

Amendment 0001

Responses to Request for Information (RFIs) for Cooperative Agreement N62478-19-2-00012 Foxtrot Petroglyph Site Specialized Recordation at The Marine Corps Air Ground Combat Center, Twentynine Palms, California. Applicable attachments provided within the CESU portal. Please see the revised statement of work for changes. Deletions made within the Request for Statements of Interest/Request for Proposals and Statement of Work are noted with a strike through font. Additions are noted with a red bold italic font. Due dates for Statements of Interest has been changed from June 24, 2019 2:00 PM local standard time to June 26, 2019 2:00 PM local standard time. This Request for Statements of Interest will remain open until an investigator team is selected. Statements of Interest received after June 26, 2019 2:00 PM local standard time is considered “late” and may not be considered.

Question 1: Is there a limit to the proportion of work that subcontractors can do under the CESU cooperative agreement?

Answer 1: Aside from any limits specified in 2 CFR 200 or within the CESU 2018-2023 agreement, there are no limits to the proportion of work that subcontractors can perform.

Question 2: Given the security requirements at MCAGCC, would it be possible to use UAS aerial platforms for LIDAR mapping, modelling, and recordation?

Answer 2: There is a strict policy of no Unmanned Aircraft Systems (UAS), but with permission from the Installation the Recipient may be able to use their own UAS. Authorization to use any UAS may be considered on per case basis and such requests can only be review after award. For proposal purposes, please provide a budget based on the notion that drones/UAS will not be used for recordation of the site. In the event that a UAS can be utilized, the awarded budget will be revisited and a deduction of cost may be requested from the Recipient.

Operation of any UAS/drone is strictly prohibited in the installation's airspace without express permission of the Commanding General MAGTF/TC/MCAGCC. Any unauthorized drone activity in the installation's airspace puts Marines and aircraft in danger, and degrades training quality; violation of this restriction can lead to legal action. Operators who do not comply may incur criminal charges under 49 USC 46307. In addition to airspace over the Combat Center, drone use is prohibited within active Temporary Special Use Airspace (TSUA) and Controlled Firing Area (CFA) adjacent to the R-2501 in Johnson Valley. Drone operators are encouraged to check Notices to Airmen (NOTAMs) prior to flight operations and to call the Command Duty Officer at 760-830-7200 or Range Control (BEARMAT) on frequency 127.125 for the status of all UAS.

Question 3: Clarify the Period of Performance. Base Period is described as 18 months, with up to two Option Items, each at 18 months (for a total of 54 months). Yet “if all Option Items are exercised during award of the base period the period of performance will be 36 months.” Are the Periods of Performance for Option Items 1 and 2 anticipated to occur concurrently (18 months following the Base Period)?

Answer 3: Dependent on the availability of funding, the Government is anticipating to award Option Items One and Two concurrently with the Base item. In the event that the Option Items are awarded at the time of award of the Base Item, the period of performance for the Option Items and Base Item will start simultaneously and will run concurrently creating a 36 month period of performance for all three tasks. In the event that the Option Items are not awarded at the time of award of the Base Item, the Government will retain the right to unilaterally award any Option Items at any time during the period of performance (18 months) of the Base Item, or during anytime within the proceeding Option Item of the Cooperative Agreement. In the event of the later taking place, the period of performance of the Cooperative Agreement will be extended by 18 months.

Question 4: Is the award amount (estimated \$92-\$103k) to apply to the “Base Year” (e.g., 12 months) or “Base Period” (18 months)?

Answer 4: The estimated availability of funding amount of \$92,397.89 to \$103,264.33 is to complete the Base Item within the 18 months period of performance.

Question 5: Should proposals include separate budgets for Option Items 1 and 2?

Answer 5: Yes, proposals shall include separate budgets for Option Items 1 and 2

Question 6: Will drone or other aerial equipment use be allowed? Will drone use be allowed if restricted to below 100 feet?

Answer 6:

Please see Amendment 0001, Answer #2

Question 7: Are the petroglyphs and pictographs continuous for the full 2-km extent of the site?

Answer 7: Yes, the petroglyph and pictographs panels are disbursed along 2 km of the lava flow wall, with two or three areas having a high concentration of panels.

Question 8: Is the site 2 miles or 2 km long? (cited as both)

Answer 8: The site is 2.9 km long.

Question 9: Will the contractor be allowed to take photos of the site and rock art elements, or will a USMC person take the photos? (per Item 3 on page 4 of the SOW)

Answer 9: It is the Recipient's responsibility to obtain security, entrance, and/or photographic clearances for himself/herself and his/her personnel onto the Installation. It may be that only government personnel may be permitted to take photographs.

Question 10: Can we complete part of the fieldwork during 2019 and part in the first half of 2020?

Answer 10: Yes, the fieldwork can be completed in 2019 and the first half of 2020.

Question 11: What is the travel time to the site from the base entrance? Is there hiking required to reach the site (or can you drive to it)?

Answer 11: The travel time from the base entrance is approximately 2 hours. The site itself is located a few hundred yards off a drivable road so it can be walked to easily, but the site is 2.9 km long so the site has to be walked or hiked to be recorded. There are a few petroglyphs that are located a little high on the lava flow, like 15 or 20 feet from the wash below, so there may be a little bit of climbing but not much, and only one person at a time could go up there.

Question 12: The RFP states that the applicant will provide type-written resumes, not to exceed 10 pages – is this 10 pages per key person or total for all staff?

Answer 12: The 10 page limitation is per key personnel.

Question 13: The SOW asks for site and rock art panel mapping using a portable LiDAR unit. Prior experience with this form of technology suggests variable results, and time-consuming post-processing costs. Would it be acceptable to substitute a different photogrammetry/3-D imaging/modeling approach, such as Structure-from-Motion, which is more cost effective and produces better mapping results?

Answer 13: The purpose of using technology to record this site is twofold. The first is to have a scientifically accurate high density point cloud/mesh that can be used for archaeological research and accurate mapping of the site and petroglyph location; the second is to create a visually appealing 3D model that can be used for a 3d virtual tour of the site. Photogrammetry is best for the first purpose while 3D photo reconstruction is best for the second (Davis et al. Heritage Science (2017) 5:25). Ideally, the

contractor would employ both methods to provide the final deliverables. The project budget should allow for both methods. Structure-from-motion should not be used because unless the contractor can provide the agency with research references showing that that method is capable of producing high density point clouds/mesh and, high resolution imagery that integrates well with animation, visualization and virtual reality applications. For both methods, artificial light will need to be used.

Question 14: Prior experience has shown drone mapping to be very efficient for mapping and documentation of rock panels, and is an ideal collection technique for photogrammetric structure-from-motion data. As commercial Part 107 UAS operators, would it be possible to use a drone that does not use Chinese software/components for the project? We understand that certain off-the-shelf drones may be disallowed on military installations. DRI has obtained permissions previously for UAS operations on DOD installations. Specifically, DOD has recently initiated a contract with French UAS manufacturer Parrot to design a small reconnaissance drone. Would it be possible to obtain permission for use of commercial aircraft manufactured by Parrot? Use of UAS would represent a significant cost savings for the Navy. Other US Manufactured UAS systems are also available.

Answer 14: This project should not use structure-from-motion data capture methods for the reasons listed above in the answer to Question 13. For the use of an UAS, please see Amendment 0001, Answer #2.

Question 15: The SOW approximates a base year level of funding between \$92,397.89 and \$103, 264.33. The SOW further lists two options. Can you confirm that these options would be funded by an additional award beyond the base year funding of 92k to 103k? Is there a funding range for each of the options?

Answer 15: The options would be funded by an additional award beyond the base period funding. Approximately \$235,662.32 to \$261,847.03 is expect to be available to support Option Item 1. Approximately \$123,733.43 to \$137,481.59 is expect to be available to support Option Item 2.

Question 16: While reviewing the literature, there was an indication of an earlier study that used digital imagery and possibly created a digital model of this rock art locality in the early 2000s. Would that data be available to be used in this project?

Answer 16: There are no studies from the early 2000s that produced digital imagery or digital models. From 1997 to 2011 there were a series of graffiti reintegration treatment and testing reports generated but that data cannot be used for this project, only for reference to distinguish between the rock art and the graffiti.

Question 17: The first paragraph of the Background section states “[t]he site contains 490 panels along a two-mile stretch of cliff face...”, whereas on page 2 the Brief Description of Anticipated Work states “[p]hotograph the entire site, i.e., the 2 km long cliff face.” Could you clarify as to whether it is miles or kilometers?

Answer 17: The lava flow forms an arc, from northwest to southeast, covering approximately 5 square miles. The rock art, both petroglyphs and paintings, is concentrated along a stretch of cliff face for a distance of 2.9 km. The cliff face ranges up to 30 feet in height from the current wash bottom, with talus boulders at the base of the cliff in many areas. The rock art is not strictly continuous for the 2.9 km. There are concentrations of panels in certain areas, with gaps of up to 435 meters between concentrations. The densest area, in terms of number of rock art panels, is a section 305 meters long near the middle of the site; this section contains 229 panels (Hedges, Hamann p2).

The site boundary I have in GIs for CA-SBR-161 is 2.45 miles long as the crow flies. It's possible that the first 0.8 miles to the west do not contain any petroglyphs or pictographs, but the contractor must examine that portion of the lava flow wall to confirm. Maximum height of wall reaches 30 feet.

Question 18: Once statements of Interest are reviewed, how long before a selection is made?

Answer 18: Typically, a selection is made within 3-4 weeks after statements of interests are reviewed. There are external circumstances that could extend this timeframe (ie number of statements of interests received, funding, etc).

End of RFIs