



INFORMATION SUMMARY

- A. Report Date: September 2nd, 2025
- B. Report Title: Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Focused Burrowing Owl Surveys for the 58.81-acre Riverside University Health System (RUHS) Medical Center Master Plan Phase I Development Study Area, City of Moreno Valley, Riverside County, California.
- C. APN#s: 486-280-025, -026, -037, and -057.
- D. Project Location: USGS 7.5' Series Sunnymead Quadrangle Township 3 South, Range 3 West, Section 6, Extending South of Brodiaea Avenue and North of Cactus Avenue, as shown in Attachment A, *Study Area Map*.
- E. Applicant: T&B Planning, Inc.
3200 El Camino Real, Suite 100
Irvine, CA 92602
Contact: Tiffany Chao (714) 505-6360
- F. MOU Principal: Cadre Environmental
701 Palomar Airport Road, Suite 300
Carlsbad, CA 92011
Contact: Ruben S. Ramirez, Jr. (949) 300-0212
- G. Date of Surveys: March 14th, 19th, April 17th, May 25th and 27th, 2025.
- H. Summary: The 58.81 study area is located within the Western Riverside County MSHCP Reche Canyon/Badlands Plan Area and is not located within an MSHCP Criteria Area Cell, Cell Group, or Linkage Area, as shown in Attachment B, *MSHCP Relationship Map* (Western Riverside County Regional Conservation Authority (RCA) Geographic Information System (GIS) Data Downloads 2025). The majority of the eastern region of the study area is characterized as the existing RUHS Medical Center including parking areas, support structures and storage areas (disturbed habitats). The western region of the Study Area is undeveloped and characterized as non-native grassland/ruderal, as shown in Attachment, C *Vegetation Communities Map*, and Attachments D to G, *Current Study Area Photographs*.

The MSHCP has determined that all of the sensitive species potentially occurring onsite have been adequately covered (MSHCP Table 2-2 Species Considered for Conservation Under the MSHCP Since 1999, 2004). However, additional surveys may be required for wildlife species if suitable habitat is documented onsite and/or if the property is located within a predetermined “Survey Area” (MSHCP 2004).

The study area occurs almost completely within a predetermined Survey Area for the burrowing owl (*Athene cunicularia*). Suitable burrowing owl burrows and features potentially utilized for refugia and/or nesting were documented within and/or adjacent to the study area including foraging habitat documented throughout the western region of the property. Therefore, focused surveys were conducted by Cadre Environmental during the spring of 2025 following MSHCP guidelines and 2012 California Department of Fish and Wildlife (CDFW) Staff Report on Burrowing Owl Mitigation recommended survey procedures.

No burrowing owl or characteristic sign such as white-wash, feathers, tracks, or pellets were detected within or immediately adjacent to the survey area during the 2025 survey efforts.

At a minimum, an MSHCP 30-day preconstruction survey will be required immediately prior to the initiation of construction to ensure protection for this species and compliance with the conservation goals as outlined in the MSHCP.

SUBJECT

Western Riverside County Multiple Species Habitat Conservation Plan Focused Burrowing Owl Surveys for the 58.81-acre Riverside University Health System (RUHS) Medical Center Master Plan Phase I Development Study Area, City of Moreno Valley, Riverside County, California.

This report presents the findings of focused Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) burrowing owl surveys conducted for the 58.81-acre Riverside University Health System (RUHS) Medical Center Master Plan Phase I Development survey area (“Study Area”) located within the City of Moreno Valley, western Riverside County, California.

The 58.81-acre RUHS Medical Center Phase I Development Study Area is located in the 78.94-acre Master Plan Area within Assessor’s Parcel Numbers (APNs) 486-280-025, -026, -037, and -057. The Study Area is located within United States Geological Survey (USGS) 7.5’ Series Sunnymead Quadrangle, Riverside County, Township 3 South, Range 3 West, Section 16. Specifically, the Study Area extends south of Brodiaea Avenue, north of Cactus Avenue, including the existing RUHS Medical Center, City of Moreno Valley, Riverside County, California, as shown in Attachment A, *Study Area Map*.

The Study Area is located within the Western Riverside County MSHCP Reche Canyon/Badlands Plan Area and is not located within an MSHCP Criteria Area Cell, Cell Group, or Linkage Area, as shown in Attachment B, *MSHCP Relationship Map* (Western Riverside County Regional Conservation Authority (RCA) Geographic Information System (GIS) Data Downloads 2025).

This report incorporates the findings of a literature review, compilation of existing documentation, and focused surveys conducted on March 14th, 19th, April 17th, May 25th and 27th, 2025. This documentation is consistent with accepted scientific and technical standards and the requirements of the MSHCP. When appropriate, general biological resources are described in summary form in an effort to provide the reader with adequate background information.

METHODS OF STUDY

APPROACH

Prior to visiting the Study Area, a review of all available and relevant data on the biological characteristics, sensitive habitats, and species potentially present on or adjacent to the Study Area was conducted. Additionally, aerial photography, and USGS topographic map data were examined. After reviewing the available information, Cadre Environmental conducted a physical site assessment/burrow and focused surveys.

As required by the MSHCP, and during the initial property assessment process, the Study Area’s APNs were searched using the RCA GIS database to determine if additional

surveys for wildlife not adequately covered by the MSHCP may be required. The Study Area is located almost completely within a predetermined Survey Area for the burrowing owl.

Plant Community/Habitat Classification and Mapping

Plant communities were preliminarily mapped with the aid of an aerial photograph using the MSHCP uncollapsed vegetation communities' classification system. When a vegetation community could not be accurately characterized using this classification system, an updated community classification code was developed to more accurately represent onsite habitat types.

Burrowing Owl Surveys

The MSHCP has determined that all of the sensitive species potentially occurring onsite have been adequately covered (MSHCP Table 2-2 Species Considered for Conservation Under the MSHCP Since 1999, 2004). However, additional surveys may be required wildlife species if suitable habitat is documented onsite and/or if the property is located within a predetermined "Survey Area" (MSHCP 2004).

Suitable burrowing owl burrows potentially utilized for refugia and/or nesting were documented within and adjacent to the Study Area including foraging habitat. Therefore, focused surveys were conducted by Cadre Environmental during the spring of 2025.

In accordance with the MSHCP Burrowing Owl Survey Instructions (2006), survey protocol consists of two steps, Step I – Habitat Assessment and Step II – Locating Burrows and Burrowing Owls. Step II is comprised of two parts, Part A: Focused Burrow Surveys and Part B: Focused Burrowing Owl Surveys. Each step is briefly outlined below, followed by the methodology and results of each survey conducted within the Study Area. All initial habitat assessment, burrow and focused surveys were conducted by Ruben Ramirez, Cadre Environmental. Surveys were conducted during weather that is conducive to observing owls outside their burrows and detecting burrowing owl sign. Surveys were not conducted during rain, high winds (> 20 mph), dense fog, or temperatures over 90 °F. None of the surveys were conducted within five (5) days of measurable precipitation. In addition to the MSHCP guidelines, field notes were taken daily. These notes recorded the date, location, animal species observed, and general habitat characteristics of each area and habitat examined that day.

Step I – Habitat Assessment

Step 1 of the MSHCP habitat assessment for burrowing owl consists of a walking survey to determine if suitable habitat is present onsite. Cadre Environmental conducted the habitat assessment on March 14th 2025. Upon arrival at the Study Area, and prior to initiating the assessment survey, Cadre Environmental used binoculars to scan all suitable habitats on and adjacent to the property, including perch locations, to ascertain owl presence.

All suitable areas of the Study Area were surveyed on foot by walking slowly and methodically while recording/mapping areas that may represent suitable owl habitat onsite. Primary indicators of suitable burrowing owl habitat in western Riverside County include, but are not limited to, native and non-native grassland, interstitial grassland within shrub lands, shrub lands with low density shrub cover, golf courses, drainage ditches, earthen berms, unpaved airfields, pastureland, dairies, fallow fields, and agricultural use areas. Burrowing owls typically use burrows made by fossorial mammals, such as California ground squirrels (*Otospermophilus beecheyi*) or badgers (*Taxidea taxus*), but they often utilize man-made structures, such as earthen berms, cement culverts, cement, asphalt, rock, or wood debris piles, or openings beneath cement or asphalt pavement. Burrowing owls are often found within, under, or in close proximity to man-made structures.

According to the MSHCP guidelines, if suitable habitat is present, the biologist should also walk the perimeter of the property, which consists of a 150-meter (approximately 500 feet) buffer zone around the Study Area boundary. If permission to access the buffer area cannot be obtained, the biologist shall not trespass, but visually inspect adjacent habitats with binoculars. Results from the habitat assessment indicated that suitable burrowing owl burrows and foraging habitat were documented within and adjacent to the Study Area. Accordingly, if suitable habitat is documented onsite, both Step II surveys and the 30-day pre-construction surveys are required in order to comply with the MSHCP guidelines.

Step II – Locating Burrows and Burrowing Owls

Concurrent with the initial habitat assessment, a detailed focused burrow survey was conducted and included documentation of appropriately sized natural burrows or suitable man-made structures that may be utilized by burrowing owl - as part of the MSHCP protocol, which is described below under Part A. Focused Burrow Survey. The MSHCP protocol indicated that no more than 100 acres should be surveyed per day/per biologist.

Part A: Focused Burrow Survey

A systematic survey for burrows, including burrowing owl sign, was conducted by walking across all suitable habitats mapped within the Study Area on March 14th, 2025. Pedestrian survey transects were spaced to allow 100% visual coverage of the ground surface. The distances between transect centerlines were no more than 20 meters (approximately 66 ft.) apart, and owing to the terrain, often much smaller. Transect routes were also adjusted to account for topography, general ground surface visibility and/or complete lack of suitable habitat. All observations of suitable burrows or dens, natural or man-made, or sightings of burrowing owl, were recorded and mapped during the survey.

Part B: Focused Burrowing Owl Surveys

Four (4) focused burrowing owl surveys were conducted within the Study Area on March 19th, April 17th, May 25th and 27th, 2025 from one hour before sunrise to two hours after

sunrise or in the early evening two hours before sunset to one hour after sunset. All surveys were conducted following MSHCP guidelines and 2012 CDFW Staff Report on Burrowing Owl Mitigation recommended survey procedures. During visual surveys, all potentially suitable burrow or structure entrances were investigated for signs of owl occupation, such as feathers, tracks, or pellets, and carefully observed to determine if burrowing owls utilize these features, when present, as shown in Attachment H, *Potential Burrowing Owl Refugia*. All burrows are monitored at a short distance from the entrance, and at a location that would not interfere with potential owl behavior, when present. In addition to monitoring potential burrow locations, all suitable habitats in the Study Area were surveyed, as shown in Attachment I, *Burrowing Owl Survey Area Map*.

**Table 1.
 Burrowing Owl Survey Schedule**

Survey	Dates (Conditions) 2025 Start – End Times	Results
1	March 19th 76°F to 68°F, winds 2-10 mph, no rain 5:00pm – 7:30am	No burrowing owls or characteristic sign detected within or adjacent to the Study Area.
2	April 17th 54°F to 58°F, winds 2-6 mph, no rain 6:30am – 9:00am	No burrowing owls or characteristic sign detected within or adjacent to the Study Area.
3	May 25th 59°F to 62°F, winds 2-4 mph, no rain 6:30am – 9:00am	No burrowing owls or characteristic sign detected within or adjacent to the Study Area.
4	May 27st 62°F to 64°F, winds 2-4 mph, no rain 6:30am – 9:00am	No burrowing owls or characteristic sign detected within or adjacent to the Study Area.

EXISTING CONDITIONS

The majority of the eastern region of the Study Area is characterized as the existing RUHS Medical Center including parking areas, support structures and storage areas (disturbed habitats). The western region of the Study Area is undeveloped and characterized as non-native grassland/ruderal, as shown in Attachment C, *Vegetation Communities Map*, Attachments D to G, *Current Study Area Photographs*, and outlined in Table 2, *Study Area Vegetation Community Acreages*.

Table 2.
Study Area Vegetation Community Acreages

Vegetation Community	Study Area Total (ac)
Developed	37.99
Disturbed	6.23
Non-Native Grassland/Ruderal	14.59
	58.81

Source: Cadre Environmental 2025.

VEGETATION COMMUNITIES

Developed

The eastern region of the Study Area is developed respective of the existing RUHS Medical Center, including parking areas, support structures and storage areas. Ornamental vegetation is scattered throughout the RUHS Medical Center including but not limited to Chinese elm (*Ulmus parvifolia*), holly oak (*Quercus ilex*), pine trees (*Pinus* sp.), red gum (*Eucalyptus camaldulensis*), date palm (*Phoenix dactylifera*), fountain grass (*Pennisetum setaceum*), Bougainvillea (*Bougainvillea* sp.), and Lantana (*Lantana camara*).

Disturbed

Disturbed regions of the Study Area include storage and vacant lands adjacent and extending north and west of the RUHS Medical Center which are generally devoid of vegetation. Scattered invasive species documented within the disturbed regions include cheeseweed (*Malva parviflora*), red-stemmed filaree (*Erodium cicutarium*), Australian saltbush (*Atriplex semibaccata*), pineapple weed (*Matricaria discoidea*), California bur clover (*Medicago polymorpha*), prostate knotweed (*Polygonum aviculare*), Russian thistle (*Salsola tragus*), and stinknet (*Oncosiphon piluliferum*). Native species documented include vinegarweed (*Trichostema lanceolatum*) and telegraph weed (*Heterotheca grandiflora*).

Non-native Grassland/Ruderal

The western region of the Study Area is characterized as non-native grassland/ruderal vegetation. Species documented within this habitat type include false barley (*Hordeum murinum*), wild oat (*Avena fatua*), ripgut grass (*Bromus diandrus*), foxtail chess (*Bromus madritensis* ssp. *rubens*), stinknet, cheeseweed, Russian thistle, common fiddleneck (*Amsinckia intermedia*), doveweed (*Croton setigerus*), yellow sweetclover (*Melilotus officinalis*), common sow thistle (*Sonchus oleracens*), tocalote (*Centaurea melitensis*), pigweed (*Amaranthus albus*), and London rocket (*Sisymbrium irio*).

SOILS

The Soil Survey of Western Riverside Area has classified the Study Area as follows (U.S. Department of Agriculture 2025):

- GyA – Greenfield sandy loam, 0 to 2 percent slopes
- GyC2 – Greenfield sandy loam, 2 to 8 percent slopes, eroded
- HcC – Hanford coarse sandy loam, 2 to 8 percent slopes
- RaA – Ramona sandy loam, 0 to 2 percent slopes
- ReC2 – Ramona very fine sandy loam, 0 to 8 percent slopes, eroded

RESULTS

No burrowing owl or characteristic sign such as white-wash, feathers, tracks, or pellets were detected within or immediately adjacent to the Study Area during the 2025 MSHCP focused survey efforts.

Due to the presence of potentially suitable habitat, a 30-day pre-construction survey for burrowing owls is required prior to initial ground-disturbing activities (including vegetation clearing, clearing and grubbing, tree removal, site watering, equipment staging, grading, etc.) to ensure that no owls have colonized the site in the days or weeks preceding the ground-disturbing activities. If burrowing owls have colonized the Study Area prior to the initiation of ground-disturbing activities, the project proponent will immediately inform the City of Moreno Valley, Wildlife Agencies, and will need to coordinate further with Wildlife Agencies, including the possibility of preparing a Burrowing Owl Protection and Relocation Plan, prior to initiating ground disturbance. If ground-disturbing activities occur, but the site is left undisturbed for more than 30 days, a pre-construction survey will again be necessary to ensure burrowing owl has not colonized the site since it was last disturbed. If burrowing owl is found, the same coordination described above will be necessary.

General wildlife species documented within or adjacent to the Study Area during the habitat assessments and focused surveys include red-tailed hawk (*Buteo jamaicensis*), sharp-shinned hawk (*Accipiter striatus*), American kestrel (*Falco sparverius*), killdeer (*Charadrius vociferus*), turkey vulture (*Cathartes aura*), rock dove (*Columba livia*), mourning dove (*Zenaida macroura*), Anna's hummingbird (*Calypte anna*), Allen's hummingbird (*Selasphorus sasin*), Cassin's kingbird (*Tyrannus vociferans*), black phoebe (*Sayornis nigricans*), Say's phoebe (*Sayornis saya*), northern rough-winged swallow (*Stelgidopteryx serripennis*), violet green swallow (*Tachycineta thalassina*), American crow (*Corvus brachyrhynchos*), yellow rumped warbler (*Setophaga coronata*), western meadowlark (*Sturnella neglecta*), house finch (*Haemorhous mexicanus*), northern mockingbird (*Mimus polyglottos*), lesser goldfinch (*Spinus psaltria*), lark sparrow (*Chondestes grammacus*), house sparrow (*Passer domesticus*), white crowned sparrow (*Zonotrichia leucophrys*), western bluebird (*Sialia mexicana*), European starling (*Sturnus vulgaris*), desert cottontail rabbit (*Sylvilagus audubonii*), and California ground squirrel.

REFERENCES

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ATTACHMENTS

Attachment A – Study Area Map

Attachment B – MSHCP Relationship Map

Attachment C - Vegetation Communities Map

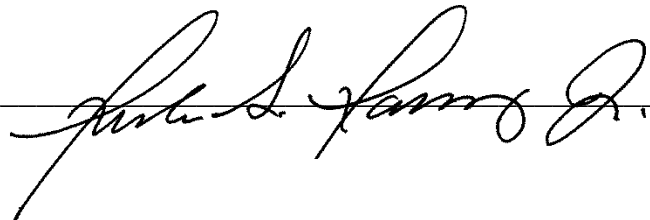
Attachment D to G - Current Study Area Photographs

Attachment H – Potential Burrowing Owl Refugia Photographs

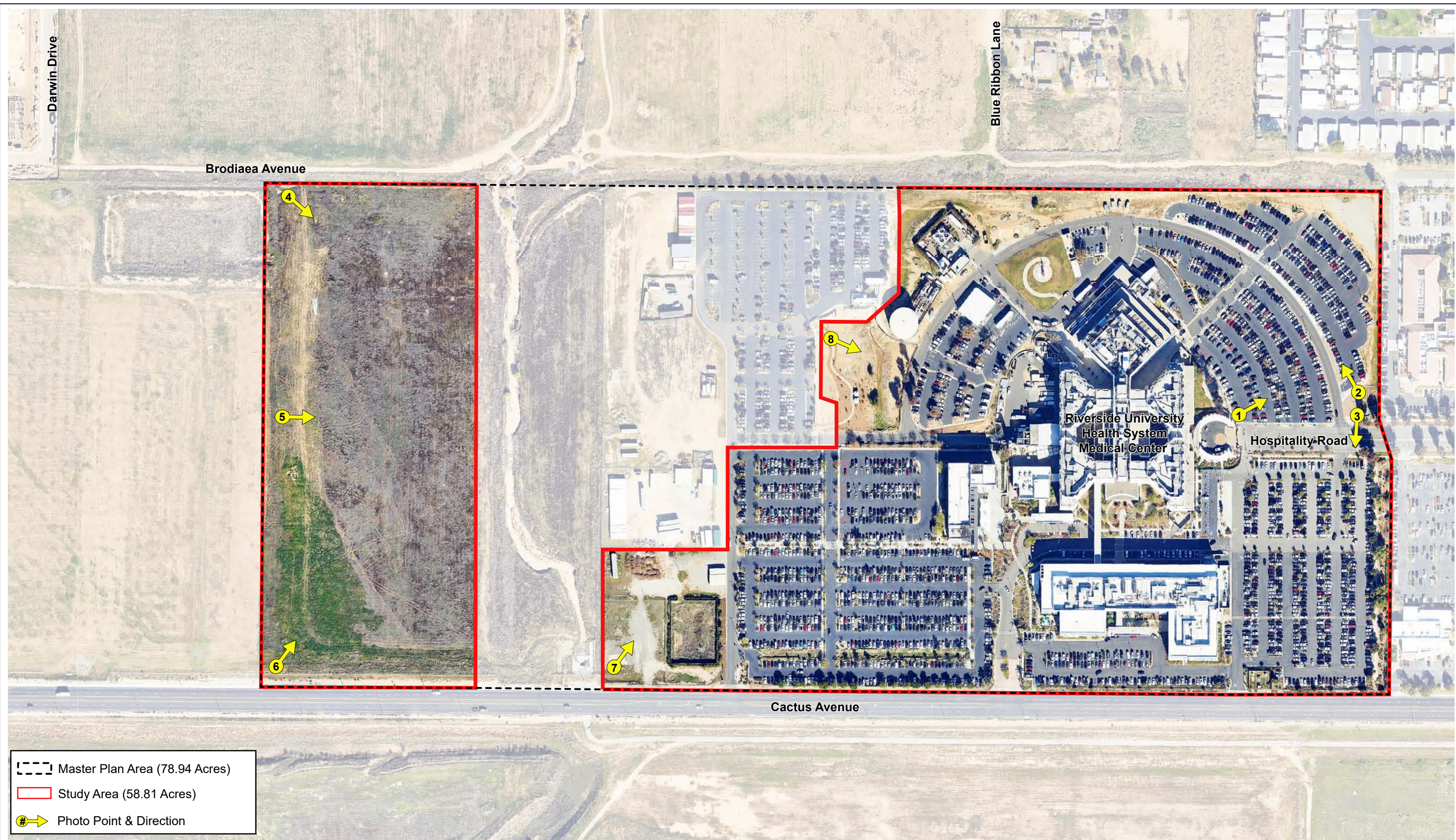
Attachment I - Burrowing Owl Survey Area Map

Certification

“I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.”

Author:  Date: September 2nd, 2025

Fieldwork Performed By:  Date: September 2nd, 2025

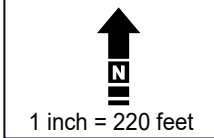


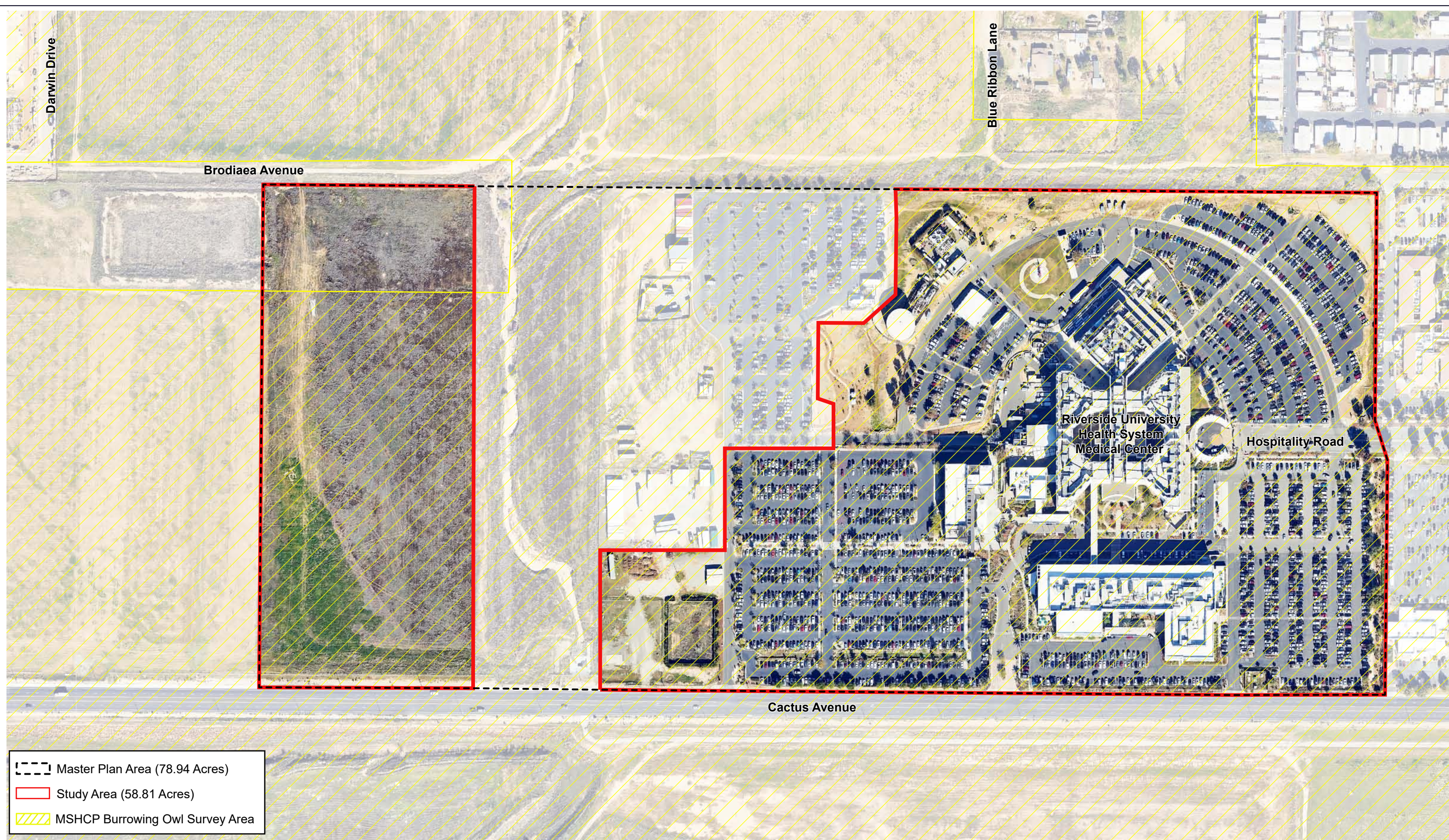
- Master Plan Area (78.94 Acres)
- Study Area (58.81 Acres)
- # ➔ Photo Point & Direction

APNs Portion of 486-280-025, -026, -037, and -057.

Attachment A - Study Area Map

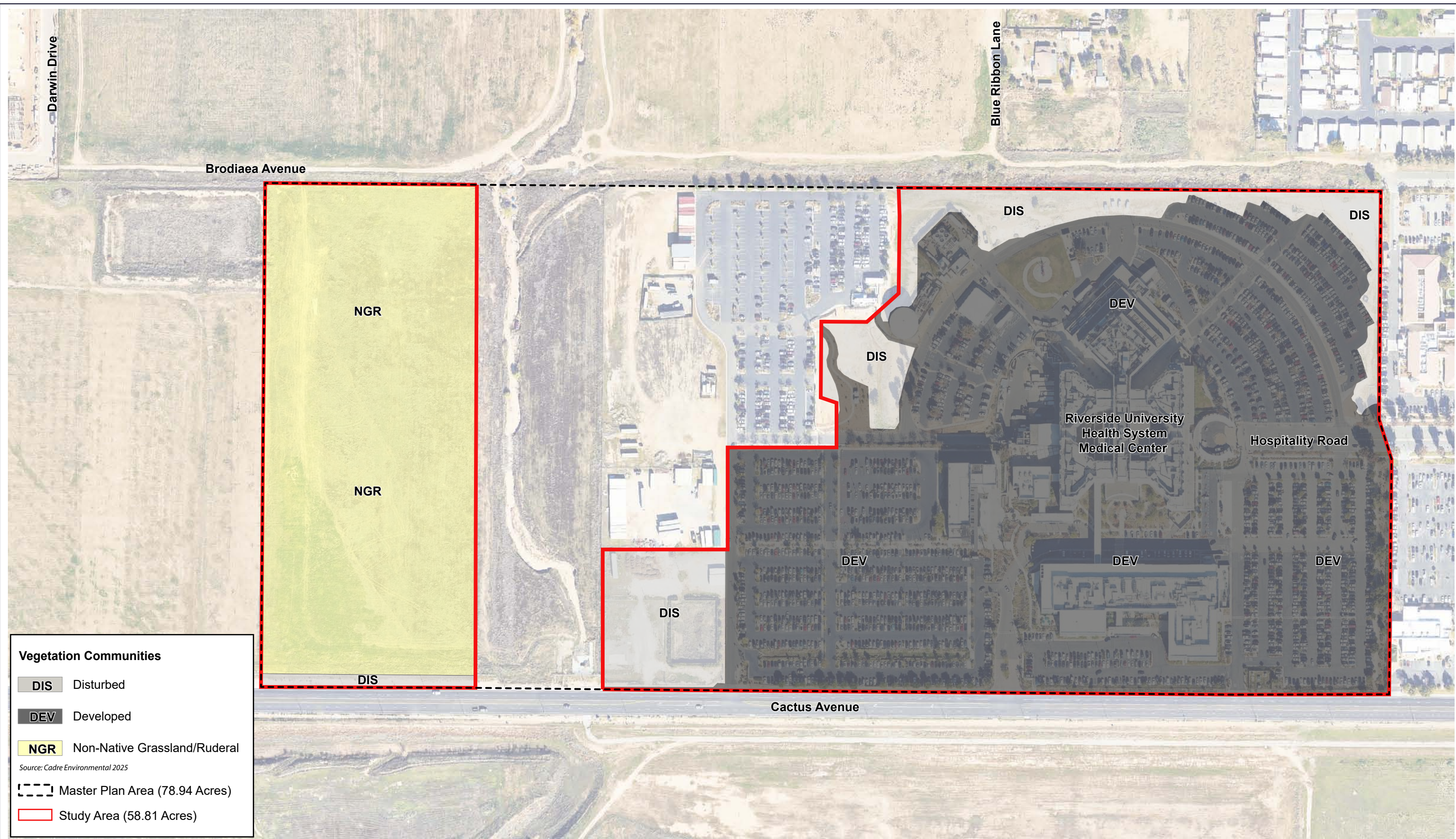
*MSHCP Focused Burrowing Owl Surveys
Riverside University Health System Medical Center Master Plan*





- Master Plan Area (78.94 Acres)
- Study Area (58.81 Acres)
- MSHCP Burrowing Owl Survey Area

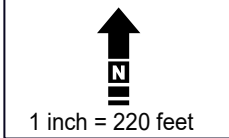
APNs Portion of 486-280-025, -026, -037, and -057.



APNs Portion of 486-280-025, -026, -037, and -057.

Attachment C - Vegetation Communities Map

*MSHCP Focused Burrowing Owl Surveys
Riverside University Health System Medical Center Master Plan*





PHOTOGRAPH 1



PHOTOGRAPH 2

Refer to Attachment A for Photographic Key - Study Area Map

Attachment D - Current Study Area Photographs

MSHCP Focused Burrowing Owl Surveys

Riverside University Health System Medical Center Master Plan





PHOTOGRAPH 3



PHOTOGRAPH 4

Refer to Attachment A for Photographic Key - Study Area Map

Attachment E - Current Study Area Photographs

MSHCP Focused Burrowing Owl Surveys

Riverside University Health System Medical Center Master Plan





PHOTOGRAPH 5



PHOTOGRAPH 6

Refer to Attachment A for Photographic Key - Study Area Map

Attachment F - Current Study Area Photographs

MSHCP Focused Burrowing Owl Surveys

Riverside University Health System Medical Center Master Plan





PHOTOGRAPH 7



PHOTOGRAPH 8

Refer to Attachment A for Photographic Key - Study Area Map

Attachment G - Current Study Area Photographs

MSHCP Focused Burrowing Owl Surveys

Riverside University Health System Medical Center Master Plan





Potential Burrowing Owl Refugia



Potential Burrowing Owl Refugia

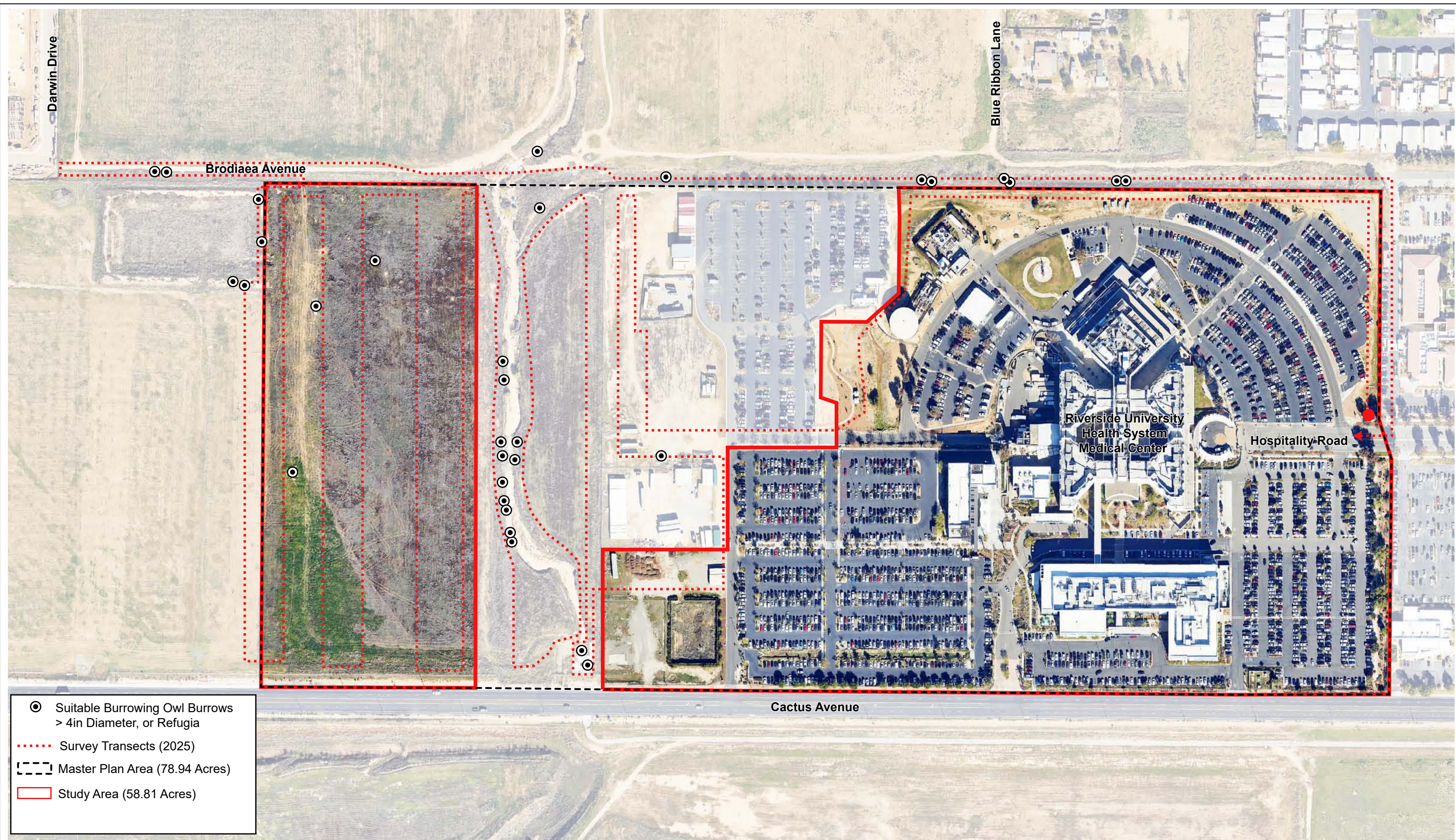
Refer to Attachment A for Photographic Key - Study Area Map

Attachment H - Potential Burrowing Owl Refugia Photographs

MSHCP Focused Burrowing Owl Surveys

Riverside University Health System Medical Center Master Plan





- ⊙ Suitable Burrowing Owl Burrows > 4in Diameter, or Refugia
- Survey Transects (2025)
- - - - Master Plan Area (78.94 Acres)
- ▭ Study Area (58.81 Acres)

APNs Portion of 486-280-025, -026, -037, and -057.