# **Bid Specification**

## Video Monitoring and Documentation





#### Specification includes camera system and managed services



Live Video Preview



Take and Share On-demand Snapshots



Current and Historical Weather Data



iOS and Android App



Custom Website Development



Installation and Maintenance



Quality Control and Maintenance



Full Service Support



Instant Time-Lapse Movies

Additional services included





1-800-EARTHCAM www.earthcam.net/contactus

#### EarthCam MegapixelCam 4K Model # ECCS99985

### 01.32.36 Video Monitoring and Documentation Bid Specification

The Contractor shall provide a 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

- The camera shall meet or exceed the following requirements:
  - Thermostatically controlled environmentally sealed enclosure with stainless steel hardware and double locking pan/tilt head
  - Industrial grade solid state embedded Linux System
  - 24 Megapixels (6000 x 4000 pixels), DSLR camera with a 15.6mm x 23.6mm DX-Format CMOS Image Sensor 2.3
  - Lens: F/3.5-F/5.6, 18mm-55mm, Optical zoom
  - Professional photo grade glass enclosure window
  - Nikon optics for superior image quality
  - 2.7
  - Auto Features: ISO, Shutter, White Balance and Focus Live streaming video preview with 1080p broadcast quality video recording capabilities 2.8
  - Image sensor cleaning for dust reduction
  - 2.10 11-point wide area autofocus system
  - 2.11 Communications: 10base-T/100base-TX Ethernet, IP Addressing: Dynamic or Static
  - 2.12 Wireless cellular 4G LTE Modem with GPS and exterior outdoor antenna
  - 2.13 Multi SIM card support for mobile carrier diversity
  - 2.14 16GB On-board data backup to provide a minimum of thirty days of on-board image retention
    2.15 Omni-directional power indicator lamp will illuminate green

  - 2.16 120VAC, 220-230VAC or 12VDC power
  - 2.17 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
- 3.2 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
- Security Interface offers flexible multi-view camera grid selective up to 9 cameras per screen streaming simultaneously
- 3.7 Picture in picture capability for viewing live video and High Definition Megapixel images simultaneously
- 3.8 Digital Pan, Tilt and Zoom capability within a High Definition image
- Instant live snapshot capability in addition to preset scheduled archives 3.9
- 3.10 Visual timeline with quick thumbnail view allows image navigation by year, month, day and hour
- 3.11 Multifunction Image Browsing
- 3.12 Time-lapse feature with optional time date overlay for instant time-lapse viewing, downloading and embedding
- 3.13 Full Screen Mode for displaying complete image without any graphical frame
   3.14 Photo Filters and Graphical Markup Tools for detailing and creating notes with graphical overlays on images, including project title, logo and time date stamp
- 3.15 Image Comparison Tool for comparing two images taken at different times, overlayed on top of each other3.16 Share Image Tool for saving, printing, emailing and posting to Hall of Fame
- 3.17 Project Management Software integration (Aconex, Autodesk BIM 360, PlanGrid, Procore, SharePoint)
- 3.18 Posting and sharing camera images with notes
- 3.19 Social Media Integration Tools for sharing project images and notes on Facebook and Twitter
- 3.20 Automatically generated daily/weekly project progress update email with camera image and weather
- 3.21 Graphical Weather applet displaying local weather data with satellite and updating radar imaging
- 3.22 Integration of maps, aerial and satellite imagery
- 3.23 Graphical Data Management Tools showing archived and current system status of solar amperage, battery power remaining, wireless radio connectivity and device
- 3.24 Automatically generated Progress Reports (in PDF and PowerPoint formats) using weekly camera images with associated weather data, notes, and Client logo
- 4 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
- The system shall capture and upload images every 15 minutes, 24 hours per day. 5.
- 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
- 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 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 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 not be acceptable.
- The Contractor shall secure a nearby structure for camera mounting or provide a fixed pole (40 foot / 12 meters height recommended) and 3 inch / 8 centimeters minimum diameter 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 building access, 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.