APPENDIX J: PALEONTOLOGICAL RESOURCES ASSESSMENT

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Submitted to:

Konstanza Dobreva

E|P|D Solutions, Inc.

Irvine, California

Prepared on Behalf of:

CapRock Partners



PALEONTOLOGICAL RESOURCES ASSESSMENT

Palomino Business Center Project

City of Norco, Riverside County, California

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PHASE I PALEONTOLOGICAL RESOURCES ASSESSMENT PALOMINO BUSINESS PARK CITY OF NORCO, RIVERSIDE COUNTY, CALIFORNIA

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January 2019

MCC Project Number: 20181001

Type of Study: Paleontological resources assessment

Paleontological Localities within Area of Potential Impact: None

Project Location: USGS 7.5' Topographic Quadrangle Corona North, Sections 13 and 24 of Township 3 South, Range 7 West APN(s):122-030-011, 122-030-016, 122-030-017, 122-030-018, 126-110-012, 126-110-013, 126-160-023, 126-170-001, 126-170-002, 126-170-003, 126-170-005, 126-170-008, 126-170-009, 126-170-010, 126-170-011, 126-170-012, 126-170-014, 126-170-015, 126-170-017, 126-170-018, 126-170-019, 126-170-033, 126-170-034, 126-180-001, 126-180-002, 126-180-003, 126-180-004-0, 126-180-005, 126-180-006, 126-180-007, 126-190-001, 126-190-002, 126-190-003, 126-200-002, 126-200-004, 126-200-006, 126-200-013, 126-200-015, 126-200-016, 126-200-017, 126-200-018, 126-200-019, 126-200-020, 126-200-021, 126-200-022, 126-200-023, 126-200-024, 126-200-025, 126-200-026, 126-210-001, 126-210-003, 126-210-004, 126-210-005, 126-210-006, 126-210-007, 126-210-008, 126-210-009, 126-210-010, 126-240-001, 126-240-002, 126-240-003, 126-240-004, 126-240-005, 126-240-006, 126-240-007, 126-170-012, 126-170-013

Project Area: 111 acres

Date of Field Survey: January 7 and January 10, 2019

Key Words: Paleontology, CEQA, Riverside, RCLIS, Negative Survey, High A Sensitivity, Qvoaa, Klst

MANAGEMENT SUMMARY

CapRock Partners proposes the construction of the new Palomino Business Park Project (Project), located in the City of Norco, in Riverside County, California. Material Culture Consulting, Inc. (MCC) was retained by E|P|D Solutions, Inc. to conduct the Phase I paleontological resource investigation of the Project Area. This assessment was conducted in accordance with the California Environmental Quality Act (CEQA) and guidelines established by the County of Riverside. This assessment included a locality search, an examination of geologic maps and paleontological literature, and a field survey.

No significant paleontological resources were identified directly within the Project Area during the locality search or the field survey. The Riverside County Land Information System (RCLIS) GIS data reveals all of the Project Area lie within an area mapped as High A sensitivity. High A sensitivity indicates that the geological formation or mapped rock units are known to contain or have the correct age and dispositional conditions to contain significant paleontological resources. Excavation during the course of the Project has the potential to reach paleontologically sensitive deposits, and, as a result, could impact paleontological resources. Therefore, MCC recommends the following procedures:

- A trained and qualified paleontological monitor should perform full-time monitoring of any excavations on the Project that have the potential to impact paleontological resources in undisturbed High sensitivity native sediments, at or below 5 feet in depth. The monitor will have the ability to redirect construction activities to ensure avoidance of adverse impacts to paleontological resources.
- The project paleontologist may re-evaluate the necessity for paleontological monitoring after examination of the affected sediments during excavation, with approval from County and Client representatives.
- Any potentially significant fossils observed shall be collected and recorded in conjunction with best management practices and Society of Vertebrate Paleontology (SVP) professional standards.
- Any fossils recovered during mitigation should be deposited in an accredited and permanent scientific institution for the benefit of current and future generations.
- A report documenting the results of the monitoring, including any salvage activities and the significance of any fossils, will be prepared and submitted to the appropriate County personnel.

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INTRODUCTION

CapRock Partners proposes the construction of the new Palomino Business Park Project (Project), located in the City of Norco, in Riverside County, California. Material Culture Consulting, Inc. (MCC) was retained by E|P|D Solutions, Inc. to conduct the Phase I paleontological resource investigation of the Project Area. This assessment was conducted in accordance with the California Environmental Quality Act (CEQA) and guidelines established by the County of Riverside. According to these regulations and guidelines, if development of a Project has the potential to result in significant impacts to paleontological resources, a plan must be developed to mitigate those impacts to a level which is less than a significant. This assessment documents the potential for encountering paleontological resources during development of this Project and provides recommendations on how to mitigate impacts to those resources.

PROJECT LOCATION AND DESCRIPTION

The Project is located within the City of Norco, in Riverside County, California (Figure 1). The Project Area is located at the northwest corner of the intersection of First Street and Parkridge Avenue, approximately 2.7 miles south of the Naval Sea Systems Command Warfare Center (Figures 2 and 3). Specifically, the proposed Project is located in Sections 13 and 24, within Township 3 South, Range 7 West on the U.S. Geological Survey (USGS) Corona North 7.5' topographic quadrangle (San Bernardino Base Meridian) (Figure 2). The total acreage for the Project is 111 acres and encompasses a total of 68 parcels:, 122-030-011, 122-030-016, 122-030-017, 122-030-018, 126-110-012, 126-110-013, 126-160-023, 126-170-001, 126-170-002, 126-170-003, 126-170-005, 126-170-008, 126-170-019, 126-170-010, 126-170-011, 126-170-012, 126-170-014, 126-170-015, 126-170-017, 126-170-018, 126-170-019, 126-170-033, 126-170-034, 126-180-001, 126-180-002, 126-180-003, 126-180-004-0, 126-180-005, 126-200-006, 126-200-013, 126-200-015, 126-200-016, 126-200-017, 126-200-003, 126-200-004, 126-200-004, 126-200-013, 126-200-023, 126-200-024, 126-200-017, 126-200-018, 126-200-019, 126-200-020, 126-200-023, 126-210-004, 126-210-003, 126-210-001, 126-210-003, 126-210-001, 126-210-003, 126-210-001, 126-210-003, 126-210-001, 126-210-003, 126-210-001, 126-210-003, 126-210-001, 126-210-003, 126-210-004, 126-210-003, 126-210-004, 126-210-005, 126-210-004, 126-210-005, 126-210-007, 126-210-003, 126-210-001, 126-240-001, 126-240-001, 126-240-001, 126-240-001, 126-240-001, 126-240-001, 126-240-001, 126-240-001, 126-240-002, 126-240-003, 126-240-001, 126-240-001, 126-240-001, 126-240-001, 126-240-001, 126-240-001, 126-240-002, 126-240-003, 126-240-001, 126-240-005, 126-240-005, 126-240-007, 126-170-013, 126-170-12.

The Project's current site plan includes the development of industrial and commercial buildings and related onand off-site improvements. Implementation of the Project would include demolition of 36 existing single-family residences, industrial warehouse buildings, related improvements, and building remnants (e.g., foundations, etc.) from prior development. The Project includes infrastructure improvements such as storm water retention and detention basins, road widening, pavement replacement, curb and gutter additions, and new water, sewer, and storm drain systems. In addition, the proposed Project would include equestrian trails along the perimeter of the site and landscaping throughout the site, including the roadway setback areas.

PROJECT PERSONNEL

Jennifer Kelly, M.S., a Qualified Riverside County Paleontologist, served as the Principal Investigator for the study. Ms. Kelly conducted the paleontological resource literature and map reviews, oversaw the field study, and prepared this report. Ms. Kelly has a M.Sc. in Geology from California State University, Long Beach and over ten years of experience in environmental and paleontological compliance in California (See Appendix A). Sonia Sifuentes, M.A., RPA, MCC archaeologist and cross-trained paleontologist, conducted supplemental pedestrian survey on January 10, 2019 and co-authored this report. Ms. Sifuentes has a M.Sc in Archaeology of the North from University of Aberdeen, Scotland, a B.A. in Anthropology from University of Southern California, and over ten years of experience as an archaeologist in Southern California, including completion of several projects in Riverside County and two years of professional experience working as a cross-trained paleontologist in Southern California. Judy Cardoza, B.A, MCC archaeologist and cross-trained paleontologist, performed the initial pedestrian survey.

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Figure 1. Palomino Business Park Project Vicinity (1:500,000)

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Figure 2. Palomino Business Park Project Area (1:24,000, as depicted on Corona North USGS 7.5 Minute Quadrangle)



Figure 3. Palomino Business Park Project Area (1:6,000, as depicted on aerial photograph)

ENVIRONMENTAL SETTING

Riverside County is situated within the Peninsular Ranges Geologic Province, and the Project Area itself is located within northwestern Riverside County, which opens up to the east onto the San Jacinto Valley. The Santa Ana River is the major drainage in the general region, with a river system flowing in an overall general northeast to southwest direction, emptying into the Pacific Ocean near Newport Beach and Huntington Beach. The Project is bounded by Rider Street to the south, Harvill Avenue to the east, Patterson Avenue to the west, and a vacant lot to the north. The Project Area is located within a relatively flat valley, with elevations averaging approximately 464 m (1523 ft.) above mean sea level (AMSL). Vegetation in much of the area has been altered by historical and modern development. Present-day vegetation includes a number of introduced species and rarely supports the full complement of native plants. The area was once a rich zone of native grasses and riparian species bordered by chaparral-covered hillsides. Patches of buckwheat (Eriogonum spp.) and prickly pear (Opuntia occidentalis) still survive along with a variety of sages (Salvia spp.), oaks (Quercus spp.), and other native species. The Perris Valley area enjoys a mild Mediterranean climate characterized by warm, dry summers and cool, moist winters.

GEOLOGICAL CONTEXT

The Corona North quadrangle is located at the northern end of the Peninsular Ranges Province, located almost completely in the Perris Block, with the southwestern tip located in the Chino fault zone. The Perris Block is a structurally stable, internally cohesive mass of crustal rocks bounded on the east by the San Jacinto fault zone, bounded on the west by the Elsinore and Chino fault zones, on the north by the Cucamonga fault zone (Morton et al. 2002), and on the south by a series of sedimentary basins (Morton and Matti 1989). The entire Project Area is mapped as Quaternary alluvium (Q) by Jennings, Strands, and Rogers (1977) (Figure 4). Morton et al. (2002) mapped the Project Area lying mainly within very old alluvial channel deposits (Qvoaa) with pockets of La Sierra Tonalote deposits observed in the southern end of the Project Area (Klst).

Quaternary very old alluvial channel deposits (arenaceoius) (Qvoaa) are early Pleistocene-aged alluvial deposit that typically consists of reddish-brown, well-indurated gravel, sand, and silt. Surfaces are well-dissected and the deposit underlies a large area between Santa Ana River and Temescal Wash. The alluvial channel deposits in this area range for very course sand to very fine sand (Morton et al. 2002).

La Sierra Tonalite (Klst) is a Cretaceous massive biotite tonalite. Compared to other units in the region, this exposure exhibits a fairly dark color. Much of this tonalite is altered to secondary minerals, especially epidote and chlorite, and contains localized zones that are thoroughly altered to epidote, quartz, and chlorite; some highly altered rocks contain tourmaline and sulfide minerals. Large body exposed west of La Sierra and larger mass, partly covered by Quaternary deposits, underlies Norco area. Named by Larsen (1948) for exposures in vicinity of La Sierra (Morton et al. 2002).

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Figure 4. Palomino Business Park Project Geologic Map (from Jennings, Strand, and Rogers 1977)

RESEARCH DESIGN

The paleontological resources assessment was conducted according to CEQA, Public Resources Code (13 PRC) 2100, (14 CAC) 15000, Appendix G, Section J, (PRC) 2100-21177, Appendix G, (PRC) 5097.5. The paleontological resources assessment was conducted to evaluate the potential existence of resources that would require a preparation of a monitoring plan and monitoring activities, in order to reduce impacts to a less than significant level. Guidelines set forth by Riverside County were consulted to ensure that all local and state requirements were met.

The Riverside County General Plan (2015), in conjunction with the Riverside County Land Information System (RCLIS) overlay map defines what significant impact on paleontological resources consists of, and requires monitoring of, activities within designated High sensitivity areas (both High A and B) that may affect these resources. Areas with a "High Potential" for paleontological resources include sedimentary rock units with a high potential for containing significant non-renewable paleontological resources and are rock units within which vertebrate or significant invertebrate fossils have been determined to be present or likely to be present. These units include, but are not limited to, sedimentary formations which contain significant non-renewable paleontological resources not units temporally or lithologically suitable for the preservation of fossils. High sensitivity includes not only the potential for yielding abundant vertebrate fossils, but also for production of a few significant fossils that may provide new and significant (taxonomic, phylogenetic, ecologic, and/or stratigraphic) data. High sensitivity areas are mapped as either "High A" or "High B."

The Riverside County General Plan also requires that a final report be submitted to the Riverside County Planning Department documenting the findings of the monitoring and mitigation work (County of Riverside 2008). Riverside County General Plan recommendations are based on the SVP Guidelines (SVP 1991, 1996).

The Multipurpose Open Space Element of the *Riverside County General Plan* provides the following requirements for paleontologically sensitive areas within the County:

- OS 19.8 Whenever existing information indicates that a site proposed for development may
 contain biological, paleontological, or other scientific resources, a report shall be filed stating the extent
 and potential significance of the resources that may exist within the proposed development and
 appropriate measures through which the impacts of development may be mitigated.
- OS 19.9 This policy requires that when existing information indicates that a site proposed for development may contain paleontological resources, a paleontologist shall monitor site grading activities, with the authority to halt grading to collect uncovered paleontological resources, curate any resources collected with an appropriate repository, and file a report with the Planning Department documenting any paleontological resources that are found during the course of site grading.
- OS 19.10 Transmit significant development applications subject to CEQA to the San Bernardino County Museum (SBCM) for review, comment, and/or preparation of recommended conditions of approval with regard to paleontological resources.

Paleontological resources (fossils) are the remains of prehistoric life. These remains can be bones, teeth, shells, wood or leaves, or trace fossils (including burrows and trackways). The Society for Vertebrate Paleontology (SVP) generally considers any resource greater than 5,000 years old to be a fossil (SVP 2010). Fossils are evidence of ancient life, and as such provide an invaluable window into the past. Fossils are considered non-renewable resources and in California, impacts to paleontological resources must be considered pursuant to CEQA requirements for environmental reviews.

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METHODS

LITERATURE AND MAP REVIEW AND LOCALITY SEARCH

The literature review included an examination of geologic maps of the Project Area and a review of relevant geological and paleontological literature to determine which geologic units are present within the Project Area and whether fossils have been recovered from those geologic units elsewhere in the region. As geologic units may extend over large geographic areas and contain similar lithologies and fossils, the literature review includes areas well beyond the Project Area. The results of this literature review include an overview of the geology of the Project Areas and a discussion of the paleontological sensitivity (or potential) of the geologic units within the Project Area. The County of Riverside also provides a paleontological resource sensitivity map for the entire county (RCLIS). This map was consulted by MCC staff on October 29, 2018. The purpose of a locality search is to establish the status and extent of previously recorded paleontological resources within and adjacent to the study area for a given project. In November 2018, a locality search was conducted through the Natural History Museum of Los Angeles County (LACM) of Los Angeles (Appendix B). This search identified any vertebrate localities in the LACM records that exist near the Project Area in the same or similar deposits.

PALEONTOLOGICAL RESOURCES SURVEY METHODS

The survey stage is important in a Project's environmental assessment phase to verify the exact location of each identified paleontological resource (if any), the condition or integrity of the resource, and provides invaluable information on the type of sediment present within the Project Area, which informs the assessment of paleontological sensitivity. On January 7, 2019, MCC qualified archaeologist and cross-trained paleontologist Judy Cardoza conducted a pedestrian survey of the Project Area. On January 10, 2019, MCC qualified archaeologist and crossed-trained paleontologist Sonia Sifuentes conducted an supplemental pedestrian survey of 4 additional parcels added to the Project Area. Special attention was paid to any graded areas and to rodent burrows that offered a better view of the underlying sediment. The field survey includes identification of sediments in the Project Area, relocation of known paleontological localities, and identification any unrecorded paleontological resources exposed on the surface.

RESULTS

The record search results from the LACM (McLeod 2018, Appendix B) do not indicate any fossils have been found directly within the Project Area, but noted localities located nearby from sedimentary deposits similar to those mapped in the Project Area. The very central and southeastern portions of the proposed Project Area is mapped containing bedrock composed of intrusive igneous rocks that will not contain recognizable fossil. The remaining Project Area has surface deposits of older Quaternary Alluvium derived from alluvial fan deposits from the hills to the east and northeast (McLeod 2018). The closest vertebrate fossil locality from similar older Quaternary deposits is LACM 1207, located just south of the Project Area on the northwestern side of Corona, west of Cota Street between Railroad Street and Harrington Street. This locality produced a fossil specimen of deer (Odocoileus) at known depth (McLeod 2018). The next closest locality is located further north-northwest of the Project Area, in the Jurupa Valley, west of Mira Loma, along Sumner Avenue north of Cloverdale Road. This locality produced fossil specimen of whipsnake (Masticophis) at depths of 9 to 11 feet below surface (McLeod 2018). Additional literature was consulted, including The University of California Museum of Paleontology (UCMP)'s Miocene Mammal Mapping Project (MioMap) (Carrasco et al. 2005), the Paleobiology Database (PBDB), and the University of Texas at El Paso (UTEP) Biodiversity Collections Paleobiology Section. Neither the MioMap or the UTEP databases yielded fossil localities within the area of the Project. The PBDB yielded two occurrences within 3 miles of the Project Area, both from the Late Cretaceous Period (see Appendix B). The RCLIS map indicates that the Project Area has a high sensitivity (High A) to produced paleontological resources during ground disturbing activities (Figure 5).

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Figure 5. Paleontological Sensitivity (from RCLIS, Red indicates High A Sensitivity)

Most of the residential properties were noted as abandoned. In areas that were accessible, ground visibility ranged from moderate (approximately 50%) to excellent (90%) due to recent plowing activities within the majority of the area. The entire API has been heavily disturbed due to residential and commercial development. Evidence of heavy bioturbation was observed within accessible areas of the API. The visual observation of sediment does align with the geologic mapping of Qvoaa (Figures 6 through 11). No paleontological resources were observed during current fieldwork survey.



Figure 6. Project Overview from Northeast corner, at Mountain Avenue and Second Street (View towards West)



Figure 7. Project Overview from Northwest corner, at Mountain Avenue and Second Street (View towards South)



Figure 8. Overview of southern parcel at Mountain Avenue and First Street (View towards Southeast)



Figure 9. Drainage observed in southern portion of larger Project Area parcel (View towards East



Figure 10. Example of soil matrix located in Northeast corner of Project Area



Figure 11. Example of soil matrix in Southern portion of Project Area

CONCLUSIONS AND RECOMMENDATIONS

MCC conducted a Phase I paleontological resource assessment of the Project Area that included a fossil locality records search and an intensive pedestrian survey covering all 111 acres. No significant paleontological resources were identified within the Project Area during the locality search or field survey. The uppermost layers of soil within the Project Area are of recently disturbed Quaternary alluvium that is unlikely to contain significant fossil vertebrates. However, LACM notes that significant fossils have been found within similar older Quaternary alluvial mapped units, and that any excavations that extend deeper and into these older and finer-grained Quaternary deposits may encounter significant fossil vertebrate remains. In addition, the Project Area is mapped in RCLIS as High A is based on geologic formations or mapped rock units that are known to contain (or have the correct age and depositional conditions to contain) significant paleontological resources at a depth below 5 feet.

Based on the results of the Phase I paleontological resource assessment, the proposed Area is considered to have high sensitivity for the potential to impact paleontological resources during construction activities at or below 5 feet in undisturbed sedimentary deposits. MCC recommends preparation of a Paleontological Resource Management Plan (PRMP) prior to construction excavation, in order to mitigate any potential impact to nonrenewable fossil resources to a less-than-significant level. It is recommended that a professional paleontologist be hired to oversee monitoring and the preparation of a PRMP. At a minimum, the PRMP should include the following items:

- A trained and qualified paleontological monitor should perform full-time monitoring of any excavations on the Project that have the potential to impact paleontological resources in undisturbed native sediments below 5 feet in depth. The monitor will have the ability to redirect construction activities to ensure avoidance of adverse impacts to paleontological resources.
- The Project paleontologist may re-evaluate the necessity for paleontological monitoring after examination of the affected sediments during excavation, with approval from County and Client representatives.
- Any potentially significant fossils observed shall be collected and recorded in conjunction with best management practices and SVP professional standards.
- Any fossils recovered during mitigation should be deposited in an accredited and permanent scientific institution for the benefit of current and future generations.
- A report documenting the results of the monitoring, including any salvage activities and the significance of any fossils, will be prepared and submitted to the appropriate County personnel.

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

Date: January 24, 2019

Signature: _

Name: Jennifer Kelly, MSc., Geology Riverside County Qualified Paleontologist

REFERENCES

Carrasco, M.A., B.P. Kraatz, E.B. Davis, and A.D. Barnosky.

2005 Miocene Mammal Mapping Project (MIOMAP). University of California Museum of Paleontology http://www.ucmp.berkeley.edu/miomap/. Last accessed on November 02, 2018.

County of Riverside

2015 General Plan of the County of Riverside. Available online at http://planning.rctlma.org/ZoningInformation/GeneralPlan.aspx. Last accessed January 10, 2019.

Jennings, C.W., Strand, R.G., and Rogers, T.H.,

1977 Geologic map of California: California Division of Mines and Geology, scale 1:750,000.

McLeod, S.

2018 Paleontological resources for proposed Palomino Business Park Project, in the City of Norco, Riverside County, Project Area.

Morton, D.M. and C.H. Gray, Jr.

- 2002 Geologic Map of Corona North 7.5' Quadrangle, Riverside and San Bernardino Counties, California: U.S. Geological Survey Open-File Report OF 02-22, *https://pubs.usgs.gov/of/2002/0022/pdf/crn_map.pdf*
- Morton, D.M., and Matti, J.C.
- 1989 A vanished late Pliocene to early Pleistocene alluvial-fan complex in the northern Perris Block, southern California, in Colburn, I.P., Abbott, P.L., and Minch, J., eds., Conglomerates in basin analysis: A symposium dedicated to A.O. Woodford: Pacific Section Society Economic of Paleontologists and Mineralogists, v. 62, p. 73-80.

Riverside County Land Information System (RCLIS)

2018 Riverside County Map My County. Available online at https://gis.countyofriverside.us/Html5Viewer/?viewer=MMC_Public. Last accessed December 02, 2018.

Society of Vertebrate Paleontology (SVP)

- 1991 Standard Measures for assessment and mitigation of adverse impacts to nonrenewable paleontological resources: Society of Vertebrate Paleontology News Bulletin, v. 152, p. 2-5.
- 1996 Conditions of receivership for paleontologic salvage collections: Society of Vertebrate Paleontology News Bulletin, v. 166, p. 31-32
- 2010 Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. 11 p. Available at; http://vertpaleo.org/PDFS/68/68c554bb-86f1-442f-a0dc-25299762d36c.pdf

Appendix A: Qualifications

Tria Belcourt, M.A., RPA President and Principal Environmental Specialist



Tria Belcourt oversees and is responsible for the entire work process at Material Culture Consulting. She is responsible for planning, supervising, and overseeing field projects, including responsibility for the professional quality of evaluations and recommendations. Tria has primary accountability for the technical completeness and competence of work conducted by her staff. She is responsible for development of work plans and/or research designs, for performance of crew chiefs, for selection standards and limitations on work assignments of crew members, for analysis and interpretation of field data, for integration of fieldwork results into comparative regional perspectives, and for preparation of reports. Tria's advanced academic training and more than twelve years of professional archaeological experience has included rigorous training and application of anthropological and archaeological theory and methods, and in recording, collecting, handling, analyzing, evaluating, and reporting cultural property data, relative to the type and scope of work proposed.

Tria has been an archaeological project manager and principal investigator for over six years, leading and managing several complex compliance projects throughout the State of California and in Southern Nevada, which have involved each step of cultural resource compliance and management. Prior to this, she spent six years as a field technician and crew chief on projects throughout California and the Southeastern United States. Her experience includes conducting background research, field survey, resource testing and formal NRHP/CRHR evaluation, data recovery plan development and implementation. She has prepared hundreds of technical reports for all of the above to state and federal standards, including following BLM standards for GIS spatial data management and technical reporting – ranging from simple clearance forms, to letter reports, to extensive data recovery reports. She was the lead preparer of the Fort Irwin Integrated Cultural Resource Management Plan (2009-2013) and has also prepared several cultural resource management plans for state regulated projects. She has overseen and conducted archaeological monitoring and management of unanticipated discovery of resources, including Native American human remains on federal lands (and repatriation of the remains), and reported the results and outcomes of cultural resource monitoring efforts in lengthy technical reports. Finally, Tria regularly provides third party and QA/QC review of cultural resource technical documents, due to her keen understanding of state and federal regulations and laws governing the management of cultural resources throughout the state of California.

Education

- 2014 Graduate Certificate in Environmental Management of Military Lands, Colorado State University
- 2010 Professional Certification in CEQA/NEPA, ICF International Corporation
- 2009 M.A. in Anthropology, University of Florida Gainesville, Florida Professional Certification in GIS
- 2006 B.A. in Anthropology, Magna Cum Laude, University of California, Los Angeles, California

Affiliations/Certifications/Training

- American Rock Art Research Association (ARARA)
- Archaeological Institute of America (AIA)

- Eastern States Archaeological Federation (ESAF)
- Midwest Archaeological Conference, Inc. (MAC)
- Ohio Archaeological Council (OAC)
- Society for American Archaeology (SAA)
- Public Education Committee Member 2015-current
- Society for Historical Archaeology (SHA)
- Society for California Archaeology (SCA)
- Workshop in Current Archaeological Prospection Advances for Non- Destructive Investigations in the 21st Century (2003)
- GPS Technology Course, Ball State University (2004)
- GLHS/MAST Nautical Archaeology Workshop and Training, National Museum of the Great Lakes,

Utility Sector Experience

Pacific Gas and Electric Company (PG&E), NERC Alert Program – Archaeological Principal Investigator; throughout California; 2015 – Present. Belcourt provides oversight of all task orders and project management of on-call task orders involving cultural resource desktop reviews, records searches and field reviews for the PG&E NERC Alert program: tracking and reporting efforts, maintaining project schedule, and timely submittal of data to prime contractor (ARCADIS).

Southern California Edison (SCE), On-Call and Emergency Projects – Archaeological Principal Investigator and Project Manager; throughout California, 2013 – Present. Belcourt provides oversight of all task orders and project management of on-call task orders involving cultural resource desktop reviews, records searches and field reviews for deteriorated poles, system upgrades, initial studies to support capital projects, and monitoring support to replace facilities due to natural disasters. This highvolume program includes preparing and submitting budgets, managing support staff and overseeing work, tracking and reporting efforts, maintaining project schedules, and preparing technical reports and GIS datasets for submittal to prime contractor (SWCA).

Southern California Edison (SCE), Small Capital Projects – Archaeological Principal Investigator and Project Manager; throughout California, 2014 – Present. Belcourt provides oversight of all task orders and project management of task orders involving cultural resources for this contract with ICF. This includes preparing and submitting budgets, managing support staff and overseeing work, tracking and reporting efforts, maintaining project schedule, and preparing technical reports and GIS datasets for submittal to prime contractor.

Southern California Edison (SCE), Coolwater Lugo Transmission Project — Environmental Project Manager; San Bernardino County, California; 2014 – 2015. Belcourt provided oversight of all project management on CWLTP: tracking and reporting efforts of subconsultants (Pacific Legacy, Paleo Solutions and Urbana Preservation and Planning), maintaining project schedule and timely submittal of project deliverables to agency reviewers. Served as communication facilitator between SCE and BLM/CPUC agency reviewers. Provided final review of the Cultural Resources Technical Report (which included over 1,000 cultural resources) and the Historic Built Environment Report - prior to draft submittal to BLM.

SCE, Eldorado Ivanpah Transmission Project – In-house Consultant for Archaeology; San Bernardino County, California and Clark County, Nevada; 2010-2012. Belcourt provided complex regulatory oversight and project management regarding cultural and paleontological resource management. She developed cultural resource specific compliance training to inform and guide construction activities and

major capital project teams. She also developed and implemented internal cultural resource management programs based on the mitigation measures in the FEIR/EIS. Tria coordinated with BLM archaeologists on discovery and management of previously unknown cultural resources discovered during construction, and managed the treatment of these resources and reporting. She provided environmental analyses, technical reports, and clearance documentation for over 20 project modifications during construction without delay to project. Developed the cultural resources geodatabase for EITP and coordinated regularly with the project GIS team.

Silver State South Substation, In-house Consultant for Archaeology; Southern California Edison, Clark County, NV; 2010-2012. Provided regulatory oversight and project management regarding cultural and paleontological resource management during project licensing and scoping. Identified potential impacts to cultural and paleontological resources, developing appropriate mitigation measures in preparation for and projecting alternative conclusions.

Tehachapi Renewable Transmission Project, Multiple Roles; Southern California Edison, Segments 1-3 and Segments 6-11, Kern, Los Angeles and Orange County, CA; 2009 - Present. Tria provided service to this project over seven years in multiple roles – archaeological field monitor, project coordinator, inhouse consultant at SCE, and principal investigator. She provided regulatory oversight and project management regarding cultural and paleontological resource management for all segments of TRTP. Developed and implemented internal cultural resource management programs based on the mitigation measures in the Final Environmental Impact Report/Environmental Impact Statement (FEIR/EIS) for TRTP, and for the existing Special Use Permits and Record of Decision for TRTP, issued by the Angeles National Forest (ANF). Oversaw preparation of the Historic Properties Treatment Plans, fieldwork and technical report preparation for two large-scale Phase III Data Recovery excavations on Angeles National Forest. Coordinated with ANF archaeologists on discovery and management of previously unknown cultural resources identified during construction. Provided cultural resources analyses and clearance documentation, including technical reports, for over 100 project modifications during construction without delay to project. Finally, Tria was responsible for maintaining the geospatial data for the project within the SCE cultural resources geodatabase TRTP and coordinated with the project GIS team.

Desert Tortoise Habitat Conservation Plan Area, Principal Investigator; Cadiz Inc., San Bernardino County, CA; 2013. Oversaw records search to identify the extent of previous cultural resources surveys and all previously recorded prehistoric and historic resources within the 7,500-acre Desert Tortoise Habitat Conservation Plan (HCP) area (Project Area) located on lands administered by the BLM Needles Field Office in unincorporated San Bernardino County, California.

Selected Publications

Belcourt, T.

2014- 2016	Southern California Edison – TRTP Segments 6 and 11C - Cultural Resources Monitoring
	Report, Prepared Monthly (October 2014-March 2016) for Angeles National Forest (ANF)
	and SCE. On file at ANF and SCE Irwindale.
2013	Cultural and Paleontoloical Resource Assessment for the Ames/Reche Groundwater Storage
	and Recovery Program, Winters Road Flow Control and Recharge Facility, Mojave Water
	Agency, Landers, San Bernardino County, California. Prepared by Cogstone Resource
	Management, Inc. On file at Mojave Water Agency.
2014	Cultural and Paleontological Monitoring Compliance Report for Street and Storm Drain
	Improvements, Jackson Avenue Bridge at Warm Springs Creek, City of Murrieta, Riverside
	County. Prepared by Cogstone Resource Management, Inc. On file at City of Murrietta
	Planning Department.
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2014 Cultural and Paleontological Resource Assessment for the OC-44 Pipeline Rehabilitation and

2015	Replacement Project, Mesa Water District, Newport Beach, Orange County, California. Prepared by Cogstone Resource Management, Inc. On file at Mesa Water District.
2015	Archaeological Monitoring and Survey Report, Southern California Edison Dead Tree Removal near Pine Flat, Tulare County, California. Submitted to SCE and on file at SCE Irwindale.
2015	Class III Cultural Resources Survey of the Pacific Gas & Electric Company (PG&E) Kerckhoff #1-Kerckhoff #2 115kV and Kerckhoff-Clovis-Sanger 115kV Projects, located on Lands Administered by the Bureau of Land Management (BLM), Bakersfield Field Office, within Fresno County, California. Prepared on behalf of PG&E and submitted to BLM Bakersfield Office. On file at PG&E, Fresno.
2015	Class III Cultural Resources Survey of the SCE Shoshone Emergency Response Location, on Lands Administered by the Bureau of Land Management (BLM), Barstow Field Office, within Inyo County, California. Prepared on behalf of SCE and submitted to BLM Barstow Field Office. On file at SCE Irwindale.
2015	Cultural Resources Assessment of Effect for Southern California Edison TD835602: Deteriorated Pole Replacement, Sequoia National Park, Three Rivers Area, Tulare County, California. Prepared on behalf of SCE for Sequoia National Park. On file at SCE Irwindale.
2015	Cultural Resources Impact Assessment for Southern California Edison TD1037389: Line Extension – Soda Springs 12 kV, Tulare County, California. Prepared for SCE. On file at SCE Irwindale.
2015	Cultural Resources Inventory for Southern California Edison's Replacement of Nine Deteriorated Power Structures (TD993840, TD994158, and TD1029116), near Kramer Junction, on Lands Administered by the Bureau of Land Management Barstow Field Office, San Bernardino County, California. Prepared on behalf of SCE and submitted to BLM Barstow Field Office. On file at SCE Irwindale.
2015	Cultural Resources Monitoring for Southern California Edison IO328390: Replace Pole and Upgrade Overhead Switch – Dinkey Creek 4kV (TD721303). Sierra National Forest, High Sierra District, Fresno County, California. Prepared on behalf of SCE for Sierra National Forest. On file at SCE Irwindale.
2015	Cultural Resources Survey in Support of a Request for Final Engineering Concurrence for Tehachapi Renewable Transmission Project Segment 8 T/L West (Phase IV) – Erosion Repair Associated with Structure M43-T3, unincorporated Los Angeles County, California. Submitted to SCE and CPUC. On file at SCE Irwindale.
2015	Cultural Resources Survey in Support of a Temporary Work Change Request for Wire Setup Sites, Distribution Pole Work Area, and Access Road near Structure M57-T2 for Segment 8, Tehachapi Renewable Transmission Project, unincorporated Los Angeles County, California. Submitted to SCE and CPUC. On file at SCE Irwindale.
2015	Results of Faunal Analysis for the Los Angeles Metropolitan Transportation Authority (Metro) Division 13 Bus Maintenance and Operation Facility Construction Project, City of Los Angeles, Los Angeles County, California. Submitted to Metro. On file at Resource Sciences and Planning, LLC, Monrovia.
2016	Archaeological Monitoring Compliance Report, Pacific Gas & Electric Company NERC Alert Program, Helms-Gregg 230kV Grading Project, Sierra National Forest, Fresno County, California. Prepared on behalf of PG&E and submitted to Sierra National Forest. On file at PG&E, Fresno.
2016	Archaeological Resource Assessment, SCE Infrastructure Replacement- Pickle Meadows 12kV, Toiyabe National Forest, Bridgeport, Inyo County, California. Prepared on behalf of SCE and submitted to Toiyabe National Forest. On file at SCE, Irwindale.
2016	<i>Cultural Resources Assessment: 84 Lumber Company Project, City of Lancaster, Los Angeles County, California</i> . Prepared on behalf of 84 Lumber Company for City of Lancaster. On file at Material Culture Consulting, Claremont.

- 2016 Cultural Resources Assessment of Effect for Southern California Edison TD1029531: Deteriorated Pole Replacement on Lands Administered by Bureau of Land Management, Ridgecrest Field Office, near Mojave, Kern County, California. Prepared on behalf of SCE. On file at SCE Irwindale.
- 2016 *Cultural and Paleontological Resources Records Searches and Field Survey, Tandis Homes Residential Development, City of Menifee, Riverside County, California.* Prepared for City of Menifee. On file at Material Culture Consulting Claremont.
- 2016 Class III Cultural Resources Survey of the Southern California Edison Company Replacement of Thirteen Deteriorated Poles Near Lockhart and Flamingo Heights, on Lands Administered by the Bureau of Land Management, Barstow Field Office, within San Bernardino County, California. Prepared on behalf of SCE and submitted to BLM Barstow Field Office. On file at SCE Irwindale.
- 2016 Phase I Cultural and Paleontological Assessment: Tandis Homes 21 Lot Residential Development Project City of Menifee, Riverside County, California. Prepared on behalf of Ridgemoor Investments, LLC for City of Menifee Planning Department. On file at Material Culture Consulting, Claremont.
- Belcourt, T. and S. Gust
- 2014 Class III Cultural Resource Investigations for Bodie Hills Desert Restoration Projects, Bureau of Land Management, Bishop Field Office, Mono County, CA - FY13-14. Prepared by Cogstone Resource Management, Inc. for BLM Bishop Field Office. On file at BLM Bishop Field Office.
- 2015 Class III Cultural Resource Investigations for Bodie Hills Desert Restoration Projects, Bureau of Land Management, Bishop Field Office, Mono County, CA - FY14-15. Prepared by Cogstone Resource Management, Inc. for BLM Bishop Field Office. On file at BLM Bishop Field Office.
- Belcourt, T., T. Jackson, M.Kay and R. Moritz
- 2016 Class III Cultural Resources Inventory for the Southern California Edison Company Kelly Cutover Project (FWA 680-16-07), Volume I – Archaeological Resources, San Bernardino County, California. Submitted to BLM Barstow Field Office, On file at Resource Sciences and Planning, LLC, Monrovia.
- Belcourt, T. and M. Kay
- 2016 Southern California Edison Company Replacement of Three Deteriorated Poles Near Fort Irwin, on Lands Administered by the Bureau of Land Management, Barstow Field Office, San Bernardino County, California. Prepared on behalf of SCE and submitted to BLM Barstow. On file at Resource Sciences and Planning, LLC Monrovia.
- Belcourt, T., M. Kay, and R. Moritz
- 2016 Cultural Resources Assesment of the State of California Department of General Services and Department of State Hospitals, Metropolitan Hospital, Norwalk, Los Angeles County, CA. Prepared for DGS/DSH. On file at Resource Sciences and Planning, LLC, Monrovia.
- Belcourt, T. and J. Kelly
- 2016 *Cultural and Paleontological Resources Assessment: Village 605 Environmental Impact Report Addendum, City of Los Alamitos, Orange County, California.* Prepared for City of Los Alamitos on behalf of Katella Property Owner, LLC by Material Culture Consulting, on file at Material Culture Consulting, Claremont.
- Belcourt, T., K. Scott and S. Gust
- 2013 Paleontological and Archaeological Assessment of the Bloomington Affordable Housing Project, San Bernardino County, California. Prepared by Cogstone Resource Management, Inc., On file at Cogstone Resource Management, Inc., Orange.
- Belcourt, T., M. Valasik, and S. Gust
- 2013 Class III Cultural Resource Investigation for the Cadiz Solar Array Desert Tortoise Habitat

Conservation Plan Area, on Lands Managed by BLM Needles Field Office, San Bernardino County, CA. Prepared by Cogstone Resource Management on behalf of Cadiz, Inc.

Daly, P. and T. Belcourt

2016 Class III Cultural Resources Inventory for the Southern California Edison Company Kelly Cutover Project (FWA 680-16-07), Volume II – Historic Built Environment Resources, San Bernardino County, California. Submitted to BLM Barstow Field Office, On file at Resource Sciences and Planning, LLC, Monrovia.

Technical Report QA/QC and Third-Party Review (representative selection)

Lamb, Meghan

- 2016 Archaeological Resources Monitoring Report: Lot 19 Tustin Legacy (Tustin Air Base) Project, City of Tustin, Orange County, California. Prepared by Paleo Solutions, Inc., and submitted to City of Tustin, California. On file at Paleo Solutions, Monrovia.
- Kelly, J. and G. Aron
- 2015 Final Paleontological Monitoring Report: Tehachapi Renewable Transmission Project, Segment 6, Los Angeles County, California. Prepared for SCE by Paleo Solutions, Inc., and submitted to ANF and CPUC. On file at SCE Irwindale.
- Kelly, J. and G. Aron
- 2015 Final Paleontological Monitoring Report: Tehachapi Renewable Transmission Project, Segment 7, Los Angeles County, California. Prepared for SCE by Paleo Solutions, Inc., and submitted to ANF and CPUC. On file at SCE Irwindale.
- Kelly, J. and G. Aron
- 2015 Final Paleontological Monitoring Report: Tehachapi Renewable Transmission Project, Segment 8, Los Angeles County, California. Prepared for SCE by Paleo Solutions, Inc., and submitted to ANF and CPUC. On file at SCE Irwindale.

Kelly, J. and G. Aron

2015 Final Paleontological Monitoring Report: Tehachapi Renewable Transmission Project, Segment 11, Los Angeles County, California. Prepared for SCE by Paleo Solutions, Inc., and submitted to ANF and CPUC. On file at SCE Irwindale.

Tinsley-Becker, W.

2015 Cultural Resources Inventory for the SCE Coolwater-Lugo Transmission Project, San Bernardino County, California, Volume 1: Historic-Era Built Environment Survey Report. Submitted to BLM Barstow Field Office, On file at Resource Sciences and Planning, LLC, Monrovia.

Pacific Legacy, Inc.

2015 *Cultural Resources Inventory for the SCE Coolwater-Lugo Transmission Project, San Bernardino County, California, Volume 2: Archaeological Resources.* Submitted to BLM Barstow Field Office, On file at Pacific Legacy, Inc., Berkeley.

Webster, B.

2016 Archaeological Monitoring Report: OCTA San Juan Capistrano Rail Side Passing Project, City of San Juan Capistrano, Orange County, California. Prepared for Earth Mechanics, Inc. by Paleo Solutions, Inc. On file at Paleo Solutions, Monrovia.

Webster, B. and M. Kay

- 2016 Archaeological Survey Report for the Southern California Edison Company Replacement of Five Deteriorated Power Poles on an Unnamed Circuit (TD 979272), Topanga State Park, Los Angeles County, California. Prepared by Paleo Solutions, Inc., on behalf of SCE.
- 2015 Archaeological Survey Report for the Southern California Edison Company Replacement of One Deteriorated Power Pole on an Unnamed Circuit (TD 1020522), Topanga State Park, Los Angeles County, California. Prepared by Paleo Solutions, Inc., on behalf of SCE.
- 2015 Archaeological Survey Report for the Southern California Edison Company Replacement of Two Deteriorated Power Poles on the Vicasa 16kv Circuit (TD 1039350), Topanga State Park, Los Angeles County, California. Prepared by Paleo Solutions, Inc., on behalf of SCE.



Jennifer Kelly has experience in all aspects of paleontology. She has extensive experience with monitoring, salvage, fieldwork, project management, and report writing, as well as volunteer experience from the La Brea Tar Pits/Page Museum and the Cooper Center of Orange County (Paleontology department) and field experience as a Staff Geologist for Leighton Geotechnical. Her expertise is Geology, and she has her M.S. in Geological Sciences, emphasis in Geochemistry.

Jennifer has taught lab courses in paleontology and general geology, and also assisted with field mapping classes. Jennifer is HAZWOPER 40-hour certified and a registered Orange County paleontologist. She has co-authored more than 60 paleontological compliance documents, including PRMPs, EIR, EIS, PEA, final monitoring reports, survey reports, and other compliance documents, in compliance with NEPA, CEQA, Caltrans and city and county laws, ordinances, regulations, and statutes.

Education

- 2012 M.Sc. in Geology, California State University, Long Beach, California
- 2005 B.S., Geology (preliminary work for entry to M.S. Geology Program), California State University, Long Beach
- 2004 B.A., Theater Arts, California State University, Long Beach

Certifications and Training

- 40 Hour Certification for HAZWOPER training under 29 CFR 1910. 120, CA (2013 2014)
- Orange County Certified Paleontologist
- San Diego County Certified Paleontologist

Utility Sector Experience

Assistant PM/Research Specialist, Tehachapi Renewable Transmission Project (TRTP), Southern California Edison (SCE), Kern County, Los Angeles County, San Bernardino County. Kelly conducted and led surveys along this project's right of way. She additionally was in charge of scheduling monitoring crews during grading in areas of paleontological sensitivity, managing and reviewing log sheets, and tracking data that is incorporated to final reports. Ms. Kelly played a valuable role with scheduling for the project's needs. She has monitored, surveyed, and reported on all paleontological facets of this project as the Lead Paleontological Monitor for segment 3B and 4-11. She has co-authored more than 10 of the compliance reports for this project. She has also performed monitoring on every segment of this Project.

Assistant PM/Research Specialist, SCE, Valley South Subtransmission Line Project, Riverside County, California. Kelly assisted with scheduling and oversight for coordination of all surveying, preparation of compliance and environmental documentation for this project, including three proposed alternatives,

and co-wrote the final PEA and survey reports, utilizing CEQA and Riverside County paleontological guidelines.

Assistant PM/Research Specialist, SCE, San Joaquin Cross Valley Loop Project, Tulare County, California. Kelly assisted with coordination of all surveying, preparation of compliance and environmental documentation for this project, and co-authored the final Paleontological Monitoring Plan for this project.

Assistant PM/Research Specialist, SCE, Devore Substation Project, San Bernardino County, California. Kelly assisted with preparation of compliance and environmental documentation including a paleontological inventory and geological map research for this project.

Assistant PM/Research Specialist, SCE, Horsetown Substation Project, Riverside County, California. Kelly assisted with preparation of compliance and environmental documentation including a paleontological inventory and geological map research for this project.

Paleontological Field Technician, El Casco System-Transmission Line, SCE, throughout Riverside County. Kelly performed paleontological monitoring. Her duties included salvaging small and large fossils, screen washing and sorting fossils. She aided in the processing of microfossils collected from bulk sampling of fossil bearing sediment, and documenting stratigraphic locations of fossil bearing units. This project was in compliance with both CEQA and the CPUC.

Assistant PM/Research Specialist, *South of Kramer Project, SCE, Hesperia to Barstow, San Bernardino, County*. Kelly assisted in overseeing portions of project management and compliance surveying, which included surveying from Hesperia to Barstow, CA for a Proponent's Environmental Assessment (PEA). All portions of the Proposed Project were located within San Bernardino County, California. This project is still active and survey results are being finalized. Kelly co-authored the final survey report for this Project. A BLM Permit was authorized for the survey.

Assistant PM/Research Specialist, OC Access Road Grading, SCE, Orange and Riverside County. Kelly assisted in documentation for the cultural resources portion, which include information regarding the location and condition of archaeological and paleontological sites recorded at or near the access roads, and recommends impact avoidance measures for future years in implementing the Protocol for 73 known archaeological sites. This required extensive coordination with Orange County Fire Authority grading department, SCE's Operations and Maintenance (O&M), and Orange County Parks. Trimble units were used for the documentation before and after grading of access roads. Communication played a key role when strategizing which locations were being graded where and when. The company came in under budget because of Kelly's efficiency and ability to coordinate and schedule.

Assistant PM/Research Specialist, West of Devers Transmission Line Project, SCE, Riverside County, California. Kelly assisted with all project management and paleontological related services. This included proper BLM authorization and permitting to conduct surveying and a research design for field reconnaissance related to PEA, EIS/EIR documentation for the proposed transmission line. She assisted with managing documentation with laws relating to paleontological resources, among which are CEQA and NEPA compliance.

Assistant PM/Research Specialist, Grid Reliability and Maintenance for Seawolf, Thresher, and Argonaut 12 kV Distribution Lines, SCE, City of Temecula, Riverside County, California.

Kelly assisted with preparation of compliance and environmental documentation including co-authoring the final paleontological report for this project in Riverside County. This report was prepared under CEQA and Riverside County guidelines.

Assistant PM/Research Specialist, Pacific Gas and Electric (PG&E), Line 300A/MP 147.7 and 180.8 Projects, San Bernardino County, California. Kelly assisted in the preparation of mitigation recommendations and a paleontological inventory report for this project. She also assisted with and scheduled planned surveys on BLM and United States Marine Corps lands.

Assistant PM/Research Specialist, PG&E, Jefferson to Stanford No. 2 60 kV Feasibility Project, San Mateo County, California. Kelly assisted with the preparation of the paleontological resources review and paleontological inventory report (PIR) and Proponent's Environmental Assessment (PEA) for this project. Several potential routes were assessed for this project, and the feasibility and paleontological potential was determined for this project. The report and PIR were prepared according to CEQA guidelines.

Assistant PM/Research Specialist, PG&E, Line 107/131 Projects, Alameda County, California. Kelly assisted with preparation of mitigation recommendations and a paleontological inventory report for this project. She also assisted with and scheduled planned surveys of proposed pipeline locations.

Assistant PM/Research Specialist, Laguna Niguel Reliability Project, SDG&E, Laguna Niguel, Orange County. Kelly performed initial research for this Project and co-authored the final report on the monitoring efforts for this project in the Capistrano Formation.

Assistant PM/Research Specialist, *Camp Pendleton Project, SDG&E, throughout San Diego and Orange Counties.* Kelly provided on-call paleontological services for this project. She was a key facet in report production and research which enabled her firm to perform all survey and monitoring work required on Camp Pendleton for CEQA/NEPA check list assessments requested from SDG&E. Kelly was cleared from the Department of Defense in order to conduct work on the base. Site assessments and monitoring include all work related to: future location of power poles and towers, water control features, trenching and subsurface excavations, access roads, grading impacts to develop substations and other facilities, work pads, staging yards, and gas pipelines.

Assistant PM/Research Specialist, SDG&E Wind Interconnection Project (WIP), San Diego County, California. Kelly co-authored the paleontological mitigation portion of the Environmental Impact Report (EIR) for this project, utilizing both San Diego County and CEQA guidelines for paleontological resources.

Assistant PM/Research Specialist, LADWP-Scattergood Project, County of Los Angeles.

Kelly provided on-call paleontological support for this project. She assisted with all project aspects associated to paleontology. She co-authored a paleontological mitigation monitoring plan and assisted in scheduling the monitoring the Scattergood Olympic Line 1 Project, completed the final mitigation document for trench exploration, and performed extensive monitoring for the project.

Transportation Sector Experience

Assistant PM/Research Specialist, Paleontological Mitigation Plans (PMP) for Caltrans Cherry/Citrus Ave I-10 interchange Project — PCR/Caltrans, San Bernardino, California. Kelly conducted all aspects of surveying, and literature searches for both projects.

Water Sector Experience

Assistant PM/Research Specialist, Cadiz Ground Water Project, ESA, San Bernardino County, California. Kelly conducted all research and data collection for the Cadiz Groundwater Conservation and Storage Project for completion of a DEIR section on paleontological resources. The project included the pipeline corridor but not the Well Field Area and Spreading Basins. Based on the results of the analysis, mitigation measures were developed and are designed to reduce potential adverse impacts to paleontological resources as a result of proposed Project construction to a less than significant level. Only one Project alternative was analyzed for impacts on paleontological resources. The paleontological analysis for the Cadiz Project is a requirement of the California Environmental Quality Act (CEQA).

Private Development Sector Experience

Assistant PM/Research Specialist, Holy Sepulchre Cemetery Expansion Project, Diocese of Orange, Santa Ana, Orange County, California. Kelly assisted with scheduling monitoring for this project, performed all project-related research, and was the co-author for the final report. The project consisted of grading and leveling several new areas for expansion of the Holy Sepulchre Cemetery, including portions that lie in paleontologically sensitive rock formations with the potential to produce fossils.

Assistant PM/Research Specialist, UC Irvine Alumni Center Project, Irvine, Orange County, California. Kelly performed all monitoring scheduling and coordination duties, as well as research and writing for the final report and the initial monitoring guidelines. This project was a high-visibility construction project for a new alumni center on the grounds of UC Irvine, in a paleontologically sensitive area.

Assistant PM/Research Specialist, Peters Canyon County Park Restrooms Project, Orange County, California. Kelly performed all paleontological monitoring scheduling and coordination duties, as well as research and writing for the final paleontological resources letter report. This project involved the leveling of a pad and significant trenching through paleontologically sensitive soils in order to install a new restroom at the northern end of this park.

Assistant PM/Research Specialist, UHS Temecula Medical Center, Tuner Construction, Temecula, *Riverside County, California.* Kelly was in charge of day to day scheduling, conducted occasional monitoring duties and part of the writing process for the final report.

Renewable Energy Sector Experience

Assistant PM/Research Specialist, Ocotillo Wind Express Project, ASPEN, Imperial County, California. Kelly was responsible for managing and collecting all field forms and data that was electronically mailed daily, and incorporating these forms in the final DEIR/EIS Report. She conducted all technical research and compiled both geological and compliance documentation into the final report that was then incorporated into the EIR/EIS.

Assistant PM/Research Specialist, Manzana Wind Express Project, Kern County, California. Kelly assisted in writing the Paleontological Mitigation Monitoring Resource Plan, which allowed her to develop a key role in presenting environmental training programs to construction workers and other environmental compliance monitors. She co-authored the final paleontological monitoring report. The Project's construction consisted of the installation of 107 to 300 wind energy turbines, aligned along approximately 26 rows, on the 6,275-acre proposed site. The Manzana Wind Energy Project site was found to have the potential for scientifically significant paleontological resources that could be impacted by construction-related ground disturbance. She co-authored the final paleontological mitigation report in compliance with CEQA and Kern County guidelines.

Assistant PM/Research Specialist, Pacific Wind Express Project, Kern County, California. Kelly assisted

in writing the Paleontological Mitigation Monitoring Resource Plan, which allowed her to develop a key role in presenting environmental training programs to construction workers and other environmental compliance monitors. She co-authored the final paleontological mitigation report.

Appendix B: LACM Locality Search Results

Natural History Museum of Los Angeles County 900 Exposition Boulevard Los Angeles, CA 90007

tel 213.763.DINO www.nhm.org

Vertebrate Paleontology Section Telephone: (213) 763-3325

e-mail: smcleod@nhm.org

2 November 2018



Material Culture Consulting 2701-B North Towne Avenue Pomona, CA 91767

Attn: Julia Carvajal, Archaeologist & GIS Specialist

re: Paleontological resources for the proposed Palomino Business Park Project, in the City of Norco, Riverside County, project area

Dear Julia:

I have conducted a thorough check of our paleontology collection records for the locality and specimen data for the proposed Palomino Business Park Project, in the City of Norco, Riverside County, project area as outlined on the portion of the Corona North USGS topographic quadrangle map that you sent to me via e-mail on 19 October 2018. We do not have any vertebrate fossil localities that lie directly within the proposed project area boundaries, but we do have localities nearby from sedimentary deposits similar to those that occur in the proposed project area.

The very central- and southeastern portions of the proposed project area have bedrock composed of intrusive igneous rocks that will not contain recognizable fossils. Otherwise, the proposed project area has surface deposits of older Quaternary Alluvium, derived as alluvial fan deposits from the hills to the east and northeast. Our closest fossil vertebrate locality from older Quaternary deposits is LACM 1207, just west of south of the proposed project area on the northwestern side of Corona west of Cota Street between Railroad Street and Harrington Street, that produced a fossil specimen of deer, *Odocoileus*. Further to the north-northwest of the proposed project area, in the Jurupa Valley west of Mira Loma, along Sumner Avenue north of Cloverdale Road, our older Quaternary locality LACM 7811 produced a fossil specimen of whipsnake, *Masticophis*, at a depth of 9 to 11 feet below the surface.

Excavations in the igneous rocks exposed in small portions of the proposed project area will not uncover any recognizable fossils. Excavations in older Quaternary deposits exposed elsewhere in the proposed project area, however, may well encounter significant vertebrate fossils. Any substantial excavations in the sedimentary deposits in the proposed project area, therefore, should be monitored closely to quickly and professionally recover any fossil remains while not impeding development. Also, sediment samples should be collected and processed to determine the small fossil potential in the proposed project area. Any fossils collected should be placed in an accredited scientific institution for the benefit of current and future generations.

This records search covers only the vertebrate paleontology records of the Natural History Museum of Los Angeles County. It is not intended to be a thorough paleontological survey of the proposed project area covering other institutional records, a literature survey, or any potential on-site survey.

Sincerely,

Summel a. Mi Leod

Samuel A. McLeod, Ph.D. Vertebrate Paleontology

enclosure: invoice