LOS ANGELES COMMUNITY COLLEGE DISTRICT



DEPARTMENT OF FACILITIES PLANNING AND DEVELOPMENT SUSTAINABLE BUILDING PROGRAM

CONSTRUCTABILITY/MAINTAINABILITY CHECK LIST

- 1) The following questions are representative of the type of inquires the C/M Review Team should be pursuing. Additional inquires should be developed and pursued as required
- 2) Are areas available for both materials, form fabrication and laydown yards, equipment parking, temporary field offices, recycling storage and handling, construction personnel parking and purchased material/equipment storage? If areas can be secured without excessive cost during the design/engineering phase, early construction efficiency can be greatly improved.
- 3) Will double handling of materials be necessary? Is there sufficient space for temporary stockpiles?
- 4) Are utilities to be relocated clearly, shown in their new location on the plans and/or reference documents? Do plans reference the same vertical and horizontal control which will be used for other required contract work?
- 5) If local municipalities plan for associated utility extensions and/or improvements, are they shown in the construction documents? Has this work been coordinated with contract construction; is the stationing compatible?
- 6) Are all pay items in the bid tabulation shown in the specifications and/or the plans? If any items are combined for payment is it clearly shown in the specifications? Conversely, is all of the required work covered by pay items?
- 7) Are work areas accessible for the construction staff, material delivery and/or equipment operation? Difficult access impacts productivity. In addition, difficult access routes frequently result in unsafe working conditions. High volume haul routes with constrictions or bottlenecks can impact both cost and schedule. Does trucking have a free flow through the site; can it merge safely into traffic? Accessibility for major pieces of equipment and temporary facilities can be critical. Is access available through adjacent properties?
- 8) What major construction activities "drive" the contract work?
- 9) Are the specified materials readily available for all features of the work?
- 10) Are designs configured to enable efficient construction? In this regard the desired result is to have an exchange of ideas between construction and design/engineering staffs before final design is started. The following factors should be kept up front in constructability deliberations. Simplicity is a desirable element in any constructible design. Flexibility for the contractor to select alternative methods and/or innovative approaches is also desirable. Sequencing of installation is as much a design consideration as it is a procurement and/or construction consideration. Designs that require special construction skills should be minimized in all cases, along with ones that are very labor intensive.
- 11) Standardized details produce both cost and schedule benefits. Specific advantages include increased productivity for repetitive field operations, volume purchase discounts, simplified material procurement/management procedures and reduced design/engineering time.
- 12) Construction efficiency must also be considered in specification development. Common problems associated with difficult to construct specifications include unrealistic tolerances and/or requirements and impractical methods of measurement and payment.



- 13) Constructability is enhanced when:
 - a) Standard specifications offer clear-cut options (the less new specification writing required, the better- and the probability of an error in rework is diminished).
 - b) Special Provisions are developed with full and early involvement of staff with appropriate construction/maintenance/operations knowledge and experience.
 - c) The specifications are up-to-date and conform to latest construction industry standards and methods.