Bid Specification

Video Monitoring and Documentation



system and managed services



Daily Megapixel Panoramas



360° User Controllable



Multiple Preset Archiving



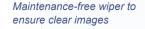
Installation and Maintenance



Current and Historical Weather Data



Full Service Support



Rugged UV and cut resistant spiral conduit for cable deployment

Heavy duty galvenized steel construction

Guy wires

Full size spare tire

Low maintenance AGM sealed battery

75 Amp battery charger



Al Media Dashboard



iOS and Android App



Fail Safe On-Board Backup Storage

User controllable ultra-precise 360° robotic Pan/Tilt/Zoom camera with multiple preset composition

Up to 10 Gigapixel (10000 megapixels) auto-generated panoramas

Live streaming video preview with weekly 1080p broadcast quality clip

17x optical zoom

Telescoping up to 42' galvanized steel mast with an electric extension

Custom branding to display your organization's logo

GPS 4G modem

Real-time remote data management

360° adjustable solar array



Additional services included









EarthCam Mobile Trailer Cam Advanced – GigapixelCam X10 Model # ECCS99285

01.32.36 Video Monitoring and Documentation Bid Specification

The Contractor shall provide a Robotic High Definition Megapixel Webcam for users to remotely view the project on a secure connection via a network connection. The camera will provide a full view of the work area on the construction site

CONTACT SYSTEM VENDOR: EarthCam / Brian Cury +1 201.488.1111 Email: WWW.EARTHCAM.NET/CONTACTUS

- 2 The trailer camera system shall meet or exceed the following requirements:
 - Dimensions: 15.5' L x 7.1' W x 7.2' H (4.57m L x 1.13m W x 2.2m H)
 - Weight: 2800lbs (1270kg)
 - Single torsion-type axle steel welded trailer with 2" adjustable ball hitch manual outriggers DOT approved lighting package to include brake and marker lights

 - Solar powered and wireless
 - Low maintenance 6Volt DC deep cycle AGM batteries, 75 Amp battery charger
 - 150 watt polycrystalline silicon photovoltaic solar modules
 - 2.8 Trailer mounted locking manual/motorized up to 42 foot telescoping mast with spiral conduit for cable deployment
 - Full size spare tire
 - 2.10 Guy wires to stabilize an extended mast and steady camera shot
 - Thermostatically controlled IP66/IP67 rated environmentally sealed black powder coated enclosure with stainless steel hardware User controlled window maintenance-free wiper to ensure clear images
 - 2.12
 - Industrial grade solid state embedded Linux System
 - 2 14 61.0 Megapixels (9504 x 6336 pixels), Full Frame camera with a 35mm Exmor R CMOS Image Sensor Lens: F3.5-6.3 OSS, 24-240mm
 - 2.15
 - SONY optics for superior image quality 2.16
 - Professional photo grade glass enclosure window 2.17

 - 2.19
 - Nikon optics for superior image quality
 Auto Features: ISO, Shutter, White Balance and Focus
 Live streaming video preview with 1080p broadcast quality video clip capability
 - 2.21 567-point wide area autofocus system
 - 2.22 425-point contrast detect points
 - Rapid archiving capability with on demand image capture as fast as every 10 seconds for short term events 2.23
 - Ultra-precise, Pan/Tilt robotic base designed to provide consistent imaging in all environments 2.24
 - Pan/Tilt: Pan Range 360° Continuous Pan, Tilt: +45° to -90° pan mode 2.25
 - Up to 10 Gigapixel (10000 megapixels) auto-generated 360° multilayer panoramas 2.26
 - 2.27 Communications: 10base-T/100base-TX Ethernet, IP Addressing: Dynamic or Static
 - 2.28 4G cellular modem
 - 2.29 Smart diagnostic LED multi-color power indicator lamp
 - 2.30 64GB On-Board Data Backup to provide a minimum of thirty days of on-board image retention
 - Short term power device to send alerts if camera goes offline 2.31
 - Custom branding to display company logo 2.32
 - Designed for EarthCam Control Center
- Internet Based Online Interface: The camera will be accessible via an internet based Software as a Service (SaaS) solution. This online interface will be managed and supported by the System Vendor. The service will be available for the term of the project and allow the viewing of live video and High Definition digital still images captured and stored of the project on both mobile and desktop platforms

The Internet Based Online Interface shall include the following features:

- Responsive HTML5 design for cross-platform access on desktop and mobile devices Secure HTTPS compliant with live stream secured & encrypted via https transport
- Display project name and logo
- Project Dashboard allows easy navigation between multiple cameras and projects 3.4
- Real-time live video viewing with user-controllable Robotic Pan, Tilt and Zoom
- User-controllable settings for creating and editing multiple preset compositions, each preset will be displayed as a thumbnail image Daily auto-generated 360° multilayer panoramas 36
- 3.7
- Onscreen control button for wiper and washer control to allow for remote cleaning of the viewing window Digital Pan, Tilt and Zoom capability within a High Definition images Custom tiling player to easily view High Definition panoramic images 3.9
- 3.11
- 3.12
- Instant live snapshot capability in addition to preset scheduled archives
 Visual timeline with quick thumbnail view allows image navigation by year, month, day and hour
 Al-edited time-lapse technology removes frames obscured by foreign objects or weather elements, with music and graphics then added for downloadable presentations
- 3.14
- Full Screen Mode for displaying complete image without any graphical frame
 Photo Filters and Graphical Markup Tools for detailing and creating notes with graphical overlays on images, including project title, logo and time date stamp
- Image Comparison Tool for comparing two images taken at different times, overlayed on top of each other
 Share Image Tool for saving, printing, emailing and posting to Hall of Fame
 Project Management Software integration (Aconex, Autodesk Construction Cloud, Autodesk Build, CMiC, InEight, Infotech, PlanGrid, Procore, Raken, Salesforce) 3.16 3.17
- 3.19
- 3D/4D Model Integration (Autodesk Navisworks, Autodesk Revit, Bentley Synchro) Social Media Integration Tools for sharing project images and notes 3.20
- Automatically generated daily/weekly project progress update email with camera image and weather
- Al Media Dashboard Interactive charts display Al-detected events and observations Graphical Weather applet displaying local weather data with satellite and updating radar imaging 3.22 3.23
- Integration of maps, aerial and satellite imagery
- Graphical Data Management Tools showing archived and current system status of solar amperage, battery power remaining, wireless radio connectivity and device location
- Access to account protected by Account Security feature which includes four levels of password protection, IP address block/permission and SSL protection of user login password.
- The system shall capture and upload images every 15 minutes, 24 hours per day.
- 6. The system shall have M2M - Machine to Machine 24/7 Support with active self-healing technology and automatic software upgrades to maintain the quality, consistency and reliability of all
- Images will be maintained on the System Vendor's servers for reference available at all times during the life of the project and for no less than 60 days after completion. All images will be protected on servers owned and operated by the System Vendor and located in a secure area at the System Vendor's location.
- The Contractor shall provide all service and maintenance, including cleaning, of the camera system throughout the life of the project including making appropriate arrangements for camera to 8. remain in operation up to and through finalization of all structural, landscaping and "completed state" condition necessary for beginning-to-end time-lapse record
- The System Vendor shall provide custom public website development. Website shall be separate from the Online Interface, match the look and colors of the project's website, and be delivered as embed code or standalone web page. Additional features include Facebook and Twitter integration, full screen mode, image comparison, weather, multiple logos, graphical background image and project description.
- The System Vendor at the end of the project shall provide a comprehensive archive package that includes all images, historical weather data, computer-generated time-lapse movies and a 10. royalty-free web-based viewer software. The software shall include the same interactive interface as the live camera during the project.
- The System Vendor shall provide time-lapse movie(s) at the end of the project. Time-lapses shall be professionally edited by a video editor using image stabilization software. The movie will start with a graphic, incorporating project title, date and logo. Periods of bad weather or inactivity shall be removed to produce a compelling and consistent movie. A machine edited movie will 11.
- 12 The Contractor shall secure a nearby space to deploy the trailer as per System Vendor's instruction. The Contractor shall supply all equipment required for safe and secure access to the camera location for technicians performing installation and maintenance services, including lane closures, bucket truck and/or lift. The System Vendor will consult on and provide recommendations for optimal camera placement and provide professional installation services as required.