



*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.



## 1 Introduction

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

### 1.1 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.

## 2 Production Plan

### 2.1 Fabrication

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

### 2.2 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.

## 3 Baffle Estimated Unit Cost

ITM Elliptical Baffle	10795
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### 3.1 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	<b>\$137,748</b>
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### 3.2 Comparison with Cost Book

The 8/26/10 AOS cost revision is detailed in the Advanced LIGO [Change Request No. ACR-100016](#).

Cost of current baffles	<b>\$135,748</b>
Plus cost of other baffles	\$756,925
Budgeted Baffles and Beam Dumps	\$599,644

Cost Overrun (\$293,029)

**4 Procurement Plan**

**April 2012**

Qty 6 ITM Elliptical Baffle	64770
Shipping	<u>3500</u>

Total Cost **\$68,270**