**EarthCam StreamCam 4K Model #ECCS99272 A&E Specifications**

**01.32.36 Video Monitoring and Documentation**

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

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 Inc. / Brian Cury +1 201.488.1111

Email: WWW.EARTHCAM.NET/CONTACTUS

* 1. **Camera System for Highest Precision Monitoring and Documentation**
     + 1. Consist of an IP66 weather resistant camera housing
       2. Industrial grade solid state embedded Linux System
       3. Live video stream in H.264 format
       4. 4K broadcast quality video clip capability
       5. H.264, MPEG-4 Part 10/AVC, Motion JPEG video compression
       6. Up to 25/30fps in all resolutions
       7. 8.3 Megapixel images (3840x2160 pixels)
       8. Lens: F1.6, f/ 3.3 – 9.8, Digital Pan, Tilt and Zoom
       9. 109° wide angle of view
       10. Auto Features: Focus and Day/Night
       11. Communications: RJ-45 10BASE-T/100BASE-TX/1000BASE-T PoE
       12. 4G cellular modem
       13. On-Board Data Back-Up to provide a minimum of 60 days of on-board image retention
       14. Power over Ethernet IEEE 802.3af/802.3at Type 1 Class 3; max 12.9W
       15. Designed for EarthCam Control Center

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
    8. Instant live snapshot capability in addition to preset scheduled archive
    9. Visual timeline with quick thumbnail view allows image navigation by year, month, day and hour
    10. AI-edited time-lapse technology removes frames obscured by foreign objects or weather elements, with music and graphics then added for downloadable presentations
    11. Full Screen Mode for displaying complete image without any graphical frame
    12. Photo Filters and Graphical Markup Tools for detailing and creating notes with graphical overlays on images, including project title, logo and time date stamp
    13. Image Comparison Tool for comparing two images taken at different times, overlayed on top of each other
    14. Project Management Software integration (Autodesk Construction Cloud, Autodesk Build, CMiC, Esri, InEight, Infotech, Procore, Projectmates, Raken, Salesforce)
    15. 3D/4D Model Integration (Autodesk Navisworks, Autodesk Revit, Bentley Synchro)
    16. Social Media Integration Tools for sharing project images and notes
    17. Automatically generated daily/weekly project progress update email with camera image and weather
    18. AI Media Dashboard - Interactive charts display AI-detected events and observations
    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**

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.

* 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. **Public Website**

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.

* 1. **End of Project Time-Lapse Movie**

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.