

**SECTION 914
PRE-CONSTRUCTION VIDEO**

914-1 SCOPE OF WORK: The Contractor shall furnish all labor, materials and equipment to perform color audio-video recording of the project site surfaces as specified herein. Contractor shall furnish to the Owner an original and three (3) copies of a continuous color and audio-video DVD recording of the project sites.

The Owner reserves the right to reject the audio-video DVD because of poor quality, unintelligible audio or uncontrolled pan or zoom. Any video rejected by the Owner shall be re-videoed at no additional cost to the Owner. The contractor shall submit one (1) DVD to the Owner for format and content approval prior to the start of any work.

914-2 QUALIFICATIONS:

- a. The video recording shall be performed by a qualified audio-video taping firm or individual knowledgeable in construction practices and experienced in the implementation of established inspection procedures.
- b. Photographer's Qualifications: Photographer shall be a firm or an individual of established reputation who has been regularly engaged as professional photographer for not less than three (3) years. The photographer must have had previous experience video documenting a minimum of ten (10) miles of preconstruction work.
- c. Any apprentice photographer must be continuously supervised by an above-described experienced photographer.

914-3 EXECUTION: Prior to the commencement of any construction, equipment or material mobilization, the Contractor shall perform an audio-video survey of each project site area which will be excavated or which has the potential to be disturbed by the Contractor's operations. Specific areas of this project include, but are not limited to:

- a. All areas to be entered by vehicles or equipment, including construction areas for both internal and excavated improvements.
- b. Areas requiring manhole work.
- c. Paved and unpaved areas which will be entered by vehicles or equipment.
- d. Other areas that may be impacted by the Work, including work staging areas and field offices, as directed by the Owner.

The Contractor shall be responsible for the timely execution of the preconstruction audio-video survey, its vantage points, and quality. The Contractor shall cooperate with the photographer's work and provide reasonable auxiliary services as requested, including access and use of temporary facilities including temporary lighting.

Submitted DVD's shall be reviewed and approved by the Owner within five (5) days of submittal of a satisfactory survey. Should the DVD not provide adequate coverage to fully illustrate the physical condition of the work area or not be in compliance with the specifications, project areas shall be re-surveyed prior to the initiation of construction at the project sites, with no additional cost to the Owner.

The Contractor shall provide four (4) copies; labeled on the DVD and jewel case cover as

follows: Face of DVD & Case Cover

PRECONSTRUCTION AUDIO-VIDEO SURVEY

Contract No. _____ **Project Title:** _____

Contractor: _____ **DVD No.** _____

Date Televised (MM/YY): _____ **Date Submitted** _____

Inside of Case Cover

Work Area	Street, Address/Location	Starting Video Counter No.

Note: The Contractor may record the surface videos of as many line segments as possible on a single DVD.

A cumulative index correlating the various segments of video coverage to the corresponding DVD's shall be supplied to the Owner. This index shall identify each segment in the video by location, engineering stationing corresponding to the stationing on the contract documents, video counter number, viewing side, point starting from, traveling direction, and ending point. Written documentation must coincide with the information on the tape so as to make easy retrieval of locations sought for at a later date.

The video portion of the recording shall produce bright, sharp, clear pictures with accurate colors and shall be free from distortion, tearing, rolls, or any other form of picture imperfection. The audio portion of the recording shall reproduce precise and concise explanatory notes by the camera operator with proper volume, clarity and freedom from distortion.

The recorder shall record the color signal with a minimum horizontal resolution of 400 lines. The color video camera shall have a minimum horizontal resolution of 700 lines at the center.

To preclude the possibility of tampering or editing, the DVD shall display continuous digital information including the following:

- a. Date and time of the recording; date information will contain the month, day and year; time information will contain hours, minutes and seconds, separated by colons.
- b. The engineering stationing corresponding to the stationing on the contract documents, or as directed by the Owner.

Digital information shall appear at the bottom of the viewing screen and in no way interfere with the video portion of the recording.

At the start of each video recording segment, an identification summary shall be read into the record simultaneously with a wide-angle view with digital information. The identification summary shall include the following:

- a. DVD number
- b. The Contractor shall identify EBROSCO
- c. Contract number and name

- d. Contractor's name
- e. Date and time
- f. Manhole numbers
- g. General location and name of street
- h. Weather
- i. Direction of travel and viewing direction

The recording shall include the coverage of all surface and other site features located in areas to be affected by the Work, extending to a minimum of 15 feet outside the actual right of way (street, construction, etc.). The surface features recorded shall include, but not be limited to, roadways, driveways, sidewalks, curbs, culverts, headwalls, retaining walls, buildings, above-ground utilities, parks, lawns, landscaping, trees, tree canopies, shrubbery and fences. The area of coverage shall extend to 50 feet from the proposed work site but shall also include all unpaved areas and access routes where vehicles or equipment will pass.

Video recording may be ordered outside of the area of coverage in order to establish those features deemed necessary by the Owner.

Video recording coverage shall include documentation of the condition of the surface and other site features located within the area of coverage and shall be supported by appropriate audio description. Audio description shall be made simultaneously with the video recording.

Houses and buildings shall be identified visually and verbally by house number in such a manner that structures of the proposed system (i.e., manholes on a sewer system) can be located by reference.

The coverage shall be continuous (i.e., the camera shall not be turned off once recording has begun) to the greatest extent possible.

The rate of travel for video recording shall be determined by the number, size and value of the surface and other site features within the construction area of coverage so as to produce a clear, detailed view of each feature. At no time shall the rate of travel exceed 44 feet per minute. Forward motion of the camera shall be halted when viewing objects or structures outside the limits of the street or easement being documented.

The photographer shall pan and zoom in and out at a reasonable rate so as to control sufficiently the clarity of objects being viewed.

When recording in rights-of-way, the camera shall be mounted on a steady base. Horizontal and vertical shots shall be made from the base, in order to insure proper perspective. The distance from the camera lens to the ground shall be not less than 12 feet. If not accessible by motorized vehicle, height shall be determined by the distance from ground to shoulder height of the camera operator. Contractor shall furnish all auxiliary lighting as required to produce a quality recording. At no time will the Contractor be allowed to use any electrical circuits within a building on private properties.

All video recording shall be performed during regular business hours, unless otherwise approved by the Owner. No video recording shall be performed if the weather is not acceptable, such as rain, fog, or elongated shadows that distort perception and tend to prevent clear resolution.

The photographer shall retain the original unedited video DVD for five (5) years after the date of final acceptance. During this period, the photographer shall fill orders by the Engineer for extra copies of DVD's priced at prevailing local commercial rates.

914-4 MEASUREMENT AND PAYMENT: No measurement or direct payment will be made for pre-construction video.