

**SECTION 01630
SUBSTITUTIONS AND "OR EQUAL" SUBMITTAL**

1.1 THE REQUIREMENT

- A. The CONTRACTOR may supply any of the materials specified or offer an equivalent. The ENGINEER shall determine whether the material offered is equivalent to that specified. The CONTRACTOR shall make all "Or Equal" submittals within thirty (30) calendar days after issuance of Notice to Proceed. Any request or submittal received after the specified period will be considered as NOT EQUAL to that so specified and will be processed as a substitution described hereinafter.
- B. Whenever any particular material, process, or equipment is indicated by patent, proprietary or brand name, or by name of manufacturer, such wording is used for the purpose of facilitating its description and shall be deemed to be followed by the words 'or equal.' A listing of materials is not intended to be comprehensive, or in order of preference. The CONTRACTOR may offer any material, process, or equipment considered to be equivalent to that indicated. The substantiation of offers shall be submitted as provided in the Contract Documents.
- C. The CONTRACTOR shall, at its expense, furnish data concerning items offered by it as equivalent to those specified. The CONTRACTOR shall have the material tested as required by the ENGINEER to determine that the quality, strength, physical, chemical, or other characteristics, including durability, finish, efficiency, dimensions, service, and suitability are such that the items will fulfill its intended function.
- D. Test methods shall be subject to the approval of the ENGINEER. Test results shall be reported promptly to the ENGINEER, who will evaluate the results and determine if the substitute items are equivalent. The ENGINEER'S findings shall be final. Installation and use of substitute items shall not be made until approved by the ENGINEER.
- E. All manufacturers' data submitted to the ENGINEER for review and acceptance shall clearly identify each proposed substitute with the corresponding Contract Drawing detail and specification section. If the ENGINEER decides to accept for use in the Project a material, process or article which is not the equal of that specified, substitution shall be made in the manner described in CHANGES AND EXTRA WORK of the GENERAL CONDITIONS, with a credit to the CITY for the difference in value.
- F. The ENGINEER shall determine whether the material offered is equivalent to that specified. Any revision to structures, piping, mechanical, electrical, instrumentation, or any other work made necessary by such substitution must be approved by the ENGINEER, and the entire cost both direct and indirect of these revisions shall be borne by the CONTRACTOR.
- G. Any materials, process, or article may be requested as a substitution by the CONTRACTOR, in lieu of that specified, under the following conditions:
 - 1. Requests must be submitted in writing and in the manner described in SHOP DRAWINGS / SUBMITTALS of these GENERAL REQUIREMENTS.

2. Requests must be submitted thirty (30) calendar days prior to starting the work, as established by the ENGINEER, so as not to cause any delay in completion of the Project. No other request will be considered after expiration of the period specified, except that in exceptional cases where it is determined to be in the best interest of the CITY, as approved by the ENGINEER.
3. The CONTRACTOR agrees to pay for all Engineering and design services, if required, to make all changes and adjustments in material and work of all trades directly or indirectly affected by the substitute, to the satisfaction of the ENGINEER, at no cost to the CITY.
4. All requests for substitution shall be made through the CONTRACTOR. Submissions by the CONTRACTOR shall imply the CONTRACTOR'S approval of such substitution.
5. No requests for substitutions will be considered during the bidding period.
6. The CONTRACTOR shall furnish adequate data with each request for approval of a substitute to enable the ENGINEER to evaluate the proposed substitution.
7. If a substitute offered by the CONTRACTOR is not found to be equal to the specified material, then CONTRACTOR shall furnish and install the specified material.
8. The specified Contract completion time shall not be affected by any circumstance developing from the provisions of this Section.

(END OF SECTION)