PROTECTED PLANT PRESERVATION PLAN

CITY OF HESPERIA, CALIFORNIA
(APN: 3046-131-20, 36, 76 & 77)

Prepared for:

CJC Holdings LLC
17260 Bear Valley Road, Suite 110
Victorville, CA 92395

Prepared by:

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Project No: RCA#2021-136 JT

RCA ASSOCIATES, INC

May 31, 2021

TITLE PAGE

Date Report Prepared:	**May 31, 2021**
Field Work Completed:	**May 27, 2021**
Report Title:	**Protected Plant Preservation Plan**
Project Location:	**Hesperia, California** **APN: 3046-131-20, 36, 76 & 77**
Prepared for:	**CJC Holdings LLC** **17260 Bear Valley Road, Suite 110** **Victorville, CA 92395**
Principal Investigators:	**Ryan Hunter, Environmental Scientist, Biologist** **Lisa Cardoso, Wildlife Biologist** **Randall Arnold, Senior Biologist**
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1.0 SUMMARY

At the request of the project proponent, RCA Associates, Inc. surveyed a 26.7-acre property located on the northwest corner of intersection Mesquite Street and Maple Avenue in the City of Hesperia, California (APN: 3064-131-20, 36, 76 &77) (Figures 1 and 2). The property site is located in Section 25, Township 4 North, Range 5 West (USGS Hesperia, CA 7.5 minute quadrangle).

The purpose of the survey was to evaluate the Joshua trees present on the site and determine which trees were suitable for relocation and which trees could be discarded prior to site clearing activities. This report provides the results of the Joshua tree survey performed on May 27, 2021. Following completion of the survey, RCA Associates, Inc. prepared this Protected Plant Preservation Plan to assist the project proponent with future relocation of any Joshua trees. Information on the Joshua trees which will need to be relocated-transplanted in the future is provided in Section 4.0. The City of Hesperia Municipal Code has a chapter (Chapter 16.24) stating the purpose of the Protected Plant Plan, the importance of preserving the Joshua Tree as an important native desert vegetation, and the consequences of removing a tree without authorization. The requirements of the Ordinance (Chapter 16.24) and the City of Hesperia's Protected Plant Plan are provided in Appendix B.

Based on the results of the field investigations there are 59 Joshua trees which occur within the boundaries of the property (Figures 1, 2 and 3). Based on the evaluation and analysis of each tree it was determined that 15 of the 59 Joshua trees (25.4%) are suitable for transplanting. These trees are marked in red in Table 4-1. The remaining 44 Joshua trees (74.6%) were determined to be unsuitable for transplanting due to a variety of factors such as size, condition, damage, dying, excessive leaning, possibly disease, clonal, etc.

2.0 INTRODUCTION AND PROJECT LOCATION

The area surveyed is located at the southwest corner of intersection Mesquite Street and Maple Avenue in the City of Hesperia, California. The California Aqueduct is located adjacently along the northeast boundary of the property, and residential units, scattered between vacant land, are located south, west, and east of the project site. The biological resources observed on site included common storksbill (*Erodium cicutarium*), California juniper (*Juniperus californica*), Nevada jointfir (*Ephedra nevadensis*), rubber rabbitbrush (*Ericameria nauseosa*), silver cholla (*Cylindropuntia echinocarpa*), and big sagebrush (*Artemisia tridentata*).

Joshua trees occur throughout the Mojave Desert in Southern California and are typically found at an elevation of 400 to 1,800 meters (~1,200 to ~5,400 feet). Joshua trees within the western portion of the Mojave Desert typically receive more annual precipitation during "normal" years; consequently, cloning occurs more often resulting in numerous trunks sprouting from the same root system (Rowland, 1978). Joshua tree habitats provide habitat for a variety of wildlife species including desert woodrats (*Neotoma* sp.) and night lizards (*Xantusia* sp.) both of which utilize the base of the trees. A variety of birds also utilize Joshua trees for nesting such as hawks, common ravens, and cactus wrens. CDFW consider Joshua tree woodlands as areas that support relatively high species diversity and as such are considered to be a sensitive desert community. Joshua trees are also considered a significant resource under the California Environmental Quality Act (CEQA) and are included in the Desert Plant Protection Act, Food and Agricultural Code (80001 – 80006).

3.0 METHODOLOGIES

Pedestrian surveys were walked throughout the site and biologists from RCA Associates, Inc. evaluated each Joshua tree to determine which trees were suitable for relocation/transplanting based on a general health assessment. Each Joshua tree received a metal numbered tag which was affixed on the north side of each tree for orientation purposes during future transplanting. Surveyor flagging was also placed around those trees suitable for transplanting to facilitate future identification. The precise location of each tree was recorded using a Garmin GPS unit and a Bushnell Yardage Pro rangefinder was utilized to determine the extent of the property boundaries. Those Joshua trees which occur on the property site are presented in Table 4-1 and the locations are provided in Figure 2.

The factors utilized to determine which Joshua trees were suitable for transplanting include the following factors:

1. Trees from about 1 foot in height up to approximately 12 feet,
2. No visible signs of damage to the tree such as absence of bark due to rodent or other animals,
3. Minimal number of branches (No more than 2 or 3 branches),
4. No excessive leaning of the tree,
5. No yellow or brown fronds,
6. Proximity to other Joshua trees (i.e., clonal), and
7. No exposed roots at the base of the tree.

4.0 RESULTS

There are 59 Joshua trees on the property and the GPS locations of the Joshua trees are provided in Table 4-1. A total of 15 Joshua tree (25.4%) is suitable for relocation/transplanting based on the seven factors listed in Section 3.0 (Table 4-1). The Joshua trees suitable for transplanting should be relocated/transplanted on-site, which is the preferable option, or to an off-site area approved by the City of Hesperia. Those Joshua trees that are not suitable for relocation/transplanting due to size, health of the tree, presence of damage, excessive branches, excessive leaning, clonal, and exposed roots should be disposed of as per City requirements.

Table 4-1: Joshua tree census. (Note: The GPS locations of the Joshua trees are provided below and those trees which are suitable for transplanting on-site as part of project landscaping are highlighted in red.)

Total Number of Joshua Trees On Site	Joshua Trees to be Transplanted	Number of Clonal Trees	Number of Non-Clonal Trees
59	15	12	47

Tag	Height (ft)	Location	Condition	Panicles Branches	Clonal	Transplantable
2295	3	N 34.397960° W 117.349411°	Dead	0P 0B		No
2296	5	N 34.397910° W 117.349878°	Dead	0P 0B		No
2297	8	N 34.398458° W 117.350058°	Good	1P 0B		Yes
2298	8	N 34.398581° W 117.350021°	Good	0P 0B		Yes
2299	6	N 34.398631° W 117.350094°	Good	0P 0B		Yes
2300	11	N 34.398731° W 117.350143°	Good	2P 2B		Yes

Tag	Height (ft)	Location	Condition	Panicles Branches	Clonal	Transplantable
2301	13	N 34.398945° W 117.350380°	Good	9P 5B	X	No
2302	5	N 34.398959° W 117.350121°	Dead	0P 0B		No
2303	8	N 34.399104° W 117.350391°	Good	2P 2B		Yes
2304	2	N 34.399165° W 117.350169°	Good	0P 0B		Yes
2305	9	N 34.399166° W 117.350145°	Dead	0P 0B		No
2306	9	N 34.398611° W 117.349859°	God	5P 2B		Yes
2307	4	N 34.398288° W 117.349806°	Good	0P 0B	X	No
2308	3	N 34.398174° W 117.349482°	Good	0P 0B	X	No
2309	9	N 34.398400° W 117.349505°	Good	1P 0B	X	No
2310	8	N 34.398947° W 117.34974°	Good	1P 0B		Yes
2311	5	N 34.399235° W 117.349727°	Dead	0P 0B		No
2312	1	N 34.399028° W 117.349296°	Good- Small	0P 0B		No
2313	10	N 34.398815° W 117.349193°	Good	1P 0B		Yes
2314	8	N 34.398717° W 117.34976°	Good	0P 0B	X	No
2315	5	N 34.398001° W 117.348799°	Dead	0P 0B		No
2316	9	N 34.398193° W 117.348788°	Good- Multiple Branches	4P 3B		No
2317	6	N 34.398164° W 117.348331°	Dead	0P 0B		No

Tag	Height (ft)	Location	Condition	Panicles Branches	Clonal	Transplantable
2318	4	N 34.398484° W 117.348282°	Dead	0P 0B		No
2319	11	N 34.398633° W 117.348974°	Good- Multiple Branches	3P 3B		No
2320	13	N 34.399056° W 117.348951°	Good- Size	5P 6B		No
2321	12	N 34.399115° W 117.348941°	Good- Multiple Branches	3P 4B		No
2322	3	N 34.399167° W 117.348996°	Good	0P 0B	X	No
2323	9	N 34.399454° W 117.349016°	Good	0P 0B		Yes
2324	8	N 34.399627° W 117.349161°	Good- Leaning	0P 0B		No
2325	6	N 34.399820° W 117.349160°	Dead	0P 0B		No
2326	8	N 34.399978° W 117.349175°	Good- Leaning	1P 0B	X	No
2327	9	N 34.400326° W 117.349442°	Good	1P 2B		Yes
2328	3	N 34.400681° W 117.349380°	Dead	0P 0B		No
2329	8	N 34.401479° W 117.349694°	Good	2P 2B	X	No
2330	11	N 34.401718° W 117.350739°	Poor- Dying	7P 6B	X	No
2331	8	N 34.402243° W 117.350317°	Good	1P 0B		Yes
2332	10	N 34.402320° W 117.350594°	Good- Multiple Branches	6P 4B		No
2333	7	N 34.°402441 W 117.3°350421	Good	0P 0B	X	No
2334	8	N 34.°402511 W 117.3°350731	Good- Multiple Branches	8P 6B		No

Tag	Height (ft)	Location	Condition	Panicles Branches	Clonal	Transplantable
2335	1	N 34.402999° W 117.350316°	Dead	0P 0B		No
2336	9	N 34.405856° W 117.350170°	Good- Multiple Branches	16P 7B		No
2337	13	N 34.402609° W 117.350078°	Good- Size	29P 14B		No
2338	15	N 34.402422° W 117.350031°	Good- Size	23P 9B		No
2339	2	N 34.401954° W 117.349571°	Dead	0P 0B		No
2340	8	N 34.401767° W 117.349247°	Dead	0P 0B		No
2341	9	N 34.401069° W 117.349442°	Good	1P 2B		Yes
2342	8	N 34.401014° W 117.349309°	Good	2P 2B	X	No
2343	8	N 34.401106° W 117.349123°	Good	0P 2B		Yes
2344	4	N 34.400847° W 117.348687°	Dead	0P 0B		No
2345	10	N 34.400731° W 117.348691°	Good	4P 2B		Yes
2346	15	N 34.400718° W 117.34882°	Good- Size	27P 11B		No
2347	15	N 34.400518° W 117.348874°	Good- Size	11P 4B		No
2348	10	N 34.400312° W 117.348987°	Dead	0P 0B		No
2349	12	N 34.400270° W 117.348798°	Dead	0P 0B		No
2350	4	N 34.400027° W 117.348291°	Good	0P 0B	X	No
2351	4	N 34.399736° W 117.347898°	Dead	0P 0B		No

Tag	Height (ft)	Location	Condition	Panicles Branches	Clonal	Transplantable
2352	11	N 34.399248° W 117.348066°	Dead	0P 0B		No
2353	5	N 34.399450° W 117.347267°	Dead	0P 0B		No

(Note: The Tag numbers correspond to the numbers placed on the Joshua trees.)

5.0 CONCLUSIONS

There are 59 Joshua trees located on the property and only 15 of these trees are suitable for relocation/transplanting. This conclusion was based on: (1) trees which were one foot or greater in height and less than twelve feet tall (approximate); (2) in good health; (3), two branches or less; (4) density of trees (i.e., no clonal trees); (5) no exposed roots; and (6) trees that are not leaning over excessively. As indicated in Table 4-1, the majority of the Joshua trees which were not suitable for relocation are relatively large ranging from about 15 to 35 feet in height.

As of September 22, 2020, the California Department of Fish and Wildlife temporarily listed the western Joshua tree (*Yucca brevifolia*) as an endangered species for one year until a final decision is made in 2021. Therefore, any attempt to remove the Joshua tree from its current position will require an Incidental Take Permit (ITP).

The City of Hesperia's Municipal Code (Chapter 16.24) requires preservation of Joshua trees given their importance in the desert community. A qualified City-approved biologist or arborist should be retained to conduct any future relocation/transplanting activities and should follow the protocol of the City's Municipal Code and Protected Native Vegetation Plan provided by the City's Planning Division. The following criteria will be utilized by the contractor when conducting any future transplanting activities.

A. The Joshua trees will be retained in place or replanted somewhere on the site where they can remain in perpetuity or will be transplanted to an off-site area approved by the City where they can remain in perpetuity. Joshua trees which are deemed not suitable for transplanting will be cut-up and discarded as per City requirements.

B. Earthen berms will be created around each tree by the biologist prior to excavation and the trees will be watered approximately one week before transplanting. Watering the trees prior to excavation will help make excavation easier, ensure the root ball will hold together, and minimize stress to the tree.

C. Each tree will be moved to a pre-selected location which has already been excavated and will be placed and oriented in the same direction as their original direction. The hole will be backfilled with native soil, and the transplanted tree will be immediately watered. As noted in Section 3.0, a numbered metal tag was placed on the north side of the trees and the trees were also flagged with surveyor's flagging. The biologist will develop a watering regimen to ensure the survival of the transplanted trees. The watering regimen will be based upon the needs of the trees and the local precipitation.

6.0 REFERENCES

Brittingham, S. and W. Lawrence.
2000. Facilitation of *Yucca brevifolia* Recruitment by Mojave Desert Shrubs. Western North American Naturalist 60(4), pp. 374-383.

City of Hesperia.
1990. Native Desert Vegetation Ordinance, Municipal Code: Chapter 16.24.

Hickman, James C.
The Jepson Manual Higher Plants of California. University of California Press. Berkeley, CA. 3rd Edition. 1996.

Holland, Robert F.
1986 Preliminary Description of the Terrestrial Natural Communities of California. Prepared for the California Natural Diversity Data Base. California Department of Fish and Game. Sacramento, California. 160 pp.

Johnson, H.
1976 vegetation and Plant Communities of Southern California Deserts- a functional view. In Symposium proceedings: Plant communities of Southern California. June Latting, editor. California Native Plant Society, Spec. No. 2 Berkeley, CA.

Munz, Philip A.
1974. A Flora of Southern California. University of California Press, Berkeley, California. 1086 pp.

7.0 CERTIFICATION

I hereby certify the statements furnished above and in the attached exhibits, present the data and information required for this Joshua tree survey and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. Field work conducted for this survey was performed by Lisa Cardoso and Ryan Hunter.

Date: May 31, 2021 Signed: Lisa Cardoso
Ryan Hunter

Field Work Performed by:

Ryan Hunter
Environmental Scientist/Biologist

Lisa Cardoso
Wildlife Biologist

APPENDIX A

Figures

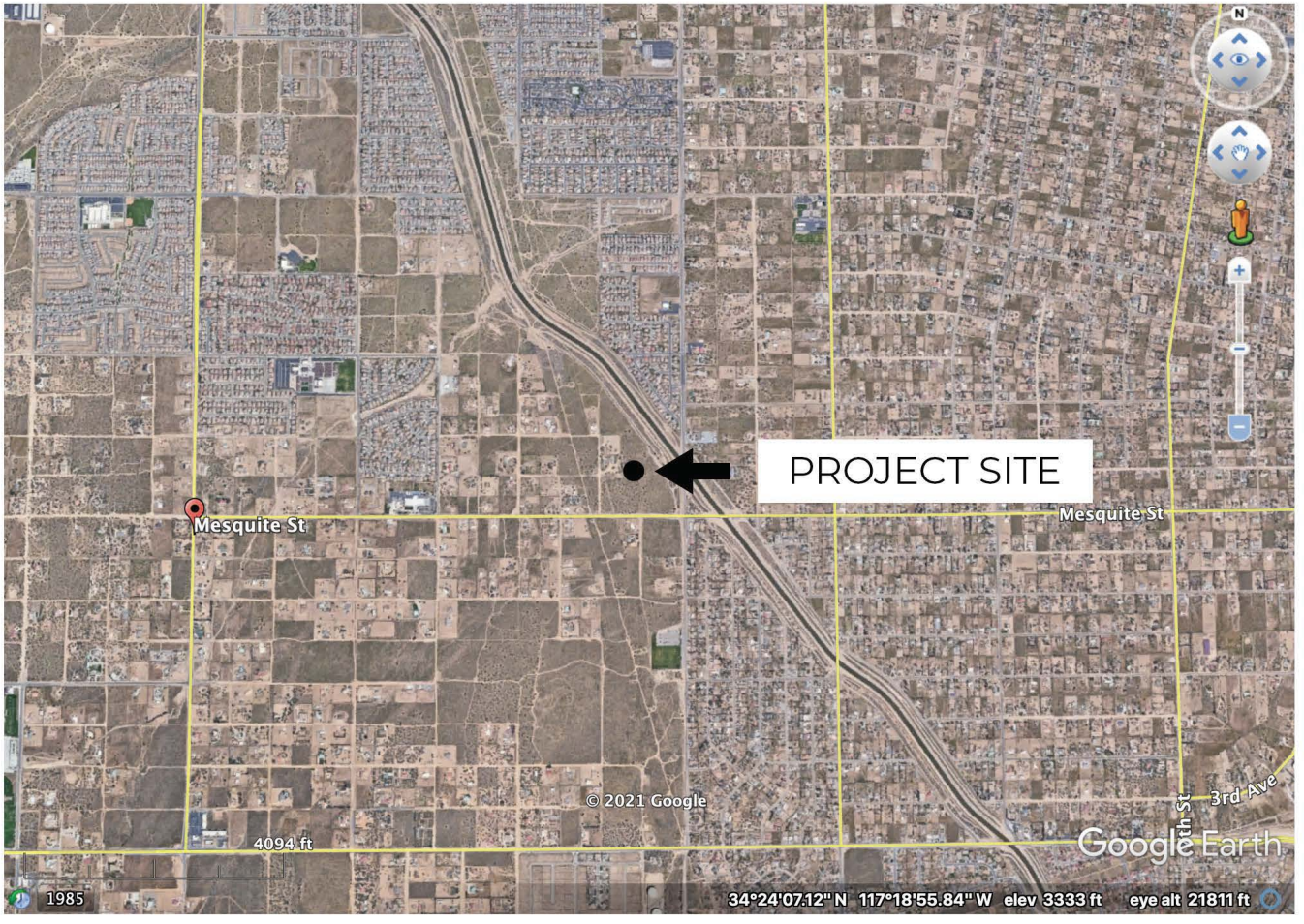

FIGURE 1: REGIONAL EXHIBIT

RCA ASSOCIATES, INC.
SOURCE: GOOGLE EARTH

RCA
ASSOCIATES, INC.

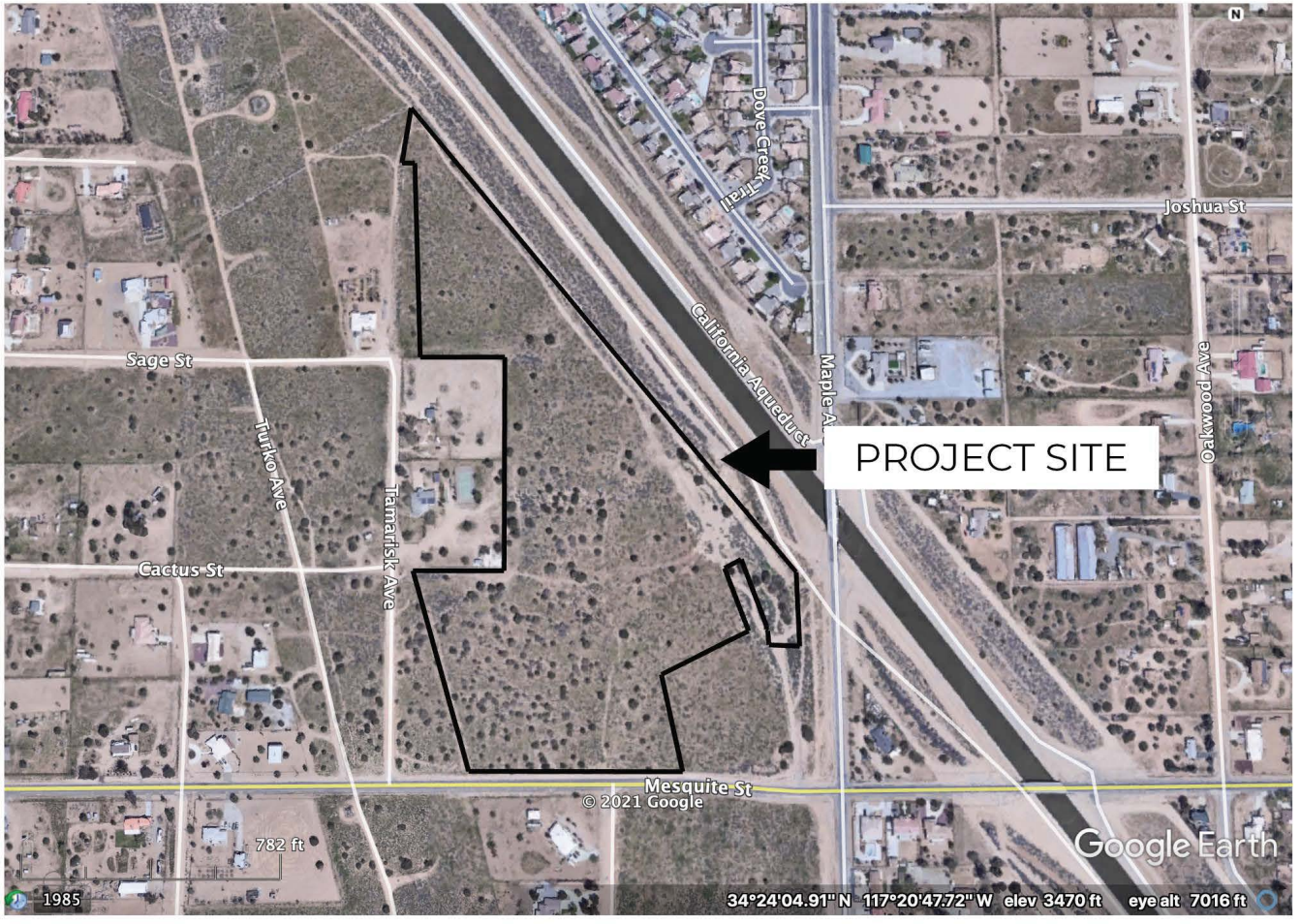

FIGURE 2: VICINITY EXHIBIT

RCA ASSOCIATES, INC.
SOURCE: GOOGLE EARTH

RCA ASSOCIATES, INC.

RCA ASSOCIATES, INC

NW Corner of Mesquite Street & Maple Avenue, Hesperia, CA

26.7-acres

RCA ASSOCIATES, INC.
SOURCE: GOOGLE EARTH

FIGURE 3: LOCATION OF JOSHUA TREES

#2021-136 JT

APPENDIX B

City of Hesperia
Municipal Code: Chapter 16.24

ARTICLE II. - DESERT NATIVE PLANT PROTECTION

16.24.110 - Purpose of provisions.

The city finds that it is in the public interest to preserve and protect specified desert native plants and provide for the conservation and wise use of our desert resources, through regulation, guidelines and enforcement that manage the removal or harvesting of such plants. They are also necessary to augment and coordinate with the State Department of Food and Agriculture in its efforts to implement and enforce the Desert Native Plant Act.

(Ord. 250 (part), 1997; SBCC § 811.0401)

16.24.120 - Scope of provisions.

A. The provisions of this article shall apply to all desert native plants growing on private land within the city and to desert native plants growing on public land owned by the city, county of San Bernardino or the state of California, except as specified by Article I of this chapter and as specified by this section.

B. Except as otherwise provided by this chapter, any person who willfully removes, or harvests or transplants a living desert native plant shall first obtain approval from the county to do so in accordance with the procedures set forth in Sections 16.24.040 or 16.24.110 et seq.

(Ord. 250 (part), 1997; SBCC § 811.0405)

16.24.130 - Commercial harvesting or transplanting of desert native plants.

A. The commercial harvesting of desert native plants shall be prohibited, except as permitted and authorized by the State Department of Food and Agriculture and as specified in the Desert Native Plant Act of 1983, as amended. The San Bernardino County Agricultural Commissioner shall be responsible for the issuance of the appropriate tags, seals and permits required by the state.

1. Protected desert native plants as specified by Section 16.24.150(B) may only be removed by a scientific or educational institution which has obtained a permit from the county agricultural commissioner for a specified number and species of these plants.
2. Written permission must be obtained from and signed by the owner of the property on which the plants are located. A copy of the document granting such permission shall be submitted to the county agricultural commissioner prior to issuance of the permit.

B. An application for a desert native plant commercial harvesting permit shall be filed with the county agricultural commissioner for review and processing. If it is determined that the proposed harvesting would not require an environmental impact report, the agricultural commissioner shall process the permit application in accordance with the provisions of this article. If an environmental impact report is required, the agricultural commissioner shall proceed only after an environmental impact report is certified, the concerns and issues are addressed, and findings made pursuant to law.

(Ord. 250 (part), 1997; SBCC § 811.0410)

16.24.140 - Findings for commercial harvesting or transplanting of desert native plants.

The county agricultural commissioner or other reviewing authority shall only authorize the commercial harvesting or transplanting of desert native plants listed in Section 16.24.150(B) subject to the provisions of this article only if one or more of the following findings are made:

A. The desert native plants are to be transplanted or harvested in a manner approved by the county agricultural commissioner or other reviewing authority, including any requirement for the issuance of plant tag seals and/or wood receipts;

B. The desert native plant is to be transplanted to another property within the same plant habitat under the supervision of a desert native plant expert and the removal of such plant will not adversely affect the desert environment on the subject site;

C. Any desert native plant on the site which is determined by the agricultural commissioner or other reviewing authority as requiring transplanting has or will be transplanted or stockpiled for transplanting in accordance with methods approved by the county agricultural commissioner. A desert native plant expert shall supervise and manage any required transplanting of desert native plants;

D. The harvesting operation has incorporated all mitigation measures, if any, establish by the environmental review action;

E. The harvesting operator has been notified of the availability of all known plants that are proposed to be removed by construction

activity within the vicinity so that these may be used in lieu of those proposed to be harvested.

(Ord. 250 (part), 1997; SBCC § 811.0415)

16.24.150 - Subject desert native plants.

The following desert native plants are subject to the regulations specified by this chapter. In all cases the botanical names shall govern the interpretation of this article.

A. Regulated Desert Native Plants. The following desert native plants, or any part thereof except the fruit, shall not be harvested or removed except under a permit issued by the agricultural commissioner or other applicable reviewing authority:
   1. The following desert native plants with stems two inches or greater in diameter or six feet or greater in height:
      a. Dalea, Spinosa (smoketree);
      b. All species of the family Agavaceae (century plants, nolinas, yuccas);
      c. All species of the genus Prosopis (mesquites).
   2. Creosote Rings, ten feet or greater in diameter.
   3. All Joshua trees (mature and immature).
B. All plants protected or regulated by the State Desert Native Plants Act (i.e., Food and Agricultural Code 80001 et seq.) shall be required to comply with the provisions of those statues prior to the issuance of any county development permit or land use application approval. The county agricultural commissioner is the responsible agency for the issuance of any required wood tags, seals or permits.

(Ord. 250 (part), 1997; SBCC § 811.0420)

16.24.160 - Subject area.

This article is applicable only within the city in which these desert native plants grow in a natural habitat.

(Ord. 250 (part), 1997; SBCC § 811.0425)

16.24.170 - Enforcement.

In addition to the enforcement provisions and penalties prescribed in Article I of this chapter and/or the State Food and Agricultural Code, Division 23, Chapter 7, the following shall apply:

A. Upon conviction of a violation of this article, all desert native plant harvesting permits issued to the person convicted shall be revoked and the permittee shall be required to surrender any unused tags and seals or wood receipts to the agricultural commissioner and no new or additional permits shall be issued to the permittee for a period of one year from the date of conviction.
B. Upon the second conviction, all permits issued to the person convicted shall be revoked and the permittee shall be required to surrender any unused tags and seals or wood receipts to the agricultural commissioner and no new or additional permits shall be issued to the permittee at any time in the future from the date of such second conviction.
C. The reviewing authority may revoke any permit, tags, or seals issued for the purpose of harvesting if the permittee willfully fails to comply with all of the conditions or stipulations of the permit.
D. Each permit authorizing the harvesting, or possessing of desert native plants or live or dead mesquite, palo verde, or ironwood species of trees which are harvested for wood shall be accompanied by a sufficient number of tags and seals or wood receipt. Such tags, seals, or wood receipts shall be issued, transported, and may be transferred to other parties in accordance with the California Desert Native Plant Act, as amended.

(Ord. 250 (part), 1997; SBCC § 811.0430)

16.24.180 - Definitions.

Terms and phrases used within this article shall be defined by Chapter 16.08 and/or as defined by the Food and Agricultural Code. The Food and Agricultural Code definition, if one exists, shall prevail over a conflicting definition in this code.

(Ord. 250 (part), 1997; SBCC § 811.0435)