# Implementation Action

## Introduction

The results of the VE study as contained in this draft report are presented for review and implementation to all project stakeholders. The following VE Alternative Response Form is designed to help the decision-makers record their implementation decisions. A compilation of the implementation decisions will be included in the Final VE Study Report.

## Implementation Action Recommendation

Reviewers are asked to provide their disposition of each VE alternative denoting their recommendation to implement or not, based on current information, in the given project development phase. It is recognized that future conditions may change this disposition. Comments will be discussed at the Implementation Meeting where final disposition and savings validation will be determined.

Disposition Recommendation Options:

* Accept
* Partially Accept (or Accept with Modification)
* Further Study Required (or Defer to Future Project Development)
* Reject

| **Alt. No.** | **Descriptive Title** | **Initial Cost Savings** | **LCC**  **Savings** | **Acceptance** | **Comments / Discussion** |
| --- | --- | --- | --- | --- | --- |
| **Civil/Site Alternatives** | |  |  |  |  |
| C-1 | Reuse existing water main in lieu of two new connections | $541,000 |  | **R** |  |
| C-2 | Evaluate building access and site circulation improvements as part of base scope | ($173,000) |  | **R** | **Element of SD2** |
| **Architectural Alternatives** | | | | | |
| A-1 | Retain and restore existing tile roofs in lieu of replacement | $1,705,000 |  | **R** |  |
| A-2 | Replace all roof tiles with alternate new material | $841,000 |  | **FSR** | **Study: Alternative materials acceptable to historic preservation and providing cost savings or other benefits may be considered.** |
| A-3 | Expand non-contributing additions to provide additional program space | ($1,450,000) |  | **R** |  |
| A-4 | Relocate main entry function and Health Administration to north side of Building 81AC | $534,000 |  | **R** |  |
| A-5 | Use exterior shafts for new elevator in lieu of providing new interior elevator shafts | - |  | **FSR** | **Not an item for further VE review. Recommendation may be considered to resolve arrangement of exits / means of egress design for the building if issues are discovered during design.** |
| A-6 | Reallocate select interior stairs for program space or mechanical plenum | ($237,000) |  | **FSR** | **Not an item for further VE review. Recommendation may be considered upon resolution of arrangement of exits / means of egress design if issues are discovered during design.** |
| **Structural Alternatives** | |  | |  | |
| S-1 | Reduce number of shear walls provided and provide alternate support for Unreinforced Masonry | $801,000 |  | **FSR** |  |
| **Mechanical Alternatives** | |  |  |  |  |
| M-1 | Provide chilled beam system in lieu of VAV system | $2,703,000 |  | **FSR** | **Recommendation may be compared to base mechanical HVAC design complying with applicable codes, standards, and VA design manuals. A waiver request would need to be approved prior to chilled beams being designed into building.** |
| **Fire Protection Alternatives** | | | | | |
| FP-1 | Consolidate and combine areas for smoke purge and compartments | $242k |  | **R** |  |
| **Electrical Alternatives** | | | | | |
| E-1 | Install all major electrical infrastructure necessary to support phased construction during first phase | $761,000 |  | **R** | **Base design must support phased construction / continuity of services.** |
| E-2 | Install main electrical feeders underground in exterior | $108,000 |  | **FSR** | **Recommendation may be considered as an element of design complying with applicable codes, standards, and VA design manuals. Further review required to ensure exterior conflicts do not exist with proposed ductbank route.** |
| **Sustainability Alternatives** | | | | | |
| SU-1 | Provide advance lighting control features | ($203,000) |  | **R** |  |
| SU-2 | Revise energy performance requirement assumptions for renovations vs. new buildings/replacement from foundations up | Comment |  | **FSR** | **Specific examples of how this recommendation may be applied to the design may be considered.** |
| SU-3 | Install system inside existing windows to improve thermal protection | ($313,000) |  | **FSR** | **Additional information / analysis necessary to weigh the relative value of this recommendation.** |
| SU-4 | Eliminate PV panels. Install equipment to support PV by others. | $6,367,000 |  | **FSR** | **Recommendation may be considered upon AE clarification of base design for PV installation. Base design must comply with energy EO and applicable sustainable requirements in the program.** |
| **Miscellaneous Alternatives** | | | | | |
| Misc-1 | Designate as an ancillary facility in lieu of essential facility | $2,957,000 |  | **R** |  |
| Misc-2 | Prefabricate modules for utility distribution in the building | $625,000 |  | **R** |  |
| Misc-3 | Remove all occupancy of Building 81 and 81AC during construction | Comment |  | **R** |  |