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| **Project Name:** | **sPHENIX Min Bias Trigger Detector** | **Date Issued:** | **12/09/2022** |
| **WBS/Control Account Number:** | **WBS 1.7** | | |
| **Control Account Manager Name (CAM):** | **Mickey Chiu** | | |
| **Control Account Title:** | **Min Bias Trigger Detector** | | |

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| **Purpose:** |
| The purpose of this form is to document acknowledgement by authorized Control Account Manager and Project Manager that work has been completed as defined in the WBS Dictionary for the above Control Account and the corresponding system KPPs (defined in PEP/PMP) are met.  By answering YES to the following questions, you acknowledge all work has been completed and reconciles with the WBS Dictionary. Sign, date and return this form to Project Controls attention Chris Herbst, Bldg 490.  If NO is checked, please use the space below to provide details on all required modifications (additions and deletions) to the WBS Dictionary. Sign, date and return this form to Project Management Center (attention Chris Herbst, Bldg 490.) |

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| **Scope Baseline:** |
| WBS Dictionary (as per latest baseline): The Minimum Bias Trigger Detector (MBD) For The sPHENIX Experiment At RHIC  The WBS 1.7 Min Bias Trigger Detector provides event-tagging at the RHIC bunch crossing frequency as well as fast z-vertex detection using two arrays of finely-segmented Cerenkov detectors with quartz radiators coupled with fast mesh-dynode photomultiplier tubes, instrumented with pulse-height and pipelined fast-timing electronics. The detector arrays are upgraded from those used in PHENIX and the electronics is constructed under this WBS. Testing of all elements is included. |
| System KPPs (Objective and Threshold; as per latest baseline)  Preinstall, bench tests:  Threshold: ≥90%live channels based on laser, 120 ps/channel timing resolution w/ bench test  Objective: ≥95%live channels based on laser, 100 ps/channel timing resolution w/ bench test |

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| **KPPs achieved:** |
| Explain the KPPs achieved and how it is demonstrated. (Attach test results/ reports where applicable)  (See attached report) All KPPs are achieved. |

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| **Cost Baseline:** | | | | | | | | |
| Control Account Baseline Cost: $170,170 | | | | | | | | |
| Control Account Actual Cost: $167,709 | | | | | | | | |
| Control Account CPI: 1.01 | | | | | | | | |
| Estimate to Complete: $0 | | | | | | | | |
| Summary of cost overrun/ underrun:  There is a positive CV of -$2,461.  The work is completed. There are outstanding invoices for delivered parts totaling $29K. This will reduce the CV to about -$27K and the CPI to 0.86. The cost overrun was due to need to purchase special cables and perform an extended development effort on the discriminator/shaper electronics to meet specifications. This effort was successful. | | | | | | | | |
| **Questions: [*Check Yes or No]*** | | | | | | | |
| 1. Is all work scope for this Control Account complete (all activities per the project baseline attached to this form) | | | | | | | |
|  | Yes | | |  | | No | [If NO, indicate required actions in the below table] |
| 2. Does the WBS Dictionary accurately represent the work completed? | | | | | | | |
|  | Yes | |  | | No | | [If NO, explain in the below table] |
| 3. Any scope (affecting system KPPs) removed from project baseline after necessary approvals? | | | | | | | |
|  | Yes |  | | | No | | [If NO, reference the baseline change document in the table below] |
| 4. Any scope (not affecting the system KPPs) removed from project baseline after necessary approvals? | | | | | | | |
|  | Yes |  | | | No | | [If NO, reference the baseline change document in the table below] |

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| **Notes and Required Actions:** |
| 1. Activities required to complete all work in this Control Account, with expected finish dates: All activities are complete. |
| 1. WBS Dictionary requires the following changes: None |
| 1. The following scope (affecting system KPPs) has been removed from project baseline (Note: Prior approval required, refer baseline change documentation): None |
| 1. The following scope (not affecting system KPPs) has been removed from project baseline (Note: Prior approval required, refer baseline change documentation): None |

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| **Acknowledgements:** | | | | |
| I acknowledge all work is complete as defined in the WBS Dictionary and the system KPPs have been met for this Control Account.  Any remaining cost on this Control Account has been estimated thoroughly and documented in this report. | | | | |
| **Acknowledgement by CAM** | |  | **Acknowledgement by Project Manager** | |
| **CAM Name:** | **Mickey Chiu** | **Project Manager:** | **Glenn R. Young** |
| **Signature:** | **Text, letter  Description automatically generated** | **Signature:** |  |
| **Date:** | **12/9/2022** | **Date:** | **12/9/2022** |

Attachments:

1. P6 baseline
2. Current working file (with baseline attached)
3. Test results/ reports (if applicable)