*LIGO Laboratory / LIGO Scientific Collaboration*

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AOS SLC BS 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) BS Elliptical Baffle.

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Log of changes:

v-2

1. Added Fabrication, installation and test schedule

# Introduction

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

## Scope

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

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

# Production Plan

## Fabrication

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

## Assembly and Test

The BS 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 on the Cartridge assembly.

## Fabrication, installation and test schedule

|  |  |  |  |
| --- | --- | --- | --- |
| AOS SLC BS Elliptical Baffle | Duration | Start | Finish |
| **BS Elliptical Baffle** | **30 days** | **Mon 6/18/12** | **Fri 7/27/12** |
| Procure Baffles | 12 days | Mon 6/18/12 | Tue 7/3/12 |
| Procure Metal Works | 15 days | Mon 6/18/12 | Fri 7/6/12 |
| Procure hardware | 22 days | Mon 6/18/12 | Tue 7/17/12 |
| Procure tooling | 15 days | Tue 7/3/12 | Mon 7/23/12 |
| Have parts cleaned and oxidized | 10 days | Wed 7/4/12 | Tue 7/17/12 |
| ship baffle parts to Observatory | 5 days | Wed 7/18/12 | Tue 7/24/12 |
| ship metal parts to Observatory | 3 days | Wed 7/18/12 | Fri 7/20/12 |
| ship tooling to Observatory | 3 days | Tue 7/24/12 | Thu 7/26/12 |
| Clean & Bake parts - Class A | 5 days | Mon 7/23/12 | Fri 7/27/12 |
| Clean & Bake tooling - Class B | 1 day | Fri 7/27/12 | Fri 7/27/12 |
| Ready for Install | 0 days | Fri 7/27/12 | Fri 7/27/12 |

|  |  |  |  |
| --- | --- | --- | --- |
| L1 Installations | Duration | Start | Finish |
| INS L1: Finalize Cartridge, AOS Baffles (BSC2) | 5 days | Tue 9/18/12 | Mon 9/24/12 |
| INS L1: Install Cartridge/CO2P & Align (BSC2) | 10 days | Tue 9/25/12 | Mon 10/8/12 |

# Baffle Estimated Unit Cost

BS Elliptical Baffle 1250

Alignment Tooling 1500

## Comparison with Cost Book

This is a new item and is not in the Cost Book

# Procurement Plan

**July 2012**

Qty 6 BS Elliptical Baffle 7500

Qty 2 Alignment Tooling 3000

Shipping 600

Total Cost  **$11,100**