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**OIPA**

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## Performance Audit of SANDAG's Contract and Project Management Over HNTB



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## Introduction

This audit is part of the Audit Committee approved FY 2024-2025 OIPA Annual Audit Plan.

- The Audit Plan is prioritized based on level of risk.
- Risks are assessed using qualitative and quantitative factors.

SANDAG's contract and project management of HNTB was included in the annual risk assessment due to significant findings in OIPA's *Investigation Report on SANDAG's SR 125 Toll Operations* released March 2024.

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## Audit Scope and Objectives

### Audit Scope

The audit period is from July 1, 2019 to June 30, 2024.

### Audit Objectives

- Determine if contracts and task orders were awarded in a competitive manner, scope of work was clearly defined and Project Managers performed oversight.
- Determine if contracts and task orders were delivered on time and within budget.
- Determine if contracts match Board-approved requisitions and required approvals.
- Assess the effectiveness of SANDAG's contract management processes over HNTB contracts – including contracts where HNTB was contracted to provide oversight.

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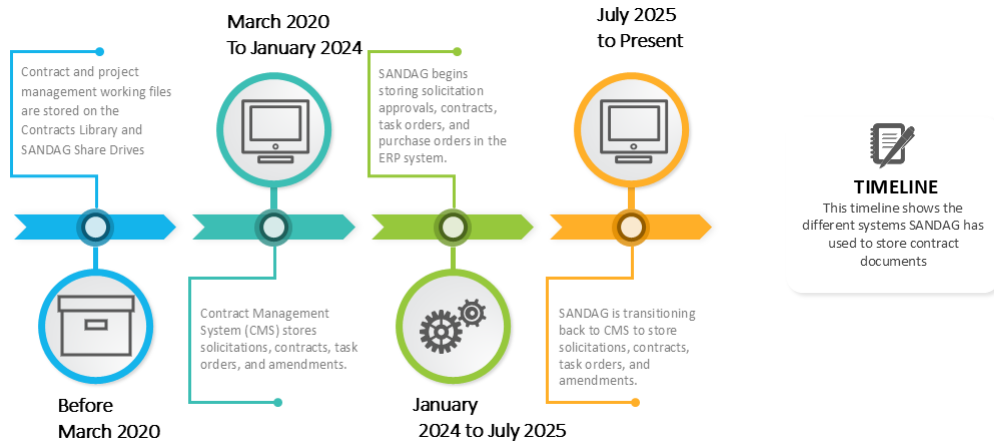
## Challenges Encountered: Data Integrity

**Data Integrity** (Records Retention System is composed of the Contracts Library, Share Drives, CMS and ERP [Figure 6 in the Report])

- Data integrity is considered in evaluating whether systems prevent unauthorized access, manipulation, or errors.
- Several control weaknesses were noted in the Contracts Library, including:
  - Lack of user access controls
  - Absence of an audit trail
  - Poor organization (partially scanned documents, multiple documents contained in single, large pdf files)
  - Documents without clear version control
- Data integrity issues make it harder for auditors to determine which documents are final, complete, and relevant. We used CMS as the expected system of record but used the Contracts Library when needed.

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# SANDAG'S Record Retention System



Source: OPIA generated

(Figure 6)

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# Challenges Encountered: Audit Scope Limitations

## Material Limitations in OIPA's audit scope:






- Of the 5 on-call master contract solicitations reviewed, 2 were either missing or incomplete.
- Task order solicitations for all 5 sampled projects selected in the audit were missing, which indicate the task order scope, deliverables, phases, and schedule.

## Documentation gaps limited OIPA's ability to:

- Confirm scope, deliverables, and schedule communicated to vendors.
- Determine whether appropriate vendors were invited to bid.
- Verify the criteria used to evaluate and select the winning vendor.

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## The Report

-  **Introduction & Background**
-  **Finding 1** SANDAG Lacked Critical Internal Controls Necessary to Ensure On-Call Contract and Task Order Processes were Transparent, Competitive, and Compliant with Internal and External Requirements
-  **Finding 2** SANDAG's Project Management of Task Orders Awarded to HNTB Lacked Critical Internal Controls over Cost Estimating, Budgeting, Deliverables, and Schedule Monitoring
-  **Finding 3** Poor Contract Development and Lax Oversight of HNTB Service Agreement to Oversee Another Vendor
-  **Finding 4** Poor Records Management Impacts Project and Contract Oversight

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## Recommendation Summary

We made **29 recommendations** (26 new and 3 repeated from past audits) to address the contract and project management issues identified in the audit. **Management agrees with all 29 recommendations.**

Our recommendations focus on establishing or bolstering internal controls to ensure adequate contract and project management oversight. They include:

- Establishing a mechanism to track task orders and amendments to their originating contract
- Ensuring on-call and task order solicitation records are complete and stored properly
- Documenting supervisory review of independent cost estimates
- Documenting the rationale for awarding task orders

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## Recommendation Summary

- Justifying and documenting contract changes
- Clearly defining contract deliverables
- Establishing a process to monitor contract deliverables
- Evaluating the resources needed to create a formal records management system
- Assigning Director-level ownership to an Agencywide records management system

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## Background

### Contracts Awarded to HNTB (FY 2008-2024)

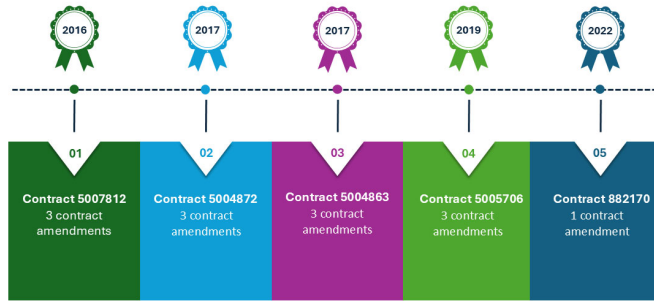
No.	Contract No.	Project Name	Contract Date	Maximum Award Amount
1	5000923	General Engineering, Design, & Environmental On-Call Services (Highway Emphasis)	Apr 2008	\$10,000,000
2	5001901	On Call Environmental Planning and Architect and Engineering Design Services	Jun 2012	\$25,000,000
3	5007812	On-Call Architect and Engineering Design Consulting Services	Nov 2016	\$50,000,000
4	5004863	On-Call ITS Category A – Tolling Advisory Services	Jul 2017	Aggregate value of all task orders issued.
5	5004872	On-Call Information Technology Services - Category D - Information Technology Development and Support	Jul 2017	Aggregate value of all task orders issued.
6	5005573	Regional Back Office System Implementation Consulting Support	Sep 2018	\$1,090,112
7	5005706	On-Call Planning Services	Dec 2019	Aggregate value of all task orders issued.
8	882170	On-Call Architecture and Engineering Services	Jul 2022	\$50,000,000
9	1197677	On-Call Mobility Technology and Intelligent Transportation Systems (ITS) Services	Apr 2023	Aggregate value of all task orders issued.

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# Background

From April 2008 to June 2024, SANDAG awarded HNTB **9 on-call** contracts.

- OIPA judgmentally selected a sample of **5 on-call contracts** awarded to HNTB for testing:



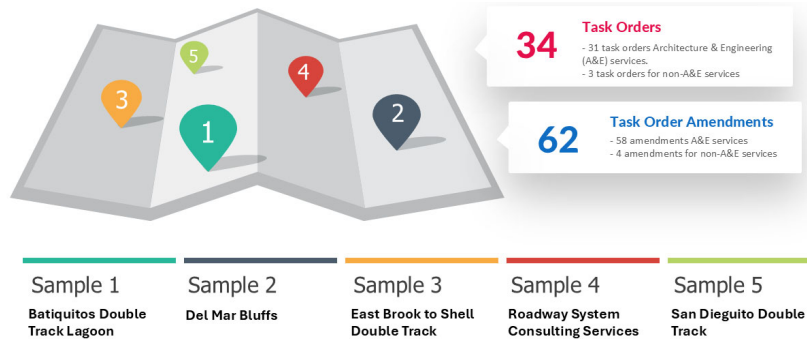
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(Figure 2)

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# Background

OIPA then judgmentally selected a sample of **5 multi-phase projects** SANDAG awarded to HNTB for testing:



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(Figure 3)

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# Background

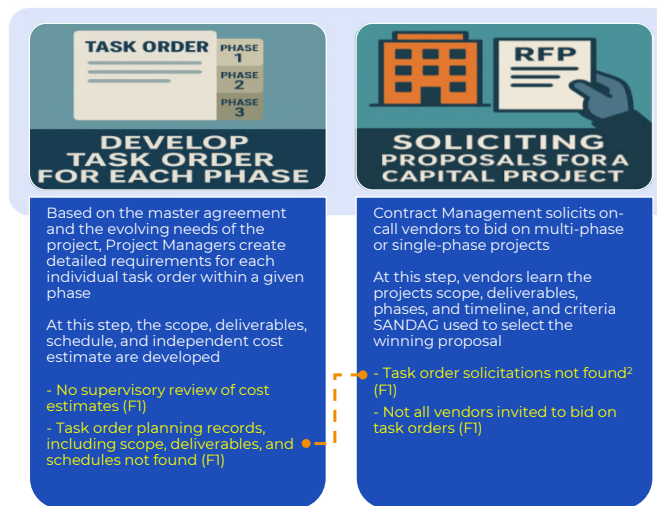


Findings are abbreviated as: F1 (Finding 1), F2 (Finding 2), and F4 (Finding 4).

(Figure 4)

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# Background



(Figure 4)

14

# Background



(Figure 5)

15

# Background



(Figure 5)

16

## Background

OIPA also judgmentally selected **1 standard service agreement contract** for in-depth review.

The Audit Committee specifically requested a closer examination of the non-competed service agreement between SANDAG and HNTB, which tasked HNTB with overseeing ETAN, the vendor responsible for implementing the new Back Office System (BOS) for toll operations.

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## Findings



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## Finding 1 – SANDAG Lacked Critical Internal Controls Necessary to Ensure On-Call Contract and Task Order Processes were Transparent, Competitive, and Compliant with Internal and External Requirements

### Summary

OIPA found SANDAG lacked critical internal controls necessary to ensure its on-call contracting and task order processes were transparent, competitive, and compliant with internal and external requirements.

These combined problems not only exposed SANDAG to legal and regulatory risk but also increased the potential for inefficiencies, unjustified costs, and reduced vendor accountability.

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## Finding 1 – Issues Identified

- **Missing** records obscured how SANDAG should issue task orders to vendors:
  - For 2 of 5 On-call Master Contract Solicitations reviewed, we could not determine what criteria SANDAG intended to use to award task orders to on-call vendors, because documentation was either missing or incomplete.
  - Without the final contract solicitations for sample contracts, we could not identify if SANDAG used the correct criteria to award task orders to on-call vendors.
- On-call contracts issued without clearly documented spending limits or approvals
- Lack of supervisory reviews undermine confidence in Independent Cost Estimates
- **Missing** task order planning and solicitation records

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## Finding 1 – Issues Identified

- For 1 of 5 (20%) projects reviewed, SANDAG did not invite all required on-call vendors to bid on the task orders
- For 3 of 5 (60%) projects reviewed SANDAG did not justify why HNTB was awarded task orders
- SANDAG did not document future phases of work in new task orders as required
- Poor review and coordination during task order preparation
- Unnecessary use of sole source and missing documentation to show if task orders were competitively bid or sole sourced
- Contract amendment not approved by HNTB

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## Finding 1 – Issues Identified

- Task order amendment awarded based on engineer continuity rather than firm qualifications
- Dollar value on task order amendments do not match supporting documentation

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## Finding 1 - Seven Recommendations

### **Recommendation #1**

Establish a review process to ensure ICEs are current, complete, and approved by a principal/manager before task order execution. Supervisory review must be clearly documented.

### **Recommendation #2**

Create a tracking mechanism to link task orders and amendments to their originating task order solicitations for phased projects to ensure that work awarded later was part of the competitively solicited scope.

## Finding 1 - Seven Recommendations

### **Recommendation #3**

For ongoing and new HNTB contracts and projects, ensure task order solicitations, evidence of who received invites to bid on task orders, and justifications of vendor selection are added to the appropriate task order record in CMS or clearly identified as missing/not found. Require supervisory reviews to ensure compliance.

### **Recommendation #4**

Update contract templates (such as the On-Call Firm Recommendation Forms) to clearly indicate whether work is standalone or part of a multi-phase project.

## Finding 1 - Seven Recommendations

### **Recommendation #5**

Develop and document a control to verify Project Managers properly document rationale for awarding task orders to on-call vendors, including why competitive bidding was not used if the task order was awarded via sole source.

### **Recommendation #6**

Establish policies and procedures for when to use a new task order or amend an existing task order, ensuring a clear audit trail can be followed for each phase of a multiphase project.

## Finding 1 - Seven Recommendations

### **Recommendation #7**

Update contract templates to ensure spending limits are accurately documented as required and approvers' names, in addition to signature, are present.

### **Repeat Recommendation**

Update the Board Policy No. 017, the Employee Handbook and Procurement Manual to create more internal controls around approval and signature of procurement transactions by including the OGC in all transactions to ensure risks are mitigated.<sup>1</sup>

<sup>1</sup> Repeated from Contracts and Procurement Operational and System Control Audit Report (Part II) -- released May 2023, Finding 1.6 Recommendation 1

## Finding 2 – SANDAG’s Project Management of Task Orders Awarded to HNTB Lacked Critical Internal Controls over Cost Estimating, Budgeting, Deliverables, and Schedule Monitoring

### Summary

SANDAG’s project management of task orders awarded to HNTB lacked critical internal controls over cost estimating, budgeting, deliverables and schedule monitoring.

The issues identified point to a broader lack of oversight and process discipline in how SANDAG developed, monitored, and closed out task orders, exposed the agency to financial risk, project delays, inconsistent results, stakeholder dissatisfaction, and diminished public trust.

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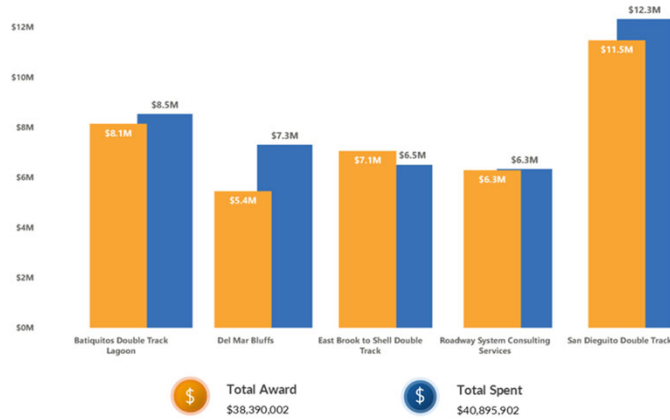
## Finding 2 – Issues Identified

- Only **29%** of task orders included a cost estimate amount needed to assess project costs:
  - The cost estimate is the starting point for negotiations with HNTB.
  - Out of 34 task orders, 31 were for A&E services.
  - Only 9 of 31 task orders (29%) had all the necessary information to evaluate end-to-end project costs to determine if SANDAG appropriately scoped work and estimated project costs

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## Finding 2 – Issues Identified

SANDAG initially awarded HNTB approximately **\$38.4M** for the **five sample projects** reviewed, yet actual approved spending increased to **\$40.9M**.



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(Figure 7)

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## Finding 2 – Issues Identified

We analyzed all 34 project task orders to identify the causes of these cost increases:

	Initial Award Amount	Total Expenditures	Difference	
Batiquitos Double Track Lagoon	\$8,131,873	\$8,510,859	\$(378,986)	4.7% more than planned
Del Mar Bluffs	\$5,444,987	\$7,283,417	\$(1,838,430)	33.8% more than planned
East Brook to Shell Double Track	\$7,055,074	\$6,484,206	\$570,868	8.1% less than planned
Roadway System Consulting	\$6,286,321	\$6,316,202	\$(29,881)	.5% more than planned
San Dieguito Double Track	\$11,471,747	\$12,301,218	\$(829,471)	7.2% more than planned
<b>Total</b>	<b>\$38,390,002</b>	<b>\$40,895,902</b>	<b>\$(2,505,900)</b>	

(Figure 8)

- **26** were completed **at or below** the initial award amount, resulting in a cost savings of approximately **\$5.1M**
- **8 exceeded** their initial award amount by more than **\$7.6M**.
- Net cost overrun of **\$2.5M**.

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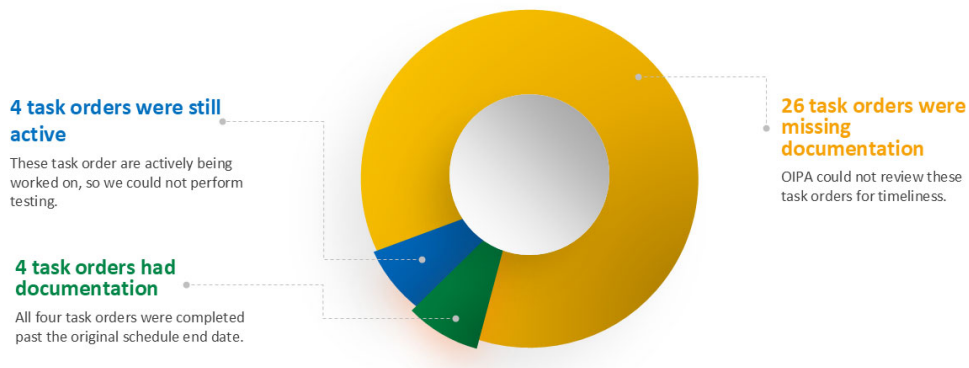
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## Finding 2 – Issues Identified

- Only 4 of 30 task orders (**13%**) included documentation needed to assess timely completion of projects



(Figure 9)

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## Finding 2 – Issues Identified

Of the 4 task orders:

- One task order had no amendments extending HNTB's schedule. CMS close out date 4 years after original deadline.
- Of the three remaining task orders reviewed, we identified task orders with missing or incorrect project schedules contributing to project delays

*According to SANDAG, in the cases where project deliverables were due after the task order had already lapsed, the Agency was aware the task order amendments were set to expire before the work was completed.*

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## Finding 2 – Issues Identified

By including work due beyond the master contact's and/or task order's expiration date, the vendor was either:

- Authorized to perform work after the legal authority of the master contract and/or task order had lapsed, or
- Issued a task order that was already invalid due to the expired period of performance.

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## Finding 2 - Nine Recommendations

### **Recommendation #1**

Develop a control to ensure Project Managers prepare and retain complete, detailed Independent Cost Estimates (ICEs) for all task orders, in accordance with the Procurement Manual.

### **Recommendation #2**

Standardize Project Management task order templates to require a clearly defined list of deliverables, responsible parties, and due dates.

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## Finding 2 - Nine Recommendations

### **Recommendation #3**

Require Project Managers to document the date vendors complete the final deliverable for task orders and retain evidence in the contract file. Require supervisory reviews to ensure compliance.

### **Recommendation #4**

Establish a formal Project Management process for monitoring project schedules, including periodic updates and milestone tracking.

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## Finding 2 - Nine Recommendations

### **Recommendation #5**

Require all amendments include a revised project schedule when extending the timeline or modifying deliverables.

### **Recommendation #6**

Require written justification for all schedule extensions. Do not allow undocumented schedule changes.

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## Finding 2 - Nine Recommendations

### **Recommendation #7**

Train Project Managers on contract monitoring responsibilities, including cost estimation, deliverable tracking, and schedule management.

### **Recommendation #8**

Establish a quality control process to audit a sample of task orders quarterly to ensure proper documentation is maintained, policies and procedures were followed, and exceptions were properly documented. Establish a compliance baseline, then track improvements overtime. When management's established goals for agencywide compliance occur, reduce reviews to no less than annually.

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## Finding 2 - Nine Recommendations

### **Recommendation #9**

Incorporate adherence to policies and procedures into Project Manager's annual performance evaluations and require supervisors to sample Project Manager's work and document compliance during annual evaluations.

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### Finding 3 – Poor Contract Development and Lax Oversight of HNTB Service Agreement to Oversee Another Vendor

#### Summary

In March 2017, SANDAG signed a contract with a third-party vendor, ETAN, to develop and implement a BOS to replace the systems at two toll facilities. In September 2018, SANDAG contracted HNTB for support services related to the BOS, including oversight of installation, training, testing, Go-Live and post Go-Live services.

We identified several issues with contract design, deliverables, and oversight of HNTB's contract for overseeing the vendor responsible for the development and implementation of SANDAG's BOS toll facilities.

### Finding 3 – Issues Identified

We found:

- **37 out of 56** contract tasks did not have a corresponding deliverable
- **14 tasks** required HNTB to provide “oversight” of ETAN, but SANDAG did not define what “oversight” meant
- **2 out of 9** contract deliverables were not linked to a specific task in the contract
- **8 out of 9** contract deliverables had no due date or time requirement
- Contract cost increases totaling over **\$2.4 million** were approved without documented deliverables or clear justification

## Finding 3 - Four Recommendations

### **Recommendation #1**

Update SANDAG Project Management contract templates to require all tasks have corresponding deliverables that are clearly defined, measurable, and time-bound, and ensure all deliverables are linked to specific contract tasks and include acceptance criteria.

### **Recommendation #2**

Update procurement guidance to require that roles and responsibilities in multi-vendor projects (e.g., oversight of contractors like ETAN) are clearly defined in both prime and support contracts and SANDAG's oversight over such multi-vendor projects is clearly defined.

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## Finding 3 - Four Recommendations

### **Recommendation #3**

Establish a checklist-based review process for all contract amendments to ensure changes in scope, deliverables, cost, or schedule are fully documented and justified. Require supervisory review to ensure compliance.

### **Recommendation #4**

Establish a centralized, secure, and auditable repository for storing vendor deliverables during the life of each project and require Project Managers to upload and maintain all submitted deliverables in this repository as they are received. Require supervisory review to ensure compliance.

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## Finding 4 – Poor Records Management Impacts Project and Contract Oversight

### Summary

Data integrity refers to the accuracy, consistency, and reliability of data through its lifecycle. SANDAG’s ongoing documentation issues stem from long-standing internal control weaknesses, including decentralized recordkeeping, lack of standardized processes, and insufficient staff training and management oversight.

Although prior audits identified these problems, and some corrective efforts are underway, critical gaps persist contributing to inconsistent, incomplete, and unreliable contract records.

## Finding 4 - Six Recommendations

### Recommendation #1

Review and update all ongoing and new HNTB contract and task order documents in CMS to ensure the final versions are complete, correctly labeled, and properly loaded. Require supervisory reviews to ensure accuracy and completeness.

### Recommendation #2

Review and update CMS data fields for HNTB contract and task order records to ensure key data (e.g., dates, status, competition type) is complete and accurate.

## Finding 4 - Six Recommendations

### **Recommendation #3**

Create and apply a consistent methodology for assigning competition types to contract, task orders and amendments in CMS.

### **Recommendation #4**

Establish and enforce a standard naming convention that includes the project name or identifier for contracts, task orders, and amendments.

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## Finding 4 - Six Recommendations

### **Recommendation #5**

Evaluate the allocation of necessary resources, including budget, time, and tools to improve documentation efforts through the creation of a formal records management system.

### **Recommendation #6**

Assign Director-level ownership to ensure accountability of the records management system.

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## Finding 4 - Six Recommendations

### Repeat Recommendation

Develop a formal quality assurance (QA) process to ensure that final versions of documents are timely, accurate, and properly stored in CMS.<sup>2</sup>

### Repeat Recommendation

Implement a training program to build employee understanding and skills related to documentation standards and requirements.<sup>3</sup>

2 Repeated from Contracts and Procurement Operational and System Control Audit Report (Part II) – released May 2023, Finding 1.8 Recommendation 2.  
3 Repeated from Contracts and Procurement Operational and System Control Audit Report (Part II) – released May 2023, Finding 1.8 Recommendation 1.

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# Questions?

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