PART 1 – GENERAL

1.01 SECTION INCLUDES
   A. Windows.
   B. Glass and glazing.
   C. Sealants.
   D. Electrolytic bituminous isolation coating.
   E. Anchorage devices and fasteners.

1.02 RELATED DOCUMENTS
   A. Aluminum windows are specified in Section 08 51 16, Aluminum Windows.
   B. Glass and glazing are specified in Section 08 80 00, Glazing.
   C. The station or building involved in this work will be in continuous operation during the construction period. This will require that the Contractor plan the work carefully to work around unavoidable obstacles. It will require further that the Contractor complete some new construction facilities required in the renovation work before proceeding with the window restoration and replacement work.
   D. Provide such additional temporary facilities as may be required to facilitate continuous, unobstructed station or building operation during transitional construction work.

1.03 MEASUREMENT AND PAYMENT
   A. General: Restoration and replacement of existing windows will not be measured separately for payment, but will be paid for as part of the Contract lump-sum price for Architectural Work.

1.04 REFERENCES
   A. Comply with the Referenced Standards specified in Section 08 51 16, Aluminum Windows, and Section 08 80 00, Glazing, as applicable to the window restoration and replacement work.
B. American Architectural Manufacturers Association (AAMA):

1. AMAA 2604 Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels (with Coil Coating Appendix)

1.05 REGULATORY REQUIREMENTS

A. Comply with the Regulatory Requirements specified in Section 08 51 16, Aluminum Windows, and Section 08 80 00, Glazing, as applicable to the window restoration and replacement work.

B. California Code of Regulations, Title 24, Part 6, California Energy Code

1.06 SUBMITTALS

A. Provide submittals in accordance with the requirements of Section 08 51 16, Aluminum Windows, and Section 08 80 00, Glazing, as applicable to the window restoration and replacement work, for the Engineer's review.

1.07 QUALITY ASSURANCE

A. Window restoration and replacement work shall conform with the installation instructions and recommendations of the manufacturer of the windows to be provided for this work.

B. Quality assurance for the window restoration and replacement work shall conform with the quality assurance requirements of Section 08 51 16, Aluminum Windows, and Section 08 80 00, Glazing, as applicable.

1.08 WARRANTY

A. Comply with the warranty requirements of Section 08 51 16, Aluminum Windows.

PART 2 – PRODUCTS

2.01 MATERIALS, EQUIPMENT, AND FACILITIES

A. Requirements: Provide all materials, equipment, tools, appurtenances, facilities, and services as required for performing and completing the window restoration and replacement work as indicated.

B. Windows:

1. Windows shall be monumental, operable and fixed sash aluminum windows, as indicated, conforming with applicable requirements of Section 08 51 16, Aluminum Windows.
2. Windows shall be fully glazed insulated-glass units, as indicated, furnished complete with continuous moldings and glazing stops, frames, finish window hardware, and all anchors, fasteners, and accessories as required for a complete and finished, operable installation.

3. Finish for windows shall be a full 70 percent polyvinylidene fluoride finish conforming with requirements of AAMA 2604. Color: as selected by the Engineer from manufacturer’s standards.

4. Window units and operable vents shall be fully weatherstripped in accordance with the manufacturer’s standards.

C. Glass and Glazing: Factory glaze sash with clear float, insulating glass as specified in Section 08 80 00, Glazing. Units shall be “wet” glazed with snap-in aluminum extruded glazing bead and PVC bulb on the interior of the glass. Exterior glass shall be set in a continuous bead of silicone sealant. Provide for expansion and contraction of acoustical glass.

D. Sealants: Refer to Section 07 90 00, Joint Protection, for requirements.

E. Electrolytic Bituminous Isolation Coating: Asphalt- or coal-tar pitch-based paint or varnish of heavy or thick consistency, or 1/16-inch thick neoprene or butyl tape.

F. Anchorage Devices and Fasteners: Tempered aluminum or 30 Series stainless steel when exposed; cadmium- or zinc-plated when concealed.

PART 3 – EXECUTION

3.01 EXAMINATION AND PREPARATION

A. After careful removal of existing windows, examine existing framed window openings for damaged and defective framing. Damaged or defective framing shall be repaired or replaced as required to provide substantial framed substrate surfaces conducive to the installation of new windows and related flashings.

B. Where aluminum is installed in contact with dissimilar metals, concrete, masonry, or stucco, the aluminum shall be painted with bituminous isolation coating or separated with neoprene or butyl tape.

C. Aluminum surfaces to be in contact with sealants shall be cleaned with solvent.

3.02 INSTALLATION OF NEW WINDOWS

A. New windows shall be installed in accordance with Section 08 51 16, Aluminum Windows, as applicable to the work of this Section.

B. All work shall be performed and completed as required to obtain the required warranties specified in Section 08 51 16, Aluminum Windows.
3.03 REHABILITATION OF EXISTING WINDOWS

A. Rehabilitate existing windows to like new condition. Operable vents shall operate smoothly and effortlessly under normal opening and closing pressures. Lubricate as required. Operable vents shall be watertight in closed position.

B. Cracked and broken glass shall be replaced, and shall conform with applicable requirements of CCR Title 24, Part 6, California Energy Code.

C. Repainting of existing windows shall conform with applicable requirements of Section 09 91 00, Painting. Color and sheen shall be as selected by the Engineer.

3.04 ADJUSTING

A. Comply with the adjusting requirements of Section 08 51 16, Aluminum Windows.

3.05 CLEANING

A. Comply with the cleaning requirements of Section 08 51 16, Aluminum Windows, and Section 08 80 00, Glazing.

END OF SECTION 08 01 57