

## **ADDENDUM NUMBER 2**

## ТО

## REQUEST FOR QUALIFICATIONS RFQ # 2023-01

### PROFESSIONAL SERVICES FOR APPLIED MONITORING OF THE LAND SURFACE USING INTERFEROMETRIC SYNTHETIC APERTURE RADAR TECHNOLOGY

LISTED BELOW ARE THE RESPONSES TO QUESTIONS, CHANGES, ADDITIONS, AND/OR DELETIONS TO THIS SOLICITATION.

**Issued by:** 

MuhDen

Michael Turco, General Manager

12/1/2023

Date

**NOTE:** FIRMS ARE REQUESTED TO ACKNOWLEDGE RECEIPT OF THIS ADDENDUM BY SIGNING AND DATING BELOW AND <u>INCLUDING</u> WITH SUBMITTED RESPONSE. RESPONSE MAY BE CONSIDERED NONRESPONSIVE IF THIS COVER PAGE IS NOT SIGNED AND RETURNED.

Acknowledgement:

Signature

Date

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This Addendum to RFQ 2023-01 is issued to answer questions and/or provide changes, additions, or deletions to this solicitation.

A modification has been made to the answer provided in **Addendum Number 1, Question 1**: Removal of "on a minimum of a quarterly basis". The updated response and original, unmodified question are:

# Question #1: It looks like mature workflows have already been developed, what new tools do you want from this new project?

Task 1 is targeted at using a processing technique that allows for consistent deliverables to HGSD staff. It does not imply that a new methodology is expected or required. The primary focus of Task 1 is to develop a consistent and repeatable processing tool to allow for the regular delivery of deformation information utilizing a peer-reviewed and published methodology.

The following additional questions were received, and answers are issued in this Addendum.

# Question #1: Can HGSD provide historical subsidence data dating back to the 1970s, and if so, in what format?

HGSD, in cooperation with the United States Geological Survey (USGS), has published numerous reports and datasets regarding the occurrence of subsidence in the Houston region. USGS reports are available and accessible on the web, HGSD GPS monitoring data are published in our annual groundwater report, and available digitally upon request.

Question #2: Should Task 1 exclusively prioritize InSAR monitoring, or is it acceptable to encompass a blend of InSAR and additional elements, such as conducting attribution analysis through ML/AI to establish connections between subsidence and potential contributing factors?

Task 1 can incorporate other techniques separate from InSAR to create a comprehensive analysis of subsidence in the region.

# Question #3: Would HGSD be amenable to contract terms previously agreed upon by an academic institution?

HGSD has executed contracts with academic institutions either through sponsored research agreements or contract terms specified by the academic institution.

Question #4: Is HGSD a subscriber to "ArcGIS Image for ArcGIS Online"? If not, would they consider becoming a subscriber for the sake of Task 2?

https://www.esri.com/en-us/arcgis/products/arcgis-image/options/arcgis-online#image-analysis-inthe-cloud

HGSD does not currently have the license for ArcGIS Image within ArcGIS Online.

# Question #5: Does HGSD expect the contractor to process all SAR data, say at quarterly intervals, throughout the duration of the contract, or is the contractor supposed to develop tools for HGSD staff to do InSAR processing and train them to do so?

HGSD envisions a combination of both the contractor processing all SAR data at an interval appropriate to maintain data quality assurances while adequately documenting land surface deformation and the contractor training HGSD staff to use the proposed platform in an efficient manner that enables staff to create SAR data-derived maps at user-defined intervals in an on-demand fashion.

Question #6: Can HGSD guarantee access to all sources of SAR data, or is it the contractor's obligation to do so?

HGSD cannot guarantee access to all sources of SAR data and expects the contractor to provide such data.

Question #7: Would you please clarify whether there are plans to provide public access to the platform developed for visualizing InSAR datasets, and if so, are there specific requirements or considerations for enabling public access to the viewer? (Previous experience, specific technical constraints, security measures, or performance considerations, etc.)

The platform developed in this project will be for internal use only; however, data products derived from that platform, such as maps and graphs, may be presented to a wide range of audiences in articles, papers, and presentations.