*LIGO Laboratory / LIGO Scientific Collaboration*

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AOS SLC ITM Elliptical Baffle

Production Plan

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**Abstract**

This document describes the plan for acquisition of parts, components, and materials needed for fabrication of six (6) ITM Elliptical Baffle.

# Introduction

This document describes the plan for acquisition of parts, components, and materials needed for fabrication of six (6) ITM Elliptical Baffle.

## Scope

The cost of the production plan is limited to the hardware acquisition costs of the ITM Elliptical Baffles.

It does not include labor for procurement, assembly, pre-alignment, test, and installation.

# Production Plan

## Fabrication

The ITM Elliptical Baffle subassemblies will be manufactured by selected machine shops.

## Assembly and Test

The ITM Elliptical Baffle sub-assemblies will be pre-assembled in a clean room, wrapped, and transported to a portable clean room near the installation site; the final installation and assembly will be done in situ inside BSC chambers. No prior testing is required.

# Baffle Estimated Unit Cost

ITM Elliptical Baffle 10795

## Total Cost for all Signal Recycling Cavity Baffles

Qty 6 ITM Elliptical Baffle 64770

Qty 4 FM Beam Dump 43180

Qty 2 FM Elliptical Baffle 1018

Qty 2 Manifold Flat Baffle 20780

Shipping 8000

Total Cost  **$137,748**

## Comparison with Cost Book

The 8/26/10 AOS cost revision is detailed in the Advanced LIGO [Change Request No. ACR-100016](https://dcc.ligo.org/DocDB/0014/M1000226/001/ACR-100016_AOS_Budget_Sched_Revs_2010-08-27.pdf).

Cost of current baffles $**135,748**

Plus cost of other baffles $756,925

Budgeted Baffles and Beam Dumps $599,644

Cost Overrun ($293,029)

# Procurement Plan

**April 2012**

Qty 6 ITM Elliptical Baffle 64770

Shipping 3500

Total Cost  **$68,270**