of the amount of basal cover within each quadrat for all shrub species.
- **Percent basal cover (herbs).** Visual estimate of the amount of basal cover within each quadrat for all herbaceous species.



- **Percent bare ground.** Visual estimate of the amount of available bare ground with no vegetation.
- **Percent rock or other.** Visual estimate of the amount of unavailable ground for supporting plant growth. Inhibitors generally included rocks and boulders, irrigation lines and valve boxes, and mulch.
- **Percent canopy.** Visual estimate of the percent canopy of each shrub and herbaceous species.
- **Photographs.** A photograph was taken from the southwest corner (facing northeast) of each quadrat.

## Percent Cover

The following quantitative data was collected in each quadrat to determine the percent cover of native and non-native species.

- **Point intercept method.** Sampling began at the southwest corner of each quadrat and continued around the quadrat in a clockwise direction. The species located precisely at every meter point was tallied, including areas of bare ground, rock and other.

## Field Results

Below are the average data collected for each planting method.

### Absolute Cover (Qualitative)

#### **Soil imprinting with hand broadcast overseeded drainage swales – Quadrats A and G (Average)**

- Percent basal cover (shrubs) – 8%
- Percent basal cover (herbs) – 9%
- Percent bare ground – 45%
- Percent rock or other – 0%
- Percent canopy (shrubs) – 28%
- Percent canopy (herbs) – 20%

#### **Soil imprinting – Quadrats B, F, and H (Average)**

- Percent basal cover (shrubs) – 9%
- Percent basal cover (herbs) – 6%
- Percent bare ground – 49%
- Percent rock or other – 0%
- Percent canopy (shrubs) – 41%
- Percent canopy (herbs) – 10%

#### **Broadcast seeding – Quadrat C**

- Percent basal cover (shrubs) – 2%
- Percent basal cover (herbs) – 5%



- Percent bare ground – 64%
- Percent rock or other – 0%
- Percent canopy (shrubs) – 17%
- Percent canopy (herbs) – 19%

#### **Broadcast seeding with soil imprinting – Quadrats D and I (Average)**

- Percent basal cover (shrubs) – 7%
- Percent basal cover (herbs) – 5%
- Percent bare ground – 61%
- Percent rock or other – 0%
- Percent canopy (shrubs) – 27%
- Percent canopy (herbs) – 13%

#### **Soil Imprinting and hand broadcast – Quadrat E**

- Percent basal cover (shrubs) – 15%
- Percent basal cover (herbs) – 5%
- Percent bare ground – 42%
- Percent rock or other – 0%
- Percent canopy (shrubs) – 49%
- Percent canopy (herbs) – 9%

#### **Percent Cover (Quantitative)**

The representation of each species within each quadrat was estimated by broad cover classes (<1%, 1-5%, 5-25%, 25-50%, 50-75%, and >75%). The percent cover of each species based upon the point intercept method is presented in Table 1 through Table 5 below.



**Table 1 Soil Imprinting with Hand Broadcast Overseeded Drainage Swales – Quadrats A and G (Average)**

| Species                        | Quadrat A      |               | Quadrat G         |               |
|--------------------------------|----------------|---------------|-------------------|---------------|
|                                | Number of Hits | Percent Cover | Number of Hits    | Percent Cover |
| <b>Native Shrubs</b>           |                |               |                   |               |
| <i>Artemisia californica</i>   | 1              | 2%            |                   |               |
| <i>Atriplex canescens</i>      |                |               | 11                | 22%           |
| <i>Atriplex lentiformis</i>    |                |               | 12                | 24%           |
| <i>Atriplex polycarpa</i>      |                |               | 3                 | 6%            |
| <i>Eriogonum fasciculatum</i>  | 1              | 2%            |                   |               |
| <b>Native Herbs</b>            |                |               |                   |               |
| <i>Elymus triticoides</i>      |                |               | 3                 | 6%            |
| <b>Non-Native Herbs</b>        |                |               |                   |               |
| <i>Centaurea melitensis</i>    | 13             | 26%           | 3                 | 6%            |
| <i>Hirschfeldia incana</i>     |                |               | 2                 | 4%            |
| <b>Bare ground</b>             | <b>35</b>      | <b>70%</b>    | <b>16</b>         | <b>32%</b>    |
|                                | Quadrat A      | Quadrat G     | A and G (% Cover) |               |
| Percent Cover Native Shrub     | 4%             | 52%           | 28%               |               |
| Percent Cover Native Herb      | 0%             | 6%            | 3%                |               |
| Percent Cover Non-Native Shrub | 0%             | 0%            | 0%                |               |
| Percent Cover Non-Native Herb  | 26%            | 10%           | 18%               |               |
| Percent Bare Ground            | 70%            | 32%           | 51%               |               |



**Table 2 Soil Imprinting – Quadrats B, F, and H (Average)**

| Species                            | Quadrat B                |               | Quadrat F        |               | Quadrat H        |               |
|------------------------------------|--------------------------|---------------|------------------|---------------|------------------|---------------|
|                                    | Number of Hits           | Percent Cover | Number of Hits   | Percent Cover | Number of Hits   | Percent Cover |
| <b>Native Shrubs</b>               |                          |               |                  |               |                  |               |
| <i>Artemisia californica</i>       | 2                        | 4%            |                  |               | 1                | 2%            |
| <i>Atriplex canescens</i>          |                          |               |                  |               | 2                | 4%            |
| <i>Atriplex lentiformis</i>        |                          |               | 3                | 6%            | 5                | 10%           |
| <i>Baccharis salicifolia</i>       | 2                        | 4%            |                  |               |                  |               |
| <i>Baccharis sarothroides</i>      | 18                       | 36%           |                  |               |                  |               |
| <i>Baccharis pilularis</i>         | 1                        | 2%            | 1                | 2%            |                  |               |
| <i>Encelia farinosa</i>            | 2                        | 4%            |                  |               |                  |               |
| <i>Eriogonum fasciculatum</i>      |                          |               | 7                | 14%           | 5                | 10%           |
| <i>Isocoma menziesii</i>           | 5                        | 10%           |                  |               | 1                | 2%            |
| <i>Salvia leucophylla</i>          | 2                        | 4%            |                  |               | 3                | 6%            |
| <i>Salvia mellifera</i>            | 5                        | 10%           |                  |               |                  |               |
| <i>Sambucus mexicana</i>           |                          |               |                  |               | 1                | 2%            |
| <b>Non-Native Herbs</b>            |                          |               |                  |               |                  |               |
| <i>Bromus rubens</i>               |                          |               | 11               | 22%           | 2                | 4%            |
| <i>Centaurea melitensis</i>        | 1                        | 2%            | 3                | 6%            | 1                | 2%            |
| <i>Mesembryanthemum nodiflorum</i> |                          |               | 3                | 6%            |                  |               |
| <b>Bare ground</b>                 | <b>12</b>                | <b>24%</b>    | <b>22</b>        | <b>44%</b>    | <b>29</b>        | <b>58%</b>    |
|                                    | <b>Quadrat B</b>         |               | <b>Quadrat F</b> |               | <b>Quadrat H</b> |               |
| Percent Cover Native Shrub         | <b>74%</b>               |               | <b>22%</b>       |               | <b>36%</b>       |               |
| Percent Cover Native Herb          | <b>0%</b>                |               | <b>0%</b>        |               | <b>0%</b>        |               |
| Percent Cover Non-Native Shrub     | <b>0%</b>                |               | <b>0%</b>        |               | <b>0%</b>        |               |
| Percent Cover Non-Native Herb      | <b>2%</b>                |               | <b>34%</b>       |               | <b>6%</b>        |               |
| Percent Bare Ground                | <b>24%</b>               |               | <b>44%</b>       |               | <b>58%</b>       |               |
|                                    | <b>B, F, H (% cover)</b> |               |                  |               |                  |               |
|                                    | <b>44%</b>               |               | <b>42%</b>       |               | <b>42%</b>       |               |



**Table 3 Broadcast Seeding – Quadrat C**

| Quadrat C                          |                |               |
|------------------------------------|----------------|---------------|
| Species                            | Number of Hits | Percent Cover |
| <b>Native Shrubs</b>               |                |               |
| <i>Artemisia californica</i>       | 1              | 2%            |
| <i>Atriplex lentiformis</i>        | 9              | 18%           |
| <i>Encelia farinosa</i>            | 1              | 2%            |
| <i>Eriogonum fasciculatum</i>      | 1              | 2%            |
| <b>Non-Native Herbs</b>            |                |               |
| <i>Centaurea melitensis</i>        | 2              | 4%            |
| <i>Mesembryanthemum nodiflorum</i> | 3              | 6%            |
| <i>Oxalis pes-caprae</i>           | 1              | 2%            |
| <b>Bare ground</b>                 | <b>32</b>      | <b>64%</b>    |
| <b>Quadrat C (% cover)</b>         |                |               |
| Percent Cover Native Shrub         | 24%            |               |
| Percent Cover Native Herb          | 0%             |               |
| Percent Cover Non-Native Shrub     | 0%             |               |
| Percent Cover Non-Native Herb      | 12%            |               |
| Percent Bare Ground                | 64%            |               |



**Table 4 Broadcast Seeding with Soil Imprinting – Quadrats D and I (Average)**

| Species                            | Quadrat D      |               | Quadrat I         |               |
|------------------------------------|----------------|---------------|-------------------|---------------|
|                                    | Number of Hits | Percent Cover | Number of Hits    | Percent Cover |
| <b>Native Shrubs</b>               |                |               |                   |               |
| <i>Artemisia californica</i>       | 2              | 4%            |                   |               |
| <i>Atriplex canescens</i>          |                |               | 8                 | 16%           |
| <i>Atriplex lentiformis</i>        |                |               | 2                 | 4%            |
| <i>Encelia farinosa</i>            | 2              | 4%            |                   |               |
| <i>Eriogonum fasciculatum</i>      | 11             | 22%           | 5                 | 10%           |
| <i>Isocoma menziesii</i>           |                |               | 1                 | 2%            |
| <b>Non-Native Herbs</b>            |                |               |                   |               |
| <i>Bromus rubens</i>               |                |               | 2                 | 4%            |
| <i>Centaurea melitensis</i>        |                |               | 15                | 30%           |
| <i>Hirschfeldia incana</i>         |                |               | 1                 | 2%            |
| <i>Mesembryanthemum nodiflorum</i> |                |               | 1                 | 2%            |
| <b>Bare ground</b>                 | <b>35</b>      | <b>70%</b>    | <b>15</b>         | <b>30%</b>    |
|                                    | Quadrat D      | Quadrat I     | D and I (% cover) |               |
| Percent Cover Native Shrub         | 30%            | 32%           | 31%               |               |
| Percent Cover Native Herb          | 0%             | 0%            | 0%                |               |
| Percent Cover Non-Native Shrub     | 0%             | 16%           | 8%                |               |
| Percent Cover Non-Native Herb      | 0%             | 38%           | 19%               |               |
| Percent Bare Ground                | 70%            | 30%           | 50%               |               |



**Table 5 Soil Imprinting and Hand Broadcast – Quadrat E**

| Quadrat E                          |                |               |
|------------------------------------|----------------|---------------|
| Species                            | Number of Hits | Percent Cover |
| <b>Native Shrubs</b>               |                |               |
| <i>Artemisia californica</i>       | 1              | 2%            |
| <i>Atriplex canescens</i>          | 5              | 10%           |
| <i>Atriplex lentiformis</i>        | 3              | 6%            |
| <i>Encelia farinosa</i>            | 1              | 2%            |
| <i>Eriodictyon trichocalyx</i>     | 6              | 12%           |
| <i>Eriogonum fasciculatum</i>      | 4              | 8%            |
| <i>Isocoma menziesii</i>           | 4              | 8%            |
| <b>Non-Native Herbs</b>            |                |               |
| <i>Centaurea melitensis</i>        | 1              | 2%            |
| <i>Hirschfeldia incana</i>         | 3              | 6%            |
| <i>Mesembryanthemum nodiflorum</i> | 1              | 2%            |
| <b>Bare ground</b>                 | <b>21</b>      | <b>42%</b>    |
| Quadrat E (% cover)                |                |               |
| Percent Cover Native Shrub         | <b>48%</b>     |               |
| Percent Cover Native Herb          | <b>0%</b>      |               |
| Percent Cover Non-Native Shrub     | <b>0%</b>      |               |
| Percent Cover Non-Native Herb      | <b>10%</b>     |               |
| Percent Bare Ground                | <b>42%</b>     |               |

## Discussion

Table 6 provides a summary of the percent cover of native and non-native shrubs and herbs, including areas of bare ground within the Coastal Sage Scrub City South B Trial Plot.

**Table 6 Summary of Percent Cover for Each Planting Method Using the Point Intercept Method**

|                                   | Soil Imprinting<br>with Hand<br>Broadcast<br>Overseeded<br>Drainage Swales<br>(Quadrats A and G) | Soil<br>Imprinting<br>(Quadrats<br>B, F, and H) | Broadcast<br>Seeding<br>(Quadrat C) | Broadcast<br>Seeding with<br>Soil Imprinting<br>(Quadrats<br>D and I) | Soil<br>Imprinting<br>and Hand<br>Broadcast<br>(Quadrat E) |
|-----------------------------------|--|---|-------------------------------------|---|--|
| Percent Cover Native Shrub        | <b>28%</b>   | <b>44%</b>                                      | <b>24%</b>                          | <b>31%</b>  | <b>48%</b>   |
| Percent Cover Native Herb         | <b>3%</b>  | <b>0%</b>                                       | <b>0%</b>                           | <b>0%</b>   | <b>0%</b>  |
| Percent Cover Non-Native<br>Shrub | <b>0%</b>  | <b>0%</b>                                       | <b>0%</b>                           | <b>8%</b>   | <b>0%</b>  |
| Percent Cover Non-Native Herb     | <b>18%</b>   | <b>14%</b>                                      | <b>12%</b>                          | <b>19%</b>  | <b>10%</b>   |
| Percent Bare Ground               | <b>51%</b>   | <b>42%</b>                                      | <b>64%</b>                          | <b>50%</b>  | <b>42%</b>   |

Dominant native shrub species include fourwing saltbush (*Atriplex canescens*), brittlebush (*Encelia farinosa*), big saltbush (*Atriplex lentiformis*), broom baccharis (*Baccharis sarothroides*), California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), coastal goldenbush (*Isocoma menziesii*), and hairy yerba santa (*Eriodictyon trichocalyx*). Dominant herbaceous species include non-native red brome (*Bromus rubens*), tocalote (*Centaurea melitensis*), short podded mustard (*Hirschfeldia incana*), and slender iceplant (*Mesembryanthemum nodiflorum*).

Non-native plant cover increased in the broadcast seeding (Quadrat C), broadcast seeding with soil imprinting (Quadrats D and I), and soil imprinting and hand broadcast (Quadrat E) treatment types and decreased in soil imprinting with hand broadcast overseeded drainage swales (Quadrats A and G) and soil imprinting (Quadrats B, F, and H) treatment types between the third and fourth quarter of 2025. The majority of treatment types saw an increase in non-native plant cover. The overall increase likely occurred as a result of increased water availability as the wet season begins. Non-native plant species cover is expected to increase throughout winter and spring of 2026 as a result of increased water availability brought on by precipitation events.

Native shrub quantitative percent cover has not substantially changed across all treatment types between the third and fourth quarter of 2025 except for Quadrat E, which decreased from 60 percent cover in the third quarter to 48 percent in the fourth quarter. This decrease is attributed to a decline in California sagebrush and big saltbush cover within the quadrat. Soil imprinting and hand broadcast (Quadrat E; 48 percent) and soil imprinting quadrats (Quadrats B, F, and H; 44 percent) had the highest percent cover of native shrubs using the point intercept method, followed by broadcast seeding with soil imprinting (Quadrats D and I; 31 percent). Soil imprinting with hand broadcast overseeding (Quadrats A and G; 28 percent) and broadcast seeding (Quadrats C; 24 percent) had the lowest percent cover of native shrubs. The quantitative cover of native herbaceous plant species was 3 percent in soil imprinting with hand broadcast overseeding (Quadrat A and G) and zero in all other planting methods in the fourth quarter of 2025.

## Recommendations

### Successional Growth and Weed Control

Wildfires in Southern California have become more common in recent years and have impacted the native landscape. Non-native weed control is essential in establishing post-fire restoration sites and is recommended by organizations such as the California Department of Fish and Wildlife Service and the California Society of Ecological Restoration. Successional regrowth of herbaceous non-native species is to be expected within the first two to three years following a wildfire. Native shrubs are expected to recover over a longer period through germination of existing seed within the topsoil and basal growth from charred plants. Native shrubs have shown notable growth in the past three years, and now appear to be well established in the trial plot.

Successional growth of herbaceous species is also important, as native herbaceous species provide natural erosion of topsoil. To promote establishment and growth of native herbaceous species, controlling the spread of non-native herbaceous species such as tocalote, red brome, and short podded mustard is essential. Reducing non-native herbaceous species growth minimizes negative competitive effects on native herbaceous and woody species for water, nutrients, and sunlight. Weed maintenance should occur no less than every four months, and special attention should be afforded to minimizing impacts to native grasses that may appear to be non-native (e.g., beardless wild rye), native seedlings, and native shrub resprouts. Weed maintenance should be scheduled to maximize removal of non-native species prior to seed set, which typically occurs in spring between the months of February and April but may also occur throughout the growing season based upon water availability.



## Supplemental Irrigation

Southern California received below average rainfall in the winter of 2024 and spring of 2025. Supplemental irrigation is a valuable restoration technique to promote establishment of native vegetation, particularly during the dry months of the year (i.e., summer and fall). As described above, native herbaceous vegetation has continued to be notably low throughout all planting methods. If native herbaceous vegetation continues to be sparse throughout the trial plot, and/or if native shrubs prematurely senesce or show indicators of drought stress, the irrigation system within the trial plot should be re-installed to increase water availability and promote seed germination and establishment of native vegetation.

Thank you for the opportunity to work with you on this important Project. Please contact Kyle Gern if you have questions concerning the contents of this report. He may be reached by telephone at 805-844-1492, or by email at [kgern@rinconconsultants.com](mailto:kgern@rinconconsultants.com).

Sincerely,  
**Rincon Consultants, Inc.**

A handwritten signature in black ink that reads "Kyle Gern". The signature is written in a cursive, flowing style.

Kyle Gern  
Biologist

## Attachments

- Attachment 1 Deck B Revegetation Area Quadrat Layout
- Attachment 2 Representative Site Photographs



## **References**

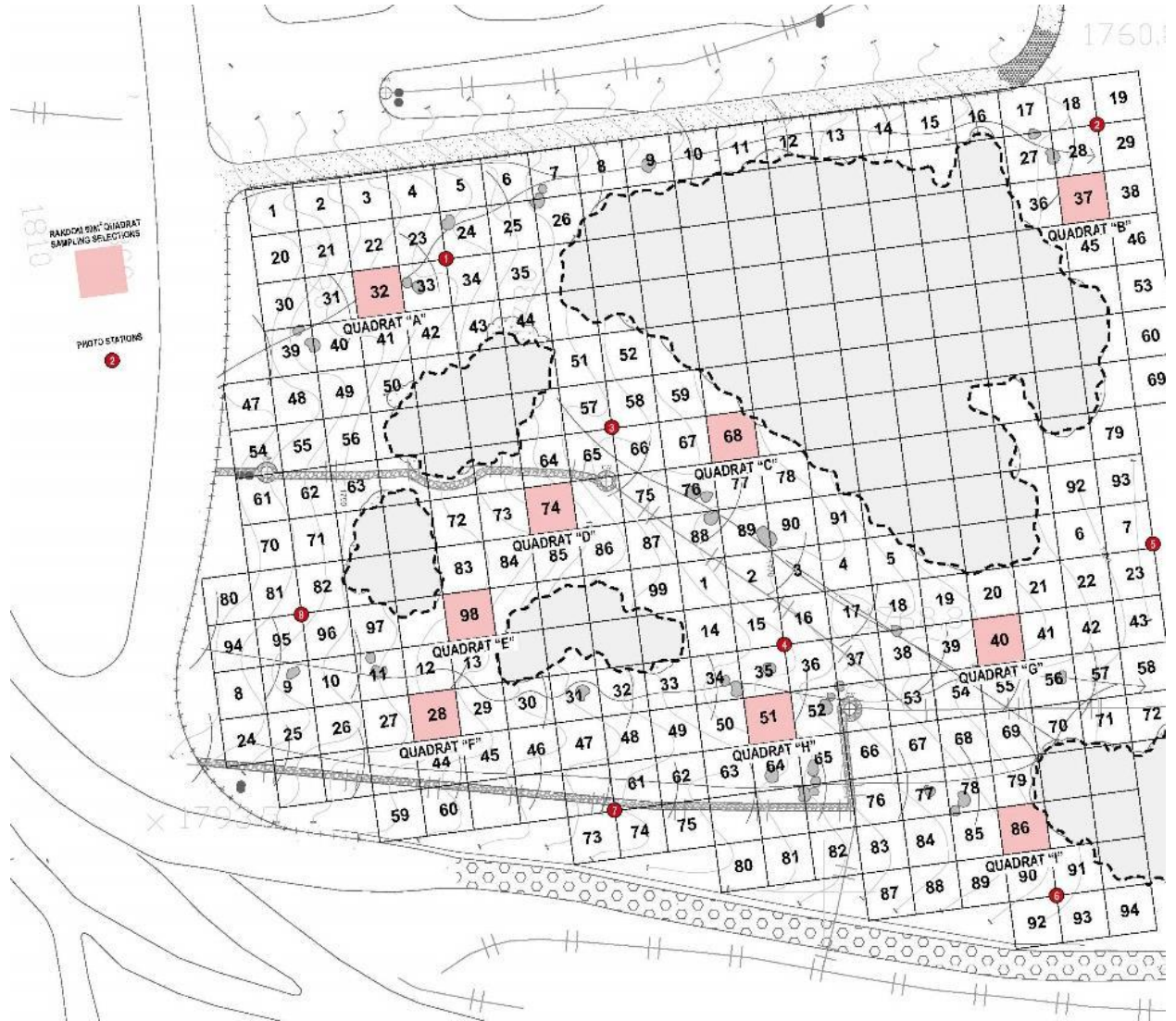
John Minch and Associates, Inc. (JMA). 2014. Methodology for Monitoring Percent Cover and Species Richness within Each Seeded Application Method on the Coastal Sage Scrub Pilot Project at the Sunshine Canyon Landfill.

# **Attachment 1**

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Deck B Revegetation Area Quadrat Layout

### Deck B Revegetation Area Quadrat Layout



## **Attachment 2**

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Photographs of Sample Plots



**Photograph 1.** Quadrat A facing northeast from southwest corner (December 30, 2025).



**Photograph 2.** Quadrat B facing northeast from southwest corner (December 30, 2025).



**Photograph 3.** Quadrat C facing northeast from southwest corner (December 30, 2025).



**Photograph 4.** Quadrat D facing northeast from southwest corner (December 30, 2025).



**Photograph 5.** Quadrat E facing northeast from southwest corner (December 30, 2025).



**Photograph 6.** Quadrat F facing northeast from southwest corner (December 30, 2025).



**Photograph 7.** Quadrat G facing northeast from southwest corner (December 30, 2025).



**Photograph 8.** Quadrat H facing northeast from southwest corner (December 30, 2025).



**Photograph 9.** Quadrat I facing northeast from southwest corner (December 30, 2025).

**ATTACHMENT 6**





**Rincon Consultants, Inc.**

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March 22, 2021  
Project No: 21-11086

Tuong-phu Ngo  
Republic Services  
14747 San Fernando Road  
Sylmar, California 91342  
Via email: [email address](#)

**Subject: Sunshine Canyon Landfill Ultimate Entry Improvement Project, Oak Tree Survey  
14747 San Fernando Road, Sylmar, California, 91342**

Dear Mr. Ngo:

Rincon Consultants, Inc. (Rincon) prepared this report for the Ultimate Entry Improvement Project (project) located at the Sunshine Canyon Landfill (landfill) in Sylmar, Los Angeles County, California. This report, prepared by ISA certified arborist Greg Ainsworth, documents the results of an oak tree survey and assessment of impacts to protected oak trees from the project and provides a current tally on the remaining oak trees in the landfills' s oak tree mitigation bank.

## Introduction

This oak tree report was prepared to disclose information on native oak (*Quercus sp.*) trees that would be removed by the proposed project.

Pursuant to the Los Angeles County Oak Tree Ordinance, any tree of the oak genus that is 25 inches in circumference (8 inches in diameter) or has a combined trunk circumference of any two trunks of at least 38 inches (12 inches in diameter), as measured 4.5 feet above the mean natural grade (i.e., diameter at breast height [DBH]), is considered a "protected tree" (Ordinance 88-0157 1, 82-0168 2, Section 22.56.2050, 1988). An oak tree that has a trunk DBH equal to or greater than 36 inches is considered a heritage tree, as defined in the Los Angeles County Oak Tree Ordinance. In accordance with the Ordinance, no damage shall occur within the protective zone (the area within the dripline of an oak tree and extending to a point at least 5 feet outside the dripline, or 15 feet from the trunk[s] of the tree, whichever distance is greater) of a protected oak tree. Damage is defined as any act causing or tending to cause injury to the root system or other parts of an oak tree, including, but not limited to, burning, application of toxic substances, operation of equipment or machinery, paving, changing of natural grade, and trenching or excavating.

## Sunshine Canyon Landfill Oak Tree Mitigation Bank

In accordance with landfill's Conditional Use Permit (CUP) and Oak Tree Permit (OTP) #86312-(5) (dated February 19, 1991) for the Sunshine Canyon Landfill Extension Project, all native oak trees that will be removed for any project-related impact shall be mitigated at a ratio of 2:1, and heritage-size oak trees (36-inch DBH or greater) shall be mitigated at a ratio of 10:1. All mitigation oaks shall be monitored for 7 years after the tree reaches 0.5 inches in diameter.



A surplus of coast live oak trees was previously planted in the landfill's mitigation areas, which now serves as a mitigation bank for the landfill to draw from for future removals of coast live oak trees. There are currently 48 coast live oaks remaining in the mitigation bank (JMA, Sunshine Canyon Landfill Oak Tree and Bigcone Douglas Fir Monitoring Report No. 28, March 8, 2021).

## Project Description

The proposed project involves the development of a landfill termination berm and cut/fill graded entrance roadway that will provide a down-slope buttress and access for a proposed landfill expansion. The nearly 190-foot-high proposed roadway and berm embankment across the mouth of the main canyon of Sunshine Canyon Landfill is designed to buttress the expanded landfill refuse prism that will be situated to the west. This new road embankment includes the associated cut and fill grading, three retaining walls, and a sedimentation basin with stormwater controls.

## Methods

All oak trees located within and immediately adjacent to the project footprint that could be impacted by the proposed project were surveyed by certified arborist Greg Ainsworth (I.S.A. Cert# WE-7473A). The tree survey was conducted on March 4, 2021. Using a forester's diameter-equivalent tape, the diameter of all native oak trees having a trunk diameter of 8 inches or greater (or combined trunk diameter of 12 inches or greater) were measured at 4.5 feet above the mean natural grade to obtain the DBH. The location of each tree was recorded from the base of the tree using a Global Positioning System (GPS) with sub-meter accuracy. The following parameters were assessed from the base of each tree (or from the nearest vantage point):

### Tree Characteristics

- Trunk diameter (DBH)
- Height
- Crown radius in all directions (north, south, east, and west).
- Balance or symmetry of the tree based on the crown radius measurements and whether the tree leans or is unstable.

### Physical Condition

- Identification of damage caused by pathogens or insect pests, by natural causes such as lightning, or by human activity.
- Evaluation of vigor based on such parameters as amount of new growth, leaf color, abnormal bark, dead wood, evidence of wilt, excessive necrosis or leaf chlorosis, thinning of crown, etc.
- Assessment of the overall health of the tree based on the evaluation of vigor, presence of damage, and comparison to the typical archetype tree of the same species.



## Health Grade

A subjective alphabetical ranking was assigned for overall health (vigor, aesthetic value, and balance) for each native oak and big cone fir tree based on the criteria described below:

- “A” = Excellent: A healthy and vigorous tree characteristic of its species and reasonably free of any visible signs of stress, disease, or pest infestation.
- “B” = Good: A healthy and vigorous tree with minor visible signs of stress, disease, and/or pest infestation. Some maintenance measures may need to be implemented, such as pruning of dead wood or broken branches.
- “C” = Fair: Although healthy in overall appearance, there is abnormal amount of stress or disease/insect infestation, and a substantial amount of maintenance may be needed.
- “D” = Poor: A tree that may be exhibiting a substantial amount of stress, disease, or insect damage than what the amount that is expected for the species. The tree may be in a state of rapid decline, and may show various signs of dieback, necrosis, or other symptoms caused by pathogens or insect pests.
- “F” = Dead: This tree has no foliage and exhibits no sign of life or vigor.

## Results

There are 20 coast live oak trees located within the project footprint, one of which is dead, and all of which would be removed by the proposed project. No other oak trees would be encroached or otherwise impacted by the proposed project. Data on these 20 oak trees is presented in Table 1 below.

**Table 1 Oak Tree Survey Data**

| Tree # | Species        | DBH | Canopy Spread |      |       |      | Health | Physical Condition | Impact Status | Reason for Impact |
|--------|----------------|-----|---------------|------|-------|------|--------|--------------------|---------------|-------------------|
|        |                |     | North         | West | South | East |        |                    |               |                   |
| 1      | Coast live oak | 13  | 14            | 3    | 8     | 21   | Fair   |                    | Removal       | Grading           |
| 2      | Coast live oak | --  | --            | --   | --    | --   | Dead   |                    | Removal       | Grading           |
| 3      | Coast live oak | 16  | 3             | 8    | 25    | 35   | Poor   | fire scar          | Removal       | Grading           |
| 4      | Coast live oak | 12  | 12            | 7    | 18    | 15   | Good   | fire scar          | Removal       | Grading           |
| 5      | Coast live oak | 18  | 11            | 15   | 30    | 7    | Good   | fire scar          | Removal       | Grading           |
| 6      | Coast live oak | 9   | 4             | 8    | 18    | 2    | Fair   | fire scar          | Removal       | Grading           |
| 7      | Coast live oak | 15  | 7             | 16   | 15    | 8    | Fair   | fire scar          | Removal       | Grading           |
| 8      | Coast live oak | 9   | 7             | 3    | 18    | 8    | Good   | fire scar          | Removal       | Grading           |
| 9      | Coast live oak | 18  | 30            | 15   | 22    | 10   | Good   | fire scar          | Removal       | Grading           |
| 10     | Coast live oak | 16  | 8             | 17   | 15    | 6    | Fair   | fire scar          | Removal       | Grading           |
| 11     | Coast live oak | 10  | 15            | 14   | 1     | 2    | Fair   | fire scar          | Removal       | Grading           |
| 12     | Coast live oak | 10  | 20            | 6    | 4     | 2    | Fair   | fire scar          | Removal       | Grading           |
| 13     | Coast live oak | 22  | 18            | 21   | 16    | 10   | Fair   | fire scar          | Removal       | Grading           |
| 14     | Coast live oak | 10  | 19            | 1    | 1     | 1    | Fair   | fire scar          | Removal       | Grading           |
| 15     | Coast live oak | 21  | 10            | 7    | 18    | 22   | Fair   | fire scar          | Removal       | Grading           |



| Tree # | Species        | DBH | Canopy Spread |      |       |      | Health | Physical Condition     | Impact Status | Reason for Impact |
|--------|----------------|-----|---------------|------|-------|------|--------|------------------------|---------------|-------------------|
|        |                |     | North         | West | South | East |        |                        |               |                   |
| 16     | Coast live oak | 18  | 1             | 22   | 19    | 8    | Fair   | fire scar, split trunk | Removal       | Grading           |
| 17     | Coast live oak | 19  | 15            | 11   | 15    | 10   | Fair   | fire scar              | Removal       | Grading           |
| 18     | Coast live oak | 12  | 15            | 7    | 15    | 7    | Fair   | fire scar              | Removal       | Grading           |
| 19     | Coast live oak | 12  | 17            | 10   | 4     | 8    | Good   |                        | Removal       | Grading           |
| 20     | Coast live oak | 8   | 4             | 12   | 6     | 1    | Fair   |                        | Removal       | Grading           |

### Mitigation

There are currently 48 coast live oak trees in the landfill’s mitigation bank. As noted in Table 1, 20 coast live oak trees would be removed by the proposed project. Therefore, at a mitigation ratio of 2:1, 40 coast live oak trees will be deducted from the landfill’s oak tree mitigation bank, leaving 4 oak trees remaining in the bank for future removals at the landfill.

Please contact Greg Ainsworth at (818) 564-5544 or email at [gainsworth@rinconconsultants.com](mailto:gainsworth@rinconconsultants.com) if you have any question or comments regarding the information provided in this report.

Sincerely,  
**Rincon Consultants, Inc.**

Greg Ainsworth, I.S.A. Cert # WE-7473A  
Director of Urban Forestry

### Attachments

Oak Tree Map

**DRAWING 1**



P:\SITES\SUNSHINE CANYON ULTIMATE ENTRANCE ROAD CONST PHASE 1-2\EXHIBITS\S021.1039-SCL-VHBT-OAK TREES LOCATIONS-FIG 1-(2021-03-24).DWG March 26, 2021 - 10:30 AM BY: GJA-USER

