**EarthCam AI SecurityCam Model #ECPW00183 A&E Specifications**

**01.32.36 Video Monitoring and Documentation**

1. **CAMERA SPECIFICATIONS**
   1. **Contractor Contact Information**

The Contractor shall provide a High Definition 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 Inc. / Brian Cury +1 201.488.1111

Email: WWW.EARTHCAM.NET/CONTACTUS

* 1. **Camera System for Highest Precision Monitoring and Documentation**
     + 1. Impact resistant aluminum enclosure
       2. Live streaming video
       3. H.264, MPEG-4 Part 10/AVC, Motion JPEG video compression
       4. Auto Features: Focus and Day/Night IR
       5. Advanced object detection with smart analytics with embedded deep-learning analytic processing (DLAP)
       6. 2 Megapixel images (1920x1080 pixels)
       7. Up to 100/120pfs n 1080p
       8. Lens: 2.8–8.5 mm, F1.2
       9. 102° Wide Angle of View
       10. Communications: RJ-45 10BASE-T/100BASE-TX PoE
       11. 4G cellular modem
       12. Secure 256 bit AES encrypted onboard storage
       13. High-Definition continuous video recording with 120 days of retention (up to 1 year available)
       14. Industrial grade solid state embedded Linux OS platform with an ultra-efficient ARM9 CPU
       15. 120VAC, 220-230VAC or 12VDC power
       16. Power over Ethernet IEEE 802.3at Type 2 Class 4, max. 25.5 W, typical 13.7 W
       17. Designed for EarthCam Control Center Software

1. **SERVICE SPECIFICATIONS**
   1. **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:

* + 1. Responsive HTML5 design for cross-platform access on desktop and mobile devices
    2. Secure HTTPS compliant with live stream secured & encrypted via https transport
    3. Display project name and logo
    4. Project Dashboard allows easy navigation between multiple cameras and projects
    5. Security Interface offers flexible multi-view camera grid selective up to 24 cameras per screen streaming simultaneously
    6. Edge Video Recorder features searchable intuitive visual timeline interface for fast incident footage retrieval and sharing
    7. Real-time live video viewing with instant live snapshot capability
    8. Visual timeline with quick thumbnail view allows image navigation by year, month, day and hour
    9. AI-edited time-lapse technology removes frames obscured by foreign objects or weather elements, with music and graphics then added for downloadable presentations
    10. Full Screen Mode for displaying video and complete image without any graphical frame
    11. Photo Filters and Graphical Markup Tools for detailing and creating notes with graphical overlays on images, including project title, logo and time date stamp
    12. Image Comparison Tool for comparing two images taken at different times, overlayed on top of each other
    13. Project Management Software integration (Autodesk Construction Cloud, Autodesk Build, CmiC, Esri, InEight, Infotech, Procore, Projectmates, Raken, Salesforce)
    14. 3D/4D Model Integration (Autodesk Navisworks, Autodesk Revit, Bentley Synchro)
    15. Social Media Integration Tools for sharing project images and notes
    16. Automatically generated daily/weekly project progress update email with camera image and weather
    17. AI Media Dashboard – Interactive charts display AI-detected events and observations
    18. Custom AI Model for Construction – detection of more than 40 different types of objects common to construction sites
    19. Graphical Weather applet displaying local weather data with satellite and updating radar imaging
    20. Integration of maps, aerial and satellite imagery
    21. Graphical Data Management Tools showing archived and current system status of solar amperage, battery power remaining, wireless radio connectivity, and device location
  1. **Security and Management**
     1. 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.
     2. The system shall capture and upload images every 5 minutes, 24 hours per day.
     3. 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.
     4. 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.

1. **CONTRACTOR REQUIREMENTS** 
   1. **Jobsite Requirements**

EarthCam (System Vendor) will consult on and provide recommendations for optimal camera placement. Contractor will mount on tripods in order to provide a full view of the desired work areas. The System Vendor may provide professional installation services as an option to the contractor. The Contractor shall supply at the camera locations a dedicated, non-switched, 15Amp 120VAC circuit in the form of an outdoor rated outlet.

* 1. **Camera Maintenance**

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.

1. **DELIVERABLES** 
   1. **Responsive, Cross-Platform Camera Media Viewer**

The System Vendor shall provide a scalable, responsive, cross-platform camera media viewer. Camera viewer to include 40 features with capability to be personalized based on client preference for a total of 720 customizable options. Viewer shall be delivered via embed code or in a standalone web page. Additional features include instant access to AI-Edited, presentation-ready videos, Facebook and Twitter social media integration, full screen mode, image comparison, weather data, multiple logos, graphical background images and customizable project description.

* 1. **End of Project**

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.