

DIVISION 1 GENERAL REQUIREMENTS

SECTION 01 3232

PHOTOGRAPHIC DOCUMENTATION

PART 1 - GENERAL

1.01 Summary

- A. Section includes description of requirements and procedures for documenting progress of Construction of the Project.

1.02 Submittals

- A. Key Plan:
 - 1. With each set of photographs, submit a key plan of the Project site and building(s) with vantage points marked for location and direction of each photograph. Indicate elevation or story of construction. Include same label information as corresponding set of photographs.
- B. Construction Photographs for Monthly Project Progress Report:
 - 1. See also Section 01 1102 "Summary of Work – Design-Build Contractor Services".
 - 2. Submit one print each and electronic copies of a minimum of six (6) photographic views in each copy of the Monthly Project Report.
 - 3. Format: 8-by-10-inch smooth-surface matte prints on single-weight commercial-grade photographic paper, enclosed back to back in clear plastic sleeves that are punched for standard 3-ring binder.
 - 4. Identification: On back of each print, provide an applied label or rubber-stamped impression with the following information:
 - a. Name of Project.
 - b. Name of Design-Build Team.
 - c. Date photograph was taken if not date stamped by camera. Project.
 - d. Description of vantage point, indicating location, direction (by compass point), and elevation or story of construction.
 - e. Unique sequential identifier.
- C. Digital Photographic Images:
 - 1. Submit a complete set of digital image hard copy as a Project Record Document. 8-by-10-inch smooth-surface matte prints on single-weight commercial-grade photographic paper, enclosed back to back in clear plastic sleeves that are punched for standard 3-ring binder. Identify as per Monthly Report identification requirements.
 - 2. Submit a complete set of digital image electronic files as a Project Record Document on CD-ROM. Identify electronic media with date photographs were taken. Provide index information necessary to link key plan as described in paragraph 1.02.A.1. Submit images that have same aspect ratio as the sensor, uncropped.
- D. Digital Video Record:
 - 1. Prior to start of construction, in the presence of the Owner's Representative, Design-Build Team must video survey (digitally record) buildings and grounds affected by this Project and submit itemized list of defects, e.g. broken glass, window screens, salvage items, paving, walks, etc. Design-Build Team must make a copy of the Digital Video Disc (DVD) record for Design-Build Team's use and deliver the original to the Owner for use at Project closeout. At completion of the Project, defects not noted on that list or not verifiable on the original DVD must be corrected or replaced by Design-Build Team at no cost to the Owner.

2. Submit two copies of each DVD with protective case within seven days of recording. Prevent accidental re-recording ("locked format").
 3. On each copy, provide an applied label with the following information:
 - a. Name of Project.
 - b. Name of Design-Build Team.
 - c. Date digital recording was made.
 - d. Description of vantage point, indicating location, direction (by compass point), and elevation or story of construction.
 - e. Weather conditions at time of recording.
 4. Transcript: Prepared on 8-1/2-by-11-inch paper, punched and bound in heavy-duty, 3-ring, vinyl-covered binders. Mark appropriate identification on front and spine of each binder. Include a cover sheet with same label information as corresponding video. Include name of Project and date of video on each page.
- E. Periodic Construction Digital Images
1. See paragraph 1.02.C.2 for similar format and identification requirement. Photos must be distributed to Owner via shared web-based Project management system or CD/DVD.

1.03 Coordination

- A. If a professional photographer is utilized, cooperate with photographer, including access to Project site and use of temporary facilities, including temporary lighting required to produce clear, well-lit photographs without obscuring shadows.

1.04 Usage Rights

- A. General:
 1. Obtain and transfer copyright usage rights from photographer to the Owner for unlimited reproduction of photographic documentation.

PART 2 - PRODUCTS

2.01 Photographic Media

- A. Digital Images:
 1. Provide images in uncompressed .TIFF format, produced by a digital camera with minimum sensor size of 4.0 megapixels, and at an image resolution of not less than 1600 by 1200 pixels.
- B. Digital Video Format:
 1. Provide high-quality color recording in DVD format.
 2. Quality must be adequate to create photographic prints to be made from individual frames.

PART 3 - EXECUTION

3.01 Construction Photographs

- A. General:
 1. Take photographs using the maximum range of depth of field, and that are in focus, to clearly show the Work. Photographs with blurry or out-of-focus areas will not be accepted.
 2. Maintain key plan with each set of construction photographs that identifies each photographic location.
- B. Digital Images:

1. Submit digital images exactly as originally recorded in the digital camera, without alteration, manipulation, editing, or modifications using image-editing software.
 2. Date and Time: Include date and time in filename for each image.
 3. Field Office Images: Maintain one set of images on CD-ROM or DVD in the field office at Project site, available at all times for reference. Identify images same as for those submitted to Construction Manager.
- C. Periodic Construction Photographs: Take a minimum of 25 digital photographs weekly, with timing each month adjusted to coincide with the cutoff date associated with each Application for Payment. Select vantage points to show status of construction and progress since last photographs were taken.
- D. Owner-Directed Construction Photographs: From time to time, the Owner will instruct photographer about number and frequency of digital photographs and general directions of vantage points. Select actual vantage points and take photographs to show the status of construction and progress since last photographs were taken.
- E. Aerial Photographs: Design-Build Team will provide a minimum of three (3) aerial photographs upon final completion of the construction process. Aerial photographs must include the entire Site of the Work.
- F. Emergency Situation/Accident Photographs: Accidents and/or emergency situations must be documented and shared with the Owner and investigative agencies.
- G. Completion Construction Photographs: Take twenty-four (24) color photographs after date of Completion for submission as Project Record Documents. Consult the Owner regarding desired vantage points.

3.02 Digital Training Videos

- A. Refer Section 01 7900 Demonstration and Training.

END OF SECTION