

3.6.3-A	CRC PROJECT PROCEDURES MANUAL	REVISION DATE:	
	Design Change Documentation	APPROVAL	APPROVAL DATE

A. OBJECTIVE

To establish guidelines and assignment of responsibilities for documenting design changes to provide a consistent and well documented means of tracking individual design change and to provide a historical record of changes to approved scope baseline established at the end of the preliminary engineering (PE) phase and described in the documentation to support the Program’s application to the FTA to enter into Final Design.

B. DEFINITION

Baseline Scope – *Baseline Scope is represented by the Transit and Highway improvements approved at completion of the Preliminary Engineering phase at which time a scope, budget and schedule would be established for the Program and for each project package described in the Project Implementation Plan. The baseline scope is also described in the documentation submitted to the FTA in support of the Program’s application to enter into Final Design.*

C. REFERENCES

1. CRC Project Management Plan
2. CRC Procedure 3.6 Change Management

D. WORK PROCESS

RESPONSIBILITIES

Program Management is responsible for ensuring design changes during Final Design and Construction phases are thoroughly documented and communicated using the change management process discussed in the Project Management Plan (PMP).

Business Services will establish a standard reporting format for summarizing material scope changes at the project package and program levels that would be reflected in monthly reports.

The Change Management Manager is responsible for coordinating closely with the Program’s design and construction managers on design changes that may affect approved scope baseline. Maintaining a consolidated design change data base. Tracking and reporting monthly on design changes by individual project packages.

The Engineering Managers (with input from their assistant managers) and the Project Engineers (Resident Engineers) with support from the Project Delivery Engineering Manager are responsible for identifying and tracking design changes in their respective area of responsibility that impact approved scope baseline during Final Design and Construction execution.

DESIGN CHANGE DOCUMENTATION

Through the Final Design and Construction phases, design changes proposed or encountered will be tracked in accordance with this Design Change Documentation procedure. Design changes may be initiated by the Engineering Managers, requested by the Program Manager or the Project Delivery Director and the Project Engineers (Resident Engineers).

Design change that should be tracked and entered into the “Design Change Tracking System” (currently, the engineering module in Prolog) is any design element that:

- Was not envisioned as part of the approved scope at completion of the PE phase, and therefore not included in the approved baseline budget, and
- Is estimated to cost in excess of \$50,000. [This \$\$ threshold and possibly higher may be warranted on a mega project like the CRC. Modify as necessary. Ensure it is consistent with the \$\$ threshold in CRC Procedure 3.6]

Each design change from the approved baseline that meets the above described criteria is assigned a unique identification number that relates to the WBS code.

The ‘Change’ module in the ‘Design Change Tracking System’ will be used to document these design changes. Minimum required information that should be entered in the ‘Change’ module includes the following:

- **Project package name**
- **Change title description**
- **Design change identification number**
- **Status** – *Active* (Actively monitored/controlled/waiting for a decision or approval by CRC Director); *Dormant* (not a current high priority, but may in the future); or *Retired* (change has passed or been resolved)
- **Date** – when the change was first identified.
- **Name of contact person** - responsible for tracking/resolving the change
- **Funding impact**; identify whether:
 - *Internally driven* (originated by WSDOT/ODOT/TriMet/C-TRAN)
 - *Externally driven* (originated outside WSDOT/ODOT/TriMet/C-TRAN; e.g. contractor or local government)
 - *Betterment* (either internally or externally driven, but paid for with outside Program funding)
- **Estimated likely cost** – provide a breakdown for the following three categories:
 - *Construction cost* (use YOE dollars plus any allocated contingency built into the unit pricing of the bid items)

- *Added A&E cost* (if the change requires significant additional design cost over what would have been required in the original PE scope)
- *Added Right of Way cost* (if the change requires additional right of way)
- **Estimated schedule impact** – describe the impact to the project schedule. Valid entries are High, Medium or Low.
- **Related Risk Event** – identify whether the change is a result of a risk event occurring; if yes, provide the risk register reference number. If not, identify whether it introduces additional risk to the project package.
- **Establish a detailed change description** – include information that is specific, measurable, attributable, and relevant to help articulate the consequences of the change including:
 - *Who initiated it, what precipitated it*
 - *Justification for the change*
 - *Summary of how the cost estimate was developed including the cost of escalation*
- **Estimate the probability the design change will be approved.** When the change has been approved by the CRC Director, the probability is entered at 100%.

E. ATTACHMENTS

None