**EarthCam Mobile TrailerCam Lite Model # ECCS09201 A&E Specifications**

**01.32.36 Video Monitoring and Documentation**

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

The Contractor shall provide a Robotic 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. Dimensions: 15.5’ L x 7.1’ W x 7.2’ H (4.57m L x 1.13m W x 2.2m H)
			2. Weight: 2800lbs (1270kg)
			3. Single torsion-type axle steel welded trailer with 2” adjustable ball hitch manual outriggers
			4. DOT approved lighting package to include brake and marker lights
			5. Solar powered and wireless
			6. 6Volt DC deep cycle flooded batteries, 50 Amp battery charger
			7. 150 watt polycrystalline silicon photovoltaic solar modules
			8. Trailer mounted locking hand crank mast winch 30 foot telescoping mast with spiral conduit for cable deployment
			9. Consist of weather resistant camera system, housed in a aluminum and plastic casing with a polycarbonate dome
			10. Pan/Tilt/Zoom controls with multiple preset compositions
			11. 1280x720 (HDTV 720) resolution
			12. 21x optical, 12x digital zoom with 360° continuous pan
			13. H.264, MPEG-4 Part 10/AVC, Motion JPEG video compression
			14. Lens: 4.0-84.6mm, F1.6-4.5
			15. Auto Features: Focus and Day/Night
			16. Communications: 10base-T/100base-TX Ethernet, IP Addressing: Dynamic or Static
			17. Wireless 4G modem LTE
			18. Secure 256 bit AES encrypted onboard storage
			19. High-Definition continuous video recording up to 120 days available
			20. Industrial grade solid state embedded Linux System
			21. Custom branding to display company logo
			22. Designed for EarthCam Control Center Lite
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 9 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 user-controllable Robotic Pan, Tilt and Zoom
		8. User-controllable settings for creating and editing multiple preset compositions, each preset will be displayed as a thumbnail image
		9. Picture in picture capability for viewing live video and High Definition images simultaneously
		10. Instant live snapshot capability in addition to preset scheduled archives
		11. Visual timeline with quick thumbnail view allows image navigation by year, month, day and hour
		12. AI-edited time-lapse technology removes frames obscured by foreign objects or weather elements, with music and graphics then added for downloadable presentations
		13. Full Screen Mode for displaying video and complete image without any graphical frame
		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
		15. Image Comparison Tool for comparing two images taken at different times, overlayed on top of each other
		16. Share Image Tool for saving, printing, emailing and posting to Hall of Fame
		17. Project Management Software integration (Aconex, Autodesk BIM 360, PlanGrid, Procore, SharePoint)
		18. 3D/4D Model Integration (Autodesk Navisworks and Revit, Bentley Synchro)
		19. Social Media Integration Tools for sharing project images and notes on Facebook and Twitter
		20. Automatically generated daily/weekly project progress update email with camera image and weather
		21. Graphical Weather applet displaying local weather data with satellite and updating radar imaging
		22. Integration of maps, aerial and satellite imagery
		23. Graphical Data Management Tools showing archived and current system status of solar amperage, battery power remaining, wireless radio connectivity, and device location
		24. Automatically generated Progress Reports (in PDF and PowerPoint formats) using weekly camera images with associated weather data, notes, and client logo
	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 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.

* 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 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**

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.