**EarthCam 360° 23MP VR Site Tour Camera Kit Model #ECHW20099 A&E Specifications**

**01 32 33 Photographic Documentation:**

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

The Contractor shall provide comprehensive photographic documentation of existing conditions, construction progress and of Pre & Post Inspection milestones on a daily or as needed basis. The images will be mapped to a site plan of the project and be available to view online as a managed service provided by the System Vendor.

CONTACT SYSTEM VENDOR: EarthCam Inc. / Brian Cury +1 201.488.1111

Email: WWW.EARTHCAM.NET/CONTACTUS

* 1. **Camera System for Photographic Documentation**
     + 1. 23MP (6720 x 3360 pixels) Dual 1” image sensors
       2. 4K H264 movie recording, 4x internal microphone for spatial audio
       3. RAW/JPEG recording file format
       4. Ability to create short-term time-lapse video
       5. 4K wireless livestream capabilities, 30 fps
       6. Focus free fisheye f/2.1, 3.5, 5.6 lens
       7. Auto, Manual and Shutter Priority shooting modes
       8. ISO (Auto, 80-6400), automatic/custom white balance, +-2 EV exposure compensation
       9. Digital display provides camera information, including battery level, image count and camera mode
       10. 12” USB Type-C Cable
       11. USB rechargeable li-ion battery, battery life typically 300 photos or 60 minutes of video
       12. Dual communication Bluetooth & wireless LAN
       13. Operating temperature 32°F-104°F
       14. 66.8” 3-Leg locking base aluminum monopod, 4 sections, 40lb max capacity
       15. Aluminum survey pole quick clamp with 40 minute level vial and compass
       16. Designed for EarthCam Control Center – Photography Documentation

1. **SERVICE SPECIFICATIONS**
   1. **Internet Based Online Interface**

Internet Based Online Interface: The photography documentation service will be delivered as 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 High Definition digital still images captured and stored of the project via a secure password protected website.

The Internet Based Online Interface shall include the following features:

* + 1. Responsive HTML5 design for cross-platform access on desktop and mobile devices
    2. Display project name and logo
    3. Project Dashboard allows easy navigation between multiple cameras and projects
    4. VR Web View support for 360 Spherical Imagery
    5. Guided tour mode for navigation of 360 spherical images
       1. Auto-play slideshow of 360 images at the click of a button – choose slideshow speed, toggle marker/floor-plan/notes overlays, loop through the end of tour
       2. Jump to different markers and images while in a guided tour – the tour resumes from the new location
    6. Navigation of 360 spherical imagery with Mini-Map of site plan and correct direction of view
    7. Electronic Indexing of images by staff, trade, date, time, location and keyword tags
    8. Navigation system for selecting specific images, dates, floor plans, photos, markers and flags
    9. Multifunction Image Browsing
    10. Upload Tool for adding site plans and photos
    11. Full Screen Mode for full screen view of site plans and images
    12. Advanced image filters
    13. Print full size images
    14. Geotagging of images
    15. Graphical Markup Tools for detailing and creating notes with graphical overlays on images
    16. Photo Management Tool for setting orientation, cropping, rotating and aligning photos
    17. Image Comparison Tool for comparing two images taken at different times, overlayed on top of each other
    18. Project Management Software integration (Autodesk Construction Cloud, Autodesk Build, CmiC, Esri, InEight, Infotech, Procore, Projectmates, Raken, Salesforce)
    19. 3D/4D Model Integration (Autodesk Navisworks, Autodesk Revit, Bentley Synchro)
    20. Mark up images to create RFIs, Observations, and Change Events with Procore
    21. Share Image Tool for saving, printing, emailing, sending to mobile devices
    22. Social Media Integration Tools for promoting and sharing project images, 360 spherical image view with Facebook and YouTube 360 Video support
    23. Weather data (temperature, relative humidity, dew-point) captured with an integrated local weather sensor and attached to every 360 image
    24. Integration of Maps, aerial and satellite imagery with site plans
    25. Ability to filter images to view only a specific group of images
    26. Ability to flag images to organize and compile for reports and presentations
    27. Ability to flag images to organize and share punch list reports with three levels of urgency
    28. Ability to flag images to display automatically on public websites
    29. VR Site Tour App available for iOS and Android devices
  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. 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. **DELIVERABLES** 
   1. **End of Project**

The System Vendor at the end of the project shall provide a comprehensive package that includes all images and related data. All images shall be loaded into a searchable PDF floor plan.