1995

Construction Contractors' Audit Manual, Volume 1

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AICPA

Construction Contractors Audit Manual

INTEGRATED PRACTICE SYSTEM

VOLUME 1

AICPA

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PRACTICE

SYSTEM

This manual has not been approved, disapproved, or otherwise acted upon by any senior technical committees of the American Institute of Certified Public Accountants or the Financial Accounting Standards Board and has no official or authoritative status.

The manual is issued as a nonauthoritative kit of practice aids and is not intended as a substitute for professional judgment or for authoritative technical literature.

The documentation in this manual is not a substitute for development and implementation by a firm of a system of quality control that is appropriately comprehensive and suitably designed in relation to the firm's organizational structure, its policies, and the nature of its practice.

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Baird,
Kurtz &
Dobson

Certified
Public
Accountants

January 24, 1995

The Board of Directors
American Institute of Certified
Public Accountants

We have reviewed the system of quality control for the development and maintenance of the 1994 edition of the *Construction Contractors' Audit Manual* (materials) of the **AMERICAN INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS (AICPA)** in effect for the year ended December 31, 1994 and the resultant materials in effect at December 31, 1994, in order to determine whether the materials are reliable aids to assist users in conforming with those professional standards the materials purport to encompass. Our review was conducted in accordance with the standards for reviews of quality control materials promulgated by the peer review committees of the Private Companies Practice Section and the SEC Practice Section of the AICPA Division for CPA Firms.

In performing our review, we have given consideration to the following general characteristics of a system of quality control. An organization's system for the development and maintenance of quality control materials encompasses its organizational structure and the policies and procedures established to provide the users of its materials with reasonable assurance that the quality control materials are reliable aids to assist them in conforming with professional standards in conducting their accounting and auditing practices. The extent of an organization's quality control policies and procedures for the development and maintenance of quality control materials and the manner in which they are implemented will depend upon a variety of factors, such as the size and organizational structure of the organization and the nature of the materials provided to users. Variance in individual performance and professional interpretation affects the degree of compliance with prescribed quality control policies and procedures. Therefore, adherence to all policies and procedures in every case may not be possible.

Our review and tests were limited to the system of quality control for the development and maintenance of the aforementioned materials of the AICPA and to the materials themselves and did not extend to the application of these materials by users of the materials nor to the policies and procedures of individual users.

In our opinion, the system of quality control for the development and maintenance of the quality control materials of the AICPA was suitably designed and was being complied with during the year ended December 31, 1994 to provide users of the materials with reasonable assurance that the materials are reliable aids to assist them in conforming with those professional standards the materials purport to encompass. Also, in our opinion, the quality control materials referred to above are reliable aids at December 31, 1994.

Baird, Kurtz & Dobson

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International

AICPA INTEGRATED PRACTICE SYSTEM
CONSTRUCTION CONTRACTORS AUDIT MANUAL

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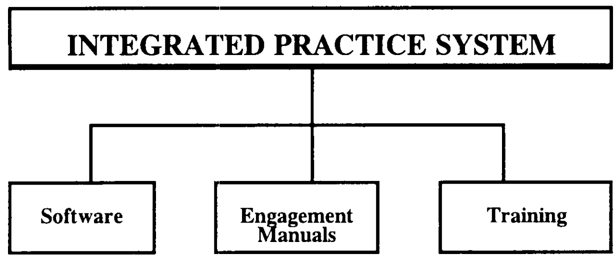
The AICPA Integrated Practice System:
For CPAs Concerned About Quality and Profitability



The Integrated Practice System gives practitioners the tools they need to conduct high-quality and cost-effective engagements. How? By enabling CPAs to anticipate engagement problems and by putting the solutions to these problems — integrated engagement manuals, software products, and training resources — within their grasp.

ONE SYSTEM, ONE SOLUTION

This innovative system is the *first* integrated system that is specifically designed to enhance the quality of your practice. It offers guidance on the day-to-day management of client engagements and provides practical discussions on the applicability of authoritative literature. Each element of the system — manuals, software, and training — was developed by CPAs who recognized the need to provide a comprehensive, hands-on approach to engagement planning and performance. Working alone or as a unified system, Integrated Practice System products provide the solutions needed for a firm to achieve top-quality performance and bottom-line profitability.

INTEGRATED PRACTICE SYSTEM — IN A CLASS BY ITSELF

Significant advantages distinguish these tools from other commercially available products. The Integrated Practice System tools —

- **Represent an integrated, synergistic system** that is state-of-the-art.

- **Include access to technical support hotlines** that put you in touch with professionals who can answer your technical questions. Just call the following numbers:

  Engagement Manuals 800-TO-AICPA (800-862-4272)

  Software Products 800-226-5800

  Training 201-938-3060

- **Receive ongoing field-testing and evaluation** from a task force of the AICPA's Private Companies Practice Section (PCPS) — CPAs who confront similar challenges in their practices and who represent the interests of local and regional firms.

- **Include a 60-day "no-questions-asked" return guarantee** that allows you the time to try the Integrated Practice System products and find out for yourself how your firm and staff can benefit from them.

ENGAGEMENT MANUALS: THE SMART KID ON THE BLOCK

Finally, there is a reliable, step-by-step approach for managing and performing your engagements. The Engagement Manuals point you in the right direction with the time-saving tools you need to conduct high-quality engagements with the greatest efficiency. Right from the start, the Engagement Manuals show you a direct route to protecting your bottom line. You can minimize on-site field work and put an end to "over-auditing" because our exclusive "ABC System" helps you evaluate risk in the critical planning stage. You'll find important guidelines to use in evaluating your client, so that you can adjust the level of testing to the internal controls employed by the client.

The Engagement Manuals feature a practical, "how-to" approach that enables you and your staff to cut through the clutter and focus on what's important. By eliminating time-consuming guesswork, they chart the course to the most cost-effective, efficient way of proceeding with your engagement. Plus, the manuals include ready-to-use forms, programs, checklists, and questionnaires — even sample correspondence to speed your work.

Each Engagement Manual includes —

- Guidance based on the most recent relevant authoritative and non-authoritative literature;
- Integrated work programs and checklists;
- Model letters ready for your use;
- Time-saving worksheets that capture important information and also help users identify opportunities for other services that can be provided to existing clients, such as consulting and tax services and the preparation of prospective financial information.
- Diskettes, in WordPerfect format, that include all the sample letters and accountant's/auditor's reports included in the manual.

What's more, the Engagement Manuals ease the process of quality review by helping you develop the documentation you need.

The Engagement Manuals can be easily used as stand-alone practice aids. Or, you can use them in conjunction with the full complement of software products — including the AICPA's very successful Accountant's Trial Balance (ATB) and Audit Program Generator (APG). It's the flexibility you need for a cost-efficient, high-quality engagement.

The AICPA recognizes your need to be up-to-date on issues that affect your clients — that's why subscribers automatically receive annual updates for the engagement manuals. Our goal, pure and simple: to provide the answers to your questions even before you ask them.

Because the AICPA has an ongoing commitment to developing the practice aids you need to serve your clients, it will continue to release new industry-specific manuals. These will contain the same kind of practical tools and how-to guidance that are the hallmarks of the Engagement Manuals.

Comprehensive Engagement Manual

The *Comprehensive Engagement Manual* can help practitioners manage most engagements. Designed to be the accountant's companion to audit, review, and compilation engagements, this manual includes checklists, forms, flowcharts, questionnaires, tables, and all the documentation necessary for any size client.

This four-volume set covers engagement performance, documentation and reporting, and helps you make key decisions, including—

- Assessing risk and establishing materiality limits;
- Selecting the most cost-beneficial audit approach;
- Designing the most economical auditing procedures; and
- Making sampling decisions that maximize efficiency.

The *Comprehensive Engagement Manual* features the unique and highly-popular "ABC System" that enables practitioners to identify the most cost-beneficial mix of tests of controls, substantive tests of balances, and analytical procedures for specific engagements. This manual is ideal for firms that want a system they can apply to the full spectrum of audit engagements—whether they plan to perform tests of controls or a totally substantive audit.

Small Business Audit Manual

The two-volume *Small Business Audit Manual*, an alternative to the *Comprehensive Engagement Manual*, walks you through each step of the audit of a small business client. Designed for firms that use a substantive testing approach on all of their audits, the *Small Business Audit Manual* helps you to:

- Plan a cost-effective and time-efficient engagement;
- Verify all financial statement assertions using substantive tests;
- Understand a client's internal control structure;
- Better understand how to apply authoritative standards to small business audits;
- Evaluate a small business' computer needs.

The *Small Business Audit Manual* also puts at your fingertips sample audit programs, questionnaires, model letters, time sheets, workpapers, and audit reports for a small business audit engagement—organized in the sequence they will be used. If your firm's audits rely totally on substantive testing, this is the manual for you.

Bank and Savings Audit Manual

The three-volume *Bank Audit Manual* can help you cope with the high risk generally associated with bank audits and the complexity of bank operations. It is designed to enable you to perform high-quality engagements with maximum time savings. Based on the unique "ABC System," this manual allows you to design the most efficient and cost-effective mix of tests of controls and substantive tests of balances, and analytical procedures. It does so by including:

- A framework to help practitioners design the most cost-effective audit strategy;
- Worksheets and forms to help auditors understand a bank's internal control structure and assess risk during engagement planning;
- Programs for interim work;
- Sampling documentation and discussions of professional standards that affect the sampling decision;
- Worksheets for various analytical procedures that can help to identify errors and irregularities;

Construction Contractors Audit Manual

You'll find this two-volume manual your most valuable practice aid when working on engagements for construction contractors. It contains:

- Two audit approaches—the "System's Walk-through Approach" for substantive audits and the "ABC System" — to help you design the most efficient and effective audit strategy for each engagement;
- Practical, how-to guidance for completing construction contractor audits;
- A chapter dedicated to the surety industry to help you understand what the surety wants and needs;
- All the necessary audit programs, forms, checklists, sample correspondence, and working papers to comply with today's quality control standards;
- A supplemental tax preparation checklist specific for construction contractors;
- The AICPA Audit and Accounting Guide, *Construction Contractors*, which contains discussions on the applicability of specific professional standards to engagements for construction contractors.

Compilation and Review Manual

This two-volume set gives you a step-by-step system to help you conduct high quality compilation and review engagements — profitably and in compliance with all current applicable professional standards. It contains:

- Programs, checklists, and sample correspondence for performing compilation and review engagements;
- Reporting guidance for OCBOA and personal financial statements;
- Guidance on performing and reporting on prospective financial information.

Credit Union Audit Manual

The two-volume set outlines the most efficient way to approach audits of credit unions and contains guidance on conducting them in compliance with current professional standards. This manual uses the "ABC System" and a newly designed audit strategy for small credit unions, which allows you to choose the best mix of tests of controls and substantive tests of balances, and analytical procedures for each engagement. This manual contains:

- Audit programs, forms, checklists, working papers, and illustrations necessary to perform credit union audits and supervisory examinations;
- The AICPA Audit and Accounting Guide, *Audits of Credit Unions*;
- The most recent checklists and illustrative financial statements for credit unions.

Quality Control Manual for CPA Firms

The *Quality Control Manual for CPA Firms*, gives you a step-by-step practical approach to establishing and maintaining your quality control system. Written by CPAs who have extensive peer review experience, it provides all of the guidance and forms you will need, without overburdening you with unnecessary and complex documentation. This manual can be used by firms of all sizes, but its simple approach was designed with the small-to-medium-size firm in mind.

Not-for-Profit Organizations Audit Manual

The two-volume *Not-for-Profit Organizations Audit Manual* contains everything you need to conduct high-quality audits—audit programs, forms, checklists, and sample auditor's reports and financial statements developed especially for not-for-profit organization audits. Also discussed in this manual are two recently-released FASB Statements of Financial Accounting Standards on contributions and not-for-profit organizations' financial statements, as well as FASB's proposed exposure draft on investments, the proposed AICPA Statement of Position on joint activities, and the AICPA's proposed Audit and Accounting Guide for not-for-profit organizations. The manual also helps you efficiently test the compliance requirements of the Yellow Book and OMB Circular A-133.

Auto Dealership Engagement Manual

The *Auto Dealership Engagement Manual* guides you through the twists and turns of an auto dealership audit. Developed to help you conduct effective and efficient engagements in this turbulent industry, it provides guidance that until now has been lacking. This manual includes:

- Two audit approaches — the All Substantive Approach for primarily substantive audits and the unique "ABC System" for audits in which it is efficient to test controls;
- An overview of the industry, including operating characteristics;
- Tailored audit programs and internal controls questionnaire;
- Discussion of auto dealership's unique accounting principles and practices;
- Sample auditor's reports and financial statements; and
- Tax information, including complex LIFO calculations and extended warranty service revenue recognition rules.

SOFTWARE — THE ELECTRONIC EDGE

The AICPA's software products — ATB Write-Up, Accountant's Trial Balance (ATB) and its modules, Audit Program Generator (APG), Engagement Manager (EM) and Depreciation, among others — put the solutions to daily practice problems at your fingertips. Together with the Engagement Manuals, they streamline engagement planning and performance, and enable you to more effectively monitor your staff and your budget. Most importantly, they prevent you from reinventing the wheel each time you plan and conduct an engagement.

It's easy to put these products to work for you. The software requires an IBM PC, XT, AT, PS/2 or IBM-compatible system and DOS version 3.1 or higher. A team of professionals is available to answer any of your questions; simply call the Software Support Hotline at 800-226-5800 or use the Software Express FAX service at 800-226-6868.

ATB Write-Up

ATB Write-Up features powerful options that let you analyze information and generate reports and financial statements quickly and easily. ATB Write-Up takes all of the power and flexibility of ATB, ATB Financial Statements, and ATB Consolidations and adds to it. ATB Write-Up offers:

- Period Reporting — Use up to 13 periods per year. This gives you the flexibility to generate annual, semiannual, quarterly or monthly reports.

- Departmental Reporting — Set up as many departments as you need. ATB Write-Up will print most workpapers and reports by department, in total for all departments, or for a selected range of departments.
- Financial Statements — Up to 16 columns, each custom-definable to include periods, departments, year-to-date, percentages, add columns together, and more.
- Consolidations — Link and combine accounts of related groups into one consolidated company.

Accountant's Trial Balance

ATB, the best-selling, most-used accounting software in the profession today, is an integral part of the IPS family. Designed ***by*** accountants ***for*** accountants and used by approximately 9,000 accounting firms, ATB automates much of the routine work associated with trial balance and financial statement preparation. Specifically, it:

- Generates picture-perfect working papers, including trial balances, journals, lead schedules, user-definable grouping schedules, and analytical review worksheets;
- Enables users to prepare trial balances based on GAAP, federal tax, state tax, or other user-selected accounting bases;
- Keeps up to five years of data on file for any one client, enabling you to generate a variety of comparative reports quickly and simply.

Modules for Use with ATB 3.0

- *ATB Financial Statements* — This powerful report writer enables you to produce final financial statements quickly and easily.
- *ATB Consolidations* — This module enables you to consolidate trial balances from up to nine individual companies into one ATB company trial balance — with ATB automatically keeping track of all activities.
- *ATB Conversion* — With ATB Conversion you can transfer any data electronically from a number of general ledger and working paper packages to ATB and from ATB to leading corporate tax preparation packages.

Audit Program Generator

The Audit Program Generator (APG) enables you to customize an audit program or a checklist to a particular client. Its unique features help you save time and unnecessary expense in conducting audits. Since its introduction in 1987, over 8,000 firms have used APG.

APG Version 2.0 enables you to —

- Create a variety of programs and checklists, including audit programs, disclosure checklists, and compliance checklists;
- Tailor the audit program to the needs of your specific client;
- Customize programs from a wide variety of sample AICPA work programs available in electronic format;
- Quickly link your audit procedures and financial statement assertions;
- Use a full-text editor to customize titles and footers and create appropriate tabular formats.

Engagement Manager

The Engagement Manager (EM) software package can assist you in planning, analyzing, documenting, and correcting engagement management problems — and free up valuable staff time in the process. Most importantly, it handles the details of creating and modifying budgets, recording actual time and expenses, and comparing results so you can devote your energy to other aspects of your business. With EM's help, you can:

- Anticipate potential budget variances and delays through a variety of analytical reports;
- Spot potential problems while there is time to take action;
- Determine the effectiveness of individual staff members by analyzing their efficiency in assigned areas.

Depreciation

Depreciation provides a simple and efficient means of calculating and tracking how assets are depreciated. It calculates depreciation for six separate reporting bases: book, federal, state, AMT, ACE, and "other." What's more, it lets you apply various methods of depreciation to any of these reports and prints out complete worksheets showing changes in various property accounts and the necessary journal entries to record depreciation for the year. Now, with its pull-down menus, Depreciation is easier to use than ever.

Reports generated through AICPA Depreciation include:

- Depreciation schedules by category, G/L account number, system, or convention
- Summarized worksheet information for Forms 4255, 4562, 4626, 4797, 6252, and Schedule D
- AMT preference calculation
- ACE adjustment calculation
- Fully depreciated assets report
- Amortization report
- Section 179 deduction report
- ITC-taken report
- Basis comparison
- Depreciation account reconciliation
- Amortization account reconciliation
- Schedule M-1 information
- Overridden calculations

TRAINING RESOURCES: MAKING THE INTEGRATED PRACTICE SYSTEM WORK FOR YOU

Whether you're a user of one or more of the Integrated Practice System products or you're looking for ways to more effectively manage engagements, Training Resources can benefit you. You'll learn how the Engagement Manuals and Software can help your practice run more smoothly and how the system works to facilitate productivity, efficiency, and quality performance by you and your staff.

The Training Resources come in three formats: self-study or self-administered group study; customized in-house group study; and conferences. Here is what's available in each format:

Self-Study or Self-Administered Group Study

An ***Orientation and Technical Update Seminar*** is a formal group study-program designed to assist firms with initially implementing the Integrated Practice System Engagement Manuals. It also provides a monitored self-study orientation on the manuals for new staff. The seminar materials can help you to better understand and apply common SASs in the most efficient manner. You'll learn how to design tests, auditing procedures and sample sizes to collect the right amount of evidence needed for particular engagements.

Accountant's Trial Balance — CPE Edition is a self-study course that teaches you how to automate your working papers for all types of engagements. You'll earn eight hours of CPE credit as you become familiar with ATB and its most used features for audits, reviews, compilations, and tax working papers.

Accountants Trial Balance With Financial Statement Generator — CPE Edition is a self-study course that enables you to rapidly learn the basics of ATB and the Financial Statement Generator add-on module. The recommended CPE credit for this course is eight hours.

Customized In-House Group Study

Special in-firm training is available to demonstrate how your firm can put the Integrated Practice System products to use. And you'll see immediate results. That's because the training leader will use a current client engagement ***you select*** as the training model. Whether you select a one- or two-day training program, you'll learn how IPS products can help you address real client needs and resolve specific client problems.

AICPA Conferences

Training sessions focusing on the Engagement Manuals are part of many AICPA conferences designed for local and regional practitioners, including the highly rated PCPS Conference and the National Accounting and Auditing Advanced Technical Symposium.

To schedule in-firm training or to obtain more information about the Integrated Practice System Training Resources, including dates and locations of these conferences, call the AICPA Technical Information Division at (201) 938-3060.

PREFACE

The AICPA *Construction Contractors Audit Manual* is a complete tool kit to planning, performing and reporting on the audit of financial statements of construction contractors. The overall approach to performing audits presented in this Manual is designed to maximize quality and efficiency. The Manual provides all necessary checklists, questionnaires and programs to assess risk and materiality levels, and to perform the most cost-beneficial audit procedures that will verify all financial statement assertions in the least amount of time.

The Manual is designed to comply with all applicable accounting and auditing pronouncements. References are made throughout to the authoritative pronouncements and cited to section numbers in AICPA *Professional Standards* and the FASB *Accounting Standards — Current Text*. Practitioners are encouraged to refer directly to the applicable technical literature, including in this case, the AICPA Industry Audit and Accounting Guide, *Construction Contractors*.

The Manual's thorough documentation system is an integral part of a firm's overall engagement quality control system. All the forms and checklists are explained in the Manual.

This two-volume Manual contains all of the documentation necessary to complete a construction contractor audit engagement, arranged in the order it normally will be needed in the engagement including:

- Client Acceptance and Continuance Form
- Contractors' Internal Control Structure Questionnaire
- Contractors' System's Walk-Through Form
- Internal Control Structure Reportable Conditions Form
- Risk of Potential Misstatements Evaluation Form
- Contractors' Planning Matrix
- Contractors' Planning Memorandum
- Contractors' Tests of Controls Programs
- Materiality Computation Form
- Summary of Possible Journal Entries Form
- Sampling Documentation
- Tests of Balances Programs
- Supplemental Tax Preparation Checklist

In addition, the Manual contains quality control and management and supervision documents:

- Consultation forms
- Representation letters
- Supervision and review checklists
- Budgeting and time control documents
- EDP documentation (for both in-house and service-center-produced records)

The *Construction Contractors Audit Manual* maximizes opportunities for additional services. Its questionnaires and checklists are sources of meaningful suggestions that can be presented to clients and that can result in wider service offerings.

Achieving both engagement quality and profitability requires extensive planning. The *Construction Contractors Audit Manual* forms, checklists, and decision matrixes are documents that require planning to begin before any field work is done and to continue until engagement completion. The planning documents included in the Manual allow for timely executive review and involvement in the audit program design and execution. Preparing and reviewing documentation helps develop skills of the in-charge accountant and other staff and helps to identify problems early.

The *Construction Contractors Audit Manual* is designed to permit maximum flexibility in the approach to engagements. All audit programs are designed to be modified to fit the client circumstances encountered.

SOFTWARE

All work programs and checklists in the *Construction Contractors Audit Manual* are available in electronic format for use with the AICPA's *Audit Program Generator* (APG2) software.

TRAINING

The AICPA has developed formal training sessions for practitioners on how to implement the IPS Engagement Manuals in an accounting and auditing practice. Presently these sessions are conducted at various AICPA conferences throughout the year in cities nationwide. For more information on these training sessions please call (201) 938-3060.

ABOUT THE AUTHORS

CRAIG BIRMINGHAM, CPA

Craig Birmingham, CPA, is Principal of Reznick, Fedder and Silverman, CPAs. He has over 18 years experience in consulting, auditing and tax return preparation for contractors and developers and currently manages services for over 50 contractors and developers annually.

Mr. Birmingham holds a B.S. in Accounting from the University of Maryland and is a member of the American Institute of Certified Public Accountants, District of Columbia Institute of Certified Public Accountants, Associated Builders and Contractors, and the Metropolitan Subcontractors Association.

RICHARD H. CHAMBERLAIN, CPA

Richard Chamberlain, CPA, is a Principal of Reznick, Fedder and Silverman, CPAs, and Director of Accounting and Auditing for the firm.

Mr. Chamberlain has over thirty years of experience in public accounting providing audit, accounting and business advisory services primarily to financial institutions, savings and loans, commercial banks, municipalities, brokers and dealers, construction, health care and nonprofit organizations. Mr. Chamberlain is responsible for managing the Firm's technical audit and accounting practice.

Mr. Chamberlain holds a Bachelor of Commercial Science degree from Benjamin Franklin University and is a member of the American Institute of Certified Public Accountants, Maryland Association of Certified Public Accountants, and the Accounting Advisory Board of the University of Baltimore.

ROY L. EISENSTADT, CPA, MBA

Mr. Eisenstadt is the Manager in Charge of Reznick Fedder & Silverman's Management Consulting Services practice. He has devoted his career helping businesses successfully meet their financial and operational challenges. His expertise includes planning, budgeting, computer systems, operations reviews, internal control studies and litigation support.

Mr. Eisenstadt has fourteen years of experience in public accounting. Prior to joining RF&S, he worked with several local and regional accounting firms, providing accounting, auditing, and business consulting services to clients in diverse industries.

Mr. Eisenstadt received his Bachelors of Business Administration from Towson State University in 1981 and his MBA from the University of Baltimore in 1992. He is a member of the American Institute of Certified Public Accountants—Management Consulting Services Division, the Maryland Association of Certified Public Accountants (MACPA), and the Home Builders Association of Maryland. Mr. Eisenstadt serves on the Management Consulting Services Committee of the MACPA.

TERENCE W. KIMM, CPA

Terence Kimm, CPA, is a manager at Reznick, Fedder and Silverman, CPAs.

Mr. Kimm has over ten years of experience providing audit, accounting and tax services. Mr. Kimm's clients include contractors, subcontractors, real estate developers, government subsidized housing projects, residential apartment projects, and syndicators.

Mr. Kimm holds a Bachelor of Science degree in Accounting from Virginia Tech and is a member of the American Institute of Certified Public Accountants, the Virginia Society of Certified Public Accountants and the Construction Financial Management Association.

GEORGE L. MARTHINUSS, JR., CPA, CFP

George Marthinuss, CPA, CFP, is president of CPE Institute, Inc. and a former partner in the regional firm of Keller, Zanger, Bissell & Company in Rockville, MD. He has over 25 years of experience in public accounting for national, regional, and local firms.

Mr. Marthinuss holds an MBA from the University of Maryland, where he was also an instructor and the faculty advisor to Beta Alpha Psi. Mr. Marthinuss is past chairman of the AICPA Accounting and Review Services Committee and formerly served on the AICPA CPE Curriculum & Quality Control Subcommittee. He is an active member of the Institute of Certified Financial Planners, the International Association of Financial Planning, the Construction Financial Management Association, and the Suburban Maryland Building Industry Association.

SUGGESTED REVISIONS TO CONSTRUCTION CONTRACTORS AUDIT MANUAL

Please submit all suggestions to improve the quality of the Construction Contractors' Audit Manual as they arise. We value users' input and will give all comments consideration when revising the manual.

To:
Susan Menelaides, CPA, Director
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AICPA
Harborside Financial Center
201 Plaza Three
Jersey City, NJ 07311-3881

From:

____
(Name)

____
(Firm)

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(Address)

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(Telephone No.)

Suggested Revisions:

Page No.	Comments

(Please attach additional sheets if necessary)

AUDIT MANUAL ADVISORY TASK FORCE

The manuals in the AICPA Integrated Practice System are monitored by a special PCPS Audit Manual Advisory Task Force. Task force members use the manuals in their audit and accounting practices and continuously provide the AICPA staff with recommendations to enhance the manuals from the perspective of the small- and medium-sized firm.

MEMBERS OF THE AICPA PRIVATE COMPANIES PRACTICE SECTION (PCPS)
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PEER REVIEW OF THE AICPA INTEGRATED PRACTICE SYSTEM

CONSTRUCTION CONTRACTORS AUDIT MANUAL

In keeping with our commitment to give you reliable practice aids, we engaged the CPA firm, Baird, Kurtz, & Dobson, to perform a peer review of the *Construction Contractors Audit Manual*. Using quality control materials that have been peer reviewed serves two purposes: (1) it provides reasonable assurance that the materials are reliable practice aids for conducting audits, reviews, and compilations in accordance with professional standards; and (2) it helps to minimize the cost of your firm's quality or peer review.

A copy of Baird, Kurtz & Dobson's unqualified peer review report follows this page. This report has been accepted by the Private Companies Practice Section and the SEC Practice Section of the AICPA's Division for CPA Firms. Although the report addresses the 1994 edition of this Manual, it is valid for three years.

Introduction

CHAPTER 1

INTRODUCTION

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CHAPTER 1

INTRODUCTION

1.000 PURPOSE OF THE MANUAL

1.001 The purpose of this Manual is to provide engagement-oriented guidance for use on nonpublic construction contractor audit engagements. While the documentation and references in this Manual are integral parts of a CPA firm's quality control system, they are not intended to serve as a complete or comprehensive quality control system.

1.002 This Manual is designed as a nonauthoritative practice aid. It is intended to provide users with practical how-to guidance in applying authoritative accounting and auditing literature in their nonpublic construction contractor audit engagements. Audits of publicly held entities and other special engagements require additional procedures and documentation.

1.003 The information in this Manual is tailored to take into account the unique operating characteristics of construction contractors. Included are many useful checklists and questionnaires to incorporate into construction contractor audits.

Organization of the Manual

1.004 This year's edition of the Manual has been re-organized to provide a more efficient and easier-to-follow format. The organization of the Manual mirrors that of the other industry-specific manuals in the Integrated Practice System series. This Manual is arranged so that each chapter is the "next step" in the audit process from planning to completing the audit. In a separate section at the end of each chapter are the applicable forms discussed in the chapter. See Illustration No. 1-1 for a summary of this reorganization. The following briefly discusses the content of the chapters.

1.005 Chapter 1 briefly discusses the purpose and use of this Manual on construction contractor audits.

1.006 Chapter 2 explores general aspects of a construction contractor and its industry. The discussion includes what a construction contractor is, with emphasis on its organizational, operational, and capital structure. Also discussed are recent trends in the construction industry, the regulatory environment in which a construction contractor operates, the contracting process, how construction businesses are established, and common users of construction contractor financial statements.

1.007 Chapter 3 covers various aspects of the surety industry.

1.008 Chapter 4 covers the auditor's considerations for deciding whether to accept or continue a relationship with a construction contractor client and audit planning requirements. Included are discussions of client acceptance and continuance, planning documentation, budgeting tools, and risk assessment.

1.009 Chapter 5 describes the unique "ABC System," which provides a framework for obtaining an understanding of the internal control structure, assessing control risk and designing an audit strategy. Emphasis is placed on a flexible method of customizing audit procedures and documentation. This approach is also presented in the AICPA's Integrated Practice System Comprehensive Engagement Manual, and in the other industry-specific manuals in the Integrated Practice System series. Also discussed is the System's Walk-Through Approach which is applied when the auditor expects to assess control risk at the maximum and plans to perform a totally substantive testing approach.

1.010 Chapter 6 discusses the internal control structure of a construction contractor. Included in this chapter are useful tools that will assist in documenting and evaluating the control structure and performing tests of controls.

1.011 Chapter 7 includes guidance on substantive testing for construction contractors as well as analytical procedures and test of balances programs designed for construction contractors.

1.012 Chapter 8 contains information about the final phases of the audit. Included in this chapter are a sample representation letter and checklists documenting the supervision and review of the audit work performed.

1.013 Chapter 9 deals with financial statement presentation and disclosure requirements and auditor's reporting requirements. It includes illustrative financial statements, disclosure and auditor's report checklists, and sample auditor's reports.

1.014 Chapter 10 covers advisory services that can be provided to construction contractor clients.

1.015 Chapter 11 is a four credit hour self-study course. The topics of this course are the construction contrators industry in general, the distinctive aspects of the construction contrator industry, the association between a contractor and it surety, the percentage-of-completion and the completed contract methods, designing an audit strategy, and performing an audit for both small and large construction contractors including determining the level of testing and understanding needed with regard to controls. This course will enable up to three members of your firm the opportunity to earn these four credits, while enhancing their auditing skills as they relate to a credit union.

1.100 USE OF THIS MANUAL

1.101 This Manual is designed as a nonauthoritative practice aid. It is intended to provide users with practical how-to guidance in applying authoritative accounting and auditing literature in their credit union audit engagements.

1.102 The sample audit programs, forms, and checklists included in this Manual should be tailored to each engagement's circumstances, and also to the firm's quality control policies and procedures.

Updating of the Manual

1.103 This Manual is updated annually to provide users the most current authoritative guidance. This edition reflects the authoritative guidance issued through September 1995, including the following:

- SAS No. 74
- SFAS No. 122
- FASBI No. 41
- SOP 95-2
- FASB Technical Bulletin No. 94-1
- EITF Consensuses adopted up to and including the July 21, 1995 Emerging Issues Task Force meeting

1.104 The reorganization of the manual is summarized in Illustration No. 1-1. The Manual is now organized so that each chapter represents the next step of an audit engagement. The summary identifies the current as well as the prior chapters and contents.

Illustration No. 1-1

SUMMARY OF CONSTRUCTION CONTRACTORS AUDIT MANUAL REORGANIZATION

1995	CHAPTER	1994	CHAPTER
1	Introduction	1	Introduction
		2	Section 2.800—EITF Consensuses
2	Construction Contractor Industry—General	2	Construction Contractor Industry—General
3	The Surety Industry	24	The Surety Industry
4	Pre-Engagement Planning	3	Client Acceptance and Continuance
		4	Engagement Letters
		10	Audit Planning
		3	Engagement Risk
		8	Errors, Irregularities, and Illegal Acts
		3	Going Concern Issues
		12	Materiality Computation Form
		10	Audit Planning Memorandum
		20	Budgeting and Time Control Documents

SUMMARY OF CONSTRUCTION CONTRACTORS AUDIT MANUAL REORGANIZATION (Continued)

1995 CHAPTER	1994 CHAPTER	
5 Audit Approach	2	Audit Approach (including the Reliance Matrix) 2.201-.207, 2.219, 2.300-2.423 ABC System 2.208-.218, 2.424-.431 System's Walk-Through Approach
	6	Contractors System's Walk-Through DOCUMENTATION FORM
	13	Sampling Documentation
	4	Documentation Assistance (including Risk of Potential Misstatements Evaluation Form and Planning Matrix)
6 Internal Controls	5	Contractors' Internal Controls Questionnaire
	11	Tests Of Controls Programs
	7	Internal Control Structure Reportable Conditions Form
	19	Revised EDP
7 Substantive Testing	6	Substantive Testing
	15	Selection of Contracts for Testing
	15	Contractors' Tests Of Balances Program
	21	Working Papers and Correspondence (excluding the Sample Attorney's Letters and Engagement Letter)
8 Completing the Audit	12	12.300-.316—SUMMARY OF POSSIBLE JOURNAL ENTRIES FORM.
	17	Client Representation Letters
	18	Supervision and Review Checklists
	18	Financial Statement Control Form
	7	Documentation Assistance (including attorney's letter)
	18	Contractors' Tax Accrual/Provision Review Checklist
	18	Contractors' Supplement to Tax Return Preparation Checklist
9 Illustrative Auditor's Reports and Financial Statements	23	Reporting
	23	Sample Auditor's Reports
	22	Checklist and Illustrative Financial Statements
10 Consulting	--	New Chapter for 1995
11 CPE Self-Study Course	25	CPE Self-Study Course
Appendix A AICPA Audit and Accounting Guide, *Construction Contractors*	Appendix A	AICPA Audit and Accounting Guide, *Construction Contractors*

1.105 Users should be alert for pronouncements issued subsequent to those listed above that could affect their engagements.

References to Authoritative Literature

1.106 Throughout this Manual, references to the publications containing authoritative literature have been included to help users in performing research. The explanation of these references follows:

AC = Accounting standards in the FASB *Accounting Standards — Current Text*

AU = Auditing standards in the AICPA *Professional Standards,* Volume 1

ET = Ethics standards in the AICPA *Professional Standards,* Volume 2

QC = Quality control standards in the AICPA *Professional Standards,* Volume 2

1.200 USE OF FORMS IN ELECTRONIC FORMAT

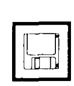
WordPerfect

1.201 Enclosed with this year's edition of the Manual is a complementary disk that contains the sample engagement letters, representation letters, sample auditor's reports, and other correspondence illustrated in this Manual. The documents in the disk are in WordPerfect format to allow you to easily customize them for each client.

Lotus 1-2-3

1.202 Also included on the complementary disk is the Summary of Possible Journal Entries Form in Lotus 1-2-3 (release 3.1 with wysiwyg or release 3.4 and higher). This file allows you to easily post unrecorded misstatements and it contains formulas to calculate totals and percentages. If you do not have access to Lotus 1-2-3, you may copy the Form included in the section 8.904 of Chapter 8 for inclusion in your workpapers.

1.203 These documents are identified in the Manual by the following icon:



1.204 **Audit Program Generator.** Many subscribers to the Integrated Practice System Engagement Manuals are also users of the AICPA's Audit Program Generator (APG), a specially designed software program that allows users to customize a variety of AICPA work programs and checklists for each client.

1.205 If you are already an APG user, you may purchase the Library Volume containing the programs and checklists (such as the Internal Control Questionnaire, the Test of Controls and Tests of Balances Programs, and the Financial Statement Disclosure Checklist) included in this Manual. To order APG and/or the APG Libraries for the IPS Engagement Manuals, call the AICPA's Order Department at 1-800-

862-4272, sub-menu #1. (The product number for the library volume for construction contractors is 016654 and is priced at $6.50.) For APG product information, call the AICPA Software Connection at 1-800-226-5800.

1.206 The programs and checklists that are available in the APG Library Volume are identified by the following icon:

1.300 RECENTLY ISSUED AUTHORITATIVE PRONOUNCEMENTS

1.301 The remaining sections of this chapter include guidance and descriptions of pronouncements primarily issued or proposed in the past year that are relevant to non-public construction contractors. These pronouncements not deemed to be relevant to a construction contractor are not identified herein. You may also need to refer to Illustration No. 1-2 to identify the level of authority the pronouncement has within the GAAP heirarchy.

SFAS No. 119, *Disclosure about Derivative Financial Instruments and Fair Value of Financial Instruments*

1.302 In an effort to improve the financial reporting of derivatives, the FASB issued SFAS No. 119, which is effective for calendar year 1994 financial statements, except for entities with less than $150 million in total assets, for which it is effective for calendar year 1995 financial statements. SFAS No. 119 expands and amends the requirements of SFAS No. 105, *Disclosure of Information About Financial Instruments with Off-Balance-Sheet Risk and Financial Instruments with Concentrations of Credit Risk*, and SFAS No. 107, *Disclosures about Fair Value of Financial Instruments*. First, it expands the disclosure requirements of SFAS No. 107 to include additional types of derivatives, such as options held. It also amends SFAS No. 107 as follows:

- If fair value information is located in more than one note, a summary table of fair value information should be included.
- Fair value and carrying amount should be disclosed together.
- Disclosures should clearly designate whether the derivatives are assets or liabilities.
- Information should clearly relate to balance sheet line items.
- Fair value information should not be combined or netted with non-derivatives (except if netting is permitted under FIN No. 39).

1.303 The Statement requires the following additional disclosures:

For derivatives held or issued for trading purposes (generally applies only to financial institutions that deal in derivatives):

- The average fair value balance of positions during the reporting period and ending fair value, and the net gains or losses resulting from trading activities.
- Identification of the derivative from which the gains or losses arose, and where those amounts are reported in the income statement.

For derivatives held or issued for purposes other than trading:

- The objectives of holding or issuing the derivatives.
- Recognition and measurement policies.
- How they are reported in the financial statements (balance sheet and income statement locations).
- If the derivatives are used to hedge anticipated transactions, a description and time period for the transactions, the classes of the derivatives, deferred gains and losses, and the events that would cause gains and losses to be recognized.

SFAS No. 121, *Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of*

1.304 In March 1995, the FASB issued SFAS No. 121, which is effective for financial statements for fiscal years beginning after December 15, 1995, with earlier application encouraged. Restatement of previously issued financial statements is prohibited. The Statement establishes accounting standards (including measurement and disclosure requirements) for the impairment of long-lived assets, certain identifiable intangibles, and goodwill related to those assets for assets to be held and used and assets to be disposed of. SFAS No. 121 amends several existing pronouncements (see paragraphs 20-33 of the Statement).

1.305 **Assets to Be Held and Used.** According to the Statement, an entity is required to review its long-lived assets, such as buildings and equipment, for impairment whenever events or changes in circumstances relating to the assets ("triggering events") indicate that the carrying amount of an asset may not be recoverable. In other words, an event or change in circumstances, such as a significant decrease in the market value of an asset, a significant change in the extent or manner in which an asset is used, or a significant physical change in an asset, may indicate that an asset has been impaired.

1.306 If a triggering event has occurred, the entity then determines if an impairment loss should be recognized by measuring the expected future cash flows[1] (undiscounted and without interest charges) to be generated from the use of the asset and its eventual disposition. If the sum of the expected future cash flows is less than the carrying amount of the asset, then an impairment loss should be recognized.

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[1] Future cash flows is defined as the future cash inflows expected to be generated by an asset less the future cash outflows expected to be necessary to obtain those inflows. When estimating expected future cash flows, assets should be grouped at the lowest level for which there are identifiable cash flows that are largely independent of the cash flows of other groups of assets.

1.307 The amount of the impairment loss to be recognized is measured by calculating the difference between the carrying amount and the fair value of the asset. The fair value is defined as the amount at which the asset could be bought or sold in a current transaction between willing parties. If quoted market prices in active markets are not available, SFAS No.121 discusses various methods of determining the fair value of the assets, including using estimates of expected future cash flows discounted at a rate commensurate with the risks involved.

1.308 Once an impairment is recognized, the reduced carrying amount of the asset is the new cost basis that should be depreciated over the asset's remaining useful life. Restoration of previously recognized impairment losses is prohibited.

1.309 **Assets to Be Disposed Of.** If management has committed to a plan to dispose of long-lived assets (whether by sale or abandonment), has the authority to approve the action, and this action is not considered a disposal of a segment under APB Opinion No. 30, the assets should be reported at the lower of carrying amount or fair value, less costs to sell. Fair value is measured the same as for assets to be held and used. The costs to sell an asset includes incremental direct costs, such as broker commissions, legal and title transfer fees, and closing costs. Assets to be disposed of should not be depreciated while they are held for disposal.

1.310 Subsequent revisions to the estimates of fair value should be reported as adjustments to the carrying amount of the assets, not to exceed the carrying amount (original basis less accumulated depreciation and amortization) of the assets before the adjustment was made.

1.311 Financial statement presentation and disclosure requirements of SFAS No. 121 are included in the Financial Statement Disclosure Checklist in Chapter 9, section 9.704.

SOP 94-6, *Disclosure of Certain Significant Risks and Uncertainties*

1.312 In December 1994, the AICPA issued this SOP in response to a need for improved disclosure of significant risks and uncertainties brought about by a volatile business and economic environment. Many of the disclosure requirements of this SOP supplement or overlap the requirements of other authoritative pronouncements, primarily SFAS No. 5, *Accounting for Contingencies*. The SOP is effective for calendar year 1995 financial statements, and for interim periods in fiscal years subsequent to the year the SOP is first adopted. It applies to financial statements of all nongovernmental entities prepared in accordance with GAAP.

1.313 The disclosure requirements of SOP 94-6 fall into four categories:

All entities should report—

(1) Nature of operations

(2) Use of estimates in preparing financial statements

Only entities that meet certain conditions should report—

(3) Certain significant estimates

(4) Current vulnerability due to certain concentrations

Because the disclosure requirements of this SOP overlap with many other disclosure requirements, they may be combined or grouped with other related disclosures.

1.314 **Nature of Operations.** SOP 94-6 requires that an entity describe its major products or services and principal markets, including the location of those markets. If the entity operates more than one business, it should also disclose the relative importance of each business and the basis for determining the relative importance, such as assets, revenues, or earnings. It is not necessary to quantify the relative importance of different operations; instead, importance can be conveyed by terms such as "predominantly," "about equally," and "major."

1.315 Sample disclosures of nature of operations for a small business follows:

- Retail Franchisor of Sporting Goods

  Sporting Goods Headquarters, Inc. (the Company) was incorporated in Arizona in January 19X1. The Company operates retail sporting goods stores and grants franchises for the operation of retail sporting goods stores under the name of Sports Headquarters. At December 31, 19Y5, the Company had ten franchise locations and three company-owned stores.

- Manufacutirng Company

  Pipe Co., Inc. located in Houston, Texas, manufactures tubing and related products. The Company sells primarily to manufacturers of oil field equipment and leisure products that are located in the Southwestern United States.

1.316 **Use of Estimates in the Preparation of Financial Statements.** Disclosures should include a statement that financial statements prepared in accordance with GAAP require the use of management's estimates. The following disclosure, found in paragraph A-9 of the SOP, can generally be used verbatim to satisfy this requirement:

> The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

1.317 **Certain Significant Estimates.** Disclosure of information about estimates is required if two criteria are met: (1) it is reasonably possible that an estimate about a condition existing at the balance-sheet date will change in the near term (one year from the balance-sheet date) and (2) the effect of the change would be material to the financial statements. Examples of estimates that are often sensitive to material change are:

* Inventory and specialized equipment subject to technological obsolescence
* Valuation allowances for deferred tax assets based on future taxable income
* Valuation allowances for commercial and real estate loans
* Environmental cleanup-related liabilities
* Litigation-related obligations
* Contingent liabilities for obligations of other entities
* Amounts reported for pensions and postemployment benefits
* Amounts reported for long-term contracts.

1.318 The disclosures for certain significant estimates supplement those in SFAS No. 5, *Accounting for Contingencies*. However, the SOP applies not just to estimates related to contingencies, but also to other types of estimates, such as those related to the carrying value of assets and liabilities (e.g., long-term construction contracts). Also, the SOP introduces the concept of a "near term" change in the estimate, while SFAS No. 5 makes no distinction between "near term" and long-term changes in estimates.

1.319 As mentioned above, this disclosure need only be made if two criteria are met:

1) *It is at least reasonably possible that an estimate about a condition that existed at the balance-sheet date will change in the near term.* The SOP draws on the SFAS No. 5 definition of reasonably possible, which is "more than remote but less than likely." Therefore, the likelihood that an estimate will change in the near term should be at least "more than remote." In considering whether the estimate is sensitive to change in the near term, the entity should consider only facts and circumstances known to management before the financial statements are issued.

   To illustrate, consider a construction contractor's long-term contracts. Estimated costs to complete includes a particular material, and management is aware at year-end that a shortage and resulting price increase for this material may occur in the next few months. If the likelihood of the price increase in the near term is more than remote, then this disclosure criterion is met.

2) *The effect of the change would be material to the financial statements*. Determining whether the effect of a change in estimate would be material to the financial statements is a matter of judgment, and presumably involves the same judgment used to determine whether other items are material to the financial statements. Also, note that the SOP refers to materiality in relation to the effect of the change, not to the estimate. For example, consider an entity that has not recorded a valuation allowance for inventory subject to rapid technological obsolescence. Even though no estimate is recorded, the entity might need to disclose the fact that it is reasonably possible that a material change in the estimate is likely to occur in the near term.

1.320 If an estimate meets the disclosure requirements of SOP 94-6, the following matters should be disclosed:

- The nature of the uncertainty and an indication that it is at least reasonably possible that a change in the estimate will occur in the near term.
- If the estimate involves a loss contingency covered by SFAS No. 5, an estimate of the possible loss or range of loss, or a statement that such an estimate cannot be made. (Note that this requirement overlaps with SFAS No. 5 disclosure requirements for loss contingencies. In fact, for such items, the only disclosure added by SOP 94-6 is the statement that it is at least reasonably possible that a change in the estimate will occur in the near term.) Also, the SOP recommends, but does not require, disclosing the factors that cause the estimate to be sensitive to material change.

1.321 Two types of accounting estimates are likely to trigger this disclosure requirement for construction contractors: estimates related to long-term contracts and potential environmental liabilities. Remember, the mere existence of significant estimates that are subject to material change in the near term do not trigger this disclosure—a condition, a situation, or circumstances must exist at the balance-sheet date that make the estimate subject to a material change in the near term. Referring to the example in paragraph 1.319, the information about a price increase that is likely to cause a material increase in job costs triggers this disclosure. Potential environmental liabilities are also likely to meet the disclosure criteria for certain significant estimates because such estimates are sensitive to material change. As a result, preparers and auditors of construction contractors' financial statements should carefully consider whether any estimates related to long-term construction contracts and environmental liabilities might trigger this disclosure requirement.

1.322 Current Vulnerability Due to Certain Concentrations. The SOP requires disclosure of certain concentrations if: (1) the concentration exists at the balance-sheet date, (2) the concentration makes the entity vulnerable to the risk of a near-term severe impact, and (3) it is at least reasonably possible that the events that could cause the severe impact will occur in the near term. (As mentioned earlier near term is defined as a period not to exceed one year from the balance-sheet date.)

1.323 This disclosure is required only if all of the following criteria are met:

1. *The concentration existed at the balance-sheet date.* The SOP specifically identifies the types of concentrations that should be considered for this disclosure:
    - Concentrations in the volume of business transacted with a particular customer, supplier, or lender;
    - Concentrations in revenues from particular products or services;
    - Concentrations in the available sources of supplies of materials, labor or services (paragraph 24 of the SOP requires some specific disclosures for labor subject to collective bargaining agreements), or of licenses or other rights used in the entity's operations; and
    - Concentrations in the market or geographic area in which the entity operates (paragraph 24 of the SOP requires some specific disclosures for foreign operations).

2. *The concentration must make the entity vulnerable to the risk of a near-term severe impact.* The key concept (and probably the most difficult one) in applying this criterion is the concept of "severe impact." Paragraph 7 of the SOP defines severe impact as:

   > A significant financially disruptive effect on the normal functioning of the entity. Severe impact is a higher threshold than material. Matters that are important enough to influence a user's decisions are deemed to be material, yet they may not be so significant as to disrupt the normal functioning of the entity...The concept of severe impact, however, includes matters that are less than catastrophic.

   As with materiality, determining whether something would constitute a severe impact requires judgment. For example, consider a manufacturer that buys all of its raw materials from one supplier. The loss of this supplier would cause significant production delays and greater than material losses of revenues, yet other suppliers can provide similar raw materials under similar terms. Thus, although losing this supplier could have a significant financially disruptive effect on the normal functioning of the entity, it would not cause bankruptcy because the entity could ultimately turn to other suppliers and resume normal operations.

3. *It is at least reasonably possible that the event that could cause the severe impact will occur in the near term.* As noted above, the SOP uses the SFAS No. 5 definition of reasonably possible of "more than remote but less than likely." Thus, the probability threshold for disclosure of a concentration is the same as that for disclosure of a loss contingency.

   It is important to note that the SOP indicates that two types of concentrations are always considered to meet this "reasonably possible" criterion: (1) concentrations of customers, grantors, or contributors; and (2) concentrations of operations in foreign countries.

   If any concentrations meet these criteria, paragraph 24 of the SOP states that disclosure "should include information that is adequate to inform users of the general nature of the risk associated with the concentration." An example of a disclosure for a concentration related to customers follows:

   > At December 31, 19X5, receivables from three customers were about 45% of trade accounts receivable, and sales to these customers comprised 40% of total sales for the year then ended.

1.324 Construction contractors are likely to encounter two types of concentrations that may trigger this disclosure: concentration of business with a particular customer and concentration in a geographic area. In regards to disclosure of concentrations in the volume of business with a particular customer, paragraph 22.a. of the SOP says, "For purposes of this SOP, it is always considered at least reasonably possible that any customer ... will be lost in the near term." In other words, the SOP deems all concentrations of business with a particular customer to meet the conditions for this disclosure.

Contractors are also likely to meet the requirements for disclosure of certain concentrations related to geographical area. As with the disclosure requirements for customers, paragraph 22.d. of the SOP state that "...it is always considered at least reasonable possible that operations located outside an entity's home country will be disrupted in ther near term." As a result, this disclosure is required for any contractor that has significant operations in a foreign country. Prepares and auditors of construction contractors' financial statements may also need to consider whether this disclosure is triggered because the contractor operates in an economically depressed market.

1.325 The Financial Statement Disclosure Checklist and Illustrative Financial Statements in Chapter 9, section 9.704, have been updated to include the disclosure requirements for SOP 94-6.

1.326 Audit Considerations for SOP 94-6. Since entities must adopt SOP 94-6 for their December 31, 1995 financial statements, auditors of those entities will need to ensure that the client has disclosed the nature of its operations, the use of estimates in preparing financial statements, certain significant estimates, and certain concentrations. The first two disclosures should be fairly straightforward. In fact, many companies already disclose information about the nature of their operations. The more difficult challenge for auditors will be to determine if circumstances that trigger the other two disclosures -- certain significant estimates and current vulnerability due to certain concentrations -- exist and, if they do, whether the disclosures are appropriate.

Generally, much of the information auditors obtain during the normal course of the audit provides a good foundation for determining whether the client has estimates and concentrations that require disclosure. Specific procedures directed towards SOP 94-6 may include:

Certain Significant Estimates:

- Obtain or prepare a listing of any estimates used in determining the carrying values of assets and liabilities and gain and loss contingencies that are sensitive to change. Using information obtained in other audit areas and through inquiries of management, determine that the listing is complete and accurate.

  Examples of such estimates include:

  - inventory and specialized equipment subject to technological obsolescence
  - valuation allowances for deferred tax assets based on future taxable income
  - valuation allowances for commercial and real estate loans
  - environmental cleanup-related liabilities
  - litigation-related obligations
  - contingent liabilities for obligations of other entities
  - amounts reported for pensions and postemployment benefits
  - amounts reported for long-term contracts

- Consider whether it is at least reasonably possible that a material change in the estimate will occur in the near term.

- If such a situation is identified, review support for the calculation of the effect of the change.

Certain Concentrations

- Obtain or prepare a listing of the following types of concentrations, if any, that existed at the balance-sheet date and that make the entity vulnerable to risk of near-term severe impact (severe impact is a higher threshold than materiality, but less than catastrophic). Using information obtained in other audit areas and through inquiries of management, determine that the listing is complete and accurate:

* volume of business transacted with a particular customer, supplier, or lender
* revenues from particular products or services
* available sources of supply of materials, labor or services, or of licenses or other rights used in operations
* market or geographic area in which the entity conducts its operations

- Determine whether it is at least reasonably possible that an event will occur in the near term that would cause the severe impact.

1.327 The Tests of Balances Audit Program in Chapter 7, section 7.400, includes steps for considering the completeness and accuracy of the SOP 94-6 disclosures.

SOP 95-2, *Financial Reporting by Nonpublic Investment Partnerships*

1.328 On May 19, 1995, the AICPA's Accounting Standards Executive Committee issued SOP 95-2, *Financial Reporting by Nonpublic Investment Partnerships*. This SOP applies to financial statements of investment partnerships exempt from SEC registration under the Investment Company Act of 1940 (with certain exceptions) when such statements are prepared in conformity with GAAP.

1.329 The SOP provides guidance on financial statement presentation and disclosure of investments, income, and partners' capital, including requirements to:

- Include a condensed schedule of investments in securities,

- Present a statement of operations in conformity with the requirements for statements of operations of management investment companies in the Audit and Accounting Guide, *Audits of Investment Companies*, and

- Disclose in the notes the method of computing payments or allocations to the general partner for management fees and present the amounts of such payments in either the statement of operations or the statement of changes in partners' capital.

1.330 The SOP is effective for financial statements issued for fiscal years beginning after December 15, 1994. Earlier application is encouraged.

Practice Bulletin (PB) No. 14, *Accounting and Reporting by Limited Liability Companies and Limited Liability Partnerships*

1.331 In April 1995, the AICPA's Accounting Standards Executive Committee issued PB No. 14, *Accounting and Reporting by Limited Liability Companies and Limited Liability Partnerships,* which requires that financial statements of a limited liability company (LLC) should:

- Be similar in presentation to those of a partnership,

- Be clearly identified as those of a limited liability company, and
- Disclose any limitations of members' liability, and different classes of members' interests and respective rights, preferences and privileges of each class.

1.332 The PB, which includes additional accounting, reporting, and disclosure requirements, is effective for financial statements issued after May 1995.

Auditing Interpretation, *The Auditor's Consideration of Management's Adoption of Accounting Principles for New Transactions or Events* (AU 9411.11-.15)

1.333 This interpretation establishes guidance on what the auditor should consider when determining the appropriateness of an accounting principle adopted by management for material new types of transactions or events for which there are no established sources of accounting principles. The Interpretation states that when the auditor is evaluating the principle, he or she should assess the appropriateness of management's basis for selecting the principle by considering whether there are:

- Analogous transactions or events for which there are established accounting principles, or
- Other accounting literature.

Auditing Interpretation, *Audits of Financial Statements That Had Been Previously Audited by a Predecessor Auditor* (AU 9315.08-.18)

1.334 This interpretation of SAS No. 7, *Communication Between Prececessor and Successor Auditors* was issued in April 1995. The interpretation provides guidance to an auditor who is auditing and reporting on financial statements previously audited and reported on by a predecessor auditor (referred to as "reauditing"). The Interpretation states that:

- The auditor should request the predecessor auditor's workpapers for the year under audit and for the prior year.
- The review of these workpapers and inquiries of the predecessor auditor do not in themselves constitute sufficient competent evidential matter to provide a basis for expressing an opinion on the financial statements.
- The successor auditor should not divide responsibility for the work performed in his or her report.
- The successor may consider the information obtained from inquiries of the predecessor and any review of the predecessor's working papers and report in planning a reaudit.
- The successor auditor must become satisfied with the existence of beginning physical inventories by making or observing physical counts of inventories after the reaudit period and performing "roll back" procedures, test intervening transactions, such as testing prior transactions, reviewing prior count records, and performing analytical procedures. The auditor may not use the predecessor's inventory or other work for these purposes.

Auditing Interpretation, ***Describing Tests of Operating Effectiveness and the Results of Such Tests*** **(AU 9324.31-.03) and** ***Service Organizations That Use the Services of the Service Organizations (Subservice Organizations)*** **(AU 9324.04-.18)**

1.335 In April 1995, these two Auditing Interpretations of SAS No. 70, *Reports on the Processing of Transactions by Service Organizations* were issued:

a. *Describing Tests of Operating Effectiveness and the Results of Such Tests,* (AU 9324.31-.03) provides guidance to a service auditor as to how much detail and what information should be included in the description of "tests applied" and the "results of the tests."

b. *Service Organizations that Use the Services of Other Service Organizations (Subservice Organizations)* (AU 9324.04-.18) provides guidance for the user auditor and the service auditor when the service organization uses a subservice organization.

Auditing Interpretation, ***Reporting on a Special-Purpose Financial Statement that Results in an Incomplete Presentation But Is Otherwise in Conformity with Generally Accepted Accounting Principles*** **(AU 9326.80-.87)**

1.336 This interpretation defines what constitutes a contractual agreement under AU 623, *Special Reports*, and which guidance within the standards should be followed under different "special reporting" situations. This Interpretation also provides guidance when the auditor is to distribute the report to additional parties that were not part of the original contract or agreement.

Auditing Interpretation, ***Eliminating a Going-Concern Explanatory Paragraph From a Reissued Report*** **(AU 9341.01-.02)**

1.337 This interpretation addresses the situation where auditors are asked to reissue reports that included a going-concern explanatory paragraph because the situation or condition that gave rise to substantial doubt about the entity's ability to continue as a going-concern has been resolved. This Interpretation provides guidance for auditors who agree to reissue their reports in such instances. It's important to note that the Interpretation does not *require* auditors to reissue their reports, however, if the auditor does agree to reissue his or her report, he or she should:

- Audit the event or transaction that prompted the request for reissuance,
- Perform procedures in paragraph 12 of AU 560, Subsequent Events, at or near the date of reissuance, and
- Consider factors described in paragraphs 6-11 of SAS No. 59, based on the conditions and circumstances at the date of issuance.

1.400 PROPOSED STATEMENTS

Proposed Amendment to SAS No. 55,
Consideration of the Internal Control Structure in a Financial Statement Audit

1.401 In February 1995, the AICPA Auditing Standards Board issued this proposed amendment to SAS No. 55 that would incorporate the internal control concepts found in *Internal Control — Integrated Framework Report* (often referred to as the "COSO report"). Specifically, the amendment would change the current definition of internal control in SAS No. 55 from "control environment, accounting system, and control procedures" to the definition in the COSO report, "control environment, risk assessment, control activities, information and communications, and monitoring." The AICPA Audit Guide, *Consideration of the Internal Control Structure in a Financial Statement Audit*, will also be revised simultaneously. The final documents are expected to be issued in December 1995, and are expected to be effective for audits of entities with fiscal years beginning January 1, 1997. This amendment is not expected to have a significant impact on practical applications of SAS No. 55.

Proposed amendment to SAS No. 58,
Reports on Audited Financial Statements

1.402 This proposed amendment was issued in July 1995 that would eliminate the requirement to add an explanatory paragraph to the auditor's report for certain uncertainties. This amendment would not affect the requirement in SAS No. 59, *The Auditor's Consideration of an Entity's Ability to Continue as a Going Concern*, to add such a paragraph for going-concern uncertainties. If approved, the final SAS is expected to be issued in December 1995, and would be effective for reports issued on or after June 30, 1996.

1.403 To determine the current status of these proposed amendments, call the AICPA's Technical Hotline at 800-862-4272, menu option 2.

Proposed Statement of Position, *Environmental Remediation Liabilities (Including Auditing Guidance)*

1.404 In June 1995, the AICPA Accounting Standards Executive Committee issued this proposed Statement of Position which provides guidance on the recognition, measurement, display and disclosure of certain environmental remediation liabilities. Among other things, the SOP requires that environmental remediation liabilities be accrued when the criteria of SFAS No. 5 are met, and it includes benchmarks to aid in determining when such liabilities should be recognized in accordance with SFAS No. 5.

1.405 Among the costs to be included in the measurement of the liability are:

a. Incremental direct costs of the cleanup effort,

b. Costs of compensation and benefits for employees to the extent they will devote time directly to the cleanup effort, and

c. Certain costs of legal work related to the cleanup effort.

The proposed SOP would be effective for financial statements beginning after December 15, 1995.

1.500 THE GAAP HIERARCHY AND EITF CONSENSUSES

1.501 In January 1992, the AICPA's Auditing Standards Board issued SAS No. 69, *The Meaning of Present Fairly in Conformity With Generally Accepted Accounting Principles in the Independent Auditor's Report* (AU411). Statement on Standards for Accounting and Review Services (SSARS) No. 7, *Omnibus Statement on Standards for Accounting and Review Services—1992* (AR 100, footnote 3), clarifies that the hierarchy also applies to compilation and review engagements. SAS No. 69:

- Created two separate but parallel hierarchies—one for state and local governments and another for nongovernmental entities.
- Established a true GAAP hierarchy—unlike the old SAS, each successive category in the hierarchy is a different level of authority.
- Elevated the authority of Financial Accounting Standards Board (FASB) Emerging Issues Task Force (EITF) consensuses and AICPA Practice Bulletins from "other literature" to "established accounting principles."

1.502 Paragraph 16 of SAS No. 69 (AU 411.16) summarizes the pronouncements that are included in each of the five categories of GAAP for nongovernmental entities and for state and local governments.

1.503 SAS No. 69 is effective for reports on financial statements for periods ending after March 15, 1992. Generally, the revised levels of authority apply to pronouncements with effective dates after March 15, 1992. However, EITF consensuses issued before March 16, 1992 also are effective for initial application of an accounting principle after March 15, 1993.

Importance of EITF Consensuses

1.504 The one-year grace period assigned to the old EITF consensuses was designed to give accountants an opportunity to become acquainted with over 150 consensuses that were adopted before March 15, 1992. The consensuses listed in sections 1.505 ("Selected EITF Consensuses Adopted Before March 16, 1992") and 1.506 ("Selected EITF Consensuses Adopted Between March 15, 1992 and July 21, 1995") have the widest applicability and relevance to construction contractors.

1.505 Selected EITF Consensuses Effective Before March 16, 1992:

Issue No.	Title and Issue
85-1	*Classifying Notes Received for Capital Stock* Should notes received in exchange for capital stock be classified as an asset or as a reduction in equity?
86-7	*Recognition by Homebuilders of Profit from Sales of Land and Related Construction Contracts* How does FASB Statement No. 66 apply to the combined sale of land and building constructed by the seller under a construction contract?

86-12 *Accounting by Insureds for Claims-Made Insurance Policies*
Should an enterprise record an incurred-but-not-reported (IBNR) liability for uninsured losses resulting from claims-made insurance policies?

86-18 *Debtor's Accounting for a Modification of Debt Terms*
Should the exchange of a new noncallable debt instrument for an older callable debt instrument be accounted for as an extinguishment of the older debt issue?

86-29 *Nonmonetary Transactions: Magnitude of Boot and the Exceptions to the Use of Fair Value*
Should the magnitude of boot affect whether an exchange of nonmonetary assets is accounted for at the recorded amounts or fair value?

86-30 *Classification of Obligations When a Violation is Waived by the Creditor*
How is the classification of long-term debt affected when the creditor waived existing debt covenant violations but retained future, periodic covenant requirements?

86-40 *Investments in Open-End Mutual Funds That Invest in U.S. Government Securities*
Should investments in mutual funds that hold debt securities be accounted for at the lower cost or market or amortized cost?

86-46 *Uniform Capitalization Rules for Inventory Under the Tax Reform Act of 1986*
Are the types of costs that must be allocated to inventory for tax purposes also capitalizable under generally accepted accounting principles?

87-8 *Tax Reform Act of 1986: Issues Related to the Alternative Minimum Tax*
How should the alternative minimum tax be accounted for under APB Opinion No. 11 and FASB Statement Nos. 96 and 109?

87-29 *Exchange of Real Estate Involving Boot*
Does FASB Statement No. 66 apply to exchanges of similar real estate involving boot that is at least 25% of the fair value of the exchange?

88-4 *Classification of Payment Made to IRS to Retain Fiscal Year*
How should partnerships and Subchapter S corporations record payments made to the IRS to retain their fiscal year?

88-5 *Recognition of Insurance Death Benefits* consensus reached on issue No. 1 only
May income from death benefits on corporate-owned life insurance policies be recorded immediately on an actuarially expected basis rather than deferred until the insured's death?

88-10 *Costs Associated with Lease Modification or Termination* consensuses reached on issues Nos. 2 and 3 only
When should costs associated with lease modification or termination be expensed?

88-18 *Sales of Future Revenues*
Should cash received in exchange for a promise to pay future revenues from a segment, product line, or other asset be classified as debt or deferred income? How should any foreign currency effects be recognized?

88-24 *Effect of Various Forms of Financing under FASB Statement No. 66*
How should profit be recognized under FASB Statement No. 66 when a real estate transaction involves various forms of financing?

89-13 *Accounting for the Cost of Asbestos Removal*
When may the costs of asbestos removal be capitalized, and, if expensed, may the costs be classified as an extraordinary item?

89-15 *Accounting for a Modification of Debt Terms When the Debtor is Experiencing Financial Difficulties*
Should the exchange of new debt for existing debt with the same creditor (at terms which are lower than the prevailing market rate) be considered an extinguishment of debt by the debtor?

90-8 *Capitalization of Costs to Treat Environmental Contamination*
Should environmental contamination treatment costs be expensed or capitalized? Supplements Issue No. 89-13.

91-8 *Application of FASB Statement No. 96 to a State Tax Based on the Greater of a Franchise Tax or an Income Tax*
How should a state franchise tax that is partly based on an income tax be accounted for under FASB Statement Nos. 96 and 109?

1.506 Selected EITF Consensuses Adopted Between March 15, 1992 and July 21, 1995

92-2 *Measuring Loss Accruals By Transferors for Transfers of Receivables with Recourse*
When receivables are sold with recourse, should the transferor accrue all probable credit losses over the life of the transferred receivables at the sale date? May the recourse obligation be discounted if the timing of the cash flows can be reasonably estimated?

93-3 *Plan Assets under FASB Statement No. 106*
If a trust is established to pay postretirement benefits, must the trust assets be "bankruptcy-proof" to qualify as plan assets under SFAS No. 106?

93-5 *Accounting for Environmental Liabilities*
When should recoveries be considered in measuring the amount of a contingent liability relating to environmental matters? Under what circumstances may an environmental liability be discounted?

93-8 *Accounting for the Sale and Leaseback of an Asset That is Leased to Another Party*
How does a seller-lessee account for a sale/leaseback of personal property when the asset is subject to an operating lease at the time of sale or is subleased or intended to be subleased by the seller-lessee to a third party under an operating lease?

93-12 *Recognition and Measurement of the Tax Benefit of Excess Tax-Deductible Goodwill Resulting from a Retroactive Change in Tax Law*
When an institution elects to retroactively amortize goodwill in accordance with the Omnibus Budget Reconciliation Act of 1993, how is the tax benefit related to tax-deductible goodwill in excess of "book" goodwill determined? How should that benefit be recognized under FASB Statement No. 109, *Accounting for Income Taxes?*

93-13 *Effect of a Retroactive Change in Enacted Tax Rates That is Included in Income from Continuing Operations*
Should the tax effect of a retroactive change in enacted tax rates for the period that includes the enactment date of the change be measured using temporary differences existing at the date of enactment or those existing at the effective date of the tax rate change

94-1 *Accounting for Tax Benefits Resulting from Investments in Affordable Housing Projects*
How should an entity that invests in a qualified affordable housing project through a limited partnership account for its investment?

94-2 *Treatment of Minority Interests in Certain Real Estate Investment Trusts*
Should the REIT's consolidated financial statements report the sponsor's interest in the operating partnership as minority interest or as one of two classes of ownership interests in stockholder's equity? How should the amount of the sponsor's interest in the operating partnership be calculated?

94-3 *Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (including Certain Costs Incurred in a Restructuring)*
When should an employer recognize a liability for (1) the cost of employee termination benefits that management decides to provide to involuntarily terminated employees, and (2) costs that are directly associated with a plan to exit an activity? What additional financial statement disclosures should the employer make related to these charges?

94-6 *Accounting for the Buyout of Compensatory Stock Options*
When compensatory stock options are repurchased by the issuing company, how should the total amount of compensation cost recognized as expense be determined?

94-8 *Accounting for Conversion of a Loan into a Debt Security in a Debt Restructuring*
In a debt restructuring, if there is a difference in the basis in the loan being restructured and the fair value of the debt security received, what should be the creditor's initial cost basis of a debt security received from the original debtor in a loan restructuring and how should the creditor account for any differences between his basis in the loan and the fair value of the security at the date of the restructuring?

94-9 *Determining a Normal Servicing Fee Rate for the Sale of an SBA Loan*

How, for the purpose of applying EITF Issue no. 88-11, *Allocation of Recorded Investment When a Loan or Part of a Loan is Sold,* should a normal servicing fee rate for SBA loans (Small Business Administration) be determined in the absence of a major secondary market maker? How should a change in the normal servicing fee rate be accounted for?

94-10 *Accounting by a Company for the Income Tax Effects of Transactions among or with Its Shareholders under FASB Statement No. 109, Accounting for Income Taxes*

Should tax effects caused by transactions among or with shareholders be included in the income statement or in equity in the separate financial statements of the company affected?

95-2 *Determination of What Constitutes a Firm Commitment for Foreign Currency Transactions Not Involving a Third Party*

What constitutes a significant economic penalty to a consolidated entity that would negate the use of hedge accounting for transactions designed to hedge intercompany foreign currency commitments?

95-3 *Recognition of Liabilities in Connection with a Purchase Business Combination*

In a purchase business combination, when should (1) costs to exit an activity of an acquired company, and (2) involuntary employee termination benefits and relocation costs be accrued as liabilities under APB Opinion No. 16, *Business Combinations*? What additional financial statement disclosures should the employer make related to these charges?

95-4 *Revenue Recognition on Equipment Sold and Subsequently Repurchased Subject to an Operating Lease*

Is a manufacturer precluded from recognizing a sale of a product to a dealer if the customer subsequently enters into an operating lease with the manufacturer or its finance affiliate who acquires that product subject to a lease?

95-5 *Determination of What Risks and Rewards, If Any, Can Be Retained and Whether Any Unresolved Contingencies May Exist in a Sale of Mortgage Loan Servicing Rights*

Should sales of mortgage loan servicing rights be recognized at the date title passes if the agreement contains any provisions that would result in the seller's retention of specified risks? (Note: This consensus supersedes the consensus reached in EITF Issue No. 89-5.)

95-6 *Accounting by a Real Estate Investment Trust for an Investment in a Service Corporation*

Does a service corporation owned by a real estate investment trust (REIT) qualify as an independent third party for purposes of determining the leasing costs capitalizable by the REIT under FASB Statement No. 91, *Accounting for Nonrefundable Fees and Costs Associated with Originating or Acquiring Loans and Initial Direct Costs of Leases*.

95-10 *Accounting for Tax Credits Related to Dividend Payments in Accordance with FASB Statement No. 109, Accounting for Income Taxes*
Certain foreign jurisdictions tax corporate income at different rates depending on whether that income is distributed to shareholders. Should a deferred tax asset be recognized (in the financial statements of a company that pays dividends subject to the tax credit to its shareholders) for the tax benefits of future tax credits that will be realized when income previously taxed at the undistributed rate is subsequently distributed?

1.507 Practitioners may obtain the *EITF Abstracts* by calling the FASB Order Department at (203) 847-0700.

Illustration 1-2

GAAP HIERARCHY SUMMARY

Established Accounting Principles	1. FASB Statements and Interpretations, APB Opinions, and AICPA Accounting Research Bulletins
	2. FASB Technical Bulletins, AICPA Industry Audit and Accounting Guides, and AICPA Statements of Position
	3. Consensus positions of the FASB Emerging Issues Task force and AICPA Practice Bulletins
	4. AICPA accounting interpretations, "Qs and As" published by the FASB staff, as well as industry practices widely recognized and prevalent
Other Accounting Literature [2]	5. Other accounting literature, including FASB Concepts Statements; APB Statements; AICPA Issues Papers; International Accounting Standards Committee Statements; GASB Statements, Interpretations, and Technical Bulletins; pronouncements of other professional associations or regulatory agencies; AICPA *Technical Practice Aids*; and accounting textbooks, handbooks, and articles

[2] In the absence of established accounting principles, the auditor may consider other accounting literature, depending on its relevance in the circumstances.

Construction Contractor Industry

CHAPTER 2

THE CONSTRUCTION CONTRACTOR INDUSTRY GENERAL

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CHAPTER 2

THE CONSTRUCTION CONTRACTOR INDUSTRY—GENERAL

2.000 WHAT IS A CONSTRUCTION CONTRACTOR?

2.001 Construction contractors are individuals, partnerships or corporations hired to manage, coordinate, procure, and produce capital assets in both the public and private sectors. Generally, construction projects include residential, industrial and commercial buildings, as well as infrastructure improvements. Additionally, component parts of these structures, such as brickwork and wiring, are construction projects themselves.

2.002 Construction contractors range in size from sole proprietors to multi-million dollar international business concerns. However, the majority of construction contractors are local or regional in geographical nature. Depending on the contractor's area of expertise and nature of the work, entering the construction contracting business can be relatively easy due to the limited start-up costs involved. A construction manager can establish a sole proprietorship and hire other companies to perform the work. Plumbers and carpenters can conduct their businesses out of their homes with very low overhead and no other employees.

2.003 The ease of entry into the construction industry, as well as the current economic climate, has resulted in a high failure rate among contractors. The industry has become very competitive resulting in decreasing profit margins. As a result, the volume of work completed must be increased while overhead costs must be decreased in order for contractors to survive. Effectively managing the financial aspects of the business has become crucial. Timely, accurate financial reporting on a contract-by-contract basis is essential for a contractor's success in today's market.

Common Characteristics of Construction Contractors

2.004 The construction contracting industry is unique from other industries for three main reasons. First, contractors typically do not build the same product twice. Each contract is a unique project. Second, contractors must estimate the costs to perform a job and commit to a price for specific performance before knowing the actual costs. Further, the contractor's obligation to perform under a contract is typically not discharged until total performance on the contract has been achieved. Finally, contractors typically perform their work at a customer-owned job site instead of at their own place of business. For all of these reasons, substantial risk is involved.

2.005 Contractors typically perform their work under contractual agreements with project owners. These contractual agreements are usually obtained through competitive bid or by negotiation for specific projects.

2.006 Bid bonds and payment and performance bonds are typically required on projects of any substantial size. As discussed more thoroughly in Chapter 3, use of these bonds helps protect project owners from a contractor's inability to perform under the contract.

Types of Construction Contractors

2.007 Contractors are typically classified as general building or heavy highway contractors. Costs, gross margins, equipment and financing needs vary tremendously based on the area of specialization and the market in which a contractor is competing.

2.008 General building contractors are the largest category of contractors. These contractors build and renovate the residential homes in which we live, the commercial buildings we frequent for work, dining and shopping, and the industrial buildings in which wholesale and consumer products are manufactured. The two major categories of general building contractors are general contractors and subcontractors. As defined in the AICPA Audit and Accounting Guide, *Construction Contractors* (the Guide), a general contractor is a contractor who enters into a contract to build a project and who takes full responsibility for its completion. The general contractor may hire subcontractors to perform portions of the work, however, the general contractor retains responsibility for problems under the prime contract. A subcontractor refers to any contractor who performs work for or supplies materials to a general or prime contractor.

2.009 Heavy construction contractors build roads and bridges, as well as other infrastructure improvements. The majority of these contractors perform work for city, county, and federal governments in addition to private customers.

2.010 The heavy construction contracting business distinguishes itself from other contractors because it is far more capital intensive and often highly leveraged. Contracts are frequently priced by unit (such as per yard poured) as opposed to fixed price. Overhead costs for these contractors are higher than general building or specialty contractors due to their high heavy equipment cost requirements.

Industry Trends

2.011 Over the last several years, the general U.S. economy has negatively impacted the construction industry. Lack of consumer confidence in the economy, widespread building vacancies leading to real estate loan defaults, tighter lending requirements, and an oversupply of unoccupied commercial real estate have decreased the rate at which new private construction projects have begun. Governmental sectors have been working with diminished resources and deficit issues, which have also tightened their spending in the construction arena.

2.012 At the beginning of the economic downturn as construction starts decreased, excavators and other "front end" contractors suffered. These contractors were the first to see their businesses decline because they are the first subcontractors to work on a project. Because electrical, drywall, carpentry and other "finish" contractors do not perform their portion of the work until later in the contract cycle, they experienced the effects of the economic slump later. Conversely, when the economy improves, the "front end" contractors are the first to benefit while other "finish" contractors have a delayed benefit.

2.013 Local Economic Pressures. While the country is depressed economically, some local areas are thriving. Currently, Los Angeles, Phoenix, Denver, and Atlanta are projecting high growth for the next few years, providing opportunities for contractors.

2.014 Opportunities in foreign countries are plentiful for contractors with the skill, knowledge, desire, and financial ability to compete in this arena. Due to lack of stability and unfamiliarity with foreign markets, a great deal of risk is inherent in expanding internationally.

2.015 Competition. Due to economic pressures, competition in the construction industry has increased dramatically. The severe slow down in commercial and industrial building markets has forced more contractors into the governmental arena. There are more contractors competing for fewer government dollars. This strong movement to publicly funded projects is also a result of the relative security government work offers in terms of payment assurance.

2.016 The number of contractors bidding on particular jobs and the frequency with which they bid for work has also increased substantially. As a result, the ratio of contracts awarded to contracts bid has decreased, along with profit margins.

2.017 In addition, contractors' ability to complete projects timely while maintaining quality has suffered in some instances. Delays in project openings and surety companies having to finance the completion of contracts have become more prevalent.

2.018 The Future. The economy has shown recent improvement. The residential construction market has improved, particularly in the single family home market, due in part to the "baby boomer" market, low interest rates, and increased consumer confidence. It is expected that both the single family and multi-family housing markets will continue to show moderate improvement over the next few years.

2.019 The retail construction market, like the commercial and industrial markets, is expected to continue to suffer. Supply continues to significantly exceed demand. Government markets such as public building construction, infrastructures, and mass transit will continue to provide sources of work for contractors. Specialty markets such as health care facilities and hotels will continue to provide opportunities in local or niche markets.

2.100 THE CONTRACTING PROCESS

2.101 Crucial to the construction process are the owners, architects, engineers, general contractors, and subcontractors.

2.102 In the construction industry, the majority of the work is awarded to the lowest qualified bidder. In contrast to bidding on projects, there are types of construction work that are primarily negotiated between the contractor and the owner, such as time and materials, unit-priced and cost-type contracts. (Appendix B of the Guide contains detailed definitions of types of contract.)

The Bid Process

2.103 The following is a general description of the bidding process. In practice, many variations in this process will be encountered.

2.104 A customer, referred to as an owner, wants to hire a contractor to produce a product (e.g., a building). The owner seeks to hire architects or engineers to translate his or her design program into drawings and specifications, and contractors to build this product.

2.105 **Plan Drawings and Specifications.** The architect is frequently chosen by the owner because of the owner's prior experience with the architect, recommendation of others, or negotiation. The architect may also be selected through a design competition. For infrastructure projects, such as a road or bridge, an engineer would most likely be hired instead of an architect.

2.106 The architect or engineer assists in translating the owner's design program into plan drawings and specifications. Once these drawings and specifications are approved by the owner, obtaining the general or prime contractor is usually the next step.

2.107 Although some owners choose to serve as the general contractor, most do not have the expertise to oversee and manage a construction project. As a result, most owners solicit bids for specialists to serve as the general contractor. The bid requests are based on the drawings and specifications prepared by the architect or engineer. Frequently, owners require the contractors to prequalify in order to submit a bid on a project.

2.108 **Prequalification.** Prequalification of contractors is evidenced by a bid bond awarded to the contractor. A bid bond is essentially a promise by a surety company to award a performance bond to the contractor in the event the contractor is awarded the contract. (A performance bond is a promise to the owner that if the contractor does not perform in accordance with the contract, the surety company is responsible for the job's completion.) The general contractor and the subcontractors are usually required to have bid bonds before they can submit a bid on the project.

2.109 **Dual Purpose of the Bid Bond.** The bonding requirement frequently alleviates the owner's concern about the contractor's financial ability to perform under the terms of the contract. Bid bonds are required by jurisdictions (public contracts) or by contract (private contracts). In addition, jurisdictions can obtain a higher bid bond than the jurisdiction itself dictates by stipulating so in the contract with the contractor. The bid bond also gives the owner assurance that a contractor will file performance and payment bonds if awarded the contract. If a contractor, after posting a bid bond, is awarded the right to perform but subsequently refuses to sign a contract, the surety company must pay the owner the difference between the winning bid and the next lowest bid.

2.110 The surety business is frequently associated with the insurance business. Sureties charge a premium ranging from one-half to four percent of the contract price. However, unlike insurance companies, which anticipate a certain amount of claims, the surety provides bonds assuming no losses. This distinction is critical. The surety, usually through agents, assesses the character and capability of the contractor. A more detailed discussion of suretyship follows in Chapter 3 of this Manual. Briefly, the contractor's capability is based on:

- historical contract performance and business performance,
- liquidity, usually in the form of working capital,
- current backlog, and
- management.

2.111 In order to assess a contractor's financial capability, the contractor must have accurate detailed job cost records as well as financial statements prepared in accordance with industry guidelines.

Role of General Contractor

2.112 A general contractor functions as the "project manager." The general contractor is responsible for completing the work to the owner's specifications within the time frame outlined in the contract. Sometimes, a general contractor not only coordinates the production but also performs a portion of the work. However, large portions of the work are frequently subcontracted by the general contractor to specialty contractors, such as excavators, demolitioners, pavers, roofers, mechanical, sheet metal, and electrical contractors.

2.113 Before submitting a bid to the owner, the general contractor will solicit bids for various portions of the work from subcontractors. These subcontractors review the plan specifications and work plan for their specialty, and provide a bid based on pricing and timing of procurement and production of raw materials. The subcontractor's bid must consider any quality and brand requirements for materials specified in the plan. The timing of the work and the nature of the conditions in which the work will be performed are also considered. Many variables exist, such as the weather, delays by other subcontractors who need to perform their work before the subcontractor can proceed, building use plans, and phase delays (when a phase of the contract is held up and further work is suspended). The timing of completion of the work by each subcontractor is critical to the profitability and timely performance of the project as a whole.

2.114 In addition to soliciting bids from subcontractors, general contractors must also price out the work they plan to perform themselves. An important portion of any contractor's costs includes indirect costs and other overhead, such as payroll taxes, insurance, and other employee benefits related to the personnel performing work directly on the job. Depending on the type of contractor and the nature of the work, depreciation, repairs, and maintenance on equipment can increase indirect costs significantly. General and administrative overhead must also be considered when pricing a job. Other factors that affect each contractor's bid price include competition, cash flow requirements, the contractor's current work load, potential for obtaining profitable change orders, and the general economic climate.

Awarding the Contract

2.115 From the bids received, the contract is typically awarded to the lowest bidder. However, the process is actually more complicated. Owners reserve the right to reject all bids. For example, a contract may not be awarded because all bids are over the owner's budget for the project, in which case, the plans may be revised and the project submitted for bid again.

2.116 Once the contract is awarded, contracts must be signed by the owner and general contractor, as well as any subcontractors. General contractors and subcontractors must obtain payment and performance bonds from surety companies. Workman's compensation and general liability insurance information needs to be verified by the owner (for general contracting work) and by the general contractor (for subcontracting work), and production scheduled. A 10-day notice to proceed once the contract is signed is common in the industry.

2.117 **Factors That Influence Contract Risk.** The following table lists a selection of factors that influence a contract's risk. These factors should be considered on a contract by contract basis.

FACTOR	LOWER RISK	HIGHER RISK
Percent complete	0%-25% and 90%-100%	25%-90%
Bid results	Tight bid results	Significant variances in bid amounts
Size of project	Relatively small job	Relatively large job
Type of project	Simple, routine	Complex, one of a kind
	Within contractor's expertise	Not within contractor's expertise
Location	Established area with past successful projects	New area
	Materials and labor readily available	Materials and labor not readily available
Owner/investor	Significant previous contact	Little previous contact
	Solid financial position	Weak financial position
Subcontractors	Significant previous contact	Little previous contact
	Solid financial position	Weak financial position
	Significant subcontract agreements finalized	Significant subcontract agreements not finalized

FACTOR	LOWER RISK	HIGHER RISK
Timing	Comfortable time frame	Tight time frame
	No penalties for late completion	Significant penalties for late completion
	No delays experienced	Significant delays experienced
Weather	Low susceptibility to adverse weather	High susceptibility to adverse weather
Type of contract	Cost type	Fixed price
Claims	No claims	Significant claims
Profit deterioration	Little deterioration	Significant deterioration
Duration	Short project	Long project
Amount of work self-performed	Small portion	Large portion

2.200 HOW CONSTRUCTION BUSINESSES ARE ESTABLISHED

2.201 Construction contractors can be found in almost any size and legal form. International and domestic corporations, partnerships, sole proprietorships, limited liability companies, and joint ventures are all typical business forms.

2.202 Although entering the market for construction contractors is relatively easy, the type of work and size of contracts that the contractor will retain is dependent on staffing procurable to the contractor, financial resources available, and the meeting of licensing standards.

Corporations

2.203 Incorporation requires obtaining a state charter and can be done easily. The corporate form is often favored because it affords limited liability to stockholders. However, banking and surety bonding requirements typically require personal guarantees of owners in closely held corporations. Additional factors that make the corporation form favorable are its perpetual nature, the entity's ability to survive the death of the owners, and the ability to obtain financing through stock sales. Selling stock in exchange for cash increases working capital and thereby increases bonding capacity. Additionally, the election of S Corporation status eliminates the problem of double taxation on corporate distributions.

Partnerships

2.204 Partnerships are more difficult to form due to the necessity of a partnership agreement. Due to the complexity in preparation and the importance of the partnership agreement, legal consultation is advised for all parties involved in partnership formation. Partners may be individuals, other partnerships or corporations. The partnership form may be either a general or limited partnership.

2.205 Creation of a partnership potentially allows individuals to combine their capital, increase financial strength, and increase bonding capacity. A trend in the construction industry towards joint ventures is a current example of the use of capital combination. However, an unfavorable feature of a partnership is that the general partners do not have the limited liability afforded to limited partners or corporate stockholders.

Proprietorships

2.206 Proprietorships are another common form of legal entity for construction contractors. Generally, proprietorships are small contractors who operate locally with annual revenues of less than several hundred thousand dollars. Except for certain specialty contractors, an individual who wants to form a proprietorship need only make the decision to start the business--filing of legal documents is not required. All income of the proprietorship is taxed at the proprietor's individual tax rate. Although corporate tax rates may be more favorable than individual tax rates at lower income levels, proprietorships may offer more favorable tax treatment for higher income levels when distributions and dissolution are considered. Responsibility for obtaining financing and the unlimited liability of the sole proprietor are unfavorable attributes of this form of business.

Limited Liability Companies

2.207 The limited liability company (LLC) is one of the newest forms of business available. Most states have passed laws allowing LLC's to exist and it is expected that other states will soon follow. The LLC is typically taxed as a partnership although the partners do not have personal liability. Practice Bulletin 14, *Accounting and Reporting by Limited Liability Companies and Limited Liability Partnerships*, issued by the AICPA in April 1995 provides reporting guidance for limited liability companies organized in the United States that prepare financial statements in accordance with generally accepted accounting principles as well as guidance on certain accounting issues.

Financing Considerations

2.208 The principal credit accommodation that lenders provide to contractors is open letters of credit, generally for the purpose of funding purchases of materials and payments to laborers while awaiting collection of billing from the customer. Lenders also finance capital expenditures for construction contractors. Long-term financing for these purchases is preferred for maintaining working capital and bonding capacity.

2.300 COMMON USERS OF THE FINANCIAL STATEMENTS

Surety Companies/Bonding Agents

2.301 As a condition of obtaining, continuing, or reevaluating a bonding relationship, surety companies (through bonding agents) usually require annual audited financial statements of the contractors. These statements frequently must contain supplemental schedules detailing contract revenue and cost information on a contract-by-contract basis. Often, interim reviewed or compiled financial statements are also required. Sureties and agents rely heavily upon information provided in these statements in determining a contractor's bonding capacity.

Lenders

2.302 As a condition of loan agreements, many lenders require construction contractors to submit annual audited or reviewed financial statements. These statements are important for the lender's evaluation of compliance with loan covenants, deciding whether to renew a loan, and for evaluating renewal of open letters of credit.

Management/Owner

2.303 Contractors that have well-maintained, integrated computerized accounting systems can provide management with timely financial information detailing contract status on a contract-by-contract basis. Most contractors maintain their accounting records on the accrual basis of accounting. If the percentage-of-completion method is used, an adjustment must be made in order to recognize contract revenues. This adjustment may have a material effect on both the balance sheet and income statement.

Business Services

2.304 Construction contractors create a host of opportunities for accountants beyond the traditional audit, review, compilation, and tax services. The following is a partial list of business services that can be marketed to construction contractors:

- Information systems evaluation and implementation
- Operational consulting to improve internal efficiency and tighten controls
- Analysis of indirect contract costs and allocations
- Analysis of actual contract costs and bid estimates
- Business planning to help increase bonding capacity

By having a thorough understanding of the construction industry, accountants have the opportunity to advise their contractor clients with purchasing, financing, and investing options that meet their needs while maximizing their bonding capacity.

2.305 The above services can provide valuable assistance to contractors. However, accountants must also ensure that they expand their client base (and services to existing clients) with clients that can mutually benefit from their services. Economic pressures causing increased competition make a thorough understanding of the construction industry a necessity.

2.306 The construction industry provides accounting opportunities for organizations diverse in size, specialization, and legal form. Specialized knowledge in the construction industry is essential for providing accurate financial information to the users of financial statements. Financial information plays a critical role in a contractor's ability to obtain work due to bonding requirements. This provides a unique advisory opportunity for accountants experienced in the construction industry.

2.400 ACCOUNTING FOR CONTRACT REVENUES AND COSTS

Overview

2.401 The objective of this section is to provide an overview of the revenue recognition methods, cost accumulation rules, and financial statement presentation issues specific to construction contractors. The accounting requirements for recognizing revenues and costs on long-term construction contracts is the most unique accounting requirement faced by contractors.

Contract Revenue Recognition Methods

2.402 Basically, two generally accepted methods of accounting for contracts are available to construction contractors: the percentage-of-completion method and the completed contract method. The primary source of authority for these methods is SOP 81-1, paragraphs 21 to 91, and Chapters 2 and 10 of the Guide.

2.403 **Percentage-of-Completion Method.** The most widely used method of accounting for contracts is the percentage-of-completion method. According to paragraph 2.05 of the Guide, this method is preferable when estimates are reasonably dependable and all of the following conditions exist:

- Contracts executed by the parties normally include provisions that clearly specify the enforceable rights regarding goods or services to be provided and received by the parties, the consideration to be exchanged, and the manner and terms of settlement.
- The buyer can be expected to satisfy his obligations under the contract.
- The contractor can be expected to perform his contractual obligations.

2.404 **Computing the Percentage of Completion**. The percentage-of-completion method recognizes revenue and estimated profit on a contract in proportion to the extent of progress on the contract.

2.405 Generally, contractors must account for each contract separately, accumulating separate revenue and direct and indirect cost information on a contract-by-contract basis. Occasionally, circumstances may indicate a need to combine similar contracts. For example, contractors may combine in a joint venture or have a series of contracts that may be best presented as combined. In order to combine construction-type contracts, the following criteria must be met, as detailed in paragraphs 35 to 42 of SOP 81-1.

1. The contracts are negotiated as a package in the same economic environment with an overall profit margin objective. Contracts not negotiated at the same time are considered a package in the same economic environment only if the time period between the commitments of the parties and the individual contracts is reasonably short.
2. The contracts are in essence an agreement to do a single project.
3. Contracts that require closely interrelated construction activities with substantial common costs that cannot be separately identified with, or reasonably allocated to, the elements, phases, or units of output.
4. Contracts performed concurrently or in a continuous sequence under the same project management at the same location or at different locations in the same general vicinity.
5. Contracts that constitute in substance an agreement with a single customer.

2.406 In order to combine production-type contracts or segments of such contracts that do not meet the above criteria, the following criteria must be met:

1. The contracts are with one or more customers for the production of substantially identical units of a basic item produced concurrently or sequentially.
2. Revenue on a contract is recognized on the units-of-delivery basis of applying the percentage-of-completion method.

2.407 There are also other circumstances where it is not appropriate to separate revenues and costs on a contract-by-contract basis. Although each time and materials work order is considered a separate contract, these projects, which are based on direct labor hours plus costs of other materials, are typically combined.

2.408 One of the most important components of the percentage-of-completion method is the measurement of the progress of the job.

2.409 In order to measure progress towards completion, input or output measures can be used. The Guide defines input measures in terms of efforts devoted to a contract, including methods based on costs and on efforts expended, whereas output measures are based on results achieved such as units produced, units delivered, contract milestones, and value added. Although using input and output measures are both allowed by the Guide, output measures are in general better gauges of progress. Frequently output measures cannot be reasonably determined and, as a result, input measures are used. Input measures, which are typically based on an effort-expended basis, have their foundation in the idea that profits on contracts originate from the contractor's efforts in all phases of the project, which might not necessarily be true.

2.410 Cost-to-Cost Method. An example of the use of an input measure is the cost-to-cost method which applies the ratio of actual costs to date and total estimated costs in determining the estimated contract profit. Actual costs to date include all materials used on a contract. The costs of materials not yet used on a specific contract are generally segregated in an inventory account and to the specific contract when used. Earned profit is the ratio of costs to date and estimated total costs multiplied by the estimated profit on the contract. For example, assume the following facts:

Contract price:	$1,000,000
Total estimated contract costs:	$ 500,000
Costs to date:	$ 200,000

2.411 The estimated profit on the contract is $500,000 (1,000,000 less 500,000). To calculate earned profit, the 2/5 ratio of costs to date and total costs must be multiplied by estimated profit of $500,000. In this case, the earned profit is $200,000. The amount of earned profit recognized in previous financial statements must also be taken into effect. Profit is not based on the amount billed on a contract as in classic accrual accounting but on the amount of the contract profit earned based on estimates. Once again, the variables used in this calculation are based on **input** measures, (or in this example, the costs **put into** the project) not on **output** measures.

2.412 When selecting a basis for measuring progress, weight should be given to all elements of a contractor's work including:

- design of the project,
- obtaining the necessary labor, materials, supplies, and equipment and mobilizing them at the construction site,
- managing the resources to complete the project, and
- demobilizing the resources from the construction site.

2.413 It is important to note that recorded profit and earned profit are analyzed on a contract-by-contract basis. The asset, "costs and profits in excess of billings on uncompleted contracts," and the liability, "billings in excess of costs and profits on uncompleted contracts," are not netted; rather, they are shown separately on the balance sheet.

2.414 It is also important to note that all contract-related cost accruals must be made prior to calculating the percentage-of-completion, earned profit, and recorded profit. Accumulation of contract costs is discussed more thoroughly in section 2.500.

2.415 The estimated total costs of a contract significantly influence the profit reported in the financial statements. In evaluating the reasonableness of estimates, accountants should consider their history with the client, the original bid estimates for the contract, the differences between the contract amount awarded and the next lowest bidder, reasons for any large differences, and management's explanation for profit fluctuations differing from expected amounts. See section 2.117 which identifies additional considerations for evaluating contract risk.

2.416 As a contract progresses, weather delays, unanticipated expenses such as unexpected site conditions, and increased efficiency affect contract costs. These changes usually result in both unapproved and approved change orders, which affect contract costs and estimates. These changes should be considered in the contract estimates.

2.417 Adjustments to Contracts. Adjustments to contract estimates are normal and recurring in the construction industry. APB Opinion No. 20, *Accounting Changes*, paragraph 31 states, "the effect of a change in accounting estimate should be accounted for (a) in the period of the change if the change affects that period only or (b) the period of change and future periods if the change affects both." SOP 81-1, paragraphs 83 and 84, more specifically recommends the use of the cumulative catch-up method, which accounts for the change in estimate in the period of the change. By applying this method, the current-period balance sheet and all future balance sheets appear as if the adjustment had been made to the original contract estimate. If the change in estimate is material, financial statement disclosure of the significant revisions is recommended.

2.418 In contrast, errors result from mathematical mistakes, mistakes in the application of accounting principles, or oversight or misuse of facts that existed at the time the financial statements were prepared. If there were a material error in the estimated costs and profits of the contract reported in a previous period, a prior period adjustment would likely be required. When there are material errors and comparative financial statements are presented, a restatement of the prior year's financial statements is needed. If single-year financial statements are presented, the error correction would be presented as an adjustment to beginning retained earnings.

2.419 Accounting for Contracts with Estimated Losses. Estimated losses on contracts are recognized in their entirety in the period in which the loss is determined. The entire estimated loss on a contract must be recorded, regardless of the stage of contract completion. A liability is recorded as the difference between the recorded profit and zero in the same manner as other overbillings or underbillings. A separate liability, "estimated loss on uncompleted contracts" is recorded for the entire estimated loss.

2.420 If information in later periods indicates adjustments are necessary to contract estimates including costs and income, those adjustments are made in the period in which the revisions are determined.

2.421 Completed Contract Method. The second method for recognizing revenues on construction contracts is the completed contract method. This method should only be used (1) when it does not vary materially from the percentage-of-completion method, (2) if reasonably dependable estimates of costs, etc. cannot be made, or (3) if there are specific hazards (e.g., contracts exposed to condemnation, etc.) that cause estimating to be undependable. The completed contract method is sometimes used by contractors that primarily have short-term contracts.

2.422 When the completed contract method is used, all revenues, costs, and profits on a contract are deferred until the contract is completed. While the contract is still in process, an asset or liability is recorded for the difference between the costs incurred on the contract and the billings. The asset is referred to as "costs in excess of billings on uncompleted contracts." The liability is referred to as "billings in excess of costs on uncompleted contract." Once a contract is substantially complete, all of the revenue, costs, and profits on the contract are recognized. Determining whether a contract is substantially complete is a matter of judgment. Generally, a contract is considered substantially complete when the remaining costs, as well as the potential risks on a contract, are insignificant. Regardless of the criteria used for determining "substantial completion," they should be consistently applied. Generally accepted accounting principles require disclosure of a contractor's criteria for determining substantial completion when the completed contract method is used, for example, whether substantial completion is based on product delivery, customer acceptance, departure from the site, or compliance with performance specifications.

2.423 Consistent with the percentage-of-completion method, estimated losses on contracts accounted for under the completed contract method are recognized in their entirety in the period in which the loss is determined. Again, a separate liability, "estimated loss on uncompleted contracts" is recorded for the entire anticipated loss. However, because of their nature, contractors who use the completed contract method of accounting for construction contracts may not always be able to develop reliable estimates of total costs. The auditor should be especially wary of any contracts in which little or no estimated profit is projected. When this occurs, the auditor should compare original bid documents to current total cost projections, determine the status of any pending change orders, and consult with project managers, engineers, estimators, as well as potentially, outside specialists, if necessary, before forming an opinion as to the adequacy of estimated total contract costs and the need to record potential losses.

2.500 CONTRACT COST ACCUMULATION METHOD

2.501 Generally, contract costs must be identified and accumulated on a contract-by-contract basis. The method for cost accumulation on contracts is described in SOP 81-1, paragraph 69, as follows:

> Contract costs are accumulated in the same manner as inventory costs and are charged to operations as the related revenue from contracts is recognized. Contract costs generally include all direct costs, such as materials, direct labor, and subcontracts, and indirect costs identifiable with or allocable to the contracts.
>
> It is important to be able to identify direct and indirect contract costs of contracts so that proper costing of projects for bidding, revenue recognition, and analysis purposes can occur.

Direct Costs

2.502 All direct costs clearly identifiable to a contract must be allocated to the contract. Direct costs include materials, direct labor, subcontract costs, and other miscellaneous costs, such as for payment and performance bonds, direct automobile and travel, equipment rentals, and permits. A question sometimes arises as to whether the cost of materials furnished directly by the project owner should be included in the direct costs. This circumstance generally occurs when the owner has more leverage with suppliers to obtain the materials at a favorable price or within a shorter time frame or has an exemption from state and local sales taxes. Generally, if a contractor has agreed to accept the risks associated with owner-provided materials (e.g. relating to the quality of the material, timely receipt of the material, etc.) and includes these factors in determining his/her fee, the costs should be included as part of the contract's direct costs. This is especially true if the contractor is responsible for determining the design, quantity, and or specifications of materials provided directly by or purchased as an agent for the project owner. Basically, costs for which the contractor is at risk are to be included in contract costs.

2.503 Material costs include items used on contracts that are routinely carried in inventory as well as items specifically purchased for a contract.

2.504 Direct labor includes supervisors who work in the field and laborers. Daily timesheets should be kept for these employees. Other employees, such as project managers, may charge their time to jobs, and if so, a portion of their salaries should be included with direct labor costs.

2.505 Subcontract costs are usually easily identifiable since job-specific contracts normally exist between the contractor and subcontractor. However, it is not uncommon for subcontractors to work on multiple jobs for a particular contractor.

Indirect Costs

2.506 According to SOP 81-1, paragraph 72, indirect costs allocable to contracts include the costs of indirect labor, contract supervision, tools and equipment, supplies, quality control and inspection, insurance, repairs and maintenance, depreciation and amortization, and, in some circumstances, support costs, such as central preparation and processing of payrolls.

2.507 Indirect costs are those not clearly related to production, either directly or by an allocation based on their discernible future benefits, such as office rent.

2.508 Major categories of indirect costs should be disclosed in the significant accounting policies note to the financial statements. Indirect costs need to be identified and meaningful allocation base determined.

2.509 Indirect labor-related costs, such as payroll taxes, health insurance, worker's compensation, and general liability insurance, should be allocated to contracts. Other indirect costs frequently allocated to contracts include depreciation and repairs of equipment and small tools.

2.510 The allocation base for indirect costs should be consistent as well as meaningful so that reasonable allocations to contracts are achieved. Common allocation bases include direct labor dollars, direct labor hours, units produced and direct material costs. An overhead rate is determined by dividing total indirect costs by the allocation base. The overhead rate will then be expressed as a percentage of the allocation base. For example, if the allocation base is direct labor hours per contract, the direct labor hours on contract A would be divided by total contractor direct labor hours. This ratio would be applied to total indirect costs. The indirect costs should be added to the costs of contract A. Determining an overhead rate is helpful for applying overhead to cost accumulation records, estimated costs to complete on contracts, and bids. Accountants as well as contractors should review this overhead rate periodically. Actual overhead rates as a percentage of the allocation base should be compared to amounts in use. Significant fluctuations may require contract costs adjustments and adjustments to estimated total costs on contracts.

Selling, General, and Administrative Expenses

2.511 Costs not clearly related to production directly or indirectly should be expensed in the period in which they are incurred. However, according to ARB No. 45, *Long-Term Construction Type Contracts*, paragraph 10, under the completed contract method, it may be appropriate to capitalize such expenses to achieve better matching of revenues and costs.

Precontract Costs

2.512 Costs incurred in anticipation of obtaining a contract that have no future benefits unless the contract is procured should be deferred only if cost recovery is probable. These deferred costs should be separately classified in the balance sheet and either transferred to contract costs when the contract is awarded or expensed as a period cost when recovery is no longer probable. If precontract costs have been expensed as a period cost, they should not be reclassified as contract costs.

2.600 ACCOUNTING FOR CLAIMS AND CHANGE ORDERS

Claims

2.601 Claims represent amounts in excess of the original contract price that a contractor seeks to collect from customers. Claims may result from unapproved or disputed change orders, delays caused by the customer, errors in plan specifications and designs, and contract termination. Other claims may result from other unanticipated costs incurred by the contractor that are not part of the existing contract.

2.602 In order to record revenues associated with a claim, the contractor must be able to demonstrate that (a) the claim will result in contract revenue in excess of the original contract and (b) the amount can be reasonably estimated. The criteria that must be met in order to record a claim in excess of the original contract price are as follows (SOP 81-1, paragraph 65):

a. The contract or other evidence provides a legal basis for the claim; or a legal opinion has been obtained, stating that under the circumstances there is a reasonable basis to support the claim.

b. Additional costs are caused by circumstances that were unforeseen at the contract date and are not the result of deficiencies in the contractor's performance.

c. Costs associated with the claim are identifiable or otherwise determinable and are reasonable in view of the work performed.

d. The evidence supporting the claim is objective and verifiable, not based on management's "feel" for the situation or on unsupported representations.

2.603 If the above requirements are met, revenue from a claim should be recorded only to the extent of any related costs incurred. In other words, profit related to a claim would not be recognized until revenue is collected. If material, the amount of such recorded claims should be disclosed in the notes to financial statements. Costs related to claims should be expensed as contract costs as incurred.

Change Orders

2.604 Modifications to an original contract are referred to as "change orders." Frequently, work on change orders is performed before obtaining written approval, which often results in disputes over whether the work was properly authorized and its pricing. As a result, auditors should review material unapproved contract change orders and determine that revenues and costs are properly recorded based on the probability of recovery.

2.605 If it is probable that the costs will be recovered through a change order, the costs should be deferred until the change order is approved, otherwise the costs should be expensed as incurred. If it is probable that the pricing of the change order will exceed the related costs and the amounts can be reasonably estimated, the total contract price and estimated profit on the contract should be adjusted.

2.606 If it is not probable that costs of a change order will be recovered, they should be expensed and the profit estimates of the contract revised. If a change order is in dispute, it should be evaluated as a claim.

2.700 ENVIRONMENTAL MATTERS

2.701 The U.S. Environmental Protection Agency (EPA) has broad powers to compel entities to clean up contaminated sites or, if they refuse, to perform the clean-up itself and seek reimbursement. In general, the responsibility to clean up a contaminated site rests with any party that ever:

- Owned or operated a contaminated site, or
- Generated or transported hazardous materials to a site.

2.702 This definition of "potentially responsible party" (PRP) is far-reaching and may have a significant impact on many contractors. Construction contractors, by the nature of their business, are constantly exposed to potential environmental liabilities. The physical act of construction may cause a contractor to purchase, store, transport, and generate materials that can result in an environmental liability.

2.703 For the construction industry, which is already plagued with overcapacity, fierce competition, and declining margins, a construction contractor's ability to respond to environmental challenges in a cost-efficient manner may determine its viability.

2.704 Under the current law,[1] the liability to remediate hazardous substances is strict. That is, the liability is imposed without regard to the liable party's fault. A contractor may unknowingly or accidentally contaminate a site, but that is irrelevant. As long as it meets the definition of a potentially responsible party, it will be held liable for cleaning up the site.

2.705 Examples of actions by construction contractors that could create such liabilities include:

- Excavating or storing materials in such a way as to allow them to be washed into a river, stream, or lake.
- Spilling fuel oil or gasoline used to power portable generators or equipment.
- Storing waste materials in a way that allows air, water or soil contamination.
- Disposing of construction wastes in an unauthorized location, or using improper disposal techniques (e.g., putting hazardous wastes in a municipal landfill).

[1] As we go to press, the federal laws that deal most directly with a company's liability to remediate contaminated sites are being rewritten. As with any legislation, it is impossible to predict the content of the final law.

- Creating environmental problems by, for example, removing lead paint or asbestos in such a way as to allow them to pollute the air or water.
- Spilling construction materials into a sewer.

Existing Accounting Guidance

2.706 Illustration No. 2-1 summarizes the accounting guidance related to environmental remediation liabilities. The primary relevant authoritative literature is SFAS No. 5, *Accounting for Contingencies.*

Illustration No. 2-1
Environmental Remediation Liabilities
Summary of Accounting Guidance

Pronouncement	Contents
SFAS No. 5, *Accounting for Contingencies*	Describes recognition criteria and disclosures for contingent liabilities.
FIN No. 14, *Reasonable Estimation of the Amount of a Loss*	Clarifies the recognition for a contingent loss when only a range of loss can be estimated.
FIN No. 39, *Offsetting of Amounts Related to Certain Contracts*	Establishes criteria for offsetting assets and liabilities in the balance sheet.
EITF Issue 89-13, *Accounting for the Cost of Asbestos Removal*	Describes circumstances in which asbestos removal costs should be capitalized or charged to expense. Consensus reached that asbestos removal costs are not extraordinary items.
EITF Issue 90-8, *Capitalization of Costs to Treat Environmental Contamination*	Describes criteria for when environmental remediation costs can be capitalized. Includes several examples of how the criteria would be applied.
EITF Issue 93-5, *Accounting for Environmental Liabilities*	Discusses measurement issues relating to environmental remediation liabilities: when to include recoveries in the measurement, and when to discount the liability.
SEC Staff Accounting Bulletin No. 92, *Accounting and Disclosure Relating to Loss Contingencies*	Applicable to public companies, but non-public companies may find the guidance useful. Addresses a number of recognition, measurement, and disclosure issues relating to environmental clean up liabilities.
Exposure Draft of a Proposed Statement of Position, *Environmental Remediation Liabilities*	A proposed SOP that: discusses key provisions of environmental legislation, provides guidance on the recognition and measurement of environmental remediation liabilities, establishes disclosure requirements, and provides auditguidance.

2.707 Generally, environmental remediation liabilities meet the definition of a contingency as described in SFAS No. 5. The Statement establishes recognition criteria for contingencies, which rely on four key concepts:

- The loss has already occurred,
- The loss impairs an asset, creates or increases a liability, or both
- One or more future events will confirm the loss
- The amount of the loss can be estimated

2.708 These key concepts establish two criteria, both of which must be met for a contingent loss to be accrued.

- The loss is probable
- The amount of the loss can be reasonably estimated

2.709 If only one of the criteria in section 2.708 is met, or if exposure to loss is in excess of the amount accrued, then disclosure of the contingency is required as long as there is at least a reasonable possibility that a loss has occurred. The disclosure should indicate the nature of the contingency and give an estimate of the possible loss (or range of loss), or state that such an estimate can not be made.

2.710 Interpretation 14 clarifies the second SFAS No. 5 criteria. If an entity can reasonably estimate a range of loss, then it should accrue the minimum amount in the range, unless one amount within the range appears to be a better estimate than any other amount in the range, in which case that amount should be used.

Problems Unique to Environmental Remediation Liabilities

2.711 ***Recognition.*** For an environmental remediation liability to be recognized it must be probable a loss has been incurred and the amount of the loss must be reasonably estimable. In practice, determining the probability of loss is relatively straightforward. A loss is considered probable if:

- Litigation, a claim, or an assessment has been asserted or is probable of assertion, and
- The contractor is associated with the site, that is, the contractor in fact arranged for disposal of hazardous substances found at a site or transported hazardous substances to the site, or is the current or previous owner or operator of the site.

2.712 Of the two recognition criteria, it is frequently more difficult to reasonably estimate an environmental remediation liability. The reasons for this include the following:

- The extent and types of hazardous substances at a site may not be known, particularly at the early stages of the process.
- There may be a wide range of technologies that can be used for remediation.
- The standards of what constitutes acceptable remediation can change.

- Other PRPs may be involved in a site and responsible for a portion of the clean-up costs. Particularly at the early phases of the process, the number and financial condition of the other PRPs, as well as the extent of their responsibility for the remediation may be unknown or subject to negotiation.

2.713 Entities may inappropriately delay the recognition of an environmental remediation liability until all the difficulties relating to its estimate have been resolved. This is inappropriate because Interpretation No. 14 requires recognition of a contingent liability if a range of loss can be estimated.

2.714 An estimate of the range of an environmental remediation liability typically is derived by combining estimates of various components of the liability (such as the costs of performing particular tasks). For some of those component ranges, there may be amounts that appear to be better estimates than any other amount within the range. For other component ranges, there may be no such best estimates. Accordingly, the overall liability that is recorded may be based on a composite of ranges of costs for some components of the liability and best estimates within ranges of costs of other components.

2.715 For example, one of the first tasks to be performed is a remedial investigation/feasibility study (RI/FS) of the contaminated site. Until that study is completed, it is typically impossible to know the nature and extent of the contamination and how to clean it up. If the RI/FS has not yet been completed, but a contractor knows it will pay for the study, the cost of the study is a surrogate for the minimum end of the range of loss. If the contractor can reasonably estimate that cost, the costs meet the SFAS No. 5 criteria and should be accrued. As more information becomes available about the site, other components of the total remediation effort should be accrued.

2.716 Even in situations in which the entity has not determined the specific strategy for remediation, estimates of the costs associated with various strategies may be reasonably estimable. As described in Securities and Exchange Commission Staff Accounting Bulletin (SAB) No. 92. "While the range of costs associated with the alternatives may be broad, the minimum clean-up cost is unlikely to be zero." In other words, the nonrecognition of a liability would be inappropriate.

2.717 The proposed SOP, *Environmental Remediation Liabilities*, provides benchmarks for evaluating the probability that a loss has been incurred and the extent to which any loss is reasonably estimable. In general, the recognition of an environmental remediation liability should not be delayed beyond the completion of the feasibility study, even if uncertainties remain.

2.718 ***Measurement***. The environmental remediation process has certain unique features, including the following:

- *A Long Time Frame*. The remediation process, from the discovery of the contamination to its analysis and eventual clean up, can take a long time, often ten years or more. During that time, remediation technologies may change. The measurement of long-term liabilities may require the consideration of discounting and inflation.
- *The Involvement of Other PRPs*. Remediation efforts frequently involve other PRPs who assume a proportionate share of the liability. Each PRP is jointly and severally liable for the remediation, which means they can be held liable for 100% of the costs. In measuring an individual PRP's liability, questions arise as to whether the measurement should be based on 100% of the liability or only the PRP's proportionate share.

- *Potential Recoveries.* Contractors who participate in the remediation process may seek reimbursement for a portion of their costs from their insurance carriers or the nonparticipating PRPs. Questions arise as to when these recoveries should be recognized and whether they can offset the related liabilities.

2.719 The characteristics of the remediation process identified in section 2.718 give rise to certain accounting issues related to the measurement of the remediation liability. The proposed SOP offers guidance on these issues, which is summarized in Illustration No. 2-2.

2.720 ***Disclosure.*** The required disclosures related to environmental remediation liabilities include the following:

- *Accounting Policies.* APB Opinion 22, *Disclosure of Accounting Policies*, requires entities to disclose accounting principles that "materially affect the determination of financial position or results of operation." The proposed SOP encourages but does not require entities to disclose the event, situation, or set of circumstances that generally triggers recognition of remediation liabilities and the entity's policy for recognition of recoveries.
- *Contingencies.* SFAS No. 5 requires certain disclosures related to contingent liabilities that are at least reasonably likely. See 2.709.
- *Discounting.* If the effect of discounting is material, EITF 93-5 requires the financial statements to disclose the undiscounted amounts of the liability and any related recovery, and the discount rate used.
- *Risks and Uncertainties.* The disclosure requirements of SOP 94-6, *Disclosure of Certain Significant Risks and Uncertainties*, also apply to environmental remediation liabilities. Among other items, the SOP requires the disclosure of information related to certain significant estimates.

Illustration No. 2-2
Environmental Remediation Liabilities
Measurement Issues and Related Guidance

Issue	Key Questions	Proposed SOP Guidance	Related Guidance
Costs to be included	What costs should be included in the measurement of an environmental remediation liability?	- Incremental direct costs of the remediation effort - Costs of employees who devote time directly to the remediation effort	N/A
Effects of future events	Should the measurement consider the effects of future events or developments, e.g. changes in technology?	- No. The measurement should be based on current technology and laws.	SAB No. 92
Discounting	Should future cash flows for environmental clean up costs be discounted?	- Discounting is allowed if the amount and timing of payments are fixed or reliably determinable.	EITF No. 93-5 SAB No. 92
	What is an appropriate discount rate?	- Discount rate should not exceed the interest rate on monetary assets that are essentially risk free and have maturities comparable to the environmental liability.	
Other PRPs	Should the liability be measured based on the total joint and several liability or the entities allocable share?	- Allocable share. The measurement of the liability includes: - The entity's allocable share of the liability, plus - Their share of amounts related to the site that will not be paid by other PRPs or the government.	SAB No. 92
Recoveries	How should recoveries be evaluated?	- Recoveries should be evaluated independently of liability. Recognize only when collection is probable.	EITF 93-5
	Can recoveries be used to offset the liabilities?	- Offsetting is generally inappropriate	SAB No. 92

2.721 The proposed SOP encourages but does not require additional specific disclosures that go beyond Opinion 22, SFAS No. 5, EITF 93-5, and SOP 94-6.

Examples

2.722 **Loss is Probable and Amount Can be Reasonably Estimated.** During March 19X4, Company A's work force was excavating for the foundation of an office tower to be built along the banks of a river. While removing soil from the site, a bulldozer operator employed by the company accidentally cut through a petroleum pipeline passing through the site, and oil spilled into the marshlands along the shore of the river. The pipeline's automatic shutoff valves engaged within five minutes, but not before 40,000 gallons of oil leaked into the river. The U.S. Coast Guard hired a contractor on an emergency basis to clean up the spill. Teams from the EPA and state department of natural resources were called to the scene and to oversee the cleanup. By the end of 19X4 (balance-sheet date) the company expects to be able to estimate the potential clean up costs and penalties it will incur. The company plans to file a claim for the loss with its comprehensive general liability insurance carrier.

2.723 In this situation, the company has incurred a probable loss. The fact that the spill was caused by an "accident" is irrelevant. Even though the final costs for cleanup and reimbursement of the government agencies may not be finalized until 19X5 or later, a liability should be recognized since the amount can be reasonably estimated and the loss is probable. If a particular amount within the range of loss cannot be determined to be the best estimate of the loss, the minimum amount in the range should be accrued. Any potential recoveries from the insurance carrier should be evaluated separately and recognized only when recovery is probable.

2.724 The financial statements should describe the nature of the uncertainties relating to the loss and include an indication that it is at least reasonably possible that a change in the estimate will occur in the near term and that the effect of the change could be material to the financial statements.

2.725 **Loss is Probable, Amount Cannot Be Reasonably Estimated**. In November 19X4, Contractor A was notified by the EPA that it had been named as a PRP in connection with the cleanup of hazardous sites in a landfill in which the contractor had disposed of concrete and other construction wastes two years earlier. At the balance sheet date.

- The identification of other PRPs is not complete
- The willingness to participate and financial resources of identified PRPs have not been determined.
- The company is clearly associated with the site and did dispose of the waste

2.726 The EPA has asserted that the company is responsible for cleaning up a contaminated site, and arranged for the disposal of hazardous substances found at the site. Therefore, it is probable that the company has sustained a loss. However, at this early stage of the process it is typically not possible to reasonably estimate the amount of this loss because of too many unknown factors. To the extent that the company is able to reasonably estimate certain components of the total loss (for example, the cost to conduct an internal investigation of the disposal records) those components would be a surrogate for the minimum end of the range of loss and should be accrued.

2.727 The financial statements should disclose the nature of the contingency and state that an estimate of the loss cannot be made. The proposed SOP encourages but does not require disclosure of the estimated time frame for resolution of the uncertainty as to the amount of the loss.

2.728 A statement that "management believes that the outcome of these uncertainties should not have a material adverse effect on the financial condition, cash flows, or operating results of the enterprise" is not a substitute for the disclosures required by SFAS No. 5. Also, any such statements should be supportable. In the situation described above, management cannot estimate the maximum end of the range of possible outcomes, so it would be difficult to support an assertion that the outcome would not have a material adverse effect.

Auditing

2.729 **Planning**. When planning an audit of a construction contractor, the auditor should have an understanding of the accounting and disclosure requirements for environmental remediation liabilities. He or she should also obtain an understanding of the nature of the contractor's business, organization, and operating characteristics and how certain aspects of the business may expose the contractor to environmental liabilities.

2.730 Knowledge about such matters ordinarily is obtained through experience with the contractor, the construction industry, and inquiry of entity personnel. Inquiries about environmental remediation liabilities might be directed to accounting, finance, operations, environmental, compliance, or legal personnel. External sources of information may include construction industry publications, financial statements, and publicly available information from other construction contractors.

2.731 **Auditing the Estimated Liability**. Management is responsible for developing appropriate estimates of environmental remediation liabilities. The auditor's responsibility is to evaluate the reasonableness of those estimates in forming an opinion on the financial statements taken as a whole. When auditing environmental remediation liabilities, auditors will typically be most concerned with the completeness, valuation, presentation and disclosure assertions.

2.732 Most construction contractors have little, if any, experience in estimating environmental remediation liabilities. For that reason, the combined inherent and control risk assessments for a contractor's environmental remediation liability typically will be high. That is, the auditor will take a primarily substantive approach for gathering evidence to support the assertions.

2.733 SAS No. 57, *Auditing Accounting Estimates,* provides guidance on obtaining and evaluating audit evidence to support assertions based on significant estimates. When evaluating the reasonableness of a contractor's estimate of environmental remediation liabilities, the auditor should first understand how management developed the estimate. Based on that understanding, the auditor should use one or a combination of the following approaches to evaluate the estimate:

- *Develop an independent expectation of the estimate to corroborate the reasonableness of management's estimate*. By itself, this may be a difficult approach because of the complexity involved in developing estimates of environmental liabilities, including the possible need to use the work of a specialist. This approach may be used in combination with other approaches.

- *Review and test the process used by management to develop the estimate.* Because of the difficulty in developing an independent estimate, this will usually be the most efficient audit approach. It may be supplemented with other approaches.

- Review subsequent events or transactions occurring prior to the completion of fieldwork. This approach, taken alone, normally will not be effective because remediation costs are expended over a long period of time, usually well beyond the completion of fieldwork. However, subsequent events may corroborate estimates made of individual components of the total liability. See 2.714 and 2.715.

2.734 Auditors should review the minutes of board of directors' meetings, regulatory reports, and other information related to environmental matters. Inquiry of both the entity's legal counsel and management responsible for environmental matters will provide the auditor useful information. Auditors should consider asking management whether the entity or any of its subsidiaries has been designated as a PRP or otherwise has a high risk exposure to environmental liabilities.

2.735 Often, management will engage a specialist to help develop an estimate of an environmental remediation liability. Such specialists include: remediation technologies specialists, responsibility allocation specialists, environmental engineers, and environmental attorneys. These specialists may help:

- Identify situations for which remediation is required.

- Design or recommend a remedial action plan for the contractor.

- Gather and analyze data on which to base the estimates of remediation costs.

- Provide information to management that will enable management to estimate the contractor's environmental remediation liability and develop the related financial statement disclosures.

2.736 Auditors who use the work of a specialist to evaluate environmental remediation liabilities should comply with the guidance contained in SAS No. 73, *Using the Work of a Specialist.*

2.737 Areas of Audit Concern

Auditors should be alert for the following:

- Inappropriate delays in recognizing a liability. Contractors may inappropriately delay an accrual of an environmental loss until sufficient information is available to reasonably estimate a single amount. As discussed in sections 2.714-2.716, an environmental remediation liability is normally accrued in stages, as a continium of events happen.
- Inadvertent and inappropriate offsetting of liabilities with potential recoveries. When evaluating a contractor's exposure to environmental liabilities, management may inappropriately net possible recoveries with probable losses. For example, a contractor may have a known, reasonably estimated liability of $1 million. The contractor may intend to seek recovery from their insurance carrier and other, non-participating PRPs. If the contractor collects these recoveries, the net out-of-pocket would be minimal. In this situation it would be incorrect for management to assert that its probable loss is immaterial. As described in Illustration No. 2-2, potential recoveries must be evaluated independently of the related liabilities (a two-event test). Recoveries should be recognized only if their collection is probable.
- Inadequate disclosure. As described in section 2.628, statements to the effect that contingent liabilities will not be material are not a substitute for the disclosures required by SFAS No. 5. Also, any such statements should be supported.

2.800 MEMBERSHIP ORGANIZATIONS AND PUBLICATIONS

2.801 Membership Organizations

The following membership organizations can provide additional information about construction contractors:

The Construction Financial Management Association (CFMA) is the only not-for profit organization dedicated to serving the financial professional in the construction industry. The CFMA publishes a bi-monthly newsletter for financial managers in the construction industry. Information regarding the CFMA may be obtained by contacting:

Construction Financial Management Association
Princeton Gateway Corporate Campus
Princeton, New Jersey 08540-1413
Tel (609) 683-5000
FAX (609) 683-4821

The Associated Builders and Contractors, Inc. (ABC), founded in 1950 by seven contractors, has more than 80 chapters across the United States with membership exceeding 15,000 companies. The ABC conducts training and seminars on a wide variety of topics affecting the construction industry. Local chapters publish monthly newsletters regarding issues important to their areas. Additional information may be obtained by contacting:

Associated Builders and Contractors, Inc.
4061 Powder Mill Road, Suite 120
Calverton, Maryland 20705
Tel (301) 595-9711
FAX (301) 595-9718

2.802 Publications

The following publications can provide more information about construction contractors:

CFMA Building Profits
707 State Road, Suite 223
Princeton, New Jersey 08540-1413
Bimonthly news magazine serving the financial manager in the construction industry.

Journal of Construction Accounting & Taxation
Warren Gorham Lamont
210 South Street
Boston, MA 02111
Quarterly publication providing articles and information to internal and external accounting professionals working in, and providing services to, the construction industry.

Engineering News-Record
1221 Avenue of the Americas
New York, New York 10020

Weekly magazine catering to the construction industry. Includes news, regular departments and features useful to all those associated with construction.

Surety Industry

CHAPTER 3

THE SURETY INDUSTRY

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THE SURETY INDUSTRY

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CHAPTER 3

THE SURETY INDUSTRY

3.000 WHAT IS A SURETY?

3.001 This chapter will provide an overview of the surety industry with special emphasis on topics that auditors need to be aware of in order to best serve their construction contractor clients. It is imperative that auditors understand the surety process, including the review and evaluation process used by sureties in determining a contractor's bonding capabilities, since sureties are one of the primary external users of contractors' financial statements. A surety company functions as an integral part of the contractor's business by ensuring the timely completion of construction projects in accordance with the terms of the contractor's agreement with the project owner. Without sureties, numerous contractors would be unable to operate. This chapter yields vital information to auditors who are performing audits of contractors.

3.002 Suretyship is a form of corporate insurance where a surety guarantees that certain commitments of a second party will be fulfilled or indemnification will be made to a third party. Surety companies provide guarantees through the issuance of surety bonds. Although most surety companies are involved in the insurance industry, insurance policies and surety bonds are issued based on different expectations and serve to protect different interested parties.

3.003 An insurance policy is a contract between two parties whereby an insurance company agrees to indemnify a second party against a loss contingency up to a predetermined limit. The amount actually paid for an insurance policy is determined by the insurance company based on its history of insuring the specific risk and the claims history of the insured. Insurance companies seek to make a profit through insuring multiple entities exposed to a common risk. The insurance premiums paid by customers form a pool and if any customer suffers an insured loss it is allowed to draw on this pool up to the coverage limits. Therefore, insurance companies establish premium rates with the expectation of paying claims while still maintaining a solvent pool.

3.004 Unlike an insurance policy, a surety bond is a contract between three parties: (1) a surety company; (2) an owner; and (3) a contractor. Under a surety agreement, the surety guarantees to the owner that the contractor will perform according to the terms of a construction contract. Simply put, suretyship may be thought of as one entity guaranteeing the obligations of a second entity to a third entity. Additionally, a contractor is obligated under a surety bond to reimburse a surety for any loss a surety incurs as a result of guaranteeing a contractor. This right of subrogation by a surety company against the contractor means that surety bonds are issued without the contemplation of incurring losses. A surety bond, therefore, functions more like a credit guarantee issued by a bank than as an insurance policy. Surety companies charge premiums based on the costs associated with providing the financial backing necessary to cover their credit exposure rather than based on claims history as in the insurance industry. The actual premiums charged are based on the type of construction project involved and are usually calculated based on a percentage of the amount of the construction contract. Surety companies operate in an environment in which events beyond their control, such as delays due to weather, may seriously threaten the performance of a bonded contractor. In addition to premiums, surety companies also require sufficient security and or collateral, as well as the personal guarantees of the owners of construction companies for whom bonds have been issued.

3.005 A construction project owner who requires surety bonds from potential bidders on a construction contract receives multiple benefits from the surety bonds. The first and most direct benefit is that owners are guaranteed to receive a finished product at the negotiated contract price. A second and sometimes overlooked benefit is the qualification process used by surety companies to determine the competency of the construction contractors bidding for the opportunity to complete a specific contract. Before a surety company agrees to guarantee the performance of a specific contractor, it will have evaluated the company extensively. The due diligence work required as part of this underwriting process ensures owners that unqualified contractors have been effectively eliminated from the bidding process.

3.100 HISTORY OF SURETY

3.101 Suretyship became a form of business in the United States during the mid-1880's and was formalized as an institution through the passing of the Heard Act in 1894. The Heard Act required surety bonds on all U.S. government-issued contracts. In 1935, the Heard Act was revised by the Miller Act, which ensured that contractors bidding on U.S. government work were qualified to do the job. Further, the Miller Act ensured that those providing labor and materials to construction contractors on U.S. government contracts were paid what they were owed because subcontractors were prohibited from placing liens to ensure payment on federally owned projects. Many states soon followed with their own similar laws for state-funded construction projects.

3.102 Surety companies must be licensed to conduct surety business in all states in which they issue surety bonds. Additionally, surety companies must be listed in the Treasury Department's Federal Register in order to issue surety bonds on U.S. government construction contracts. There is no statutory requirement for the use of surety bonds in the private sector; however, it is routine for private sector owners to require the use of surety bonds.

3.200 TYPES OF BONDS

Bid Bonds

3.201 Bid bonds are used as a prequalification tool by construction project owners. When a surety company issues a bid bond, it states to the owner that it believes the contractor has the ability and resources to complete the project at the bid price. A bid bond also lends assurance to an owner that contractors will file their performance and payment bonds if awarded the contract. If a contractor, after posting a bid bond, is awarded the right to perform but then refuses to sign the contract, it is the surety's responsibility to pay the owner the difference between the winning bid and the next lowest bid. Without this prequalification process the construction industry would be troubled with unrestricted and unprequalified bidding.

Performance Bonds

3.202 A performance bond is a guarantee to an owner that a contractor will complete a project as specified by the terms and conditions of a construction contract. If a contractor deviates from the contract terms, the surety is obligated to reimburse the owner for losses. The surety's obligation to the owner ends upon satisfactory completion of the project. Performance bonds sometimes include a maintenance bond, which guarantees against any faulty workmanship or materials. Maintenance bonds are usually good for one year after construction is complete, but longer coverage can be obtained by paying additional fees. A surety company assumes a high degree of risk when it issues a performance bond. A surety must fully understand each term of a construction contract prior to issuing this type of bond.

Payment Bonds

3.203 If a contractor fails to pay suppliers for materials used on a project or to pay subcontractors who provide labor, the suppliers and subcontractors can place a lien on the property. As a result, surety companies guarantee payment to those who perform services and provide materials for construction projects through the issuance of labor and material payment bonds. Requiring a payment bond from the construction contractor assures the owner that the title to his or her property will be free of any liens from subcontractors or material suppliers upon completion of the project.

Completion Bonds

3.204 In lieu of issuing performance and payment bonds, a surety may issue a completion bond, which guarantees that the contractor will perform and pay for all contracted work. Consequently, a completion bond represents the greatest risk for a surety company because the surety must finance a job as well as find a contractor to complete the work if the original contractor does not fulfill its contractual obligation.

Other Bonds

3.205 To obtain a state or city contractor's license, a permit bond may be required. A permit or license bond guarantees that a contractor will restore public property to its original state after completion of contract work. In this way, the public property of the municipality, state, or city is protected.

3.206 Financial guarantees are another form of bonding. Guarantees of payment of wages and fringe benefits, release of contract payment retentions, and release of liens are all examples of financial guarantee bonds.

3.207 Although these bonds have been discussed from the owner's perspective, it is not uncommon for general contractors to require the same types of bonds from their subcontractors.

3.208 Bond premiums are usually based on the amount of the construction contract and the type of construction involved. When a construction contract amount changes, such as through change orders, the bond premium must also be adjusted. The obligee, or project owner, must realize that contract changes that increase a surety's risk without the surety's consent may cause the obligee to lose its rights under the bond. Additionally, because many general contractors require surety bonds from their subcontractors, general contractors should also communicate any subcontractor change orders with the subcontractor's surety company.

3.300 HOW DOES A SURETY EVALUATE A COMPANY?

3.301 Before a surety issues any type of bond to a construction company, the surety evaluates the company at several different levels. The company's ethics, management personnel, financial management, financial position, and production capabilities are all assessed.

Ethics

3.302 A company's ethics are reviewed by gathering information from owners for whom the contractor has previously worked. A company's suppliers and subcontractors are another source questioned in determining a company's business ethics. In reviewing the resumes of a contractor, its owners, and its key employees, a surety can become aware of the experience and educational background of a company's important decision makers. The job history of project managers, even if the jobs were with different contractors, may be an important indicator of the future profitability of both contracts and the contractor.

3.303 Sureties can also obtain assurance as to a contractor's trustworthiness and business practices from outside professionals. Attorneys, accountants, insurance professionals, and bankers assist contractors in their decision making process; therefore, a surety may contact these individuals to obtain information about the contractor's professional reputation. A surety looks to the contractor's financial statements in order to evaluate the contractor. The accountant should anticipate what the surety will be looking for and analyzing in order to prepare the most useful statements possible. The contractor's attorneys must also be knowledgeable in the construction industry, and must also possess expertise in various areas of law, such as construction contract review and litigation. Without expert support, contractors could enter into contracts without being fully aware of their obligations.

3.304 Insurance professionals are critical in assessing a contractor's risk exposure. A surety may rely on a contractor's insurance company's expertise in protecting the company.

3.305 A contractor's banker must also understand the nature of the construction industry and be able to provide credit if an unanticipated need for cash arises. The liquidity of a contractor not only enhances its bonding potential but is also essential for the continuation of operations during adverse conditions.

3.306 The surety in a sense not only evaluates the contractor when assessing a contractor's character but also looks at the competency of related professionals by reviewing documentation and information provided by those professionals.

Management

3.307 As part of its evaluation process of a contractor, a surety studies the contractor's business continuation plan. This document outlines the plan that would go into effect if a key figure within the organization is incapacitated. In reviewing a contractor's business continuation plan, sureties also review the specific provisions for ownership succession. Continuation plans should include a predetermined method of valuing ownership interests as well as a financing method for the purchase. Surety companies are generally opposed to plans requiring a large reduction in the company's equity. Continuation plans should anticipate various scenarios including the contractor's death or incapacity. A surety will also want to be assured that any potential successor is as experienced and knowledgeable in the construction industry as the predecessor.

3.308 A company's management team is evaluated based on its organizational structure and controls. The function of each management level should be evaluated in its specific role as well as its link to the entire structure of the company. With larger companies, it is difficult for senior management to be aware of the day-to-day activities on a particular job site. Thus, it is of major importance that the personnel at a job site maintain daily communication with the main office. It is also important that the supervisory personnel at a job site are informed of the relevance of the information they provide to the home office. The accounting personnel should review all data provided to them directly from job sites for accuracy so that it enters the job cost system free of errors.

Financial Management

3.309 The financial management staff needs to maintain cost and management information systems that provide accurate information about costs to date and estimated costs of completion for each individual job. This usually requires constant communication between accounting and job supervision personnel. Overstatements and understatements of costs in the job cost system cause the profit on a job to be improperly recorded, leaving the surety unable to rely on the company's financial information.

Financial Position

3.310 A surety must be able to determine from a contractor's cash flow planning that a contractor can continue operations in the event one job has poor cash flow. Sureties generally require audited financial statements, however sureties may accept reviewed or compiled financial statements after reviewing contract revenues, financial strength, and in-house reporting capabilities. In order to determine the financial position of a contractor, sureties are provided with cash flow projections, personal financial statements of shareholders and information about undrawn unsecured lines of credit.

Production Capabilities

3.311 The production capabilities of a contractor are influenced by a contractor's areas of expertise, geographic location and experience. These influences are critical in a contractor's ability to fulfill its contractual obligations. A surety will incur losses if a contractor is unable to complete a bonded job according to its specifications. Each production phase, i.e., design, field construction and completion, is individually evaluated. Looking at a company's performance history will give a surety insight into the production potential of a contractor. Because the decline of business in the construction industry has led some contractors into geographic locations and job markets outside their areas of expertise, sureties are hesitant to bond contractors working in areas in which there is not a past history of success.

3.400 WHAT WILL THE SURETY BE LOOKING FOR?

Financial Statements

3.401 After a surety company evaluates the various organizational elements, it must examine the contractor's financial statements, with a focus on the contractor's profit history. In addition to the measurement and disclosure requirements of generally accepted accounting principles (GAAP), sureties prefer that contractors' financial statements include certain supplementary schedules, such as a summary of construction activity including all completed and uncompleted construction contracts, a schedule of aged construction contract accounts receivable, a schedule detailing the composition of a contractor's backlog of construction work, a schedule detailing unallocated indirect costs, and a schedule of general and administrative expenses.

Revenue Recognition

3.402 It is difficult to match revenues to expenses in the construction industry because of the long-term nature of contracts. There are two acceptable methods of revenue recognition: the completed contract method and the percentage-of-completion method. Under the completed contract method no profit is recognized until the contract is finished. On the other hand, the percentage-of-completion method recognizes profits as the work progresses based on a percentage of the total estimated profit. Contractors may use a variety of different bases for allocating total estimated profit under the percentage-of-completion method. Some of the more common bases are: (1) costs to date to total estimated contract costs; (2) units completed to total units of the project; and (3) quantity of effort expended to the total effort required for the entire contract. No definitive rules exist for selecting the appropriate base for a contract; however the base selected should be the one that best measures the progress of the contract. Further, the base selected for one contract should be used for all similar contracts. Statement of Position (SOP) 81-1, *Accounting for Performance of Construction-Type and Certain Production-Type Contracts,* paragraph 23 recommends the percentage-of-completion method as preferable when estimates are reasonably dependable and all of the following conditions exist:

a. Contracts executed by the parties normally include provisions that clearly specify the enforceable rights regarding goods or services to be provided and received by the parties, the consideration to be exchanged, and the manner and terms of settlement.

b. The buyer can be expected to satisfy his or her obligations under the contract.

c. The contractor can be expected to perform its contractual obligations.

Analytical Procedures

3.403 Analytical procedures performed by a surety include ratio analysis and balance-sheet analysis which encompasses both working capital and net worth analyses. Ratio analysis entails reviewing a contractor's financial statements based on relationships of the account balances. Working capital is the difference between current assets and current liabilities. However, sureties often exclude certain items from this amount, such as prepaid expenses and intangible current assets. Sureties may also increase working capital by including certain long-term assets such as cash surrender value of life insurance and long-term investments in marketable securities. Working capital analysis is used to determine the short-term cash capabilities of a contractor during its operating cycle. An analysis of net worth (the difference between assets and liabilities) gives the surety an indication of the contractor's long-term capabilities in terms of its creditworthiness and ability to sustain losses.

3.404 Questions that should be addressed in balance sheet analysis, as listed by the Construction Financial Management Association in *Financial Management and Accounting for the Construction Industry*[1] pages 14-46 and 14-47, section 14.04 are:

1) Is the contractor making adequate profits to allow the business to grow even though the contractor may take on a money-losing project?
2) Is the contractor maintaining adequate liquidity to finance operations without totally relying on outside sources for that liquidity, i.e., short-term bank credit, and is there enough liquidity to fund a money-losing project without destroying the liquidity base?
3) How is the contractor managing cash, especially that portion of cash generated by overbillings (often referred to as job borrowings)?
4) How is the contractor using assets, including any assets that are in excess of current operating needs?
5) Is the fixed asset base adequate or excessive for current operations and are those fixed assets being properly used to enhance operational profitability?
6) Is the asset base composed of "quality" assets or are there significant assets of a questionable basis, i.e., unsubstantiated project claims?
7) Is debt excessive, especially debt that is fixed in nature without assets earning income to amortize debt retirement?
8) Are debt payments and accrued expenses covered or likely to be covered by the profits being made by the existing work program?
9) Can the equity account support current operations and possibly fund a money-losing project without being eliminated?

3.405 The Construction Financial Management Association recommends focusing on individual assets when completing working capital analysis, including:

1) review of cash and short-term investments to determine if there are speculative investments in these accounts.
2) review of accounts receivable focusing on collectability and closely scrutinizing any intercompany, stockholder, partner, or employee receivables.
3) review of inventory if the amount of the inventory is a significant percentage of the total current asset base.

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4) review of work-in-progress if the amount of work-in-progress is a significant percentage of the total current asset base.

5) review of prepaids if amounts are a significant percentage of the total current asset base.

6) review of joint ventures.

3.406 Other events of concern to a surety are late financial statements, change of accountants, and errors or inadequate disclosures. A surety may perceive that a financial statement was filed late because there was a problem with the accounting records or because there was a disagreement between a CPA and contractor. A change in CPAs is also an indication of disagreements between a contractor and CPA. Any uncertainties on the part of a surety may lead to its refusal to issue a bond, therefore the above matters should be avoided whenever possible.

3.407 Items that are looked upon favorably by a surety are contractors with unsecured lines of credit and bonded subcontractors. An unsecured line of credit indicates that a contractor is creditworthy with immediate access to cash. On the other hand, a contractor that has large amounts of secured financing could leave a surety competing with a bank if business were to go bad. By ensuring that subcontractors are bonded, a contractor reduces its risk and also gives the surety more confidence in its bonding of the contractor.

3.408 A surety's relationship with a construction contractor does not end upon the issuance of a surety bond; nor should it be the starting point of their relationship. Using many of the same evaluation processes surety companies go through in evaluating construction contractors, construction contractors should also apply a screening process in choosing a surety company. A surety company's reputation, understanding of the particular construction trade, and ability to meet the bonding needs of an individual construction contractor are all important considerations in developing a long-term relationship. The relationship should be one of continuous communication — the surety should continually provide management assistance to the contractor and the contractor should freely communicate any changes in its contract terms and conditions. It is in both a surety's and contractor's best interest for a contractor to profitably complete its contracts. Open lines of communication between contractors and sureties is the best way to facilitate long-term mutually beneficial results for all parties.

3.409 Auditors can add value to the services they provide to contractors by tailoring contractor financial statements to meet the needs of the surety. The auditor must be aware of what the surety is looking for in order to provide the most useful information within the financial statements. The auditor can also provide suggestions including those related to statement presentation and analysis. Auditors must be cognizant of who the recipients of financial statements are as well as the users' needs.

Audit Planning

CHAPTER 4

PRE-ENGAGEMENT CONSIDERATIONS AND AUDIT PLANNING

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CHAPTER 4

PRE-ENGAGEMENT CONSIDERATIONS AND AUDIT PLANNING

4.000 INTRODUCTION

4.001 In recent years, accountants who provide auditing services have become increasingly aware of the importance of evaluating their relationships with prospective and continuing clients and the need to perform adequate planning in their audit engagements. This chapter discusses the requirement to perform client acceptance and continuance procedures and to audit construction contractors' financial statements. Also discussed are other pre-engagement considerations.

4.100 CLIENT ACCEPTANCE AND CONTINUANCE

4.101 Although most firms want to expand their client base, this expansion should be carefully monitored to ensure that accepting a prospective client and continuing a relationship with an existing client will not harm the firm's reputation and standing in the community.

4.102 The AICPA Statement on Quality Control Standards (SQCS) No. 1, *System of Quality Control for a CPA Firm*, requires CPA firms to establish a system of quality control. Included in a system of quality control should be policies and procedures for accepting and continuing clients. Specifically, paragraph 7 of SQCS No. 1 (QC 10.07) states:

> Policies and procedures should be established for deciding whether to accept or continue a client in order to minimize the likelihood of association with a client whose management lacks integrity.

4.103 Firms should develop, preferably in writing, quality control policies and procedures for evaluating new and existing client relationships. These policies should specify:

For prospective clients

- The procedures to be followed for evaluating a prospective client, including
  - obtaining and reviewing the prospective client's available financial statements or information.
  - inquiring of third parties, such as the prospective client's attorneys, bankers, etc., about the organization and its management.
  - communicating with the predecessor auditor or accountant.

- — considering circumstances that would require special attention or that present special risks in the engagement.
- — evaluating the firm's independence and ability to serve the prospective client.
- — determining whether accepting the client would violate any applicable regulatory agency requirements or the ethics codes of the AICPA or state CPA society.

- The individuals responsible for evaluating prospective clients and making acceptance decisions, and for approving such decisions.
- How appropriate firm personnel are informed of the policies and procedures for accepting clients.
- The individuals responsible for administering and monitoring compliance with the firm's policies and procedures.

For continuing clients

- The procedures followed for evaluating relationships with continuing clients, such as:
  - — considering whether significant changes have occurred since the last engagement, such as changes in management, legal counsel, financial condition, or scope of the engagement.
  - — considering whether any conditions exist that would have caused the firm to reject the client had they been known at the time of initial acceptance.
- The frequency of such evaluations.
- The individuals responsible for evaluating continuing clients, for deciding whether to continue relationships with existing clients, and for approving such decisions.
- How firm personnel are informed of the firm's continuance policies and procedures.
- The individuals responsible for administering and monitoring compliance with the policies and procedures.

Each firm should design quality control policies and procedures that meet its unique organizational and operating characteristics.

4.104 Examples of situations that may require consultation with the client include:

- Going-concern problems.
- Identification of errors, irregularities and illegal acts, including significant instances of noncompliance with regulations governing federal awards.
- Information that raises doubt about management's integrity.
- Unresolved disagreements among engagement personnel.

4.105 The Client Acceptance and Continuance Form in section 4.501 is designed to help firms evaluate prospective and existing clients. It provides documentation of the evaluation process for new and existing clients, the decision to accept and continue clients, and approval of the decision to accept and continue clients. This Form should be modified as necessary to interface with the firm's quality control policies and procedures for acceptance and continuance of clients.

4.106 For prospective clients, Part I of the Client Acceptance and Continuance Form should be completed by the in-charge and approved by the engagement partner. Part II should be completed by the engagement partner and approved by the partner responsible for approving new clients.

4.107 For existing clients, the in-charge should update and revise the form, as necessary, to evaluate the desirability of continuing the relationship with the client. Multi-year sign-off space is provided to document an annual evaluation and the engagement partner's approval of the continuance (or discontinuance) decision.

> **Practice Tip:**
>
> A CPA firm should question accepting a client that is classified as high risk at a low or discounted fee.

Independence

4.108 A critical factor in deciding to accept a new client or continue a relationship with an existing client is whether the firm is independent of the client. The following sections briefly summarize the AICPA's key independence requirements for auditors, including special independence interpretations and rulings that apply to auditors of construction contractors.

4.109 Auditors must be independent of a client in order to be able to express an opinion on the financial statements. SQCS No. 1 contains a requirement that firms establish quality control policies and procedures that ensure compliance with the professional requirements concerning independence. Specifically, paragraph 7 of this Statement states:

> Policies and procedures should be established to provide the firm with reasonable assurance that persons at all organizational levels maintain independence to the extent required by the rules of conduct of the AICPA. Rule 101 of the rules of conduct (ET section 101) contains examples of instances wherein a firm's independence will be impaired.

4.110 Also, the AICPA's *Code of Professional Conduct* "Objectivity and Independence" (ET section 55), states:

> A member in public practice should be independent in fact and appearance when providing auditing and other attestation services.

4.111 In addition to the basic independence rule found in the *Code of Professional Conduct* are independence interpretations and rulings that address specific situations encountered by accountants. The following are three independence rulings, found in ET Section 191, that apply especially to auditors of small businesses. However, accountants should be familiar with all of the independence rules, interpretations, and rulings.

- Ethics Ruling 101.3, "Accounting Services" (ET 101.05), sets forth criteria for independence when the member is asked to provide manual or automated bookkeeping or data processing services (including systems design and programming assistance and renting computer time) to a client.
- Ethics Ruling 191.1, "Acceptance of a Gift" (ET 191.001-.002), indicates that a member may not accept more than a token gift from a client.
- Ethics Ruling 191.3, "Members as Signer or Cosigner of Checks" (ET 191.005-.006), indicates that a member may not accept responsibility of signing or cosigning checks.
- Ethics Ruling 191.4, "Payroll Preparation Services" (ET 191.007-.008), indicates that a member may not perform payroll preparation services for a client if the member is a signer or cosigner of the checks and the member's bank account is used.

4.112 These independence requirements apply not only to AICPA members, but to their spouses and dependents as well. Independence of a member or a member's firm is generally not impaired solely because the member's spouse or a dependent is employed by the client, as long as the employment position does not allow significant influence over the client's operating, financial, or accounting policies. However, if employment is a position in which the person's activities are audit-sensitive (normally an element of or subject to significant internal accounting controls, such as cashier, internal auditor, or accounting supervisor), the auditor's independence would be impaired.

4.113 In addition to establishing policies and procedures to ensure that firms have adequate procedures to determine that their personnel are independent with respect to their clients, the authors believe it is advisable to also ensure that potential independence impairments have been identified and resolved before each engagement begins. As a result, the Client Acceptance and Continuance Form in section 4.501 requires that this determination be made on each engagement before deciding to accept a new client or continue a relationship with an existing client.

Practice Tip:

All practitioners, and the members of their professional staffs, must be thoroughly familiar with the Code of Professional Conduct, the interpretations of ET section 55 that appear in ET section 101, and the related individual rulings that appear at ET section 191 ("Ethics Rulings on Independence, Integrity, and Objectivity").

4.200 ENGAGEMENT LETTERS

4.201 Adequate engagement planning includes communicating an understanding of the nature of the firm's services, timing of the field work, report deadlines, responsibilities of the client and methods of fee determination and payment. The engagement partner should confirm, at least annually, an understanding of the nature of the engagement and the extent of the reporting responsibilities before beginning field work. Such communication will normally include an appropriate engagement letter and a pre-engagement client conference.

4.202 Currently there are no authoritative pronouncements requiring a written engagement letter for an audit, although most firms regard their completion as good business practice. An engagement letter helps to prevent misunderstandings between the client and the auditor regarding the services to be provided, including the limitations. The engagement letter also sets forth the responsibilities of the client, and in most states it becomes a legally binding contract on both parties. There are other good reasons to obtain an engagement letter, including the following:

- *Reduce the risk of litigation.* Misunderstandings with clients regarding the nature and limitations of the services provided can result in litigation.
- *Avoid misunderstandings by the staff.* The staff performing the work can review the engagement letter to obtain a clear understanding of the services to be provided and the required timing of issuance of the report.

> **Practice Tip:**
>
> Often, entities that have never been audited resist signing a client representation letter. To avoid client resistance at the end of the audit, many firms notify the client in the engagement letter that they will be asked to sign a client representation letter.

4.203 The letter should be prepared by the in-charge or the engagement partner before any significant work takes place on the engagement. The engagement partner should personally present the letter to the client to ensure that a complete understanding has been achieved. The signed copy should be filed with the current engagement's working papers.

> **Practice Tip:**
>
> Be careful when using a proposal or preliminary engagement letter for a client. If the letter describes additional services that are not finally agreed upon, it may be used in litigation as an indication of inadequate performance by you on the engagement. You should always make sure that a final engagement letter is issued in such circumstances.

4.204 Should the nature of an engagement change during its progress, or should the firm be engaged for additional services during the year, a new engagement letter should be prepared. A step-down to a compilation or review engagement, or a special engagement for preparing a forecast, are examples of changes that would require a new engagement letter. Such changes should be approved by the engagement partner, after careful consideration of the reasons justifying the change. For example, the reasons justifying a step-down from an audit to a compilation or review may prevent the firm from reporting on the lower level of service.

4.205 The content of the engagement letter should include the following:

- Addressee

  The letter should be addressed to the board of directors, all partners or the proprietor. The client should be requested to return a copy of the letter indicating approval by the appropriate person.

- Nature of the engagement

  A description of the primary service should be included. Circumstances causing modification of the standard report, subsequent to signing the engagement letter, should be discussed with the client by the engagement partner.

- Additional services

  All additional services such as income tax return preparation or consulting services should be described in the letter.

- Unexpected circumstances

  Client notification, in the event of unforeseen circumstances, should be mentioned.

- Auditor's responsibilities

  The auditor will inform the client of any material errors and all irregularities and illegal acts, unless they are clearly inconsequential, that come to the auditor's attention.

- Client's responsibilities

  Client assistance such as schedules, financial statements and tax return preparation, and other clerical assistance should be included. It often is detailed in a separate attachment to the engagement letter.

- Fee determination and billing methods

  The anticipated fee or fee range may be included. Estimates of fees should be based on conservative, carefully prepared estimates. The expected billing methods and payment periods should be described.

- Signatures

  The engagement partner should sign the letter on behalf of the firm. The client representative responsible for the engagement should sign the letter indicating agreement with the contract.

4.206 Section 4.502 provides an example of an engagement letter appropriate for the audit of a construction contractor.

> **Practice Tip:**
>
> When the engagement letter is prepared, the auditor should be mindful to address the financial statements that will be presented. For instance, if a "statement of revenues and expenses" will be issued, the engagement letter should not refer to a "statement of income."

> **Practice Tip:**
>
> If the basis of accounting used by the client is other than GAAP, the engagement letter, auditor's report, and financial statements should state the basis of accounting followed.

4.300 AUDIT PLANNING

4.301 Professional standards include many general and specific planning requirements. The two basic requirements to plan engagements are —

(1) The third General Standard of rule 201 of the AICPA *Code of Professional Conduct* (ET 201.01) states that a member shall "adequately plan and supervise the performance of professional services."

(2) The first standard of field work, as stated in AICPA Statement on Auditing Standards (SAS) No. 1, section 150, *Generally Accepted Auditing Standards* (AU 150.02), requires that "the work is to be adequately planned and assistants, if any, are to properly supervised."

4.302 SAS No. 22, *Planning and Supervision* (AU 311), provides guidance to the independent auditor performing an audit in accordance with GAAS on the considerations and procedures applicable to planning and supervision, including preparing an audit program and obtaining knowledge of the client's operations. Many other SASs also require consideration of matters during planning such as potential misstatements, continued existence of the entity, accounting estimates, obtaining an understanding of the internal control structure, and preliminary materiality.

4.303 Audit planning for construction contractor engagements is also affected by the following SASs:

1. SAS No. 11, *Using the Work of a Specialist*
2. SAS No. 22, *Planning and Supervision*
3. SAS No. 31, *Evidential Matter*
4. SAS No. 39, *Audit Sampling*
5. SAS No. 41, *Working Papers*

6. SAS No. 47, *Audit Risk and Materiality in Conducting an Audit*
7. SAS No. 48, *The Effects of Computer Processing on the Examination of Financial Statements*
8. SAS No. 53, *The Auditor's Responsibility to Detect and Report Errors and Irregularities*
9. SAS No. 54, *Illegal Acts by Clients*
10. SAS No. 55, *Consideration of the Internal Control Structure in a Financial Statement Audit*
11. SAS No. 56, *Analytical Procedures*
12. SAS No. 57, *Auditing Accounting Estimates*
13. SAS No. 59, *The Auditor's Consideration of an Entity's Ability to Continue as a Going Concern*
14. SAS No. 67, *The Confirmation Process*
15. SAS No. 70, *Reports on the Processing of Transactions by Service Organization*
16. SAS No. 73, *Using the Work of a Specialist*

4.304 The in-charge should be familiar with the requirements of these pronouncements before completing the Audit Planning Memorandum. In addition, the in-charge should be familiar with the auditing guidance in the AICPA Audit and Accounting Guide, *Audits of Construction Contractors*.

4.305 Achieving both engagement quality and profitability requires extensive planning. Engagement planning should begin well before field work begins and continue until the completion of the engagement. The engagement partner should be involved at strategic times during the planning, performance, and completion of an engagement. Early and frequent executive involvement in program design and in related judgment decisions will help develop the in-charge and other staff, will help identify problems early, and will result in a high-quality, profitable engagement.

4.306 Effective planning for audits of construction contractors generally involves the following six basic audit planning activities:

1. Obtain an understanding of the client's internal control structure.
2. Determine the level of overall engagement risk, the risks of potential misstatements, the risk of direct-effect illegal acts, the potential for going-concern problems, and the preliminary materiality limit.
3. Make judgments about the staffing of the engagement and the extent of supervision.
4. Decide on the most cost-beneficial audit approach and the planned reliance on types of tests, based on the risk assessment.
5. Perform analytical procedures sufficient to plan the nature, timing, and extent of auditing procedures.
6. Consider placing reliance upon the work of internal auditors.

Obtain an Understanding of the Internal Control Structure

4.307 SAS No. 55, *Consideration of the Internal Control Structure in a Financial Statement Audit,*[1] requires that auditors obtain an understanding of the client's internal control structure sufficient to plan the audit. Paragraph 16 of SAS No. 55 (AU 319.16) says:

> The auditor should obtain a sufficient understanding of each of the three elements of the entity's internal control structure [the control environment, accounting system, and control procedures] to plan the audit of the financial statements. The understanding should include knowledge about the design of relevant policies, procedures, and records and whether they have been placed in operation by the entity. In planning the audit, such knowledge should be used to:
>
> - Identify types of potential misstatements.
> - Consider factors that affect the risk of material misstatements.
> - Design substantive tests.

Completion of the Internal Control Structure Questionnaire in section 6.200, provides a basis for obtaining an understanding of the client's internal control structure sufficient to plan the audit for those audits performed in accordance with the ABC Approach. For those audits performed in accordance with the System's Walk-Through Approach, the auditor must complete the Contractors' System's Walk-Through Documentation Form in order to obtain the understanding necessary.

Assess Risk

4.308 **Overall Engagement Risk.** Engagement risk for a client has the following primary components:

- Integrity of management
- Use of financial statements
- Auditability of the entity
- Business environment

4.309 Overall engagement risk will subjectively affect the desired level of assurance in the financial statements taken as a whole. Specifically, it will affect the acceptable levels of risk of incorrect acceptance and risk of assessing control too low in the substantive tests of balances and tests of controls sample size determinations. Evaluating overall engagement risk as high or low will result from considering each of these four components. The rationale behind the evaluation should be documented in the Audit Planning Memorandum discussed in section 4.506.

4.310 High overall engagement risk on construction contractor audits can be controlled by using more reliable procedures and by testing more individually significant items and larger samples. Such high risk, however, does not preclude the auditor from performing procedures at an interim date when the internal control structure evaluates as a System A or B for the applicable financial statement items and related assertions.

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[1]As discussed in chapter 1, section 1.401, the AICPA's Auditing Standards Board has released a proposed amendment to SAS No. 55 that would incorporate the definition and description of internal control found in the Committee on Sponsoring Organizations report, *Integrated Control—Integrated Framework,* (the "COSO" Report) into SAS No. 55. It is not expected to result in a significant change in practice.

Integrity of Management

4.311 SAS No. 58, *Reports on Audited Financial Statements,* states, "The financial statements are the responsibility of management." SAS No. 53, *The Auditor's Responsibility to Detect and Report Errors and Irregularities,* states, "The auditor neither assumes that management is dishonest nor assumes unquestioned honesty." SAS No. 53 also states, "Management integrity is important because management can direct subordinates to record transactions or conceal information that can materially misstate financial statements."

4.312 The integrity of management should be evaluated as part of the client acceptance or retention decision on the Client Acceptance and Continuance Form (section 4.501). Approval of the Client Acceptance and Continuance Form by designated partners indicates that the integrity of management is considered adequate and that no circumstances have come to their attention that would require special auditing procedures to detect and report errors, irregularities, or illegal acts.

4.313 Any significant matters related to management's integrity, arising during the planning and performance of the audit, should be documented in a special memorandum containing a description of:

- The matters designated for further consideration.
- The risk of material misstatement to the financial statements.
- The additional or changed auditing procedures considered necessary to mitigate such risks.
- The results of performing such procedures and their effects on the audit report.

Use of Financial Statements

4.314 The risk associated with the use of financial statements is usually high since auditors cannot control their ultimate distribution or the purposes for which users rely on them. The risk is even higher in circumstances such as the following:

- Statements used in legal proceedings
- Statements used for price-setting in purchases, sales or mergers.
- Statements of construction contractors submitted to bonding underwriters.
- Statements used for obtaining credit.

4.315 The expected use of the financial statements should be documented annually on the Client Acceptance and Continuance Form.

Auditability of the Entity

4.316 A firm should consider the auditability of the entity prior to deciding whether to accept or retain a client. Although a potential client may request an audit and users of the financial statements may require an audit, certain factors may preclude an auditor from being able to express an opinion on the financial statements.

4.317 If a client's accounting system does not provide sufficient evidence to support the recorded transactions, or if the client's accounting records have been destroyed or lost, the entity may be unauditable.

4.318 For a new client, the determination of auditability can usually be determined through discussions with management and the predecessor auditor. The auditor should inquire as to the accounting system and how management determines that the policies and procedures for processing financial information are followed. For a continuing client, auditability is determined by discussions with management as well as through prior experience.

Business Environment

4.319 The auditor should also consider the business environment in which the client operates. The business environment for construction contractors can create some special situations that auditors should consider in deciding to accept a new construction contractor client or to continue an existing client relationship. Indications that the construction contractor might be subject to an adverse business environment might include: tough competition, long bid lists, decreasing profit margins, and increasing interest rates. In addition, construction contractors must also deal with other issues in their business environment such as surety obligations and contractual estimates. The auditor must also be especially aware of environment risks, including insurance coverage, contractual requirements, and potential costs involved. In addition, the auditor should consider if the client is in a financial position where bankruptcy, takeover or merger, or sudden collapse could occur. All of these concerns should be addressed when an auditor decides to accept or retain a client and should be documented on the Client Acceptance and Continuance Form.

4.320 Risk of Potential Misstatements. The risk that potential misstatements will occur results primarily from weaknesses in the internal control structure, inherent risks in certain transaction or account balances, material and unusual account balances, and the credit union's history of misstatements. SAS No. 47, *Audit Risk and Materiality in Conducting an Audit,* refers to these risks as inherent and control risks. SAS No. 53, *The Auditor's Responsibility to Detect and Report Errors and Irregularities,* refers to errors and irregularities as unintentional and intentional misstatements of financial statements, respectively. For those audits in accordance with the ABC Approach, these risks are evaluated and documented on the following forms, which are included in Chapters 5 and 6 of this Manual:

- Planning Matrix
- Risk of Potential Misstatements Evaluation Form
- Internal Control Structure Questionnaire—Construction Contractors

For those audits in accordance with the System's Walk-Through Approach, only the Contractors' System's Walk Through Form must be completed.

4.321 Part I of the Form, "Special Consideration," consists of a series of questions that might present a special risk situation, and space to describe any circumstances that might give rise to high risk. In completing Part I, the auditor should be alert for any other situations, that might present a high risk on the engagement. Part II of the Form, "Potential Misstatements Matrix," summarizes the effects of high risk situations, and provides space for further explanation of the situation.

4.322 Identification of high risks for an audit area will cause the auditor to modify his or her audit strategy. High risk caused by the lack of adequate internal controls or accounting systems procedures, or other circumstances, may affect one or many planned auditing procedures. For example, a company policy that requires progress billings as of the 20th of each month may require detailed tests of the billings cutoff at year end to determine any potential misstatement; other procedures in such audit areas, however, would be unaffected by this potential misstatement. On the other hand, a trend of increasing bad debts could affect all auditing procedures in the receivables classifications. The risk summary on the Potential Misstatements Matrix should be transferred to the Contractors' Planning Matrix upon completion of the form.

Errors and Irregularities

4.323 SAS No. 53, *The Auditor's Responsibility to Detect and Report Errors and Irregularities* (AU 316), requires auditors to assess the risk that errors and irregularities that have a material effect on the financial statements could occur, and to design and perform the audit to obtain reasonable assurance that such errors and irregularities will be detected during the audit. It also discusses the impact of errors and irregularities on the auditor's report, and the auditor's requirement to communicate errors and irregularities to the audit committee or its equivalent.

4.324 Paragraph 2 of SAS No. 53 (AU 316.02) defines errors as "*unintentional* misstatements or omissions of amounts or disclosures in financial statements." In paragraph 3 (AU 316.03), irregularities are "*intentional* misstatements or omissions of amounts or disclosures in financial statements." Because irregularities are intentional (and, as a result, may involve forgery or collusion), they are usually more difficult to detect than errors.

4.325 Because the auditor's opinion is based on the concept of reasonable assurance, auditors cannot guarantee that financial statements are free from material misstatements due to errors and irregularities. However, they must exercise due care in planning, performing, and evaluating the results of the audit and must apply the appropriate level of professional skepticism to achieve reasonable assurance that material errors and irregularities will be detected.

4.326 As part of audit planning, auditors should assess the risk that errors and irregularities may cause the financial statements to be materially misstated. The auditor's concern about the risk of material misstatement is either heightened or mitigated by the auditor's understanding of the internal control structure. Based on this assessment, the auditor should design the audit to provide reasonable assurance of detecting errors and irregularities that could have a material effect on the financial statments.

4.327 SAS No. 53 (AU 316.10) cites a number of management, operational, industry, and engagement characteristics that might cause the auditor to believe that there is an increased risk that material errors and irregularities could occur. Several of these characteristics are listed below:

- Management's attitude towards financial reporting is unduly aggressive.
- Operating and financing decisions are dominated by a single person.
- Management places undue emphasis on meeting earnings projections.
- The entity's profitability relative to its industry is inadequate.
- The entity operates in a declining industry with many business failures.
- Many contentious or difficult accounting issues are present.
- Significant and unusual related-party transactions or balances are present.

4.328 Completing or updating the Client Acceptance and Continuance Form (section 4.501, Chapter 4), and either the Contractors' Internal Controls Questionnaire (section 6.200, Chapter 6) or the Contractors' System's Walk-Through Documentation Form (section 5.607, Chapter 5), provides a basis for assessing the risk that material errors and irregularities could occur.

4.329 Design of the Audit. Based on this assessment, the auditor should design the audit to provide reasonable assurance of detecting errors and irregularities that could have a material effect on the financial statements. If there are high risk situations, this strategy might involve placing more experienced staff on the engagement, increasing supervision and review of assistants' work, testing more items, performing procedures at year end rather than at interim dates, or modifying the nature of auditing procedures to obtain more reliable evidential matter.

4.330 Evaluating the Audit Test Results. Auditors are accustomed to evaluating the impact of differences between the client's accounting records and the auditor's findings. This evaluation is emphasized in SAS No. 53 because irregularities have implications beyond their direct monetary effects.

4.331 SAS No. 53 requires that when the auditor concludes that a potential audit adjustment is related to an irregularity, but is not material to the financial statements, he or she should refer the matter to at least one level of management above those involved in the irregularity, and should be satisfied that the irregularity has no implications on other aspects of the audit. An example of an irregularity that would generally not be material to the financial statements is a misappropriation of petty cash.

> **Practice Tip**
>
> If an irregularity is discovered, it should be brought to the attention of the engagement partner before it is discussed with the client.

4.332 If the auditor believes that the irregularity is or could be material to the financial statements, he or she should—

a. Consider the implications for other aspects of the audit.

b. Discuss the matter and the approach for further investigation with an appropriate level of management at least one level above those involved.

c. Attempt to obtain sufficient competent evidential matter to determine whether, in fact, material irregularities exist and, if so, their effect.

d. If appropriate, suggest that the client consult with legal counsel on matters concerning questions of law.

4.333 Effect of Irregularities on the Auditor's Report. If financial statements affected by a material irregularity are not revised, the auditor should express either a qualified or adverse opinion, explaining all substantive reasons for the opinion. If the auditor is unable to perform necessary auditing procedures related to the irregularity, or if the auditor is unable to reach a conclusion about the financial statement effect of the irregularity, he or she should issue a disclaimer of opinion, or a qualified opinion due to a scope limitation. If the client refuses to accept a modified auditor's opinion due to an irregularity, the auditor should withdraw from the audit. In any event, the auditor should ensure that matters involving errors and irregularities are communicated to the audit committee or its equivalent.

Illegal Acts

4.334 SAS No. 54, *Illegal Acts by Clients* (AU 317), prescribes the nature and extent of consideration an auditor should give to the possibility that the client has committed illegal acts, and also provides guidance on the auditor's responsibilities when a possible illegal act is detected.

4.335 Paragraph 2 of SAS No. 54 (AU 317.02) defines illegal acts as "violations of laws or governmental regulations. Illegal acts by clients are acts attributable to the entity whose financial statements are under audit or acts by management or employees acting on behalf of the entity." Determining whether an act is illegal is normally beyond the auditor's professional competence and would generally be based on an attorney's advice or on the findings of a court of law.

4.336 Of key importance to applying SAS No. 54 is understanding the difference between direct and indirect effects of laws and regulations. Direct-effect laws and regulations are those that affect financial statement line items. For example, federal tax laws directly affect the amounts of income tax expense and accruals reported in the financial statements. Indirect-effect laws and regulations are those that relate more to the entity's operations than to its financial statements, such as occupational safety and health, food and drug administration, equal employment, and anti-trust laws and regulations. While violations of these laws do not directly affect financial statement line items, they can result in monetary fines, penalties and damages that could require adjustment to or disclosure in the financial statements. Understanding these two concepts is important because the auditor's responsibilities to detect and report direct-effect laws and regulations are different from the responsibilities to detect indirect-effect laws and regulations. Specifically, the auditor's responsibility to detect misstatements from illegal acts that have a direct and material effect on the financial statements is governed by SAS No. 53 (discussed in sections 4.323-4.333). SAS No. 54 therefore applies to illegal acts related to indirect-effect laws and regulations (hereinafter called simply "illegal acts").

4.337 SAS No. 54 does not require the auditor to design tests to detect illegal acts; however, the auditor must be aware that illegal acts may have occurred and must perform certain audit procedures to confirm the existence of illegal acts if such specific evidence is discovered. The Statement indicates that the auditor should obtain an understanding of the nature of the act, the circumstances in which it occurred, and sufficient other information to evaluate the effect on the financial statements. If information provided by management is insufficient to determine whether an illegal act has occurred, the auditor should:

- Consult with the client's attorneys or other specialists about the application of relevant laws and regulations to the circumstances, and the possible effects on the financial statements.
- Apply additional procedures, if necessary, to obtain further understanding of the nature of the act.

4.338 If the auditor concludes that an illegal act has occurred, he or she must consider the implications (both qualitative and quantitative) of the illegal act on the auditor's report and the financial statements. Improper accounting or inadequate disclosure of a material illegal act could result in a qualified or adverse opinion, disclosing all substantive reasons for the opinion. If the auditor is unable to obtain sufficient competent evidential matter about a possible illegal act, the auditor would generally disclaim an opinion on the financial statements. If the client refuses to accept a modified auditor's report in these situations, the auditor should consider withdrawing from the engagement, and should communicate the reasons for withdrawal to the audit committee or its equivalent, or to the board of directors or owners.

4.339 **Potential For Going-Concern Problems.** Financial reporting is based on the assumption that the entity will continue as a going concern, unless there is significant information to the contrary. Statement on Auditing Standards (SAS) No. 59, *The Auditor's Consideration of an Entity's Ability to Continue as a Going Concern* (AU 341), requires the auditor to evaluate the client's ability to continue as a going concern for a reasonable period of time, not to exceed one year beyond the date of the financial statements being audited. To perform this evaluation, the auditor is not required to design audit procedures to detect going-concern problems; rather, the evaluation should be based on information obtained during the course of the audit about conditions or events that indicate that there is substantial doubt about the entity's ability to continue as a going concern. Examples of such conditions or events are negative cash flows, defaults on loan agreements, contraction of service levels, franchise termination by a manufacturer, legal proceedings, and operating difficulties.

4.340 If the auditor concludes that there is substantial doubt about the entity's ability to continue as a going concern, he or she should:

- Consider management's plan to mitigate the effects of the condition or event, and
- Assess the likelihood that the plans can be effectively implemented.

4.341 If substantial doubt remains after evaluating management's plans, the auditor should:

- Consider the adequacy of financial statement disclosures about the going concern problem, and
- Include an explanatory paragraph in the auditor's report to reflect his or her conclusion that there is substantial doubt about the entity's ability to continue as a going concern.

4.342 Whenever the auditor becomes aware of conditions or events that cause him or her to believe that there may be substantial doubt about an entity's ability to continue as a going concern, he or she should document the condition or event, the procedures followed to reach a conclusion about whether substantial doubt exists and, if applicable, the effect on the auditor's report and financial statements. If questions about an entity's ability to continue as a going concern arise in performing pre-engagement and audit planning procedures, they should be documented in the Client Acceptance and Continuance Form and the Audit Planning Memorandum. Questions identified during engagement performance should be documented in a special memorandum that includes a discussion of:

1. The nature of the condition or event that raises a going-concern question.
2. The evaluation of management's plans and other factors, and related audit evidence, that might either mitigate or aggravate the condition or event.
3. The assessment of whether substantial doubt exists about the entity's ability to continue as a going concern.
4. The evaluation of the adequacy of financial statement disclosures of the matters giving rise to the information indicating a going-concern problem and management's plans to mitigate the problem.
5. Any modifications to the auditor's report considered necessary for the uncertainty.

4.343 The following are some conditions and events that may raise a question about a construction contractor's ability to continue as a going concern:

- Recurring operating losses
- Working capital deficiencies
- Default on loans or similar agreements
- Restructuring of debt
- Substantial dependence on the success of a particular project
- Legal proceedings, legislation or similar matters that might jeopardize the construction contractor's ability to operate

- History of reoccurring inaccurate project cost estimates
- Reductions of surety line of credit
- Difficulty in obtaining a surety or changes in the surety/contractor relationship

4.344 As mentioned above, if the auditor becomes aware of any of these conditions during the course of the audit, he or she should inquire about management's plans to mitigate the effect of the conditions or events, and should assess the likelihood that such plans can be effectively implemented.

4.345 In addition, he or she should consider calculating the Altman Z Score, which is another indicator of an entity's health and its ability to continue as a going concern. A sample form is presented in section 4.508.

Altman Z Score

4.346 The Altman Z Score, developed by Edward I. Altman,[2] is a composite formula that is widely used to measure the financial health of a company. The formula takes financial ratios and multiplies each by a specific constant. The computed amounts then are added together to obtain an overall score. If the total Z Score determined under this calculation exceeds 2.6, the entity probably can be considered sound and secure. If less than 1.1, long-range survival prospects may be in question.

4.347 The Z Score can be computed on the Altman Z (Zeta) Score Calculation Form in Chapter 4, section 4.508. This score then is compared to scores from other entities to rate relative financial health. Also, the trend of the Z Score should be analyzed to determine whether or not a problem may be developing.

4.348 Practitioners should consider calculating the Z Score when they become aware of the conditions and events listed in section 4.343 that may raise a question about the entity's ability to continue as a going concern.

4.349 Because the Z Score is only one means of measuring an entity's financial health, a CPA firm's quality control policies and procedures should indicate under what conditions, if any, the auditor would make this calculation.

4.350 The results of the Z Score would be documented in the Client Acceptance and Continuance Form and in the Audit Planning Memorandum.

4.351 The AICPA Auditing Standards Board recently issued an auditing interpretation titled, *Eliminating a Going-Concern Explanatory Paragraph From a Reissued Report* (AU 9341.01-.02) which addresses the situation where auditors are asked to reissue reports that included a going-concern explanatory paragraph because the situation or condition that gave rise to substantial doubt about the entity's ability to continue as a going concern has been resolved. Chapter 1, section 1.337, summarizes the guidance for this interpretation.

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[2] Source: Altman, Edward, *Corporate Financial Distress: A Complete Guide to Predicting, Avoiding, and Dealing with Bankruptcy*, 1983, John Wiley & Sons.

Making Preliminary Judgments About Materiality Levels

4.352 Overall Materiality. The overall materiality level reflects the maximum dollar amount of misstatements, known and unknown, the auditor is willing to accept in the financial statements as a whole without adjustment. Under SAS No. 22, auditors are required to plan their audits to provide reasonable assurance that material misstatements will be detected. In meeting this requirement, auditors should establish a preliminary materiality threshold for the purpose of planning the appropriate auditing procedures to detect material misstatements in the financial statements. SAS No. 47 defines materiality as "the magnitude of an omission or misstatement of accounting information that, in the light of surrounding circumstances, makes it probable that the judgment of a reasonable person relying on the information would have been changed or influenced by the omission or misstatement." Most practitioners establish materiality limits during engagement planning and then compare those limits at the conclusion of the engagement to amounts of unadjusted, projected, and estimated misstatements from the current and, if applicable, prior year audits to evaluate the risk of unacceptable amounts of misstatements in the financial statements. The purpose of this evaluation is to consider:

1. The effects of individual known but unadjusted misstatements, projected and estimated misstatements on financial statement amounts.
2. The causes of such misstatements and the likelihood there may be related conditions that could materially affect the financial statements.

Such evaluation may be made on the Summary of Possible Journal Entries Form (see section 8.904).

4.353 While it may be necessary to allocate the overall materiality limit to account balances (determine tolerable misstatements) for certain statistical sampling applications, it is not otherwise necessary. Amounts from the materiality guidelines below, however, *may* be assigned to major financial statement items on the Summary of Possible Journal Entries Form for the purpose of measuring the effects of possible entries on such classifications at the option of the engagement partner.

4.354 Materiality Table. Quantifying the materiality level is a matter of professional judgment. Materiality for planning purposes in the audit of a construction contractor is typically determined based on a percentage of a financial statement base. Often, the materiality base is the greater of total assets of the organization or the sum of total revenues. The percentage used is a sliding scale based on the size of the contractor, as illustrated below:

Materiality Base — Greater of Total Assets or Total Revenues: Over	But Not Over	Percentage of the Base		
$ 0	$ 30,000	6.00%		
30,000	100,000	$ 1,800 + 5.00%	in excess of $	30,000
100,000	300,000	5,300 + 3.00%	in excess of	100,000
300,000	1,000,000	11,300 + 2.00%	in excess of	300,000
1,000,000	3,000,000	25,300 + 1.50%	in excess of	1,000,000
3,000,000	10,000,000	55,300 + 1.00%	in excess of	3,000,000
10,000,000	30,000,000	125,300 + 0.50%	in excess of	10,000,000
30,000,000	100,000,000	225,300 + 0.25%	in excess of	30,000,000
100,000,000	300,000,000	400,300 + 0.20%	in excess of	100,000,000
300,000,000	—	800,300 + 0.15%	in excess of	300,000,000

4.355 As an illustration of the application of the table, assume that a construction contractor has total assets of $80,000 and total revenues of $150,000. Using the larger materiality for planning purposes would be calculated as follows:

$$5{,}300 + [(150{,}000 - 100{,}000) \times .030] = 6{,}800$$

4.356 Using The Materiality Computation Form. The Materiality Computation Form in section 4.507 should be used to compute the overall materiality limit, the basic allowance for unknown misstatements to be used in substantive tests of balances sampling, and the lower limit for individually significant items. The lower limit for individually significant items can be used to determine immaterial sampling populations and account balances for which no auditing procedures are necessary.

4.357 The overall materiality limit is general, rather than absolute guideline and represents the allowance for both known and unknown misstatements. Known and unknown misstatements are considered to comprise 100% of the overall materiality limit; known misstatements being 1/3 and unknown misstatements being 2/3. The rationale to establish engagement materiality limits should be documented on the Materiality Computation Form (section 4.507) and in the Audit Planning Memorandum (section 4.506).

Staffing The Engagement And Plan For Supervision

4.358 As part of the planning process, the auditor should provide reasonable assurance that persons who work on a construction contractor audit possess the appropriate technical training and proficiency. SQCS No. 1 states the basic quality control requirement for assigning personnel to engagements:

> Policies and procedures for assigning personnel to engagements should be established to provide the firm with reasonable assurance that work will be performed by persons having the degree of technical training and proficiency required in the circumstances. In making assignments, the nature and extent of supervision to be provided should be taken into account. Generally, the more able and experienced the personnel assigned to a particular engagement, the less is the need for direct supervision.

4.359 The following should be considered in making assignments of individuals to construction contractor audits:

- Staffing and timing requirements of the specific construction contractor.
- Evaluation of qualifications of personnel regarding experience, position, background, and special expertise.
- The planned supervision and involvement by supervisory personnel.
- Projected time availability of individuals to be assigned.
- Situations where independence problems and conflicts of interest may exist or may appear to exist, such as assignment of personnel to audits for clients who are former employers or are employers of certain kin.
- Continuity of personnel to provide an efficient audit, balanced against rotation of staff to provide other personnel with different experience.

4.360 Supervising personnel on an audit is an ongoing process. However, at the initial planning stage of the audit, supervision of personnel requires developing realistic estimates of the time that will be needed to perform and review the staff's work. Use of budgeting and time control documents facilitate effective audit supervision and management. Although not required by professional standards, budget and time control analyses can help improve audit profitability by identifying problems and inefficiencies early. Staff time should be recorded weekly on the Time Accumulation Sheet (section 4.503), with total audit time summarized on the Time Summary Form (section 4.504) and compared to budget. At the completion of the audit, the Time Accumulation Sheet should be reconciled to the Time Summary Form and to the firm's billing records. These documents have been designed for use in all construction contractor audit engagements in excess of 40 hours. Used consistently, they can make staff more conscious of the efficient use of time and improve their performance.

4.361 For budgets to benefit the firm and audit personnel, they must first be realistically prepared. Budgets must be based on audit circumstances, not on fees. If the staff becomes aware of ways to reduce audit time in the future, the suggestions should be noted on the Summary of Time Savings for Next Year Form found in section 4.505.

Perform Analytical Procedures

4.362 SAS No. 56, *Analytical Procedures* (AU 329), provides for analytical procedures to be used for the following three purposes:

- In the planning stage, to plan the nature, timing, and extent of other auditing procedures.
- As a substantive test to obtain evidential matter about financial statement assertions.
- In the final review stage, as an overall review of the financial information.

4.363 The purpose of analytical procedures performed during planning are often very simple. For example they may include few or all of the following:

- review of fluctuations in account balances using the current and prior year's trial balances.
- scan of ledgers and journals noting large or unusual appearing items.
- identify unusual or unexpected balances or relationships.

The auditor should customize analytical procedures to suit the specific engagement being performed.

4.364 The auditor should document the results of the planning analytical procedures performed in the Audit Planning Memorandum in section 4.506, and communicate his or her observations to the audit team. Further audit testing should be modified based on the results of the analytical procedures performed. Analytical procedures performed as a substantive test and at the final review stage are discussed in Chapters 7 and 8 respectively.

Change in 1995 Edition of the Tests of Balances Programs, Audit Planning Memo, and the Analytical Procedures Program

Based on feedback we have received from users of this Manual, we have revised the 1995 edition of the Tests of Balances Programs and Audit Planning Memo. The Tests of Balances Programs and the Audit Planning Memo now include the related substantive analytical procedures (previously included in the Analytical Procedures Program), which is designed to allow you to more easily choose the right mix of tests of details and substantive analytical procedures for each major audit area, based on the results of completing the Internal Controls Questionnaire, the Risk of Potential Misstatements Form, and the Tests of Controls Program, and considering which types of tests are the most efficient and effective for the audit area. Because of this change, the separate Analytical Procedures Program is no longer included in this Manual.

4.400 DOCUMENTING AUDIT PLANNING DECISIONS

4.401 The Audit Planning Memorandum is the culmination of the planning process and should be prepared for all construction contractor audit engagements. It is critical to achieving both engagement quality and profitability. The Memorandum should be prepared by the in-charge and approved by the engagement partner before engagement personnel begin field work. It can be prepared using the form in section 4.506 or in a handwritten or typed narrative. Subsequent revision to the planning activities should be documented in the working papers.

4.402 The Audit Planning Memorandum is comprised of Section I, "Engagement Administration", and Section II, "Technical Audit Planning Decisions." A few words about section subheadings follow.

I. A. Presentation of Engagement Letter

The engagement letter is a primary tool for obtaining client understanding of our responsibilities and theirs. Obtaining a good understanding before the engagement begins will prevent misunderstandings later. To gain a good understanding, the engagement executive should deliver the letter and discuss its contents with the client's audit committee or persons of equivalent authority. The pers9ons at the presentation and matters discussedshould be described here or in a separate memo.

I. B. Use of Client Assistance or Paraprofessionals

The schedule attached to the Client Acceptance and Continuance Form lists possible areas of client assistance. Client assistance should be used to the maximum extent possible on every engagement. When client personnel are unavailable, the use of firm paraprofessionals to perform any necessary accounting services and clerical work in connection with the engagement should be considered.

I. C. Planning for Proper Work Space and Equipment

The in-charge has responsibility to arrange adequate work space before the field work begins. Poor lighting, lack of adequate heat or air conditioning, desks or tables that are too small, or work locations that are not near client accounting personnel are examples of situations that hinder the efficient completion of an engagement.

The client should be asked to provide engagement personnel with calculators and, if available, microcomputers and printers. Using client equipment reduces firm operating costs and eliminates transporting firm equipment to the client's office.

I. D. Assignment of Staff

A basic element of a good quality control system is assigning personnel to engagements and tasks that are commensurate with their capabilities. Assigning the right people to engagements also helps complete the engagements in the minimum amount of time.

Whenever possible, the prior year's engagement personnel should be reassigned and rotated to new positions each year. When reassignment is not possible, an attempt should be made to assign new staff with experience in the client's business or industry. When inexperienced personnel, or personnel unfamiliar with the client's business or industry, are assigned to an engagement, the in-charge or engagement partner is responsible for providing appropriate training and supervision.

I. E. Target Dates

Setting target dates during planning is the first step to achieving timely engagement completion. These target dates should also become the input to the firm's staff scheduling system.

I. F. Use of Specialists

Using outside specialists should be considered whenever audit procedures require knowledge or skills beyond the firm's expertise. Such areas may include actuarial computations for pension funds, questions of law, audits designed using clients' EDP systems, environmental issues, and estimates of costs to complete and percentage of completion.

I. G. Use of Audit Software

Audit software should be used to the maximum extent practical on all engagements. This section should list the specific, planned applications.

I. H. Audit Budget

The audit budget should be prepared, at least tentatively, prior to beginning field work. The budget should be based on circumstances, not on fees. The budget documents should be summarized in this section for discussion with the engagement partner.

I. I. Other Special Considerations

This section is provided to document any significant engagement administration circumstances or problems not covered above.

II. A-F Technical Audit Planning Decisions

Each section should present the results of the decisions, as well as the rationale, or judgments, behind them. Detailed computations or explanations should either be included or incorporated by reference to other working papers or forms. Section II.E. must include documentation about the assessed level of control risk if the assessed level of control risk is below the maximum.

II. G. Planning Analytical Procedures

Analytical procedures used in planning the audit should focus on enhancing the auditor's understanding of the client's operations, transactions, and events that have occurred since the last audit, and on identifying areas that may present significant audit risks. Such procedures range from reviewing changes from the prior year to the current year's working trial balances, to more extensive analyses using quarterly financial information.

II. H. Other Special Considerations

Special risks of misstatements, omissions, irregularities, or illegal acts, or any other accounting or auditing problems discovered during planning, should be discussed in this section. The situation, its possible impact on the financial statements, and the planned modification of auditing procedures should be detailed for consideration and approval by the engagement partner. Recent pronouncements should be reviewed to ascertain if they are applicable to the engagement, and this possible impact on the financial statements and modification of auditing procedures should be described for consideration and approval by the engagement partner. Also, the most recent AICPA Audit Risk Alert should be reviewed.

4.500 DOCUMENTATION ASSISTANCE

4.501

Client Acceptance and Continuance Form—Part I

Client: ________________________________

Financial Statement Date: ________________________________

INSTRUCTIONS:

Part I: Part I of this form should be completed for all prospective clients for which audit services are to be performed. The form should be completed by the in-charge and approved by the engagement partner as a basis for initially accepting the client. Part I should be updated and reviewed annually as a basis for deciding to retain the client.

Part II: Part II of this form should be completed by the engagement partner and concurring partner to document the firm's decision to either accept or reject the client.

CLIENT'S LEGAL NAME:

ADDRESS:

PHONE:

FEDERAL I.D. NO.:	STATE I.D. NO.:

1. Describe the nature of the client's business (and locations, if other than above address):

2. Circle the type of entity: corporation, S Corporation, proprietorship, LLC, or partnership

3. List key owners, officers, and directors of the client:

CLIENT ACCEPTANCE AND CONTINUANCE FORM — PART I
(Continued)

Name	% Owned	Position	Family Relationship

4. Identify any related businesses or individuals:

Name	Nature of Relationship

5. Identify the client's predecessor accountants:

Name:
Address:
Phone:
Contact Person:

6. Indicate the results of our inquiries of the predecessor accountant regarding the following:

   a. Reasons for change of accountant: ____________________

   ____

   ____

   b. Integrity of management and owners: ____________________

   ____

   ____

CLIENT ACCEPTANCE AND CONTINUANCE FORM — PART I
(Continued)

c. Disagreements on accounting principles and auditing, review, or compilation procedures: ______

d. Fee disputes: ______

7. Describe the client's relationships with financial institutions: ______

Institution	Type of A/C's or Loans	Account Executive and Phone

Result of inquiries: ______

8. Describe the services to be provided by us: ______

CLIENT ACCEPTANCE AND CONTINUANCE FORM — PART I
(Continued)

Service	How Often?			Report Deadlines
	Monthly	Quarterly	Annually	

9. Will the financial statements and reports be used for high-risk purposes, for example, reports to regulatory agencies, to obtain or review significant amounts of credit, or performance bonding, or for sale of the business? ______ If so, describe: ______________________

____

____

10. Read the latest financial statements and tax returns and indicate any unusual findings:

Item Reviewed	As of	Finding

11. Does the client have potential going-concern problems? ______ If so, describe them: ______

____

12. Are there any other issues within the business environment that create unique risks to the contractor?

______ If so, describe them: ______________________

CLIENT ACCEPTANCE AND CONTINUANCE FORM — PART I
(Continued)

13. Identify the client's legal counsel:

Name:
Address:
Phone:
Contact Person:

Results of inquiries: ______________________________

____

14. State name(s) of other third parties contacted concerning management's and owners' reputation, attitude, ability, and integrity:

15. Describe any significant engagement performance, accounting, or tax problems with which we should be concerned:

16. Describe any pending litigation against the client or its principals:

CLIENT ACCEPTANCE AND CONTINUANCE FORM — PART I
(Continued)

17. Describe the fee/billing arrangements:

18. Describe any potential independence problems with respect to the client:

19. Describe any major changes in the above information since our last evaluation of this client. Also describe any other matters that have come to our attention that would have caused us to reject the client had we been aware of them at the time of our initial acceptance of this client:

	19____	19____	19____	19____	19____
Prepared or updated by: In-charge	____	____	____	____	____
Reviewed by: Engagement Partner	____	____	____	____	____

Client Acceptance and Continuance Form—Part II

Client: ______________________________

Financial Statement Date: ______________________________

	Yes	No
1. Is there any reason to doubt the integrity of management (owners)?	☐	☐
2. Are we aware of any significant disagreements between management or owners and the predecessor accountant?	☐	☐
3. Does there appear to be any potential fee collection problems?	☐	☐
4. Are the client's needs beyond our capabilities or staffing abilities?	☐	☐
5. Are we aware of any independence problems that may affect our ability to meet the client's needs?	☐	☐
6. Are there high-risk factors related to the engagement that may affect our decision to accept the client?	☐	☐
7. Is there a potential problem with management or owners not fully understanding the limitations of the services to be provided (for example, management's expectation that we will be responsible for the detection of fraud)?	☐	☐

For any "Yes" answers, explain how we plan to mitigate the problem (for example, by assigning more experienced personnel to the engagement, using outside consultants, obtaining a retainer from the client, etc.):

Acceptance Decision:

Yes ______ No ______

Engagement Partner: ______________________________ Date: ____________

Concurring Partner: ______________________________ Date: ____________

4.502 ENGAGEMENT LETTER — AUDIT OF FINANCIAL STATEMENTS

[CPA Firm Letterhead]

[Date]

____

____

____

[Client's Name and Address]

Dear ____________________ :

This letter is to confirm our understanding of the terms and objectives of our engagement.

We will audit the Company's financial statements for the year ending ____________ [balance-sheet date] for the purpose of expressing an opinion on them. The proper recording of transactions, safeguarding of assets, and the financial statements are the responsibility of the Company's management. Our responsibility is to report on the fairness of the presentation of the financial statements in accordance with generally accepted accounting principles.

We will conduct our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures included in the financial statements. It also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

Although the audit is designed to provide reasonable assurance of detecting errors and irregularities that are material to the financial statements, it is not designed and cannot be relied upon to disclose all fraud, defalcations, or other irregularities. However, we will inform you of any material errors, and all irregularities or illegal acts, unless they are clearly inconsequential, that come to our attention.

Additionally, we will issue a report on certain supplemental information that will accompany your basic financial statements.

Assistance to be supplied by your personnel, including the preparation of schedules and analyses of accounts, is described on a separate attachment. Timely completion of this work will facilitate the completion of our audit.

As part of our engagement for the year ending __________ [balance-sheet date], we will also prepare the Company's federal and state income tax returns.

Our fees will be billed as work progresses and are based on the amount of time required at various levels of responsibility, plus out-of-pocket expenses. Invoices are payable upon presentation. We will notify you immediately of any circumstances we encounter that could significantly affect our initial estimate of total fees, which will range from $________ to $________.

If this letter correctly expresses your understanding, please sign the enclosed copy where indicated and return it to us.

We appreciate the opportunity to serve you and trust that our association will be a long and pleasant one.

Sincerely,

[Engagement Partner's Name]
[Firm Name]

Accepted and agreed to:

____

[Client Representative's Name]

____

[Title]

____

[Date]

NOTE:

To alert the client to the fact that they will be asked to sign a management representation letter at the conclusion of the engagement, some practitioners add the following sentence to the engagement letter: "At the conclusion of our audit, we will request certain written representations from you about the financial statements and related matters."

4.503

Time Accumulation Sheet

Client: ____________________

Financial Statement Date: ____________________

INSTRUCTIONS:

The amount in the Budget column should be obtained from the Time Summary Form. The Actual Hours and Date columns should be completed on a daily basis and subtotaled weekly. For engagements in excess of three weeks, additional Time Accumulation Sheets should be completed.

At the conclusion of the engagement, the amounts in the Total column should be posted to the Time Summary Form and reconciled to the firm's billing records.

		ACTUAL HOURS AND DATE																	
WORK AREAS	Budget						sub-total						sub-total						Total
Planning & administration																			
Internal control structure																			
Cash																			
Investments																			
Receivables																			
Inventories																			
Other assets																			
Property & equipment																			
Notes & loans payable																			
Payables & accruals																			
Income taxes																			
Other liabilities																			
Equity																			

Time Accumulation Sheet, continued

		ACTUAL HOURS AND DATE																
WORK AREAS	Budget					sub-total						sub-total						Total
Revenues																		
Expenses																		
Commitments, contingencies, & subsequent events																		
Related parties																		
Trial balance & adjustments																		
Supervision & review																		
Management letter																		
Report preparation																		
TOTAL																		

Prepared by: ______________________ Date: ______________
(In-Charge)

Reviewed by: ______________________ Date: ______________
(Engagement Partner)

4.504

Time Summary Form

Client: ______________________________

Financial Statement Date: ______________________________

INSTRUCTIONS:

The Budgeted Hours section of the form should be prepared by the in-charge and approved by the engagement partner during the planning stage of the engagement. The amounts in the Total column should be posted to the Time Accumulation Sheet.

The Actual Hours section of the form should be completed and the variances calculated at the conclusion of the engagement. Any significant variance should be analyzed and explained.

	Budgeted Hours					Actual Hours					Actual Over (Under)
	Asst.	I/C	Mngr.	Ptnr.	Total	Assist.	I/C	Mngr.	Ptnr.	Total	
Planning & administration											
Internal control structure											
Cash											
Investments											
Receivables											
Inventories											
Other assets											
Property & equipment											
Notes & loans payable											
Payables & accruals											
Income taxes											
Other liabilities											
Equity											

	Budgeted Hours					Actual Hours					Actual Over (Under)
	Asst.	I/C	Mngr.	Ptnr.	Total	Assist.	I/C	Mngr.	Ptnr.	Total	
Revenues											
Expenses											
Commitments, contingencies, & subsequent events											
Related parties											
Trial balance & adjustments											
Supervision & review											
Management letter											
Report preparation											
TOTAL											

Prepared by: ______________________ Date: ______________

(In-Charge)

Reviewed by: ______________________ Date: ______________

(Engagement Partner)

4.505

Summary of Time Savings for Next Year

Client: ____________________

Financial Statement Date: ____________________

INSTRUCTIONS:

This form should be completed by any member of the engagement team that has a time saving suggestion, and reviewed by the in-charge and the engagement partner. The suggestion should indicate the engagement area, the procedure currently performed, and how that procedure can be improved.

SAVINGS SUGGESTIONS

____

____

____

____

____

____

____

____

____

____

____

Prepared by: ____________________ Date: __________
(Staff Member)

Reviewed by: ____________________ Date: __________
(In-Charge)

____________________ Date: __________
(Engagement Partner)

4.506

Audit Planning Memorandum

Client: ______________________________

Financial Statement Date: ______________________________

INSTRUCTIONS:

This memorandum should be completed for all audit engagements by the in-charge and reviewed by the engagement partner, before engagement personnel begin field work.

I. ENGAGEMENT ADMINISTRATION

A. Presentation of Engagement Letter

____
____
____
____
____

B. Use of Client Assistance or Paraprofessionals

____
____
____
____
____

C. Planning for Proper Work Space and Equipment

____
____
____
____
____

D. Assignment of Staff

____

____

____

____

____

E. Target Dates

Audit report	______________________
Management letter	______________________
Tax returns	______________________
Start of interim field work	______________________
Start of year-end field work	______________________
Other	______________________

F. Use of Specialists

____

____

____

____

G. Use of Audit Software

____

____

____

____

H. Audit Budget

____

____

____

____

I. Other Special Considerations

II. TECHNICAL AUDIT PLANNING DECISIONS

A. Overall Engagement Risk

B. Understanding of Internal Control Structure

C. Overall Materiality Limit

D. Sampling

E. Audit Approach

F. Key Engagement Area(s)

G. Planning Analytical Procedures (see section III.A. for preliminary analytical review procedures)

H. Other Special Considerations (e.g. consider the nature and existence of any laws and regulations (OSHA, EEOC, etc.) the violation of which may have a material effect on the financial statements.)

____

____

____

____

III. PRELIMINARY ANALYTICAL REVIEW PROCEDURES

A. Compute the following ratios and compare with preceding year's. Investigate significant changes:

1. Number of days net contract revenues in year-end contract receivables.
2. Year-end contracts receivable as a percentage of gross contract revenues.
3. Contract receivables turnover or average contract receivables collection period.
4. Contract adjustments and allowances as a percentage of contract revenues.
5. Bad debts expense as a percentage of revenue by category.
6. Allowance for doubtful accounts as a percentage of receivables by category.
7. Aging categories as a percentage of total accounts receivables.
8. Interest earned to the average notes receivable outstanding.
9. Total gross contract profit percentage.
10. Total inventory turnover.
11. Rate of return on major classes of marketable securities.
12. Accounts payable turnover, or average accounts payable payment period.
13. Percent of year-end trade accounts payable to purchases, or number of days purchases in year-end trade accounts payable.
14. Long-term debt to stockholders' equity.
15. Interest expense as a percentage of:
    a. Net revenue.
    b. Average balance of notes payable and long-term debt outstanding.
16. Compute the following as a percentage of net revenues:
    a. Direct labor.
    b. Indirect labor.
    c. Commissions.
    d. Office salaries.

17. Compute the following expenses as a percentage of total wages, salaries, and commissions. Compare with prior year's and investigate significant changes:

    a. Payroll taxes.

    b. Workers' compensation, disability, and unemployment insurance.

B. Compare prior year income and expense accounts with current year expense accounts, and identify the percentage change and dollar change. Investigate material differences.

Prepared by: ______________________________ Date: ____________________
(In-charge)

Reviewed by: ______________________________ Date: ____________________
(Engagement Executive)

______________________________ Date: ____________________
(Engagement Partner)

4.507

Materiality Computation Form[3]

Client: ____________________

Financial Statement Date: ____________________

INSTRUCTIONS:

This form should be completed by the in-charge during planning and approved by the partner before field work is started. Separate materiality computations should be made for compliance tests of each major federal award programs under OMB Circular A-133 (see section 3.510).

I. Overall Materiality Limit Computation:

Approximate balances at or near financial statement date:

A. (Total Assets - A) × C + B = D ________

B. (Total Revenue - A) × C + B = E ________

Overall Materiality Limit = Greater of D or E ________

Materiality Base — Greater of Total Assets or Total Revenues: Over (A)	But Not Over	Percentage of the Base: B	C	
$ 0	$ 30,000		6.00%	
30,000	100,000	$ 1,800 +	5.00% in excess of	$ 30,000
100,000	300,000	5,300 +	3.00% in excess of	100,000
300,000	1,000,000	11,300 +	2.00% in excess of	300,000
1,000,000	3,000,000	25,300 +	1.50% in excess of	1,000,000
3,000,000	10,000,000	55,300 +	1.00% in excess of	3,000,000
10,000,000	30,000,000	125,300 +	0.50% in excess of	10,000,000
30,000,000	100,000,000	225,300 +	0.25% in excess of	30,000,000
100,000,000	300,000,000	400,300 +	0.20% in excess of	100,000,000
Over 300,000,000	—	800,300 +	0.15% in excess of	300,000,000

[3]Subscribers to the 1994 edition of this Manual will notice that changes have been made to this table. These changes were made to better reflect the amounts and percentages used in current practice, and will result in lower materiality thresholds.

Rationale for overall materiality limit (if other than the larger of above computations):

____

____

____

____

II. Basic Allowance for Unknown Misstatement Computation

For nonstatistical sampling applications, the basic allowance can be used in place of the tolerable misstatement amount. If used in the table approach or model approach, it should also be considered when comparing total actual, projected, and estimated misstatements to the final materiality limit.

Overall materiality limit from above	$ ________
Less estimated known misstatement from sampling and nonsampling tests (1/3 of overall materiality limit)	$ ________
Basic allowance for unknown misstatement (tolerable misstatements)	$ ________

III. Individually Significant Items—Computation of Lower Limit

The lower limit for individually significant items will usually be set at 1/3 of the basic allowance. Individually significant items may also be determined judgmentally for each sampling application. The rationale for such judgmentally determined limits should be explained on the following page.

Lower limit for individually significant items $ ________

Rationale for lower limit:

____

____

____

____

____

____

This uniform lower limit will normally be used for determining individually significant items to derive sampling populations, and for determining sampling populations and account balances that are not material and can be excluded from testing.

Materiality Computation Form
(Continued)

If different lower limits are used for certain accounts, or for such procedures as a search for unrecorded liabilities, the reasons for their use should be documented below:

If different lower limits are used for certain accounts, or for such procedures as sales and purchases cutoff tests and searches for unrecorded liabilities, the reasons for their use should be documented below:

Prepared by: ____________________ Date: __________
(In-charge)

Reviewed by: ____________________ Date: __________
(Engagement Partner)

4.508

Altman Zeta (Z) Score Calculation Form

Client: ______________________________

Financial Statement Date: ______________________________

The Z Score may be used as one indicator of an entity's financial "health" and ability to continue as a going concern. It is used when the auditor becomes aware of conditions and events that raise questions about the entity's ability to continue as a going concern. If Total Z Score determined under this calculation exceeds 2.6, the entity can probably be considered sound and secure. If less than 1.1, long-range survival prospects can probably be considered dim.

The calculation presented here is a general one. Somewhat different calculations, constants, and values apply to manufacturing and service entities. In those cases, additional research should be performed. Adjust the calculations as necessary for the client's situation.

The trend of the Z Score should also be part of the analysis. If a negative trend exists, even though Z Score is in the healthy range, a problem may be developing. On the other hand, if Z Score indicates that survival prospects are not favorable, but the trend is positive, a brighter future may be in store.

This Form should be prepared by the in-charge and reviewed and approved by the engagement partner. The conclusions should be documented in the Client Acceptance and Continuance Form and in the Audit Planning Memorandum.

	Results	×	**Constant**	=	**Value** **Current Year** **19___**	**Prior Years** **19___**	**19___**
1. Working Capital / Total Assets	______	×	6.56	=	______	______	______
2. Retained Earnings / Total Assets	______	×	3.26	=	______	______	______
3. Earnings Before Interest and Taxes / Total Assets	______	×	6.72	=	______	______	______
4. Equity / Total Liabilities	______	×	1.05	=	______	______	______
Total Z Score					======	======	======

ALTMAN ZETA (Z) SCORE CALCULATION FORM
(Continued)

Discuss and evaluate any significant factors that might mitigate a low score (for example, "large back order of business") and list any suggestions that might help entity improve its financial status:

Discuss and evaluate any significant factors (including non-financial items) that might impact upon the entity's ability to continue as a going concern (including loss of significant customers, legal issues or management plans). If necessary, evaluate prospective financial information. Attach all items used.

Conclusion:

	19___	19___	19___	19___	19___
Prepared by:					
Reviewed by:					

Audit Approach

CHAPTER 5

AUDIT APPROACH

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CHAPTER 5

AUDIT APPROACH

5.000 INTRODUCTION

5.001 This Manual presents practical assistance to all auditors of construction contractors, whether the auditors develop their own forms, questionnaires, programs, and workpapers, or whether they use those provided throughout this Manual.

5.002 This chapter, however, presents a unique approach (the ABC System) to audit planning and performance - an approach designed specifically to minimize substantive testing and thereby maximize engagement profits. Also presented is the System's Walk-Through Approach which is used when performing substantive testing is more efficient than performing tests of controls.

5.003 Included in this chapter is sampling guidance for performing tests of controls and tests of balances.

5.100 OVERVIEW OF AUDIT APPROACH

Overview of ABC System Approach

5.101 The ABC System is a unique approach to planning and performing an audit. It is designed to allow the auditor to assess the control risk for each of the major audit areas of an entity, and to provide the auditor with the tests of controls (TOCs), tests of balances (TOBs), and analytical procedures most likely to be relevant to each major audit area.

5.102 The ABC System is based on the assumption that the auditor will desire to place as much reliance on the client's internal control structure as possible in order to minimize substantive testing while maintaining high audit quality and complying fully with all generally accepted auditing standards.

5.103 The Contractor's Internal Controls Questionnaire (Chapter 6, section 6.200) is organized into three levels of priorities (for each major audit area):

- Those controls necessary to provide the client with an effective basic accounting system (level C),
- Those controls necessary to provide the client with both an effective accounting system and good primary controls (levels B and C acting together), and
- Those controls necessary to provide the client with good secondary controls, as well as good primary controls and an effective accounting system (levels A, B, and C acting together).

5.104 By completing the entire Contractors' Internal Controls Questionnaire, the auditor can assess the controls for each major audit area. The auditor can then exercise judgment to determine that:

- A major audit area for which all (or substantially all) controls in the A, B, and C levels are present would qualify as an "A System," for which the auditor could assess control risk as low or moderate (which would justify minimizing substantive tests once the controls themselves are tested),
- A major audit area for which all (or substantially all) controls in the B and C (but not the A) levels are present would qualify as a "B System," for which the auditor could assess control risk as moderate to slightly below the maximum (which would justify reducing some substantive tests once the controls are tested), or
- A major audit area for which all (or substantially all) controls in the C level (but not the A and B levels) are present would qualify as a "C System," for which the auditor could assess control risk as maximum to slightly below maximum (which would cause the auditor to perform primarily substantive tests in most cases, even after the controls are tested).

5.105 The Reliance Matrix in section 5.108 portrays the interrelationship of control risk and degree of reliance on controls for systems classified as A, B, or C.

5.106 The Contractors' Tests of Controls Programs (Chapter 6, section 6.400) and Contractors' Tests of Balances Audit Program (Chapter 7, section 7.400) are organized according to whether controls over a major audit area are determined to constitute an A System, a B System, or a C System. Each major audit area must be assessed and classified independently from other major audit areas; thus, the payroll and personnel cycle may be classified as an A System, the acquisitions and payments cycle may be classified as a B System, and the revenues and collections cycle may be a C System. Of course, an auditor must use his or her understanding of the client and the construction industry to customize the precise audit program for an engagement, but the ABC System gives the auditor assistance with determining appropriate and justifiable levels of substantive testing without "overauditing" or "underauditing."

5.107 The ABC System incorporates analytical procedures to the maximum extent possible, whether a system is rated as A, B, or C, in order to obtain the optimal mix of audit evidence for quality and efficiency.

Reliance Matrix

5.108 The following Reliance Matrix illustrates the alternative approaches to construction contractor audits outlined in this manual. The approaches can be applied separately by transaction cycle and assume analytical procedures will be applied and relied on to the maximum extent practical.

RELIANCE MATRIX

Reliance on Types of Tests Based on Control Risk Assessment

Audit Approach	Control Risk	Tests of Controls (TOCs)	Analytical Procedures (APs)	Tests of Balances (TOBs)
ABC System Approach:				
SYSTEM A— Good Internal Control Procedures	Low to Moderate	High Reliance	Maximum Extent Possible	Low Reliance
SYSTEM B— Good Accounting System and Primary Controls	Moderate to Slightly Below the Maximum	Moderate Reliance	Maximum Extent Possible	Low to Medium Reliance
SYSTEM C— Good Accounting System or More Efficient Substantive Test Approach	Slightly Below the Maximum to Maximum	Low or No Reliance	Maximum Extent Possible	Slightly less than High to High Reliance
System's Walk-Through Approach:				
Weak Accounting System or More Efficient Substantive Test Approach	Slightly Below the Maximum to Maximum	No Reliance	Maximum Extent Possible	Slightly less than High to High Reliance

5.200 TYPES OF TESTS

5.201 In developing an audit strategy, the auditor must consider, among other things, the relative efficiency and effectiveness of the three types of audit procedures—tests of controls, tests of balances, and analytical procedures. To help in this determination (which influences the auditor's selection of the ABC System or the System's Walk-Through Approach), the following sections briefly describe these three types of tests.

Tests of Controls

5.202 When the auditor assesses control risk at below the maximum (such as in a System A or B), he or she must perform tests of controls to support the lower assessed level of control risk. Appendix B of SAS No. 55, *Consideration of the Internal Control Structure in a Financial Statement Audit* (AU 319.67), defines tests of controls as:

> Tests directed toward the design or operation of an internal control structure policy or procedure to assess its effectiveness in preventing or detecting material misstatements in a financial statement assertion.

5.203 Examples of tests of controls include inquiries of client personnel, inspection of documents and reports, and observation of the application of a control policy or procedure. Performing tests of controls to support a lower assessed level of control risk allows the auditor to reduce substantive tests. As a result, before performing tests of controls, the auditor should weigh the relative effort needed to perform the tests of controls against the effort saved by reducing substantive tests. Tests of Controls Programs are included in Chapter 6, section 6.400.

Substantive Tests

5.204 Paragraph 4.11 of the AICPA's Audit Guide, *Consideration of the Internal Control Structure in a Financial Statement Audit*, states:

> The auditor makes judgments about the nature of substantive tests based on an assessment of the effectiveness and efficiency of the available alternative procedures in detecting material misstatements. The procedures may include substantive analytical procedures, substantive tests of details, or a combination of both. Judgments about the nature, timing, and extent of audit procedures are influenced by the —
>
> - Assessment of the inherent risk of material misstatement.
> - Materiality of transactions and balances.
> - Assessed level of control risk.
> - Amount, volume, and variability of transactions and balances.
> - The effectiveness of other available audit procedures.

5.205 As a result, the assurance an auditor needs from substantive tests (which is based on the assessed level of control risk and tests of controls) is obtained by performing substantive tests of balances procedures, substantive analytical procedures, or a combination of both.

5.206 Depending on the nature and extent of the analytical procedures, it may be possible to *substantially* reduce the related tests of balances. For example, a reasonableness test of depreciation expense may eliminate detail tests of a client's depreciation schedule. As another example, calculation of units sold times average sales price to predict sales revenues may eliminate the need for further analysis of that account. In both of these cases, a simple analytical procedure can be used to adequately verify all the financial statement assertions for a general ledger account balance. Further tests of those balances may not be necessary.

5.207 Substantive Tests of Balances. Whenever control risk is assessed at the maximum level (a substantive audit approach), the auditor will place high reliance on substantive testing. Characteristics of highly reliable substantive tests are that they are performed at year end rather than at interim dates, the evidence provided by the tests is highly reliable (such as examining supporting documents prepared by a third party rather than internally-prepared documents), and maximum sample sizes are selected.

5.208 When the auditor assesses control risk at a moderate or low level and therefore performs tests of controls, the nature, timing, and extent of substantive tests may be changed. The following Evidence Matrix shows the impact of the auditor's control risk assessment on the substantive tests of balances evidence.

EVIDENCE MATRIX

Audit Approach	Control Risk for Most Financial Statement Assertions	Substantive Tests of Balances Evidence: Amount	Nature	Extent	Timing
ABC System Approach					
System A — Good Internal Control Procedures	Low	Small Amounts	Least Reliable	Small Samples	Most Precede Year End
System B — Good Accounting System and Primary Controls	Moderate	Medium Amounts	More Reliable	Medium Samples	Some Precede Year End
System C — Good Accounting System	Slightly Below the Maximum to Maximum	Large Amounts	Most Reliable	Large Samples	Most at Year End
System's Walk-Through Approach					
Weak Accounting System or More Efficient Tests Of Balances	Slightly Below the Maximum to Maximum	Large Amounts	Most Reliable	Large Samples	Most at Year End

5.209 The Contractors' Tests of Balances Audit Program is included in Chapter 7, section 7.400.

5.210 Analytical Procedures. In most cases, analytical procedures should be performed to the maximum extent possible, because they are often more efficient to perform than tests of balances.

Notice of Change in 1995 Edition of Analytical Procedures Program

Based on feedback from users of this Manual, the Analytical Procedures Program is no longer included. Instead, the substantive procedures that were included in that Program are now included in the related Tests of Balances Program in Chapter 7, section 7.400. This change was made to allow you to more easily choose the right mix of tests of details and analytical procedures for each major audit area based on the results of completing the Internal Controls Questionnaire, the Risk of Potential Misstatements Form, and the Tests of Controls Program, and considering which types of tests are the most efficient and effective for the audit area.

Also, the Audit Planning Memorandum in Chapter 4, section 4.506 has been expanded in this new Edition of the Manual to include some suggested ratios that you may consider in performing planning analytical procedures for audits of construction contractors.

5.211 Analytical procedures should be performed by the in-charge or a supervised assistant as early in the engagement as possible. If the client prepares year-end adjustments prior to beginning year-end field work, analytical procedures should be performed immediately upon beginning field work. In fact, in these cases, it may be appropriate for the in-charge to arrive several hours, even days on larger jobs, before the staff. The in-charge should use this lead time to complete the analytical procedures, to follow up on the results, and to reflect the conclusions in the modifications of the Contractors' Tests of Balances Audit Program (Chapter 7, section 7.400).

5.212 If the client does not prepare year-end adjustments, analytical procedures should at least be performed as work is completed and adjustments are prepared for each audit area. Performing analytical procedures as work is completed will provide corroborating evidence that will help achieve the desired level of assurance. In such cases, the results of the analytical procedures are high-reliance evidence. When modifying the tests of balances procedures, the contribution of analytical procedures to verification of the financial statement assertions should be considered.

5.300 THE AUDIT APPROACH

5.301 As explained in section 5.100, the audit approaches that are used in this Manual are the ABC System Approach and the System's Walk-Through Approach. Both approaches are described in the following sections.

The ABC System Approach

5.302 The ABC System Approach should be used for engagements in which the auditor plans to perform tests of controls in order to minimize substantive tests. The following are the basic steps involved in designing an audit approach using the ABC System, and the forms and documents contained in this Manual related to those steps:

Procedure	Documentation
1. Understand the entity's operations and the construction industry.	1. Client Acceptance and Continuance Form
2. Perform audit planning procedures.	2. Audit Planning Memorandum
3. Perform analytical procedures sufficient to plan the audit.	3. Audit Planning Memorandum
4. Obtain an understanding of the entity's internal control structure.	4. Contractors' Internal Controls Questionnaire and Computer Controls Questionnaires
5. Assess the risk that misstatements in the financial statements could occur.	5. Risk of Potential Misstatements Evaluation Form
6. Assess control risk for each financial statement assertion and determine the tests of controls and the level of substantive tests to be performed.	6. Contractors' Internal Controls Questionnaire and Planning Matrix

5.303 Procedure 1 is discussed in Chapters 1-4 while Procedures 2 and 3 are discussed in Chapters 4 and 7, respectively, of this Manual. The following sections discuss Procedures 4, 5, and 6 and the related documentation.

5.304 Using the AICPA Audit and Accounting Guide Volume 2

5.305 The AICPA's Industry Audit and Accounting Guide, *Construction Contractors* (AICPA Audit and Accounting Guides, Volume 2, loose-leaf version with conforming changes as of March 1995), includes information about accounting and auditing that is unique to that industry. It discusses the components of the internal control structure, audit objectives, and the nature of the construction contractor's operations and financial statement classifications. All engagement personnel should read and understand the Guide (reproduced in Appendix A) before modifying and using the documentation in this Manual.

5.306 The AICPA also publishes annual Audit Risk Alerts intended to provide auditors with an overview of recent economic, industry, regulatory, and professional developments that may affect the audits they perform. The 1994 Construction Contractor Audit Risk Alert highlights current issues that may result in increased audit risk such as new governmental policies, fierce competition within the industry, and restructuring of construction contractor companies.

5.307 Economic risks and audit risks associated with the construction contractor industry, and their effect on planning the audit are emphasized in the Guide. For each material financial statement area, the Guide discusses the following:

- Financial presentation and disclosures
- Audit objectives
- Planning considerations
- Internal control structure
- Test of controls
- Substantive tests

5.308 The Guide also discusses authoritative pronouncements and their effect on auditing procedures and accounting principles of construction contractors. Also included are chapters discussing types of contracts, joint ventures, income tax accounting, income recognition, and legal and regulatory considerations.

5.309 Illustrations of the form and content of financial statements, including typical disclosure for construction contractors, are presented in the Guide.

5.310 Internal Control Structure. SAS No. 55, *Consideration of the Internal Control Structure in a Financial Statement Audit* (AU 319), requires the auditor to obtain a sufficient understanding of an entity's control structure (control environment, control policies and procedures, and accounting system) to adequately plan the audit and to determine the nature, timing, and extent of audit procedures. As discussed in Chapter 1, section 1.401 the AICPA's Auditing Standards Board has released a proposed amendment to SAS No. 55, which is expected to be effective in the fourth quarter of 1995. This amendment would incorporate the definition and description of internal control found in the Committee on Sponsoring Organizations report, *Internal Control—Integrated Framework,* (the "COSO Report") into SAS No. 55. It is not expected to result in a significant change in practice. The description of the three elements of the control structure currently contained in SAS No. 55 is illustrated below:

ELEMENTS OF THE INTERNAL CONTROL STRUCTURE

For a financial statement audit, an entity's internal control structure is comprised of the following:

Control Environment: The collective effect of various factors on establishing, enhancing, or mitigating the effectiveness of specific policies or procedures. The control environment includes such factors as —

- Management's philosophy and operating style.
- The entity's organizational structure.
- The functioning of the board of directors and its committees, particularly the audit committee.

- Methods of assigning authority and responsibility.
- Management's control methods for monitoring and following up on performance, including internal auditing.
- Personnel policies and practices.
- Various external influences that affect an entity's operations and practices, such as state lien laws.

The control environment reflects the overall attitude, awareness, and action of the board of directors, management, owners, and others concerning the importance of control and its emphasis in the entity.

Accounting System: The methods and records established to identify, assemble, analyze, classify, record, and report an entity's transactions and to maintain accountability for the related assets and liabilities. An effective accounting system will give appropriate consideration to establishing methods and records that will —

- Identify and record all valid transactions.
- Describe on a timely basis the transactions in sufficient detail to permit proper classification of transactions for financial reporting.
- Measure the value of transactions in a manner that permits recording their proper monetary value in the financial statements.
- Determine the time period in which transactions occurred to permit recording of transactions in the proper accounting period.
- Present properly the transactions and related disclosures in the financial statements.

Control Procedures: Those policies and procedures, in addition to the control environment and the accounting system, that management has established to provide reasonable assurance that specific entity objectives will be achieved. Control procedures pertain to —

- Proper authorization of transactions and activities.
- Segregation of duties to reduce the opportunities to allow any person to be in a position to both perpetrate and conceal errors or irregularities in the normal course of his or her duties—assigning different people the responsibilities of authorizing transactions, recording transactions, and maintaining custody of assets.
- Design and use of adequate documents and records to help ensure proper recording of transactions and events, such as monitoring the use of prenumbered documents.
- Adequate safeguards over access to and use of assets and records, such as secured facilities and authorization for access to computer programs and data files.

- Independent checks on performance and proper valuation of recorded amounts, such as clerical checks, reconciliations, comparisons of assets with recorded accountability, computer-programmed controls, management review of reports that summarize the detail of account balances (for example, an aged trial balance of contracts receivable), and user review of computer-generated reports.

5.311 Completion of the Contractors' Internal Controls Questionnaire (section 6.200) satisfies the SAS No. 55 requirement to obtain and document the understanding of the three elements of the control structure. Additional narratives and flowcharts may be useful on larger, more complex engagements, however, they should supplement rather than replace the Contractors' Internal Controls Questionnaire.

5.312 The Questionnaire contains the following seven sections, representing the major audit areas for a typical construction contractor:

I. Cash.
II. Contracts receivable confirmations and alternative procedures, and contract revenue tests.
III. Vouching and inspecting fixed assets, search for unrecorded liabilities, purchases cutoff, expense account analysis and vouching, and construction contract costs.
IV. Payroll tests.
V. Physical inventory observation, inventory pricing and clerical tests.
VI. All cycles.
VII. Project administration and evaluation, estimating and bidding, and job site accounting and controls.

5.313 The Contractors' Internal Controls Questionnaire, Contractors' Tests of Controls Programs, and Contractors' Tests of Balances Audit Programs are organized by major audit area and are based on transaction cycles. Strengths and weaknesses in the internal control structure for each transaction cycle must, therefore, be reflected in the auditor's planned assessed level of control risk. The relationship is illustrated below:

RELATIONSHIP OF MAJOR AUDIT AREAS TO TRANSACTION CYCLES

Major Audit Area	Related Transaction Cycles
1. Cash	1. Collections and payments.
2. Contracts receivable confirmation and alternative procedures	2. Contract billings and collections.
3. Physical inventory observation	3. Inventory and warehousing.
4. Tests of balances inventory pricing and clerical tests	4. Inventory and warehousing.

5. Vouching and inspecting fixed assets	5. Acquisitions and payments.
6. Search for unrecorded liabilities	6. Acquisitions and payments.
7. Purchases cutoff	7. Acquisitions and payments.
8. Payroll tests	8. Payroll and personnel.
9. Expense account analysis and vouching	9. Acquisitions and payments.

5.314 Within each of the seven sections of the Contractors' Internal Controls Questionnaire listed in section 5.312 are three categories of controls: the accounting system controls, primary controls, and secondary controls. As described below, the "yes" and "no" responses within the three categories will help the auditor select the proper system for that section. System C is the weakest system and is characterized by good accounting system controls, but weak primary and secondary controls; System A is the strongest and is characterized by good accounting system and good primary and secondary controls. Even if the auditor anticipates that some major audit areas will be C Systems, all questions should be answered so that the auditor's requirement to understand the control structure is met. The following describes how to select the appropriate system (A, B, or C) after completing the Contractors' Internal Controls Questionnaire.

1. Within each of the seven sections of the Questionnaire, identify the most advanced system classification, A, B, or C, with a majority of "yes" answers in each section of the Questionnaire. Because tests of controls often require less time than tests of balances, the objective should be to perform tests of controls to the maximum extent practical.

2. Consult with the engagement partner to determine if tests of controls for the system classification selected are practical in light of past experience with the client. Prior years' unacceptable results from tests of controls, and the resulting high reliance on tests of balances, may cause the partner to select a lower system classification, i.e., B or C, and minimize controls testing. In other words, this decision may prevent overauditing.

3. For all "no" answers, i.e., potential weaknesses, up to and including the system selected in each section, complete the following process:

   a. Determine if the "no" answer is, in fact, a weakness.

   b. For the potential weakness, review any "yes" answers to other controls for possible offsetting strengths. Such strengths could be included within the system classification selected or in a more advanced system. For example, a weakness in a System B (a "no" answer) could be offset by another control within System B (a "yes" answer) or by a control in System A.

c. The Contractors' Tests of Controls Programs have been designed to test the controls that exist in each system, as evidenced by the Contractors' Internal Controls Questionnaire. For example, the control in a System A that may offset a weakness in System B would not be tested when the System B tests of controls program is used. To rely on the offsetting System A control, a modifying test of that control must be added to the System B program.

d. Select the Contractors' Tests of Controls Programs for each section of the Questionnaire that corresponds with the selected system classification, A, B, or C.

5.315 The in-charge's selection of the type of internal control system should be recorded on the Planning Matrix (section 5.602), and reviewed by the engagement partner before the in-charge selects the corresponding Contractors' Tests of Controls Programs. The complete Internal Control Structure Questionnaire is included in Chapter 6, section 6.200.

5.316 EDP Controls. SAS No. 48, *The Effects of Computer Processing on the Examination of Financial Statements,* amended SAS No. 22, *Planning and Supervision,* by adding to the list of required planning considerations the methods used to process significant accounting information, e.g., computer processing, because such methods influence the design of the accounting system and the nature of the internal control procedures. SAS No. 48 also describes the aspects of computer processing that may have an effect on planning an audit of financial statements. Completion of the EDP questionnaires provides the auditor with the minimum understanding of the internal control structure required to design an all-substantive audit approach. If the audit is designed to test controls (thereby reducing substantive testing) the questionnaires guide the auditor in identifying key EDP controls. The auditor would then incorporate these controls into the Internal Controls Questionnaire and the Tests of Controls Programs.

5.317 For entities using microcomputers for various accounting applications, certain basic internal control weaknesses may also exist. Any weaknesses resulting from microcomputer applications should also be considered during the evidence design process.

5.318 Risk of Potential Misstatements Evaluation. An important consideration in designing an audit strategy is considering the risk that errors, irregularities, and illegal acts that have a material effect on the financial statements could occur. The assessment of this risk, combined with information obtained in completing the Client Acceptance and Continuance Form, the Audit Planning Memorandum, and the Contractors' Internal Controls Questionnaire, affects the nature, timing, and extent of tests required to reduce that risk to an acceptable level. For example, if the auditor determines that there is a high risk that a material error could occur in a particular area (such as an asset subject to misappropriation or an account that involves very complex accounting methods), he or she would increase the amount of evidence required from tests of controls, analytical procedures, and/or tests of balances for that area. The purpose of the risk evaluation is to direct the auditor's efforts toward the audit areas that are most likely to contain misstatements. Most importantly, this assessment occurs before the evidence collection process begins.

5.319 This early assessment allows the auditor to modify the design of tests before the engagement is completed and overauditing has occurred. For example, the auditor may have planned to test a client's inventories by relying heavily on tests of controls in order to reduce year-end inventory count observations, pricing, and clerical tests. A review of the client's prior year's error history, however, revealed that significant counting, pricing, and clerical testing errors had occurred, resulting in a significant extension of the year-end tests. In this case, both extensive tests of controls and tests of balances were required. Had the prior year's errors been identified at the beginning of the engagement, the auditor would have planned to rely primarily on substantive tests, rather than waste time and effort on tests of controls that produced unsatisfactory results.

5.320 The Contractors' Risk of Potential Misstatements Evaluation Form in section 5.601, is designed to help the auditor assess the likelihood that material misstatements in the financial statements could occur and, if so, to develop an appropriate audit strategy. It should be completed during the pre-engagement audit planning by the in-charge and reviewed by the engagement partner.

5.321 The Form is comprised of two parts. Part I, "Special Considerations," is a series of questions about the client and the audit engagement circumstances that could indicate a high risk of potential misstatements. "Yes" answers to the questions in Part I should be explained. Part II, "Potential Misstatements Matrix," involves assessing the risk of misstatements for each audit area. This assessment is made by considering: (1) the responses to Part I, "Special Considerations," (2) whether the accounts are unusual and material or high risk due to the client's industry and operations, and (3) information from prior years' engagements about high exposure areas and any significant adjustments, made or passed. After considering these three risk categories, the auditor arrives at a conclusion, based on his or her professional judgment as to whether risk is high or low for each area. This conclusion is transferred to the Contractors' Planning Matrix (section 5.602) where it will be considered in developing an audit strategy. Any situations that indicate a high risk of potential misstatement should be described, along with the planned modification to the tests of controls and substantive tests.

The Contractors' Planning Matrix

5.322 Completion of the Client Acceptance and Continuance Form, the Audit Planning Memorandum, the Contractors' Internal Controls Questionnaire, and the Contractors' Risk of Potential Misstatements Evaluation Form provides the auditor with the information needed to plan the nature, timing, and extent of tests. The Contractors' Planning Matrix is designed to bring this information into one form.

5.323 The Contractors' Planning Matrix contains the following major audit areas:

- Cash, including collections and payments
- Receivables, billings, and collections
- Inventories and purchases
- Fixed assets
- Accounts payable, including subcontractors
- Revenues
- Costs of revenues
- Other accounts

5.324 These are the areas most likely to be tested under a System A or B. In other words, they are areas in which tests of controls are generally an efficient and effective means of reducing substantive tests on a construction contractor engagement. The Matrix should be modified on each engagement to include any other accounts or audit areas for which the System A or B would be more efficient and effective.

5.325 Completion of the Contractors' Planning Matrix involves the following steps for each audit area:

1. Indicate the preliminary system classification (A, B, or C) from the Contractors' Internal Controls Questionnaire.
2. Based on the system classification in step 1, select the planned assessed level of control risk. Because a System C lacks good primary and secondary controls, control risk should be assessed at the maximum or slightly below the maximum for these classifications. Control risk for System B classifications can be assessed at a moderate level, and for System A, at a high level. Also, the auditor may elect to use the System C even though the system is evaluated as an A or B if he or she believes it will be more efficient and effective to test those assertions under System C (a primarily substantive approach).
3. From the Contractors' Risk of Potential Misstatements Evaluation Form, indicate whether the risk of potential misstatements is high or low.
4. Determine whether analytical procedures can be relied on to detect material misstatements and indicate whether the risk that they will **not** detect a material misstatement is maximum, moderate, or low.
5. Indicate briefly, the planned reliance on tests of balances, including the nature, timing, and extent of these tests.

5.326 This section shows some ways that substantive tests of balances may be reduced when the ABC System is used.

REDUCTIONS IN SUBSTANTIVE TESTS OF BALANCES

Audit Areas	Possible TOBs Reductions
1. Cash	1. Prove fewer bank reconciliations. Prove some reconciliations at dates other than balance-sheet date. Trace fewer reconciling items to support. Use client's subsequent bank statement instead of cutoff statement.
2. Contracts receivable confirmation and alternative procedures for nonreplies and exceptions	2. Send fewer confirmations. Confirm at dates other than balance-sheet date. Alternative procedures for nonreplies to positive requests should consist of reviews of subsequent collections. Absent subsequent collections, and in the event of numerous nonreplies, billing and contract documents should be examined.
3. Revenues	3. Limit the extent of tests of amounts.
4. Physical inventory observation[1]	4. Fewer test counts taken and recorded. More time spent determining client is following instructions. Less time spent on observation. Observe cycle counts for perpetual systems.

REDUCTIONS IN SUBSTANTIVE TESTS OF BALANCES (Continued)

Audit Areas	Possible TOBs Reductions
5. Tests of balances inventory pricing and clerical tests[1]	5. Limit the extent of the tests.
6. Vouching and inspecting fixed assets	6. Less physical inspection of assets. Limit the extent of vouching tests for additions, repairs, supplies, etc., especially when numerous, low value assets have been capitalized.
7. Search for unrecorded liabilities	7. Higher dollar limits for review of journals, open invoices, receiving reports and purchase order files. Few, if any, vendor confirmations would be sent.
8. Purchases cutoff	8. Limit the extent of tests of amounts.
9. Payroll tests	9. Eliminate periodic comparison of payroll. Eliminate reconciliation of payroll to payroll tax returns.
10. Expense account analysis and vouching	10. Limit the extent of account analysis and vouching.

[1] When a client's inventory system is nonperpetual, controls testing of inventory cannot be performed. Observation procedures, pricing, and clerical tests are primarily substantive tests of balances, the extent of which depends on how well client personnel follow written instructions and on the extent of the client's double-checking procedures.

5.400 THE SYSTEM'S WALK-THROUGH APPROACH

5.401 The System's Walk-Through Approach is appropriate for engagements in which an all-substantive testing approach is considered to be the most efficient approach, either because the client does not have strong internal control policies and procedures or because testing the client's control policies and procedures would be less efficient and effective than performing substantive tests. The Approach is summarized as follows:

a. Control risk is assessed at the maximum.

b. TOCs are considered inefficient.

c. The System's Walk-Through Approach is used to gain an understanding of the internal control structure.

d. High reliance is placed on substantive tests — analytical procedures and tests of balances.

5.402 The following Evidence Modification Matrix should be used to guide the System's Walk-Through Approach for construction contractor audits:

Evidence Modification Matrix

	Reliance on Types of Tests		
Engagement Risks	System's Walk-Through	Analytical Procedures	TOBs
1. Either a high overall engagement risk, a high risk of potential misstatements, or both.	Understanding only	High	High
2. Both a low overall engagement risk and a low risk of potential misstatements.	Slight	High	Slightly less than High, to High

5.403 Variations in reliance on types of tests relate primarily to the nature, extent, and timing of auditing procedures. High reliance requires using the most reliable procedures, selecting large sample sizes, and performing tests of balances and analytical procedures at or near the balance-sheet date. Slightly less than high reliance may permit less reliable procedures, smaller sample sizes, and the performance of certain analytical and tests of balances procedures at interim dates.

5.404 The risk analysis must be made by transaction cycle and related to the corresponding tests of balances audit areas. The Contractors' System's Walk-Through Documentation Form in section 5.607, provides guidance in assessing risk on the engagement.

5.405 When both categories of risk are low, as is the case in number 2 of the Evidence Modification Matrix in section 5.402 above, the reliability of the procedures may be reduced in part, sample sizes may be reduced somewhat, and certain tests of balances procedures may be performed as of an interim date.

5.406 Consider, for example, the audit areas affected by the revenues and collections cycle, that is, contract receivables and revenue. High reliance would normally mean sending positive confirmations to all individually significant contract receivables balances on the balance-sheet date. The lower limit on individually significant items would be relatively small so that the dollar amount of the accounts selected would compose a significant portion of the account balance, say, 60 to 70 percent. Contract revenue would be analyzed by month and trends compared for three or four years; variances would be investigated.

5.407 Reducing the reliance on these substantive tests for low risks in both categories could permit a higher lower limit on individually significant items; that is, individually significant items would compose a smaller portion of the population. A small number of negative confirmations could be selected for representative accounts from the remaining population. Assuming procedures outlined in AICPA Statement on Auditing Standards (SAS) No. 45, paragraphs 1 through 10, *Substantive Tests Prior to the Balance-Sheet Date* [AU 313.01-.10], are performed, it may also be possible to confirm receivables as of an interim date. The detailed analysis of contract revenue by month may only be necessary in low risk circumstances if analytical procedures identify problems or unexplained variances.

5.408 The evidence design process in this approach begins with the assumption that high reliance on analytical procedures and tests of balances will be required on construction contractor audits. If, however, the overall engagement risk based on the Client Acceptance and Continuance Form (Chapter 4, section 4.501), and the risks of potential misstatements assessed during the system's walk-through are low, the nature, extent, and timing of tests of balances may be modified to reflect a slightly lower degree of reliance.

5.409 Illustration No. 5-1 provides starting-point guidance for modifying reliance on tests of balances in circumstances of low risk. This illustration reflects the typical nature, extent, and timing of procedures that would normally be performed when either overall engagement risk or risk of potential misstatement is high, and provides an alternative for cases when both risks are low.

Illustration No. 5-1
Illustrative Construction Contractors' Tests of Balances Procedures

Major Audit Area	High Reliance (Program Design Considerations)	Slightly Less Than High Reliance (Program Design Considerations)
1. Cash	1. Prove all major bank reconciliations at the balance-sheet date. Trace most reconciling items to cutoff statements. Confirm all accounts. Search for unrecorded transfers.	1. Perform the same tests due to the high risk inherent in cash balances.
2. Contract receivables, billings, and collections	2. Send positive confirmations or perform alternative procedures for individually significant accounts representing a substantial portion of the account balances as of the balance-sheet date. Support nonreplies and exceptions by reference to billing and cash receipts documents. Consider sending positive confirmations on a few representative remaining accounts.	2. Select fewer items as individually significant items for positive confirmation.
3. Inventories	3a. Consider observing inventory from start to finish. Make test counts of all individually significant items.	3a. Depending on the client's controls over count, raise the lower limit of individually significant items for test counts.
	3b. Perform inventory pricing and clerical tests for all individually significant items.	3b. Depending on the client's double-check procedures for pricing, extending, and footing the inventory sheets, consider reducing the number of individually significant items tested from 100 percent.
4. Fixed assets	4. Perform extensive vouching and inspections. A significant portion of the additions should be subjected to support tests.	4. Raise the lower limit of individually significant items subjected to vouching and inspection (that is, vouch fewer items).

5.	Accounts payable	5a. Perform an extensive search for unrecorded liabilities, including subsequently recorded transactions, open invoices, and receiving report and purchase order files. Lower limits for individually significant items should be used. Consider confirming major suppliers, including zero balances.	5a. Perform the same tests due to high inherent risk of unrecorded payables.
		5b. Perform extensive purchases cutoff tests by referring to vendor invoices for a long period before and after balance-sheet date.	5b. Shorten the test period or raise the lower limit of individually significant items tested.
6.	Expense accounts	6. Scan expense ledgers for unusual entries and perform extensive vouching tests for all significant accounts. Vouch entries by examining cancelled checks and supporting documents.	6. Expense procedures are basically the same.
7.	Payroll accounts	7. Compare monthly payroll by labor category and follow up on variations by referring to underlying records. Consider reconciling gross wages to payroll tax returns and, if necessary, testing a few selected disbursements in detail.	7. Basically, the same procedures can be performed, except detailed tests can be eliminated.

5.410 Terms such as *extensive, substantial,* and *significant,* are not, of course, subject to precise definition. Definitions will vary in each engagement's circumstances and depend on such considerations as materiality, the inherent nature of transactions and balances, and the overall mix of evidence. These words are used here to indicate that when the System's Walk-Through Approach is used to obtain an understanding of the internal control structure, tests of balances and analytical procedures are the primary sources of evidence to corroborate the financial statement assertions. If, for example, the evidence on an engagement previously consisted of a mix of tests of controls, tests of balances, and analytical procedures, eliminating the tests of controls would not mean the auditor would need less evidence. It would simply mean that more evidence from tests of balances, analytical procedures, and other procedures would be required, since the overall evidence necessary for the required level of assurance would remain the same.

5.411 The System's Walk-Through Approach should be used on engagements in which the auditor does not plan to perform tests of controls—either because the client does not have strong primary and secondary control procedures, or because testing those controls would be inefficient. This approach involves assessing control risk at the maximum for all major audit areas. Under this approach, no reliance is placed on tests of controls and high reliance is placed on tests of balances and analytical procedures. Even though tests of controls are not required when control risk is assessed at the maximum, the auditor may want to perform System C tests of controls. Performing these minimum tests of controls is recommended because they can enhance the auditor's understanding of the control structure and flow of transactions through the accounting system, and also allow the auditor to slightly reduce substantive tests.

5.412 The following shows the primary planning procedures and related forms that should be completed when using the System's Walk-Through Approach, along with the corresponding forms.

Procedure	Documentation
1. Understand the entity's operations and the construction industry.	1. Client Acceptance and Continuance Form
2. Perform audit planning procedures, including analytical procedures sufficient to plan the audit.	2. Audit Planning Memorandum
3. Obtain an understanding of the entity's internal control structure, assess the risk that misstatements in the financial statements could occur, and assess control risk for each financial statement assertion and determine the tests of controls and the level of substantive tests to be performed.	3. Contractor's System's Walk-Through Documentation Form

5.413 Completion of the Contractors' Internal Controls Questionnaire, the Contractors' Planning Matrix, and the Contractors' Risk of Potential Misstatements Evaluation Form is not necessary under the System's Walk-Through Approach.

Analytical Procedures

5.414 As for all audit engagements, analytical procedures should be performed on construction contractor audit engagements to the maximum extent practical and should be performed as early in the engagement as possible. On engagements where significant adjustments are required, analytical procedures should be performed after all significant adjustments have been recorded. In each circumstance, the planned reliance on analytical procedures should be reflected in the modification of the Contractors' Tests of Balances Audit Program.

Tests of Balances

5.415 Because minimum or no reliance is placed on tests of controls in the System's Walk-Through Approach, substantive tests become the primary source of evidence. The nature, timing, and extent of the tests of balances and analytical procedures selected should be those that are the most reliable, such as, positive vs. negative confirmations, larger sample sizes, and tests performed at year-end rather than at interim dates. This section presents some suggestions that should be considered in designing high-reliance tests of balances for major audit areas.

SYSTEM'S WALK-THROUGH APPROACH
SUGGESTED TESTS OF BALANCES

Major Audit Area	Program Design Consideration
1. Cash	1. Prove all major bank reconciliations at the balance-sheet date. Trace most reconciling items to cutoff statements. Search extensively for unrecorded bank transfers.
2. Contracts receivable confirmation and alternative procedures	2. Send positive confirmations for representative accounts comprising a substantial portion of the account balances at year end in accordance with SAS No. 39. Support nonreplies and exceptions by reference to billing and cash receipts documents. Compare billings by month, by contract type, to preceding years. Follow up on significant fluctuations by inspecting underlying records.
3. Revenues	3. Perform extensive tests of percentage of completion by reference to contract records.

Major Audit Area	Program Design Consideration
4. Physical inventory observation	4. Consider observing inventory from start to finish. Make extensive test counts at all locations.
5. Inventory pricing and clerical tests	5. Perform extensive, representative tests in accordance with SAS No. 39. A significant portion of the inventory items should be subjected to tests.
6. Vouching and inspecting fixed assets	6. Perform extensive vouching and inspections. A significant portion of the fixed assets, repairs, supplies, etc., account balances should be subjected to tests.
7. Search for unrecorded liabilities	7. Perform an extensive search for unrecorded liabilities including subsequently recorded transactions, open invoices, receiving reports and purchase order files. Low dollar limits should be used. Consider confirming major suppliers, including zero balances.
8. Purchases cutoff	8. Perform extensive cutoff tests by reference to vendor invoices for a large period before and after the balance-sheet date.
9. Payroll tests	9. Compare monthly payroll by labor category and follow up on transactions by reference to underlying records. Consider predictive analytical procedure or reconciling gross wages to payroll tax returns. Consider observation of payroll distribution.
10. Expense account analysis and vouching	10. Perform extensive vouching tests for all significant account balances by examining canceled checks and supporting documents.

Documentation

5.416 Engagement documentation for both the ABC System and the System's Walk-Through Approaches should be completed as follows:

Documentation	ABC Approach	System's Walk-Through Approach
1. Client Acceptance and Continuance Form	X	X
2. Engagement letter	X	X
3. Audit Planning Memorandum	X	X

4. Contractors' Internal Controls Questionnaire	X	
5. Contractors' Tests of Controls Programs	X	
6. Contractors' System's Walk-Through Documentation Form		X
7. EDP documentation	X	X
8. Contractors' Risk of Potential Misstatements Evaluation Form	X	
9. Planning Matrix	X	
10. Materiality Computation Form	X	X
11. Budget and time control documents	X	X
12. Sampling documentation	X	X
13. Contractors' Tests of Balances Audit Program	X	X
14. Summary of Possible Journal Entries Form	X	X
15. Contractors' Tax Accrual/Provision Review Checklist	X	X
16. Tax return preparation checklist, if applicable	X	X
17. Contractors' Supplement to Tax Return Preparation Checklist, if applicable	X	X
18. Consultation Form(s)	X	X
19. Internal Control Structure Reportable Conditions Form	X	X
20. Financial Statements and Notes Checklist and Disclosure Supplement for Construction Contractors	X	X
21. Engagement Performance Review Checklist	X	X
22. Contractors' Technical Review Checklist	X	X
23. Client representation letter	X	X
24. Financial Statement Control Form	X	X

Contractors' Systems Walk-Through Documentation Form

5.417 The Contractors' System's Walk-Through Documentation Form (section 5.607) is an integral part of the construction contractors' System's Walk-Through Approach—that is, the auditor expects to assess control risk at the maximum and plans to perform a totally substantive testing approach. Its purpose is to guide the auditor in obtaining an understanding of the client's accounting system, evaluating the risk of potential misstatements, gathering evidence that will corroborate other tests or information supporting the completeness assertion, designing the mix of evidence, and making suggestions that will assist the client in improving its accounting system.

5.418 The Form should be completed during engagement planning, prior to performing any analytical procedures or tests of balances. Significant weaknesses in the accounting system, which may indicate a high risk of potential misstatements, should be compensated for by expanded analytical and tests of balances procedures.

5.419 Because the System's Walk-Through Approach is designed for audits in which only substantive tests will be performed, performing tests of controls is unnecessary. However, the System's Walk-Through Approach does include some limited tests of controls designed to enhance the auditor's understanding of the client's control structure and accounting system.

5.420 As used in this Form, the terms "construction contract" and "contract" and their derivatives are synonymous; "purchase" includes *subcontract*, and "vendor" includes *subcontractor*.

5.421 Components of the System's Walk-Through Approach are considered in several pronouncements. AICPA Statement on Auditing Standards (SAS) No. 31, *Evidential Matter* (AU 326), requires the auditor to obtain sufficient competent evidential matter, by substantive tests of management's assertions and other procedures, to support his or her opinion on the financial statements. SAS No. 55, *Consideration of the Internal Control Structure in a Financial Statement Audit* (AU 319), recognizes tests of controls, analytical procedures, and tests of balances as the basic types of tests. Evidence in a given client's circumstances can be obtained from a mix of such tests. The System's Walk-Through Approach uses a mix of evidence from the walk-through, analytical procedures, and tests of balances. When control risk is assessed at slightly less than maximum because the accounting system is good, the System's Walk-Through Approach may permit slight reductions in substantive tests. The System's Walk-Through Approach is designed to gather the minimum amount of evidence in each client's circumstances in the least amount of time.

5.422 SAS No. 55, paragraph 2 (AU 319.02), states:

> In all audits, the auditor should obtain a sufficient understanding of each of the three elements (of the internal control structure) to plan the audit by performing procedures to understand the design of policies and procedures relevant to audit planning and whether they have been placed in operation.

5.423 When the auditor assesses control risk at the maximum, neither an internal controls questionnaire nor inquiry-type tests of controls is necessary. The System's Walk-Through Approach provides an understanding of the client's control environment and the flow of transactions through its accounting system that is sufficient for audit planning. The approach also provides documentation of the understanding for use in designing the mix and nature of other types of tests and for making suggestions for improvement to the client.

5.424 SAS No. 47, *Audit Risk and Materiality in Conducting an Audit* (AU 312), provides guidance on the auditor's consideration of audit risk and materiality when performing an audit. Materiality is discussed in detail in Chapter 4. Audit risk, as described in SAS No. 47, includes the risk that may be inherent in the nature of a transaction or balance, the risk resulting from weaknesses in the internal control structure, and the risk that the auditor's tests may not detect misstatements resulting from the inherent and control risks. The System's Walk-Through Approach incorporates inherent and control risks in the section on the evaluation of risk of potential misstatements. Inherent risk is assumed to be maximum unless it is mitigated by internal control structure policies or procedures. Detection risk is minimized by the effectiveness of the auditing procedure followed.

5.425 Using The Contractors' System's Walk-Through Documentation Form

The Form is comprised of the following eight sections:

I. Industry Information
II. Company Organization and Personnel
III. Related Parties
IV. Financing
V. Accounting System Records and Procedures
VI. Walk-Through Checklist
VII. Evaluation of Risk of Potential Misstatements
VIII. Preliminary Evidence Design Matrix

5.426 Completion of Sections I through V documents the auditor's understanding of the three elements of the control structure—control environment, control procedures, and accounting system—for a typical construction contractor. Flow-charts and internal control questionnaires are generally not necessary in a small construction contractor engagement. These sections can be completed and updated by the client, and reviewed by engagement personnel.

5.427 Section VI, Walk-Through Checklist, supplements the auditor's understanding of the accounting system by requiring engagement personnel to walk a small number of transactions through the accounting system. This section is particularly helpful on new clients and for new firm personnel. It need not be performed every year, especially if the client's accounting system and personnel have not changed since the last engagement, and if control risk is assessed at the maximum.

5.428 SAS No. 53, *The Auditor's Responsibility to Detect and Report Errors and Irregularities* (AU 316), and SAS No. 54, *Illegal Acts by Clients* (AU 317), require the auditor to consider the possibility that errors, irregularities, and illegal acts that have a material effect on the financial statements could occur and not be detected. These Statements require, among other things, that the auditor consider that possibility and design an appropriate audit strategy. Section VII, Evaluation of Risk of Potential Misstatements, helps the auditor evaluate the possibility that material errors, irregularities, and illegal acts could occur.

5.429 Section VIII, Preliminary Evidence Design Matrix, brings together the auditor's findings from the Client Acceptance and Continuance Form (Chapter 4, section 4.501), the Audit Planning Memorandum (Chapter 4, section 4.506) and Section VII above to design an appropriate audit strategy.

5.430 All compensating analytical or tests of balances procedures should be cross-referenced to the Contractors' Tests of Balances Audit Program (TOB program) (Chapter 7, section 7.400). Inapplicable or immaterial procedures should be marked "N/A" or "N/R."

5.431 Included in section 5.607 is a completed Contractor's System's Walk-Through Documentation Form for a hypothetical engagement. This Form is included to illustrate how the system's walk-through procedures might be documented.

5.500 SAMPLING DECISIONS

Audit Procedure Study and Changes to "Sampling Decisions"

5.501 As this Manual goes to print, the Auditing Standards Division of the AICPA is developing an Audit Procedure Study (APS) to replace the AICPA Audit and Accounting Guide, *Audit Sampling* (the Audit Sampling Guide). The APS is expected to be issued by the fourth quarter of 1995.[2]

5.502 The guidance contained in this section is consistent with the guidance in the Audit and Accounting Guide except that the "assurance factors" used in the Model Approach (see section 5.536) conform with those used in the draft APS. The authors believe that these factors better reflect current practice.

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[2] The APS may be obtained by calling the AICPA's Order Department at 1-800-862-4272.

5.503 This section has been revised to make it easier to comply with the requirements of SAS No. 39, *Audit Sampling*. To simplify our coverage of audit sampling for substantive tests, the Table Approach to nonstatistical sampling has been removed from this edition of the Manual because the approach is in substance equivalent to the Model Approach. Practitioners who wish to use the Table Approach should refer to the Audit Sampling Guide. In this regard, the following forms have been deleted:

- Sampling Decision Working Paper
- Sample Size Selection and Evaluation Form
- Attributes Sampling Summary Form
- Nonstatistical Sample Size Selection Matrix — Tests of Controls

5.504 The requirements for audit sampling are included in SAS No. 39, *Audit Sampling* (AU 350), and the Audit Sampling Guide (AAG-SAM).

5.505 According to SAS No. 39, *Audit Sampling* (AU 350), sampling occurs when the auditor tests less than 100% of a population to make some conclusion about the population. SAS No. 39 applies to tests of controls when such tests are performed and to tests of balances when sampling populations are material. The extent to which sampling is used in an audit depends on the size of the client and the nature of the client's internal control structure. If the System's Walk-Through Approach is being used, the auditor will not perform tests of controls using audit sampling. Also, if the sampling populations are small, it is usually more efficient to audit individually significant items and obtain audit assurance about the remaining balance through analytical procedures than to perform audit sampling. As the size and sophistication of the client's internal control structure increases, the auditor is more likely to use audit sampling to perform tests of controls and tests of balances.

Audit Sampling for Tests of Controls

5.506 SAS No. 39 indicates that an auditor may use nonstatistical or statistical sampling in performing tests of controls. This Manual provides guidance for both approaches. Regardless of whether nonstatistical or statistical sampling is being used, audit sampling for tests of controls involves the following steps:

1. **Determine the objective of the test** — The objective of a test of control is to determine whether a particular internal control policy or procedure is being applied as prescribed. Audit sampling for tests of controls is generally appropriate when application of the internal control policy procedure leaves documentary evidence of performance. Normally, audit sampling for tests of controls will involve selecting a sample of documents and examining them for evidence that the relevant internal control policy or procedure was applied. Tests of controls involving observation of performance of procedures or inquiries of the client are not normally subject to audit sampling.

2. **Define the deviation conditions** — A deviation condition is a situation that indicates that the policy or procedure was not performed. For example, if the auditor is examining purchase invoices for evidence of approval of an expenditure (e.g., the initials of the approving individual), a deviation condition would be an invoice that is not initialed by the appropriate individual. Adequate performance of a policy or procedure consists of all the steps the auditor believes are necessary to support the assessed level of control risk. For example, assume that a prescribed procedure

requires that support for every disbursement should include an invoice, a voucher, a receiving report, and a purchase order, all stamped "Paid." The auditor believes that the existence of an invoice and a receiving report, both stamped "Paid," is necessary to indicate adequate performance of the procedure for purposes of supporting the assessed level of control risk. Therefore, a deviation may be defined as " a disbursement not supported by an invoice and a receiving report that have been stamped 'Paid.'"

3. **Define the population** — The population selected must be appropriate for the objective being tested. For example, if the auditor is testing the operating effectiveness of an internal control procedure designed to determine if all shipments were billed, the auditor would not detect deviations by sampling from billed items. An appropriate population for detecting such deviations usually includes the record of all items shipped.

   For samples to be representative of the period under audit, the population generally should include all transactions processed during the period. However, sometimes the results of tests performed at an interim date may be sufficient to generalize about the population for the entire period. In determining whether interim tests are sufficient, the auditor should consider the results of the tests, responses to inquiries concerning the remaining period, the length of the remaining period, the nature and amounts of the transactions or balances involved, and related evidence obtained from the tests of balances. If a control policy or procedure has been changed during the year, the auditor will often decide that it is efficient to only test the new policy or procedure.

   For sample results to be reliable, the sample must be selected from the complete population. Completeness of the population can be determined by either physical or numerical control. Normally, the auditor can establish the completeness of the population by inspecting the documents to see that it appears that they have all been accounted for.

4. **Determine the method of selecting the sample** — Any sample that is selected should be representative of the population and all items should have an opportunity to be selected. Random-number selection should generally be used when statistical sampling is being applied. When nonstatistical sampling is applied, random-number sampling, systematic sampling, and haphazard sampling are methods that might be used to obtain a representative sample. Methods of selecting samples are discussed beginning at section 5.543.

5. **Determine the sample size** — Sample sizes for tests of controls are affected by (1) the risk of assessing control risk too low, (2) the tolerable deviation rate, (3) the expected population deviation rate, and (4) any effects of small population sizes.

   Guidance for determining sample size when performing nonstatistical sampling begins with section 5.509. A description of statistical sampling begins with section 5.512.

6. **Perform the sampling plan** — Once the sample has been selected, the auditor should examine each item for evidence of performance of the internal control policy or procedure. If the auditor selects an item that is unused (e.g., a voided document), the auditor should select another item, at random. However, the auditor should make sure that the item really represents an unused item. If the document is valid, but cannot be found, the item should be treated as a deviation in evaluating the sample results.

7. **Evaluate the sample results** — Guidance for evaluating nonstatistical sampling results begins with section 5.510 and guidance for evaluating statistical sampling results begins with section 5.513.

8. **Document the sampling procedure** — The audit working papers should document the following matters:

- The objectives of the test.
- A description of the deviation conditions.
- The acceptable risk of assessing control risk too low.
- The tolerable deviation rate.
- The expected deviation rate.
- The sample results, including the disposition of any deviations found.
- The effect of the results on the auditors assessed level of control risk.

5.507 Factors Affecting Sample Sizes for Tests of Controls. Sample sizes for tests of controls are affected by the following factors:

1. *Acceptable risk of assessing control risk too low.* The risk of assessing control risk too low is the risk that the sample supports a lower level of control risk than is in fact the case. Decreasing the risk of assessing control risk too low will increase the sample size.
2. *Expected population deviation rate.* The expected population deviation rate represents the rate of deviations the auditor expects to find in the population. As the expected population deviation rate increases, the sample size will increase.
3. *Tolerable deviation rate.* Tolerable deviation rate is the maximum rate (%) of deviations from a control procedure that the auditor is willing to accept without increasing the assessed level of control risk. Higher tolerable deviation rates will permit smaller sample sizes.
4. *Population size.* Populations over 500 items have little or no effect on sample size. For populations under 500 in size, the auditor may slightly reduce the size of the sample.

5.508 The effects of these factors may be summarized as follows:

Factor	Effect on Sample Size
Acceptable risk of assessing control risk too low — increase (decrease)	Smaller (larger)
Tolerable deviation rate — increase (decrease)	Smaller (larger)
Expected population deviation rate — increase (decrease)	Larger (smaller)
Population size	Populations less than 500 items should be adjusted to slightly smaller sample sizes

5.509 Sample Sizes Using Nonstatistical Sampling. Nonstatistical sample sizes for tests of controls may be determined using the sample size selection tables in section 5.510, or they may be selected on a purely judgmental basis. Sample sizes should be entered directly on the appropriate Tests of Controls Program. For each method of selection, the auditor should document consideration of the relevant factors. For example, the rationale for selecting tests of controls sample sizes of 30 from the first table in section 5.510 for an internal control system that is classified as a System B may be:

1. Control risk will be assessed at a moderate level, and
2. The expected population deviation rate is at or near zero.

5.510 The following tables should be used for a nonstatistical approach to determine sample sizes for tests of controls:

CONTROLS TESTING NONSTATISTICAL
SAMPLE SIZE SELECTION TABLE

Assessed Level of Control Risk	Sample Size
Maximum	0
Slightly below the maximum	15
Moderate	30
Low	40

The numbers in the table were determined using a risk of assessing control risk too low of 10% and an expected population deviation rate of 0%. When deviations are expected or found in a sample, the following table may be used to determine the sample size or evaluate the sample results:

Deviations (Expected or Actual)	Assessment of Control Risk		
	Slightly Below Maximum	Moderate	Low
0	15	30	40
1	25	50	65
2	34	67	90
3	43	85	115

5.511 In evaluating the results of the sample, the auditor should consider the number of deviations found and the nature of the deviations. If the auditor uses the first table in section 5.510 to determine sample size, the discovery of one or more deviations will require the auditor to reassess the planned level of control risk. In these cases, the second table in section 5.510 may be used to evaluate the assessed level of control risk that is supported by the sample results. When looking at the nature of the deviations, the auditor is concerned with the following questions:

- Was the cause of the deviation an error or does it indicate an intentional violation of the control?
- Are there implications for other audit areas?

5.512 Sample Sizes Using Statistical Sampling. The appropriate statistical method for tests of controls is attributes sampling, which is a technique designed to estimate qualitative characteristics of a population. Attributes sampling results may be used to estimate the frequency of deviations from performance of an internal control policy or procedure.

5.513 Applying attributes sampling involves performing the following steps:

1. **Decide on the attributes to test.** The Tests of Controls Program may include the testing of one or more attributes. Proper evaluation of the results may require testing and evaluating each attribute separately.
2. **Define the population from which the sample items should be selected.** The auditor should make sure that the population is appropriate for the audit objective as described in 5.506.
3. **Specify the following factors:**

   - *Acceptable Risk of assessing control risk too low.* The risk of assessing control risk too low is the risk the sample supports a lower level of control risk than is the case. Since sample evidence represents the only evidence typically obtained about the operating effectiveness of a particular control, the risk of assessing control risk too low is usually set at 5% or 10%.
   - *Tolerable deviation risk.* Tolerable deviation rate is the maximum rate (%) of deviations from a control procedure the auditor is willing to accept without increasing the assessed level of control risk. Higher assessments of control risk will permit higher tolerable deviation rates as shown in the following table:

Planned Assessed Level of Control Risk	Tolerable Rate
Low	2% - 7%
Moderate	6% - 12%
Slightly below the maximum	11% - 20%
Maximum	Omit test

- *Expected population deviation rate.* The expected population deviation rate represents the rate of deviations the auditor expects to find in the population. The auditor's expectations may be based on prior years' experience with the client, or experience with similar clients. Sample sizes will increase significantly as the expected population deviation rate increases from zero. If the deviation rate in the sample turns out to be higher than the rate specified by the auditor in determining the sample size, the sample results will not support the auditor's planned assessed level of control risk.

4. **Determine the appropriate sample size.** Sample sizes are found in the tables in sections 5.514 through 5.515. The table in section 5.514 is designed for a risk of assessing control risk too low of 5%, and the table in section 5.515 is designed for a 10% risk of assessing control risk too low. With the tolerable deviation rate and the expected deviation rate, the auditor may find the sample size from the table. The numbers in parentheses are the number of deviations that may be found in the sample and still support the auditor's planned assessed level of control risk.

5. **Randomly select the sample from the population.** The section beginning at 5.543 describes the methods that may be used to select a random sample.

6. **Perform the audit procedures to identify deviations in the sample.**

7. **Calculate the statistical results.** Using the tables in sections 5.516–5.517 for the appropriate risk of assessing control risk too low, determine the actual tolerable deviation rate from the sample size and the actual number of deviations found in the sample.

8. **Reassess the level of control risk.** If the actual deviation rate in the sample is higher than that specified in determining the sample, the sample results will not support the auditor's planned assessed level of control risk. In these situations, the auditor should increase the assessed level of control risk. The auditor should also consider the causes of the deviations found, and whether they have implications for other audit areas.

9 **Document the Sampling Procedures.** The audit working papers should document the matters set forth in 5.506 (item No. 8).

5.514

Statistical Sample Sizes for Testing Controls
Five Percent Risk of Assessing Control Risk Too Low
(with number of expected errors in parentheses)

Expected Population Deviation/ Error Rate	Tolerable Rate 2%	3%	4%	5%	6%	7%	8%	9%	10%	15%	20%
0.00%	149(0)	99(0)	74(0)	59(0)	49(0)	42(0)	36(0)	32(0)	29(0)	19(0)	14(0)
.25	236(1)	157(1)	117(1)	93(1)	78(1)	66(1)	58(1)	51(1)	46(1)	30(1)	22(1)
.50	*	157(1)	117(1)	93(1)	78(1)	66(1)	58(1)	51(1)	46(1)	30(1)	22(1)
.75	*	208(2)	117(1)	93(1)	78(1)	66(1)	58(1)	51(1)	46(1)	30(1)	22(1)
1.00	*	*	156(2)	93(1)	78(1)	66(1)	58(1)	51(1)	46(1)	30(1)	22(1)
1.25	*	*	156(2)	124(2)	78(1)	66(1)	58(1)	51(1)	46(1)	30(1)	22(1)
1.50	*	*	192(3)	124(2)	103(2)	66(1)	58(1)	51(1)	46(1)	30(1)	22(1)
1.75	*	*	227(4)	153(3)	103(2)	88(2)	77(2)	51(1)	46(1)	30(1)	22(1)
2.00	*	*	*	181(4)	127(3)	88(2)	77(2)	68(2)	46(1)	30(1)	22(1)
2.25	*	*	*	208(5)	127(3)	88(2)	77(2)	68(2)	61(2)	30(1)	22(1)
2.50	*	*	*	*	150(4)	109(3)	77(2)	68(2)	61(2)	30(1)	22(1)
2.75	*	*	*	*	173(5)	109(3)	95(3)	68(2)	61(2)	30(1)	22(1)
3.00	*	*	*	*	195(6)	129(4)	95(3)	84(3)	61(2)	30(1)	22(1)
3.25	*	*	*	*	*	148(5)	112(4)	84(3)	61(2)	30(1)	22(1)
3.50	*	*	*	*	*	167(6)	112(4)	84(3)	76(3)	40(2)	22(1)
3.75	*	*	*	*	*	185(7)	129(5)	100(4)	76(3)	40(2)	22(1)
4.00	*	*	*	*	*	*	146(6)	100(4)	89(4)	40(2)	22(1)
5.00	*	*	*	*	*	*	*	158(8)	116(6)	40(2)	30(2)
6.00	*	*	*	*	*	*	*	*	179(11)	50(3)	30(2)
7.00	*	*	*	*	*	*	*	*	*	68(5)	37(3)

* Sample Size is too large to be cost effective for most audit applications.

Derived from AICPA Audit and Accounting Guide, *Audit Sampling*.

NOTE: This table assumes a large population.

5.515

Statistical Sample Sizes for Testing Controls
Ten Percent Risk of Assessing Control Risk Too Low
(with number of expected errors in parentheses)

Expected Population Deviation/ Error Rate	Tolerable Rate 2%	3%	4%	5%	6%	7%	8%	9%	10%	15%	20%
0.00%	144(0)	76(0)	57(0)	45(0)	38(0)	32(0)	28(0)	25(0)	22(0)	15(0)	11(0)
.25	194(1)	129(1)	96(1)	77(1)	64(1)	55(1)	48(1)	42(1)	38(1)	25(1)	18(1)
.50	194(1)	129(1)	96(1)	77(1)	64(1)	55(1)	48(1)	42(1)	38(1)	25(1)	18(1)
.75	265(2)	129(1)	96(1)	77(1)	64(1)	55(1)	48(1)	42(1)	38(1)	25(1)	18(1)
1.00	*	176(2)	96(1)	77(1)	64(1)	55(1)	48(1)	42(1)	38(1)	25(1)	18(1)
1.25	*	221(3)	132(2)	77(1)	64(1)	55(1)	48(1)	42(1)	38(1)	25(1)	18(1)
1.50	*	*	132(2)	105(2)	64(1)	55(1)	48(1)	42(1)	38(1)	25(1)	18(1)
1.75	*	*	166(3)	105(2)	88(2)	55(1)	48(1)	42(1)	38(1)	25(1)	18(1)
2.00	*	*	198(4)	132(3)	88(2)	75(2)	48(1)	42(1)	38(1)	25(1)	18(1)
2.25	*	*	*	132(3)	88(2)	75(2)	65(2)	42(1)	38(1)	25(1)	18(1)
2.50	*	*	*	158(4)	110(3)	75(2)	65(2)	58(2)	38(1)	25(1)	18(1)
2.75	*	*	*	209(6)	132(4)	94(3)	65(2)	58(2)	52(2)	25(1)	18(1)
3.00	*	*	*	*	132(4)	94(3)	65(2)	58(2)	52(2)	25(1)	18(1)
3.25	*	*	*	*	153(5)	113(4)	82(3)	58(2)	52(2)	25(1)	18(1)
3.50	*	*	*	*	194(7)	113(4)	82(3)	73(3)	52(2)	25(1)	18(1)
3.75	*	*	*	*	*	131(5)	98(4)	73(3)	52(2)	25(1)	18(1)
4.00	*	*	*	*	*	149(6)	98(4)	73(3)	65(3)	25(1)	18(1)
5.00	*	*	*	*	*	*	160(8)	115(6)	78(4)	34(2)	18(1)
6.00	*	*	*	*	*	*	*	182(11)	116(7)	43(3)	25(2)
7.00	*	*	*	*	*	*	*	*	199(14)	52(4)	25(2)

* Sample Size is too large to be cost effective for most audit applications.

Derived from AICPA Audit and Accounting Guide, *Audit Sampling*.

NOTE: This table assumes a large population.

5.516

Statistical Sample Results Evaluation
Table for Tests of Controls
Tolerable Deviation Rate at Five Percent Risk of Assessing Control Risk Too Low

Actual Number of Deviations/Errors Found

Sample Size	0	1	2	3	4	5	6	7	8	9	10
25	11.3	17.6	*	*	*	*	*	*	*	*	*
30	9.5	14.9	19.6	*	*	*	*	*	*	*	*
35	8.3	12.9	17.0	*	*	*	*	*	*	*	*
40	7.3	11.4	15.0	18.8	*	*	*	*	*	*	*
45	6.5	10.2	13.4	16.4	19.2	*	*	*	*	*	*
50	5.9	9.2	12.1	14.8	17.4	19.9	*	*	*	*	*
55	5.4	8.4	11.1	13.5	15.9	18.2	*	*	*	*	*
60	4.9	7.7	10.2	12.5	14.7	16.8	18.8	*	*	*	*
65	4.6	7.1	9.4	11.5	13.6	15.5	17.4	19.3	*	*	*
70	4.2	6.6	8.8	10.8	12.6	14.5	16.3	18.0	19.7	*	*
75	4.0	6.2	8.2	10.1	11.8	13.6	15.2	16.9	18.5	20.0	*
80	3.7	5.8	7.7	9.5	11.1	12.7	14.3	15.9	17.4	18.9	*
90	3.3	5.2	6.9	8.4	9.9	11.4	12.8	14.2	15.5	16.8	18.2
100	3.0	4.7	6.2	7.6	9.0	10.3	11.5	12.8	14.0	15.2	16.4
125	2.4	3.8	5.0	6.1	7.2	8.3	9.3	10.3	11.3	12.3	13.2
150	2.0	3.2	4.2	5.1	6.0	6.9	7.8	8.6	9.5	10.3	11.1
200	1.5	2.4	3.2	3.9	4.6	5.2	5.9	6.5	7.2	7.8	8.4

* Over 20 percent

Derived from AICPA Audit and Accounting Guide, *Audit Sampling*.

NOTE: This table presents upper limits as percentages. This table assumes a large population.

5.517

Statistical Sample Results Evaluation
Table for Tests of Controls
Tolerable Deviation Rate at Ten Percent Risk of Assessing Control Risk Too Low

Actual Number of Deviations/Errors Found

Sample Size	0	1	2	3	4	5	6	7	8	9	10
20	10.9	18.1	*	*	*	*	*	*	*	*	*
25	8.8	14.7	19.9	*	*	*	*	*	*	*	*
30	7.4	12.4	16.8	*	*	*	*	*	*	*	*
35	6.4	10.7	14.5	18.1	*	*	*	*	*	*	*
40	5.6	9.4	12.8	16.0	19.0	*	*	*	*	*	*
45	5.0	8.4	11.4	14.3	17.0	19.7	*	*	*	*	*
50	4.6	7.6	10.3	12.9	15.4	17.8	*	*	*	*	*
55	4.1	6.9	9.4	11.8	14.1	16.3	18.4	*	*	*	*
60	3.8	6.4	8.7	10.8	12.9	15.0	16.9	18.9	*	*	*
70	3.3	5.5	7.5	9.3	11.1	12.9	14.6	16.3	17.9	19.6	*
80	2.9	4.8	6.6	8.2	9.8	11.3	12.8	14.3	15.8	17.2	18.6
90	2.6	4.3	5.9	7.3	8.7	10.1	11.5	12.8	14.1	15.4	16.6
100	2.3	3.9	5.3	6.6	7.9	9.1	10.3	11.5	12.7	13.9	15.0
120	2.0	3.3	4.4	5.5	6.6	7.6	8.7	9.7	10.7	11.6	12.6
160	1.5	2.5	3.3	4.2	5.0	5.8	6.5	7.3	8.0	8.8	9.5
200	1.2	2.0	2.7	3.4	4.0	4.6	5.3	5.9	6.5	7.1	7.6

* Over 20 percent

Derived from AICPA Audit and Accounting Guide, *Audit Sampling*.

NOTE: This table presents upper limits as percentages. This table assumes a large population.

Audit Sampling for Tests of Balances

5.518 In planning tests of balances, the auditor should decide on the most efficient approach to performing the tests. For some recorded populations, instead of sampling, it may be more efficient to examine individually significant items comprising a majority, or near majority, of the recorded population. Audit assurance about the remaining balance may then be obtained by (1) performing analytical procedures, or (2) concluding that the risk of material misstatement of the remaining balance is low. For example, confirmation of 50% to 80% of the dollar amount of accounts receivable may be necessary when risk is high; 40% to 60% may be sufficient when risk is low.

5.519 Obviously, when the remaining balance, after auditing the individually significantly items, is immaterial, no testing of the remaining balance is necessary.

5.520 The decision to sample, or not to sample, should be documented in the Audit Planning Memorandum (Chapter 4, section 4.506).

5.521 Selecting all individually significant items is not considered a sampling application. Items such as large receivables are usually examined individually. Procedures used for examining such items should ordinarily be the most reliable under the circumstances, such as positive confirmation requests.

5.522 When planning a sampling application for tests of balances, the in-charge should consider the financial statement assertions and audit objectives and their relationship to populations selected. For example, understatements cannot be detected by sampling recorded amounts; instead, units from populations of all existing transactions must be selected. The populations, and the appropriate sampling units, are described in the Tests of Balances Program — Construction Contractors (Chapter 7, section 7.400).

5.523 The following is an approach to nonstatistical sampling for tests of balances.

1. Determine the sampling population by identifying and deducting the individually significant items.
2. Determine the sample size by considering the following factors:
   - The amount of tolerable misstatement.
   - The assessed level of inherent and control risk for the assertions being tested.
   - The risk that other substantive procedures (e.g., analytical procedures) will fail to detect a material misstatement.
   - Variations within the population.
3. Select the sample.
4. Perform the test procedure.

5. Evaluate the results.

   - Project the misstatement.
   - Consider sampling risk.
   - Consider qualitative aspects of the test results.

6. Document the sample procedure when using the Model Approach described in sections 5.531–5.542, the Model Approach Working Paper — Tests of Balances Sampling (see section 5.706) and the Audit Sampling Evaluation Form — Tests of Balances Sampling (see section 5.707) may be used for this purpose.

5.524 Sample selection methods should produce representative samples and may include random selection, systematic selection, or haphazard selection methods. Care should be taken to avoid bias, however, when a haphazard selection method is used. Section 5.543 describes these sample selection methods.

5.525 Determine the Sample Size for Tests of Balances. Sample sizes for tests of balances are affected by the following factors:

- *Tolerable misstatement.* As the amount of tolerable misstatement increases, the sample size decreases. Conversely, larger sample sizes are required to compensate for a smaller amount of tolerable misstatement. The tolerable misstatement for a sampling application may be taken from the Materiality Computation Form in Chapter 4, section 4.507.
- *Assessed level of inherent and control risk.* As the combined level of inherent and control risk increases, the sample size increases. Assessments of inherent and control risk may be obtained by reviewing the Planning Matrix (see section 5.602).
- *The risk that other substantive procedures will fail to detect a material misstatement.* As the risk that other substantive procedures will fail to detect a material misstatement increases, the sample size increases. This risk is determined by considering the effectiveness of these procedures.
- *Variations within the population.* Sample sizes are smaller when the sampling population is stratified into homogeneous groups. Larger sample sizes are usually required to obtain a representative sample from sampling populations with high variations.

5.526 Illustration No. 5-2 summarizes the impact of the factors above on sample size planning.

ILLUSTRATION NO. 5-2

FACTORS INFLUENCING SAMPLE SIZES FOR SUBSTANTIVE TESTS OF BALANCES

Factor	Conditions Leading to: Smaller Sample Size	Larger Sample Size
a. Tolerable misstatement.	Larger amount	Smaller amount.
b. Assessed level of inherent and control risk.	Lower.	Higher.
c. Risk that other procedures will fail to detect a material misstatement.	Lower.	Higher.
d. Variation within the population.	Less variation.	More variation.

5.527 Nonstatistical Sampling Approaches. At the direction of the engagement partner, either of the following nonstatistical approaches can be used for selecting tests of balances sample sizes:

1. Judgmental method.
2. Model approach.

5.528 Judgmental Method. Sample sizes can be selected judgmentally after considering the influence of the factors described above. The in-charge should describe, in the Audit Planning Memorandum, the factors that influence the sample sizes selected for substantive tests of balances. The engagement partner should approve the planned sample sizes before the substantive tests of balances work is begun. See Chapter 4, section 4.506 for an illustrative Audit Planning Memorandum.

5.529 Judgmentally selected samples are considered in terms of audit coverage of a total population. Large dollar coverage generally includes individually significant items, and units from the sampling population that cover more than 50% of the dollar amount of the total population.

5.530 The coverage of the total population will also be affected by the nature of the population and the degree of the engagement risks. For example, a large coverage of accounts receivable for confirmation in high-risk circumstances may be from 50% to 80% of the total dollar population. A large coverage for an inventory price test in the same circumstances may only be 30% to 40% of total inventory because the risk of inventory price misstatement is generally less. In low-risk circumstances, a large coverage of accounts receivable may be 40% to 60%, a large inventory coverage may be 20% to 30%. These percentages are not presented as specific guidelines for decision making, but as illustrations of the factors influencing nonsampling decisions. Since the auditor's opinion is expressed on the financial statements taken as a whole, evidence should be designed to include tests of a majority of the dollars in the financial statements, but should also be, overall, the most efficient in the circumstances.

5.531 The Model Approach. The model approach is a nonstatistical sampling method that is based on Probability Proportional To-Size (PPS) Sampling. Because the approach is based on PPS theory, the overall materiality limit does not have to be allocated to each account to determine tolerable misstatements. Instead, the basic allowance for unknown misstatement, i.e., overall materiality limit minus estimates for unadjusted misstatement from nonsampling tests, expected projected misstatement from sampling tests and related allowances for imprecision, may be used in place of tolerable misstatement for each sampling application. An acceptable approach would be to use 66⅔%, or a smaller percentage, of the overall materiality limit for the basic allowance. (See the Materiality Computation Form in Chapter 4, section 4.507). Under PPS theory, the overall materiality limit does not have to be allocated to accounts because the financial statements may be viewed as one population and the basic allowance for unknown error applies to the financial statements taken as a whole. The basic allowance must also be considered, however, when measuring misstatements on the Summary of Possible Journal Entries Form.

5.532 It is important to recognize that when sample sizes are selected nonstatistically based on some statistical theory such as PPS, it is assumed that the population will be stratified. A simple method of stratification is as follows:

- Determine the mean of the population to be sampled.
- Select 2/3 of the sample items from those items equal to or greater than the mean.
- Select 1/3 of the sample items from those items less than the mean.

5.533 If it is not practical to stratify the sampling population, the sample size should be increased by a factor of 20%, or multiplied by 1.2.

5.534 A more time consuming, yet more accurate method would, of course, be a PPS statistical selection method. For the sake of time, however, this statistical method ordinarily is not used. When populations are unusually large and engagement risks are high, however, a PPS statistical method may be appropriate. Guidance for PPS statistical sampling may be found in the AICPA Audit Sampling Guide.

5.535 Developed from the model in the Audit Sampling Guide (paragraphs 4.57 to 4.60), the Model Approach follows:

Sampling Population Tolerable Misstatement	×	Assurance Factor	=	Preliminary Sample Size (units)
Preliminary Sample Size (Units)	×	Marginal Risk Factors (1.2 to 1.5)	=	Adjusted Sample Size (units)

5.536 The assurance factors, also based on PPS statistical theory, are as follows:

Assessment of inherent and control risk	Risk that other substantive procedures (e.g. analytical procedures) will fail to detect a material misstatement		
	Maximum	Moderate	Low
Maximum	3.0	2.3	1.9
Slightly below maximum	2.7	2.0	1.6
Moderate	2.3	1.6	1.2
Low	1.9	1.2	1.0

5.537 The steps to be taken in determining the sample size using the Model Approach Working Paper — Tests of Balances Sampling Form (see section 5.706) are as follows:

A. Assess the combination of inherent and control risk:

1. Maximum — Control and inherent risk are assessed at the maximum for the particular assertions. No tests of controls are required to support this assessment.

2. Slightly below the maximum — Control and inherent risk are assessed at slightly below the maximum for the particular assertions. Minimal tests of controls are required for this assessment.

3. Moderate — Control and inherent risk are assessed at a moderate level for this particular assertion. Moderately effective tests of controls are required for this assessment.

4. Low — Control and inherent risk are assessed at a low level for the particular assertions. Very effective tests of controls are required for this assessment.

B. Determine the basic allowance for unknown misstatements (tolerable misstatement). This is related to preliminary estimates of materiality for the engagement.

C. Assess the risk that other substantive procedures (such as analytical procedures) designed to test the same assertions will fail to detect a material misstatement in a particular assertion as follows:

1. Maximum — No other substantive procedures are performed that are designed to test the same assertions.

2. Moderate — Other substantive procedures to test the assertions are expected to be moderately effective in detecting material misstatements.

3. Low — Other substantive procedures to test the assertions are expected to be highly effective in detecting material misstatements.

D. Determine the population's recorded amount after deducting any items that will be audited 100% (all items that are more than 1/3 of tolerable misstatement).

E. Use the appropriate assurance factor and the formula to determine the initial sample size.

5.538 Depending on the amount of the basic allowance for unknown misstatements, sample sizes computed with this model may approximate those sizes selected judgmentally. Because the model is based on a highly stratified approach, and this approach usually will include minimal or no stratification, the sample should be somewhat larger than the preliminary size if there are significant variations in the population. If stratification is necessary and is not practical, an acceptable approach would be to multiply the preliminary sample size by a marginal risk factor of 1.2 to compensate for the sampling risk associated with not stratifying. The marginal risk factor should *not* be used when the population is stratified or when stratification is not necessary.

5.539 **Evaluating the Sample Results.** The misstatement in the sample must be projected to the population. One method of projecting the amount of misstatement found in a sample is to divide the amount of misstatement by the fraction of total dollars in the population to total dollars included in the sample. For example, if a $1,000 misstatement is found in a sample of 10 percent of the population, the projected misstatement would be $10,000 ($1,000/.10).

5.540 A second method for projecting the misstatement uses the average difference between the audited and the recorded amounts of each item included in the sample. For example, if $200 of misstatement is found in a sample of 100 items, the average difference between audited and recorded amounts for items in the sample is $2 ($200/100). An estimate of the amount of misstatement in the population may be calculated by multiplying the total number of items in the population (in this case 25,000 items) by the average difference of $2 for each sample item. The estimate of misstatement in the population is $50,000 (25,000 × $2).

5.541 If the projected misstatement is less than tolerable misstatement for the account balance, consideration must be given to the risk that actual misstatement exceeds the amount of tolerable misstatement. If the projected misstatement is less than 1/3 of tolerable misstatement, it is generally safe to conclude that sampling risk is sufficiently low. If it is greater than 1/3, consideration should be given to performing additional tests of the account.

5.542 The Audit Sample Evaluation Form — Tests of Balances (section 5.704) is designed to project the misstatement in the sample to the population, and to evaluate sampling risk. The form should be completed by the in-charge and reviewed by the engagement partner. Remember that any projected misstatement should be posted to the Summary of Possible Journal Entries Form.

Selecting Samples

5.543 SAS No. 39 permits random number selection, systematic selection with or without random starts and haphazard selection methods for nonstatistical sampling. Block sampling is not acceptable. A random number selection method should be used for statistical sampling.

5.544 Random-based selection methods can be applied using random number tables or computer or calculator programs. The Random Selection With a Random Table Form (see section 5.705) may be used to document sample size selections using a random number table.

5.545 To use a random number table:

1. Assign each element in the population a unique address that corresponds to the random number table.
2. Decide how to read the table, i.e., the number of digits and location, and if top to bottom, left to right.
3. Place a pencil on a page to determine a random starting point.
4. Modify the population numbers to the smallest possible number of digits to reduce discards.

5.546 The procedure for using a program or calculator to generate random numbers varies with the programs. However, these techniques generally require the auditor to provide the smallest and largest item numbers, and the number of sample items needed.

5.547 Systematic sampling requires the calculation of an interval. An interval is determined by dividing the population size by the number of sample units desired. For example:

$$\begin{aligned} N &= \text{Sample Size} &&= 4{,}000 \\ n &= \text{Desired Units} &&= 50 \\ I &= \text{Interval} \end{aligned}$$

$$I = \frac{N}{n} = \frac{4{,}000}{50} = 80$$

5.548 After selecting a random number within the interval as a starting point, each 80th unit would be selected. A Random Selection With a Systematic Sample Form in section 5.706 may be used to document systematic selection methods with random starts.

5.549 Haphazard sampling involves selecting items on a purely judgmental basis, without any bias towards the selection of particular items.

Documentation

5.600 DOCUMENTATION ASSISTANCE

5.601

Contractors' Risk of Potential Misstatements Evaluation Form

Client: ______________________________

Financial Statement Date: ______________________________

INSTRUCTIONS:

This form should be used on construction contractor audit engagements under the ABC System to evaluate and document the risk of potential misstatements. Answers should be based on inquiries of client personnel, the auditor's understanding of the client's business and the construction industry, experience from prior years' engagements, the current year's internal control structure assessment and other special considerations. The impact of the risk of potential misstatements should be documented in the Contractors' Planning Matrix.

	Yes	No
I. Special Considerations: ("Yes" answers, i.e., high risk, should be checked on accompanying Potential Misstatements Matrix)		
1. Are there client-imposed limitations on the scope of the engagement? (Describe below.)	______	______
2. Is this an initial engagement?	______	______
3. Do discussions with prior engagement personnel or predecessor accountants indicate a high risk of potential misstatements? (Describe below.)	______	______
4. Are the client's accounting policies, methods, or estimates unusual or difficult to apply, or have they been changed recently? (Describe below.)	______	______
5. Are there significant related-party or other unusual transactions? (Describe below.)	______	______
6. Does the client have many loss contracts?	______	______
7. Are gross profit rates on contracts highly variable?	______	______
8. Is the overall engagement risk evaluation high?	______	______

Describe the circumstances surrounding "yes" answers and record their effects on the Potential Misstatements Matrix:

II. Potential Misstatements Matrix:

Complete the accompanying Potential Misstatements Matrix and transfer the summary of risk by audit area to the Contractors' Planning Matrix. In addition to classifying the risk of potential misstatements from special considerations above by engagement area, the Potential Misstatements Matrix includes similar classifications for:

1. High Risk or Material *and* Unusual Account Balances:

   The nature of the client's industry or business may typically cause certain account balances, and the relative risk of misstatements, to be high. Percentage of completion calculations on contracts in process, for example, normally cause the risk of potential misstatements for contract receivables to be high. Material account balances must also be unusual in the client's circumstances to be considered high risk. Fixed assets or administrative expenses, for example, would not be considered high risk unless increases or decreases were unusual in nature or amount.

2. Reportable Conditions in the Internal Control Structure:

   Reportable conditions are derived from the Contractors' Internal Controls Questionnaire. The effects of reportable conditions on major engagement areas should be evidenced on the Potential Misstatements Matrix.

3. Significant Prior Year Adjustments and Exposure Areas:

   Significant prior year adjustments, made or passed, and exposure areas that may recur and affect the current period should also be evidenced on the Potential Misstatements Matrix.

The risk categories on the Potential Misstatements Matrix for each engagement area should contain a check mark (√) where the risk of potential misstatements is high. Low risk is otherwise assumed. After considering the number and significance of misstatements in each engagement area, the in-charge should use professional judgment to summarize the risk of potential misstatements as low or high. The summary should be transferred to the Contractors' Planning Matrix. Describe below the modifications to the Contractors' Tests of Balances Audit Program that will be made to compensate for the high risks of potential misstatements. (Low risks require no modification.)

POTENTIAL MISSTATEMENTS MATRIX

Engagement Area*	Special Considerations	High Risk/Unusual and Material Account Balances	Prior-Year Adjustments or Exposure Areas	Risk Summary (Low or High)
I. Cash				
II. Contract Receivables				
III. Other Accounts Receivable				
IV. Notes Receivable				
V. Allowance for Doubtful Accounts				
VI-A. Inventory Observation				
VI-B. Inventories				
VII. Marketable Securities				
VIII. Prepaid Expenses				
IX. Fixed Assets				
X. Investments and Other Assets				
XI. Deferred Charges and Intangibles				
XII. Accounts Payable				

POTENTIAL MISSTATEMENTS MATRIX
(continued)

Engagement Area		Special Considerations	High Risk/Unusual and Material Account Balances	Prior-Year Adjustments or Exposure Areas	Risk Summary (Low or High)
XIII.	Accrued Expenses, Income Taxes, and Other Liabilities				
XIV.	Notes Payable and Long-Term Debt				
XV.	Contingent Liabilities, Contracts, and Commitments				
XVI.	Stockholders' Equity				
XVII.	Related-Party Transactions				
XVIII.	Revenues				
XIX.	Costs of Revenues				
XIX-A.	Construction Contracts				
XX.	Payroll				
XXI.	Other Revenues and Expenses				

* Numbers coincide with sections in Contractors' Tests of Balances Audit Program.

EXPLANATION OF HIGH RISK OF POTENTIAL MISSTATEMENTS

Engagement Area	Explanation

Prepared by: ______________________ Date: __________
(In-charge)

Received by: ______________________ Date: __________
(Engagement Partner)

5.602

Contractors' Planning Matrix

Client: ______________________________

Financial Statement Date: ______________________________

INSTRUCTIONS:

The Contractors' Planning Matrix should be prepared by the in-charge for construction contractor audit engagements under the ABC Approach. The Matrix coordinates the evaluation of the risk of potential misstatements and the internal control structure to guide the selection of tests of controls (TOCs) and tests of balances (TOBs) procedures and sample sizes. The Matrix should be completed after the following documents have been finalized:

1. Client Acceptance and Continuance Form.
2. Audit Planning Memorandum.
3. Contractors' Internal Controls Questionnaire and any supplementary narrative and flowcharts.
4. Contractors' Risk of Potential Misstatements Evaluation Form.

The Matrix and related documentation should be reviewed by the engagement partner before the tests of controls are started.

CONTRACTORS' PLANNING MATRIX (Continued)

Audit Area	(1) System Classification (Circle One)	(2) Assessed Level of Control Risk (Circle One)*	(3) Risk of Potential Misstatement (High or Low)	(4) Risk That Analytical Procedures Will Not Detect Material Misstatement (Circle One)*	(5) Resulting Evidence Required From Detailed TOBs
Cash, Including Collections & Payments					
a. Existence & Rights	A B C	M S Md L	________	M Md L	________
b. Completeness	A B C	M S Md L	________	M Md L	________
c. ________	A B C	M S Md L	________	M Md L	________
Receivables, Billings, & Collections					
a. Existence & Rights	A B C	M S Md L	________	M Md L	________
b. Completeness	A B C	M S Md L	________	M Md L	________
c. Valuation (Allowance for Uncollectibles)	A B C	M S Md L	________	M Md L	________
d. ________	A B C	M S Md L	________	M Md L	________
Inventories & Purchases					
a. Existence & Rights	A B C	M S Md L	________	M Md L	________
b. Completeness	A B C	M S Md L	________	M Md L	________
c. Valuation	A B C	M S Md L	________	M Md L	________
d. ________	A B C	M S Md L	________	M Md L	________

* M — Maximum
S — Slightly below the maximum
Md — Moderate
L — Low

CONTRACTORS' PLANNING MATRIX (Continued)

Audit Area	(1) System Classification (Circle One)	(2) Assessed Level of Control Risk (Circle One)*	(3) Risk of Potential Misstatements (High or Low)	(4) Risk That Analytical Procedures Will Not Detect Material Misstatement (Circle One)*	(5) Resulting Evidence Required From Detailed TOBs
Fixed Assets					
a. ________	A B C	M S Md L	________	M Md L	________
b. ________	A B C	M S Md L	________	M Md L	________
c. ________	A B C	M S Md L	________	M Md L	________
Accounts Payable, Including Subcontractors					
a. ________	A B C	M S Md L	________	M Md L	________
b. ________	A B C	M S Md L	________	M Md L	________
c. ________	A B C	M S Md L	________	M Md L	________
Revenues					
a. ________	A B C	M S Md L	________	M Md L	________
b. ________	A B C	M S Md L	________	M Md L	________
c. ________	A B C	M S Md L	________	M Md L	________
Costs of Revenues					
a. ________	A B C	M S Md L	________	M Md L	________
b. ________	A B C	M S Md L	________	M Md L	________
c. ________	A B C	M S Md L	________	M Md L	________

* M — Maximum
S — Slightly below the maximum
Md — Moderate
L — Low

CONTRACTORS' PLANNING MATRIX (Continued)

Audit Area	(1) System Classification (Circle One)	(2) Assessed Level of Control Risk (Circle One)*	(3) Risk of Potential Misstatement (High or Low)	(4) Risk That Analytical Procedures Will Not Detect Material Misstatement (Circle One)*	(5) Resulting Evidence Required From Detailed TOBs
Other Accounts:					
______	A B C	M S Md L	______	M Md L	______
______	A B C	M S Md L	______	M Md L	______
______	A B C	M S Md L	______	M Md L	______
______	A B C	M S Md L	______	M Md L	______
______	A B C	M S Md L	______	M Md L	______
______	A B C	M S Md L	______	M Md L	______

Note: For any assertions not contained on the Matrix, it is assumed that control risk is assessed at the maximum.

Prepared by: ______________________ Date: ______________
(In-charge)

Approved by: ______________________ Date: ______________
(Engagement Partner)

* M — Maximum
S — Slightly below the maximum
Md — Moderate
L — Low

Contractors' Planning Matrix Legend

(1) The systems classification is obtained from the Contractor's Internal Controls Questionnaire. It may vary by financial statement assertion.

(2) Assessing control risk at less than the maximum will decrease the amount of evidence required from substantive tests. Control risk may be assessed at the Maximum (M), Slightly below the maximum (S), Moderate (Md), or Low (L). TOCs must be performed in situations where control risk is assessed at slightly below the maximum or at a moderate or low level.

(3) From the Contractors' Risk of Potential Misstatements Evaluation Form, the risk of potential misstatements (low or high) may vary for different financial statement assertions. These risk factors may increase or decrease the needed evidence from substantive tests.

(4) Evidence from analytical procedures can reduce the extent of the evidence required from other substantive tests (that is, tests of balances). The Contractors' Planning Matrix rates this evidence in terms of the risk that the analytical procedures will fail to detect a material misstatement in the account or the assertions about the account. For example, maximum risk means no evidence is obtained from analytical procedures.

(5) The required evidence from detailed TOBs is a product of the assessed level of control risk, the risk of potential misstatements, and the evidence obtained from analytical procedures. The examples below illustrate this relationship.

System Classification	Control Risk	Risk of Potential Misstatements	Risk That Analytical Procedures Will Not Detect a Material Misstatement	Resulting Evidence Required from Detailed Tests of Balances
A	M S Md L	Low	M Md L	None
A	M S Md L	High	M Md L	Low
A	M S Md L	Low	M Md L	Low
A	M S Md L	Low	M Md L	Moderate
B	M S Md L	Low	M Md L	None
B	M S Md L	High	M Md L	Moderate
B	M S Md L	Low	M Md L	Moderate
C	M S Md L	Low	M Md L	Low
C	M S Md L	High	M Md L	Moderate
C	M S Md L	Low	M Md L	Slightly Below High
C	M S Md L	Low	M Md L	Moderate
C	M S Md L	Low	M Md L	High

The Contractors' Planning Matrix contains assessments for assertions about those accounts where audit efficiencies are usually obtained. Assertions about other accounts not contained in the Matrix can be added when control risk for those assertions is assessed at below the maximum. For assertions about accounts not included or added to the Contractors' Planning Matrix, control risk is assessed at the maximum and maximum reliance is placed on analytical procedures and tests of balances.

These guidelines presume account balances are material. If balances are immaterial, so state in the Resulting Evidence Required from Detailed TOBs column. No evidence is required for immaterial account balances.

A high degree of evidence from detailed tests of balances will require procedures with high reliability, such as large sample sizes with tests performed primarily at the balance-sheet date. A low degree of evidence from detailed tests of balances will allow less reliable tests, such as small sample sizes and performing tests at interim dates.

The ABC approach presumes high reliance on analytical procedures for all engagements to the maximum extent practical.

Final modification of the Contractors' Tests of Balances Audit Program will be made based on the results of performing the tests of controls on the internal control structure policies and procedures.

(6) Nonstatistical sample size ranges for tests of controls may be determined using the following table unless otherwise directed by the engagement executive. Sample sizes so selected should be entered directly on the appropriate Contractors' Tests of Controls Program. The in-charge should document in the Audit Planning Memorandum consideration of the factors that affect the sample sizes selected. The engagement partner should approve the Audit Planning Memorandum before the tests of controls are begun.

TESTS OF CONTROLS
SAMPLE SIZE SELECTION TABLE

Assessed Level of Control Risk	Sample Size*
Maximum	0
Slightly below the maximum	15
Moderate	30
Low	40

* The numbers in the table were determined using a risk of assessing control risk of 10% and an expected population deviation rate of 0%. If one or more deviations is found in the sample, either the sample size or the assessed level of control risk should be increased.

Tests of controls consisting of observation of performance and inquiries are not normally subject to audit sampling.

(7) When deviations are expected or found in a sample, the following table may be used to determine the sample size or evaluate the sample results:

Deviations (Expected or Actual)	Assessment of Control Risk		
	Slightly Below Maximum	Moderate	Low
0	15	30	40
1	25	50	65
2	34	67	90
3	43	85	115

5.603

Model Approach Working Paper — Tests of Balances Sampling

Client: ______________________________

Financial Statement Date: ______________________________

1. Check the financial statement assertion(s) being tested:

   a. Existence and occurrence ______
   b. Rights and obligations ______
   c. Completeness ______
   d. Valuation or allocation ______

2. Description of sampling application: ______________________________

3. Total recorded population for ______________________________ $__________

   Less amount of individually significant items (Usually all items equal to or greater than 1/3 of tolerable misstatement) (__________)

   Sample population $__________

4. Describe what will be considered to be a misstatement for testing purposes:

Assessment of inherent and control risk	Risk that other substantive procedures (such as analytical procedures) will fail to detect a material misstatement		
	Maximum	Moderate	Low
Maximum	3.0	2.3	1.9
Slightly below maximum	2.7	2.0	1.6
Moderate	2.3	1.6	1.2
Low	1.9	1.2	1.0

5. Calculate the initial sample size with the following formula:

Sampling Population		Basic Allowance (Tolerable Misstatement)		Assurance Factor		Initial Sample Size
$________	÷	$ ________ [1]	×	______	=	________

6. Allocate the sample items:

	Population		Sample	
	Items	**Dollars**	**Items**	**Dollars**
a. Stratum 1—Items above the mean of the sampling population (select 2/3 of the sample items from this subpopulation)	____	$____	____	$____
b. Stratum 2—Items less than the mean of the sampling population (select 1/3 of the sample items from this subpopulation)	____	$____	____	$____
c. Total	____	$____	____	$____

Prepared by: ____________________ Date: ______________
(In-charge)

Reviewed by: ____________________ Date: ______________
(Engagement Partner)

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(1) Amount should be two-thirds of overall materiality limit.

5.604

Audit Sample Evaluation Form — Tests of Balances Sampling

Client: ______________________________

Financial Statement Date: ______________________________

1. Project the misstatement (use only one column if the sample population was not stratified):

	Stratum 1	Stratum 2
a. Misstatement in the sample	$________	$________
b. Dollar value of the sample	$________	$________
c. Dollar value of the strata	$________	$________
d. Projected misstatement in the sample stratum (c. ÷ b. × a.)	$________	$________
e. Total projected misstatement in the sample population (d.1 + d.2)	$ ________	

2. Evaluate sample risk:

a. Misstatements found in the group audited 100%	$________
b. Projected misstatement in the sample population (1.e.)	$________
c. Total projected and known misstatement (2.a. + 2.b.)	$________
d. Amount of above misstatement corrected	$________
e. Remaining known and projected misstatement (2.c.-2.d.)	$________*
f. Tolerable misstatement for the account (From the Model Approach Working Paper—Tests of Balances)	$________
g. Is the remaining known and projected misstatement (e.) less than 1/3 of the amount of tolerable misstatement (f.)?	Yes ___ No ___

If the answer to g is "No" sampling risk may be unacceptably high and additional testing should be considered.

* This amount should be posted to the Summary of Possible Journal Entries Form (chapter 8, section 8.904).

5.605

Random Selection With a Random Table Form

Client: ____________________

Financial Statement Date: ____________________

INSTRUCTIONS:

To use the random selection method with a random number table:

- Assign each element of the population a unique address that corresponds to the random number table.
- Decide how to read the table, i.e., the number of digits and location, and if top to bottom, left to right.
- Place a pencil on a page to determine a random starting point.
- Modify the population numbers to the smallest possible number of digits to reduce discards.
- Pure random sampling should be applied to the entire population; stratified random sampling would separate the population according to some characteristic such as size of elements or features of the underlying transaction. This form should be used to document random selection with a random table or calculator. If a computer is used, a copy of the computer printout should be retained as documentation.

POPULATION DESCRIPTION

1. Type of document designated as the sampling unit. ____________________

   a. Largest document number plus 1 ____________________

   b. Smallest document number ____________________

   c. Population size ____________________

2. Nature of the sampling unit if not a document. ____________________

3. Description of the population if No. 2. is applicable (including population size and numbering of population). ____________________

RANDOM NUMBER TABLE

Name of table. ____________________

Page(s) used. ____________________

Correspondence between the table and sampling units (normally document number). ____________________

Number of digits used. ____________________

Starting point in table. ____________________

First usable sample number. ____________________

Last usable sample number. ____________________

Stopping point in table. ____________________

Number of sample items selected. ____________________

Modifications to reduce discards. ____________________

Prepared by: ____________________ Date: ____________________
(In-Charge)

Reviewed by: ____________________ Date: ____________________
(Engagement Partner)

5.606

Random Selection With a Systematic Sample Form

Client: ______________________________

Financial Statement Date: ______________________________

INSTRUCTIONS:

This form is used to document systematic selection methods with random starts.

POPULATION DESCRIPTION

1. Type of document designated as the sampling unit. ____________________
   a. Largest document number plus 1 ____________________
   b. Smallest document number ____________________
   c. Population size ____________________
2. Nature of the sampling unit if not a document. ____________________
3. Description of the population if No. 2. is applicable (including population size and numbering of population). ____________________

$$\frac{\text{Population Size}}{\text{Sample Size}} = \text{initial interval}$$

Initial interval $\times$ number of desired starts =

adjusted interval

Rounded interval.

Random number(s) from the table.

First sample item(s).

Last sample item(s).

Prepared by: ______________________________ Date: ____________________
(In-Charge)

Reviewed by: ______________________________ Date: ____________________
(Engagement Partner)

5.607

Contractor's System's Walk-Through Documentation Form

Client: ABC Construction Company

Financial Statement Date: 12/31/X4

INSTRUCTIONS:

The Form should be prepared for all initial engagements. If capable client personnel are available, Sections I through V should be completed by such personnel and reviewed by the in-charge. Otherwise, the in-charge should complete these and the remaining sections. On a recurring engagement, the in-charge should update sections I through V by interviewing client personnel, but need not update the Walk-Through Checklist (Section VI) if he or she a) determines that there have been no changes to the client's system and b) expects to assess control risk at the maximum. The in-charge should use the results of Sections VI, VII, and VIII to modify the Contractors' Tests of Balances Audit Program. The Form should be reviewed by the engagement partner before any field work is begun.

I. INDUSTRY INFORMATION

A. Describe major types of activities.

Contract construction:
As a general contractor, ABC obtains construction contracts through the competetive bidding process or through direct negotiations with project owners.

Other:
Construction Management type contracts

B. What basis of accounting is used (GAAP, cash, tax, etc.)?
GAAP

C. What method(s) is (are) used to account for contract construction revenues and costs (percentage-of-completion, completed contract, etc.)?
Percentage of completion

Contractors' System's Walk-Through Documentation Form (Continued)

D. Describe any other significant or unusual accounting policies.
The company is self-insured with respect to health and workmans compensation insurance.

II. COMPANY ORGANIZATION AND PERSONNEL

A. Identify and describe the responsibilities and experience of officers and accounting personnel.

Name	Responsibilities	Experience
John Smith	CEO	20 yrs
Joe Smith	construction manager	15 yrs
Ann Jones	controller	8 yrs
Mary Campbell	clerk	2 yrs
Chris Williams	personnel director	5 yrs

III. RELATED PARTIES

A. Describe any affiliated company relationships.
various real estate development partnerships rellated through common ownership

B. Describe any relationships with major customers or vendors.
none

IV. FINANCING

A. Obtain copies of agreements for permanent file.

B. Describe major sources of short- and long-term financing.
Short term - line of credit - First State Bank
long-term - Equipment loans - various financial institutions

C. Describe stock option, compensation, or repurchase plans.
N/A

Contractors' System's Walk-Through Documentation Form (Continued)

D. Describe any convertible debt features, compensating balance requirements, or restrictive debt covenants.

Company's line of credit requires specified minimum current and net quick ratios.

V. ACCOUNTING SYSTEM RECORDS AND PROCEDURES

A. Accounting System Records

1. Describe method of processing records (manual, write-it-once, microcomputer, service bureau, etc.).

Cash receipts journal: microcomputer

Cash disbursements journal: microcomputer

Petty cash journal: manual

Contract revenues journal: microcomputer

Sales journal: microcomputer

Contract billings journal: microcomputer

Purchases journal: microcomputer

Payroll journal and records: microcomputer

Subsidiary ledgers

Contract receivables: microcomputer

Other receivables: manual

Contractors' System's Walk-Through Documentation Form (Continued)

Accounts payable: microcomputer

Inventory: none

Fixed assets: lotus 123 schedules

Insurance: none

Contract costs: microcomputer

Payroll: microcomputer

Subcontracts: microcomputer

Other (describe):

2. Describe (or obtain copies of) the documents included in the major transaction cycles (number of parts, prenumbering, method of filing, etc.).

Revenue and Collections Cycle

Customer order form: none

Shipping report: none

Construction contracts: maintained outside of the accounting department by the construction manager

Change order form: maintained with construction contracts in either AIA or other owner mandated format

Sales invoice: N/A

Contractors' System's Walk-Through Documentation Form (Continued)

Credit memo: generally done as a negative change order

Cash receipts prelist: prepared for daily cash deposit

Remittance advices: none

Deposit slip: deposit slips are copied along with related checks. Validated deposit slips are attached to the copy and filed by month

Contract progress billing documents: Prepared manually by project managers on AIA or other owner mandated forms

Other (describe): none

Acquisitions and Payments Cycle

Purchase order form: prenumbered forms filled out in triplicate - must be approved by project manager

Receiving report: matched and filed with purchase order form

Vendor invoice: matched and filed with purchase order form

Bank checks: computer checks are prenumbered, have carbon copies + stored in locked cabinet. Manual checks kept by controller.

Contract estimating and bidding documents: maintained in contract bid file

Other (describe): none

Payroll and Personnel Cycle

Employee personnel records and files (describe): maintained by personnel director

Contractors' System's Walk-Through Documentation Form (Continued)

Time cards: filed by pay period - completed manually and signed by supervisor

Other (describe): -

Construction contract management reports (describe reports, documents and forms used for project administration and evaluation and for construction site accounting and control): maintained through integrated job cost accounting system

B. Accounting System

Describe accounting system procedures by major transaction cycle.

Revenues and Collections Cycle

Authorization

1. Describe the contract cost estimating and bidding process and documents used by the client. Construction manager obtains job plans and specifications. Estimating department prepares bid proposal. Construction manager reviews bid and approves bid / makes changes to bid / decides not to bid on the job.
2. How is a construction contract authorized? through signature of construction manager and project owner.
3. Which personnel are involved with authorizing a contract and what are their responsibilities? Construction manager has ultimate authority.
4. If there are other sales transactions, how are they authorized; how is the authorization documented; which personnel are involved with the authorization and what are their responsibilities? none

Contractors' System's Walk-Through Documentation Form (Continued)

Initiation

1. Describe the procedures and documents used to generate progress billings on contracts in process. monthly invoices prepared by project manager based on contract's schedule of values and percentage completion of job. Generally these must be approved by the project architect and owner prior to payment.
2. If there are other sales transactions, how are they initiated and documented; which personnel are involved with the initiation and what are their responsibilities? Construction management contracts are generally billed monthly on a flat fee basis.
3. How are cash collections received? Either by check received in mail or via bank wire transfer.
4. What documents are used to evidence cash collections? copy of check, deposit slip and bank statement
5. Which personnel are involved with cash collections and what are their responsibilities? receptionist opens mail, all checks are given to accounting clerk who prepares deposit slip.
6. Who makes bank deposits and how often are they made? accounting clerk makes daily bank deposits - monthly bank reconciliations are done by the controller
7. How are credits to customers' accounts initiated? negative contract change orders
8. What documents are used to evidence credits to customers' accounts? contract change order forms
9. Which personnel are involved with initiating credits to customers' accounts and what are their responsibilities? project managers negotiate these, if any with project owners. They must be approved by the construction manager

Contractors' System's Walk-Through Documentation Form (Continued)

Recording

1. Describe the source journal used to record construction contract revenues. contract billings/revenue journal and a/R journal

2. Which personnel record the construction contract revenue journal and how often are entries prepared? controller records monthly based on invoices prepared by project managers

3. If there are other sales transactions, how are they recorded (include description of source journals); which personnel journalize the transactions and how often are entries prepared? construction management type contracts are billed by the project construction manager and recorded by the controller monthly.

4. How are cash receipts transactions recorded? Through the cash receipts journal which is posted daily as checks are deposited.

5. Describe the source journals used to record cash collections. cash receipts and A/R journal

6. Which personnel record transactions in the cash collections source journal and how often are entries prepared? accounting clerk records cash receipts daily and controller reconciles to bank statement monthly.

Safeguarding and Accountability

1. How are revenues, collections, and receivables balances summarized for individual customers? Through the aged a/r report. For each job - owner has own job number in system. System generates a/r aging and billings report by job number.

2. Which personnel are involved with the summarization of revenues and collections and what are their responsibilities? accounting clerk enters information based on invoices and cash receipts into accounting system. Receivables are reconciled by the controller and project manager.

Contractors' System's Walk-Through Documentation Form (Continued)

3. How often are contract billings mailed? monthly

4. How often are customers' statements mailed? N/A

5. How are revenues and collections transactions posted to the general ledger and how often is it done? revenues are posted monthly and cash collections are posted daily.

6. Which personnel reconcile general ledger receivables balances with summaries of balances for individual customers and how often is it done? The controller with the help of project managers. — done monthly

7. How often are receivables aged and reviewed by the owner or manager? Aged a/r report is reviewed monthly by the project managers and construction manager.

Acquisitions and Payments Cycle

Authorization

1. How is the purchases transaction authorized? Through completion of a purchase order form or negotiated sub-contract agreement.

2. What document or record is used to evidence purchases authorization? A signed purchase order form or subcontract agreement.

3. What personnel can authorize purchases? Purchase orders – project managers subcontract agreement - Construction manager

Initiation

1. How is the purchases transaction initiated? A purchase order form is completed or subcontract is negotiated.

Contractors' System's Walk-Through Documentation Form (Continued)

2. What document or record is used to evidence purchases initiation? (Which first evidences liability?) signed purchase order or subcontract agreement.

3. Which personnel are involved with initiating purchases and what are their responsibilities? Either a job superintendent, project manager, or construction manager.

4. Who prepares checks, how many are prepared monthly, and how often are they prepared? All checks are prepared through the automated a/p system weekly. About 100 checks are run weekly.

5. Who signs checks and what documents are reviewed at the time of signing? CEO signs all checks > $500. He reviews matched purchase orders receiving reports, and vendor invoices as well as automated subcontractor status reports.

6. What procedures prevent duplicate payments? All invoices must be approved by individual project managers + the construction manager prior to the CEO review. Once paid, invoices are marked "paid" + the check number + date are also noted.

Recording

1. How are purchases transactions recorded? Approved invoices are matched with purchase orders and receiving reports (if applicable) and are input into the A/P system by vendor and job.

2. Describe the source journal used to record purchases transactions. purchase journal report

3. Which personnel record transactions in the purchases source journal and how often are entries prepared? weekly input into the system by the accounting clerk

4. Describe the source journal used to record disbursements. cash disbursements journal

Contractors' System's Walk-Through Documentation Form (Continued)

5. Which personnel record transactions in the disbursements source journal and how often are entries prepared? system automatically updates cash disbursements journal as checks are prepared (weekly)

Safeguarding and Accountability

1. How are purchases and disbursements summarized by vendor? system does automatically through vendor and job number codes
2. Which personnel are involved in the summarization and what are their responsibilities? system does automatically
3. How are purchases and payments posted to the general ledger and how often is it done? system does automatically as weekly check runs are prepared
4. Which personnel reconcile general ledger accounts payable balances with the summarization of purchases and disbursements by vendor? Controller with project managers
5. What kinds of documents or records are maintained to control inventory items? N/A
6. Which personnel are involved with the inventory recordkeeping? N/A
7. Which personnel have physical access to inventories? N/A
8. How often are physical counts of inventories made? N/A
9. What kinds of fixed asset records are maintained and who has responsibility for maintaining them? Lotus 1-2-3 schedule maintained by the controller

Contractors' System's Walk-Through Documentation Form (Continued)

10. Construction contract payables and costs

    a. Describe the procedures and documents used to account for costs of materials, labor, equipment, and overhead for individual contracts direct costs are recorded directly to jobs when approved by project managers. Overhead allocations are pre-programmed into the payroll system

    b. Describe the procedures used to select subcontractors and to control payments on uncompleted contracts. Subcontractors are selected through a competetive bidding process. Payments on uncompleted contracts are monitored through the integrated subcontractor jobstatus report

    c. Describe the accounting and internal control procedures that are performed at construction sites.
    Almost all accounting procedures, other than those related to petty cash disbursements, are done through the home office.

Payroll and Personnel Cycle

Authorization

1. How are employees hired and fired? Project superintendents and the office manager hire on an as needed basis. Required forms are: W-4, state form, I-9, + completed employment application. Firing is usually done by the same individuals. Any documentation related to the termination is in the individuals personnel file.
2. What documents or records are used to evidence hiring or firing?
   maintained in personnel file - see item #1

3. What personnel are involved with hiring and firing and what are their responsibilities?
   see item #1

Initiation

1. How are hours worked by employees accounted for? timecards

2. What document or record is used to evidence hours worked? timecards

Contractors' System's Walk-Through Documentation Form (Continued)

3. Which personnel approve hours worked and how is the approval evidenced? job superintendents and office manager approve through signing time cards

4. How are rates of pay, withholdings, and deductions established or changed? established at time of hiring and changed through documentation in personnel file

5. Which personnel are involved in payroll computations and what are their responsibilities? Accounting clerk enters information from timecards coded by cost category and job number. System automatically performs all calculations.

Recording

1. How are payroll transactions recorded? By entering timesheet information

2. Describe the source journal used to record payroll transactions. payroll journal

3. Which personnel record transactions in the source journal and how often are entries prepared? accounting clerk inputs timecards weekly

Safeguarding and Accountability

1. What kinds of employee payroll records are maintained? timecards are filed weekly. All other records are maintained in employee personnel files.

2. Which personnel are involved in preparing these records? Office manager is responsible for maintaining personnel files.

3. How often are paychecks distributed by management? weekly

Contractors' System's Walk-Through Documentation Form (Continued)

General

1. How is the general ledger posted and balanced and how often is it done? All transactions are posted to the G/L daily as they are entered into the various source journals.

2. Which personnel post and balance the general ledger? Accounting clerk + the controller.

3. Which personnel prepare and post adjusting journal entries? controller

4. Which personnel are involved with the bank statement reconciliation and how often is it reconciled? controller, monthly

5. How often are interim financial statements prepared and what information do they contain? quarterly balance sheet / P+L / percentage completion schedule

6. What functions of internal check are performed by management that have not been mentioned above? CEO has ultimate approval authority as all checks greater than $500 require his signature. CEO also receives monthly bank statements unopened and reviews cancelled checks for any improprieties.

7. What hazard and fidelity insurance is carried by the company? Insurance is reviewed annually with agent prior to seeking bids from various underwriters.

8. How does management monitor—

   a. Adequacy of insurance coverage? annual reviews

   b. Compliance with restrictive loan covenants and similar agreements? review of quarterly financial statements + ratio analysis

   c. Potential contract claims and back charges? All must be approved by the construction manager

Contractors' System's Walk-Through Documentation Form (Continued)

9. Does management adequately exclude personal transactions from the business? (Describe any such personal transactions recorded in the business records.) yes - nothing discovered in prior audit disbursement tests

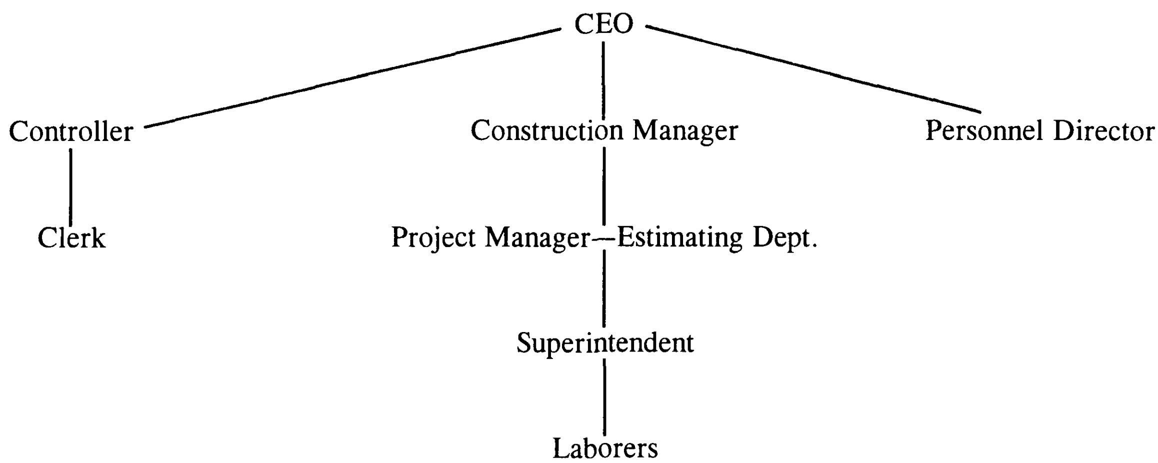
Control Environment

1. Describe the organization of management, accounting, and operations personnel below or attach an organization chart. see next page

2. Describe management's attitudes and practices that may affect the risk of errors or irregularities in the financial statements. Consider such factors as deteriorating operations creating a need for additional financing, financial statement ratios influencing lenders' decisions, motivation of owner to reduce income taxes, and owner's history of taking unnecessary business risks. business owners - The CEO + construction manager - take a very conservative financial reporting position. This has been proven through little or no profit fade noted on jobs carried over from one year to the next.

Contractors' System's Walk-Through Documentation Form (Continued)

Organizational Chart



Contractors' System's Walk-Through Documentation Form (Continued)

3. In the case of an absentee owner, describe the manager's compensation method and whether it is reasonable. N/A

4. Describe management's awareness of the importance of a good accounting system, performing controls, and understanding and use of related financial information. owners are very aware of use of financial statements by the bank and bonding company

5. List the accounting personnel, their positions and length of employment, describe briefly their education and experience, and evaluate their job performance. See item II for length of service with company. All considered knowledgable and effective

	19X4	19__	19__	19__	19__
Prepared or updated by: Client	SY				
In-charge	TAK				

Contractors' System's Walk-Through Documentation Form (Continued)

VI. WALK-THROUGH CHECKLIST

Walk-through procedures must be documented on a working paper, in a memorandum, or on copies of documents selected from the client's records. The engagement personnel who perform these procedures should place their initials in each column as they complete each step. Any procedures that are not applicable should be marked "N/A".

Procedure	Transactions					
	Revenue	Coll.	Acq.	Paymt.	Payroll	Persnl.
1. For each type of transaction, select at least two documents from the population.	-All items below are workpaper references. -Individual responsible for completing step has signed off on related workpaper.					
a. Construction contract	10	B-1	C-1	BB-1	40	40-1
b. Other, if applicable	15	B-10	C-10	BB-10	40	40-1
2. Obtain copies of the documents; prepare a flowchart or working paper and/or write a memo to record the documents inspected and the procedures performed.	20	B-20	C-20	BB-20	40	40-1
3. Based on the client's system description above, walk through each transaction by performing the following:						
a. Examine the documents to determine that authorization and initiation procedures are performed and evidenced.	30	30	35	35	40	40-1
b. Verify the clerical and mathematical accuracy of data on the documents.	30	30	35	35	40	40-1
c. Trace the documents to a source journal entry and compare them to the recorded information.	30	30	35	35	40	40-1

Contractors' System's Walk-Through Documentation Form (Continued)

Procedure	Transactions (Initial and Date) Revenue	Coll.	Acq.	Paymt.	Payroll	Persnl.
d. Test foot the primary column in the source journal for an appropriate period and trace the total to the general ledger.	30	30	35	35	40	40-1
e. Select a representative bank statement and inspect evidence of reconciliation and review procedures.	30	30	35	35	40	40-1
f. Scan the general journal for the year and obtain explanations for unusual entries.	30	30	35	35	40	40-1
g. Inspect evidence of the periodic balancing of the general ledger and contract records.	30	30	35	35	40	40-1
h. Read the most recent internally prepared financial statements or trial balance and investigate any unusual matters.	50	50	50	50	50	50

VII. EVALUATION OF RISK OF POTENTIAL MISSTATEMENTS

Describe weaknesses in the accounting system's procedures, material and unusual account balances resulting from the transactions, prior years' adjustments or exposure areas related to the transactions, complex applications of accounting principles, related-party transactions, client-imposed scope limitations, an initial engagement, or other special considerations that may indicate high risks of potential misstatements that could materially affect the financial statements.

Revenues and Collections Cycle

The company has traditionally a low number of high dollar volume contracts annually with a high number of owner change orders. A material change in any one contract value would have a material affect on the company's financial statement.

Evaluation of risk of potential misstatements (circle) High Low

Contractors' System's Walk-Through Documentation Form (Continued)

Description of analytical and/or tests of balances procedures to compensate for high risks [cross-reference to TOB program]:

-continue to get third party confirmation on majority of contracts on percentage of completion schedule
-review a/r aging + test for subsequent receipts on amounts not confirmed
-continue to compare job gross profit percentages.

Acquisitions and Payments Cycle

Although the accounting department lacks segregation of duties, the CEO reviews all disbursements and unopened bank statements which provides reasonable assurance that the risk of potential understatements of costs undetected by audit procedures is low.

Evaluation of risk of potential misstatements (circle) High Low

Description of analytical and/or tests of balances procedures to compensate for high risks [cross-reference to TOB program]:

use standard TOB program

Payroll and Personnel Cycle

Because the company operates with only about 20 employees, the risk of understatement of payroll costs going undetected by normal audit procedures is low.

Contractors' System's Walk-Through Documentation Form (Continued)

Evaluation of risk of potential misstatements (circle) High Low

Description of analytical and/or tests of balances procedures to compensate for high risks [cross-reference to TOB program]:

standard TOB program

VIII. PRELIMINARY EVIDENCE DESIGN MATRIX

Instructions:

A high risk of potential misstatements, or high overall engagement risk, normally will require application of the most reliable procedures, selection of large sample sizes, and performance of procedures at or near the balance-sheet date. A low risk of potential misstatements, and low overall engagement risk, will permit using less reliable procedures, selecting smaller sample sizes, and performing certain procedures at an interim date. The Preliminary Evidence Design Matrix is based on the evaluation of overall engagement risk from the Client Acceptance and Continuance Form, on the evaluation of risk of potential misstatements above, and on the Audit Planning Memorandum.

The "Reliance on TOBs" column will be used to—

1. Select the sections of the TOB program applicable to the client.

2. Guide the modification of the nature, extent, and timing of the standard TOB program procedures.

Transaction Cycles Section:

The "Overall Risk" and "Risk of Misstatements" columns in the Transaction Cycles Section should be designated as either high or low. The not applicable (N/A) designation may be used when the account balance is not material or when the client has no such account. The "Reliance on TOBs" column will be the higher of the designations in the two Risk columns. In other words, for reliance on tests of balances to be low, both Risk columns must contain a "low" designation. A low reliance designation will permit the use of less reliable procedures, such as negative confirmations, smaller sample sizes, and certain testing at an interim date.

Contractors' System's Walk-Through Documentation Form
(Continued)

General Section:

Most of the evidence necessary to verify financial statement assertions for the account classifications listed under the General Section is obtained from tests of balances and will generally be unaffected by risk—that is, reliance will usually be high because of the nature of the procedures typically performed. The "Reliance on TOBs" column for these classifications should be designated as either high or low. Since reliance on analytical procedures will normally be high on all construction contractor audits, no column has been provided for such procedures.

Audit Area	Overall Risk[1]	Risk of Misstatements[2]	Reliance on TOB's	TOB Program
TRANSACTION CYCLES SECTION				
Revenues and Collections				
1. Contract receivables	Low	High	High	II
2. Contract revenues	Low	High	High	XVIII, XIX-A
Acquisitions and Payments				
3. Inventories and costs of revenues	Low	Low	Low	VI, XIX, XIX-A
4. Fixed assets	Low	Low	Low	IX
5. Accounts payable	Low	Low	Low	XII
6. Expense accounts	Low	Low	Low	XXI
Payroll and Personnel				
7. Payroll accounts	Low	Low	Low	XX

[1] From the evaluation of overall engagement risk in the Client Acceptance and Continuance Form and the Audit Planning Memorandum.

[2] From the evaluation of risk of potential misstatements in Section VII above.

Contractors' System's Walk-Through Documentation Form (Continued)

Audit Area Risk[3]	Overall Misstatements[4]	Risk of on TOBs	Reliance Program	TOB
GENERAL SECTION				
1. Cash	Low	High	High	I
2. Other accounts receivable	Low	Low	Low	III
3. Notes receivable	N/A	N/A	N/A	IV
4. Allowance for doubtful accounts	Low	High	High	V
5. Marketable securities	N/A	N/A	N/A	VII
6. Prepaid expenses	Low	Low	Low	VIII
7. Investments and other assets	Low	Low	Low	X
8. Deferred charges and intangibles	N/A	N/A	N/A	XI
9. Accrued expenses, income taxes and other liabilities	Low	High	High	XIII
10. Notes payable and long-term debt	Low	Low	Low	XIV
11. Stockholders' equity	Low	Low	Low	XVI
12. Other revenues and expenses	Low	Low	Low	XVIII, XXI

Prepared by: Steve Yeager (In-charge) Date: 2/28/xx

Reviewed by: Thomas Kline (Engagement Partner) Date: 2/28/xx

[3] From the evaluation of overall engagement risk in the Client Acceptance and Continuance Form, and the Audit Planning Memorandum.

[4] From the evaluation of risk of potential misstatements in section VII above.

Internal Controls

CHAPTER 6

INTERNAL CONTROLS

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CHAPTER 6

INTERNAL CONTROLS

Table of Contents (Continued)

CHAPTER 6

INTERNAL CONTROLS

6.000 CONSIDERATION OF INTERNAL CONTROLS IN CONSTRUCTION CONTRACTOR AUDITS[1]

Introduction

6.001 This chapter covers the auditor's consideration of the internal control structure in audits of construction contractors' financial statements in accordance with generally accepted auditing standards (GAAS). As discussed in Chapter 4, the auditor's consideration of the internal control structure plays a vital role in determining the nature, timing, and extent of the audit procedure to be performed. This chapter provides guidance on obtaining an understanding of documenting, and testing internal control procedures used by construction contractors.

6.002 Statement on Auditing Standards (SAS) No. 55[2], *Consideration of the Internal Control Structure in a Financial Statement Audit* (AU 319), indicates that an entity's internal control structure consists of the following three elements:

- the control environment,
- the accounting system, and
- control procedures.

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[1] For the applicability of this chapter, see the illustration entitled, "Approach to Planning" in Chapter 4.

[2] As discussed in Chapter 1, section 1.401, the AICPA's Auditing Standards Board has released a proposed amendment to SAS No. 55 that would incorporate the definition and description of internal control found in the Committee on Sponsoring Organizations report, *Integrated Control — Integrated Framework,* (the "COSO Report") into SAS No. 55. It is not expected to result in a significant change in practice.

6.003 Control Environment. Most auditors think of internal controls in terms of policies and procedures over the recording, processing, and reporting of financial data. While these specific internal control policies and procedures are certainly the backbone of good internal controls, SAS No. 55 emphasizes the need to consider other factors (referred to as the "control environment") that can greatly impact, both positively and negatively, a construction contractor's internal controls. The following are examples of factors that should be considered in obtaining an understanding of a construction contractor's control environment, as listed in paragraph 9 of SAS No. 55 (AU 319.09):

- Management's philosophy and operating style.
- The contractor's organizational structure.
- The functioning of management and its committees, particularly the audit committee.
- Methods of assigning authority and responsibility.
- Management's control methods for monitoring and following up on performance.
- Personnel policies and practices.
- External influences that affect the construction contractor's operations and practices.

6.004 As mentioned above, these factors can positively or negatively impact a construction contractor's internal controls. For example, if the construction contractor has established strong internal controls but management's attitude towards maintaining the controls is lax, then internal controls could easily be bypassed or overridden. Conversely, if internal controls are weak due to a lack of segregation of duties, active oversight by top management of the accounting and financial reporting process can mitigate the weakness. In most cases, considering the above factors gives the auditor a sufficient understanding of the control environment to understand top management's attitude, awareness, and actions towards the control environment.

6.005 Accounting System. The accounting system consists primarily of the construction contractor's methods to identify, assemble, analyze, and record financial information. These methods are crucial to providing accountability of the construction contractor's assets and liabilities. Effective accounting systems will:

- Identify and record all valid transactions.
- Classify financial transactions on a timely basis.
- Value these financial transactions in an appropriate manner.
- Adequately disclose these transactions in the financial statements.

6.006 Control Procedures. Control procedures are those policies and procedures, in addition to the control environment and accounting system, that have been established to provide reasonable assurance that specific objectives will be achieved. Control procedures include:

- Proper authorization of transactions.
- Adequate segregation of duties.

- Providing a documented audit trail.
- Safeguarding of assets.
- Independent review of other procedures performed.

6.007 The auditor must understand the procedures a construction contractor utilizes to attain the objectives outlined above in order to adequately plan and perform an audit.

Documentation of Internal Control Structure

6.008 In all audits, the auditor is required to obtain and document his or her understanding of the elements of the control structure in order to plan the engagement. The Internal Controls Structure Questionnaire, section 6.200, and EDP Questionnairés and Evaluation Form, section 6.300, can assist the auditor in accomplishing these objectives for engagements in which the ABC System is used. For audits in which the ABC system is followed, auditors use the Internal Controls Questionnaire and EDP Questionnaires and Documentation Form modify the Tests of Controls Program. When the System's Walk-Through Approach is used (see section 5.400), the Internal Controls Questionnaire and EDP Questionnaires and Documentation Form are used to obtain the minimum understanding required of the internal control structure. The Internal Control Structure Questionnaire has been customized to reflect the controls typically required for a construction contractor. The EDP Questionnaires and Evaluation Form in section 6.300 aid the auditor in his or her documentation of the EDP controls.

6.009 As discussed in Chapter 5, completing the Internal Control Structure Questionnaire helps the auditor select the appropriate system (A, B, or C) for each major audit area. The system selected should be noted on the Planning Matrix in section 5.502 in Chapter 5 for use in determining the nature, timing, and extent of tests.

6.010 The following describes the process for selecting a system:

1. Within each of the seven sections of the Internal Control Structure Questionnaire (identified in section 6.105), identify the most advanced system classification, A, B, or C, with a majority of "yes" answers. Because tests of controls often require less time than tests of balances, the objective should be to perform tests of controls to the maximum extent practical.
2. Consult with the engagement partner to determine if tests of controls for the system classification selected are practical in light of past experience with the client. Prior years' unacceptable results from tests of controls, and the resulting high reliance on tests of balances, may cause the in-charge to select a lower system classification, i.e., B or C, and minimize controls testing. In other words, this decision may prevent inefficient auditing.

3. For all "no" answers, i.e., potential weaknesses, up to and including the system selected in each section, perform the following:

   a. Determine if the "no" answer is, in fact, a weakness.

   b. For the potential weakness, review any "yes" answers to other controls for possible offsetting strengths. Such strengths could be included within the system classification selected or in a more advanced system. For example, a weakness in a System B (a "no" answer) could be offset by another control within System B (a "yes" answer) or by a control in System A.

6.011 The Internal Control Structure Questionnaire may be completed by the client's employees or by engagement personnel. If the client's employees are used, their work should be reviewed by the in-charge to ensure that questions are answered correctly.

6.012 Rather than complete a new Questionnaire every year, many firms merely update the prior year's questionnaire and any supplementary narratives and flowcharts. As mentioned above, client personnel should be used whenever possible to perform the updates.

Testing the Internal Control Structure

6.013 An inverse relationship exists between the amount of tests of controls and the substantive testing performed in an audit. For engagements using the ABC System (see Chapter 5) the auditor will perform tests of controls for some or all major audit areas.

6.014 Similar to the Internal Control Structure Questionnaire, the Tests of Controls Programs contain the three levels of controls: System C, (accounting system), System B (primary controls), and System A (secondary controls). As a result, the auditor should complete the Tests of Controls Programs that correspond to the systems selected in the Internal Control Structure Questionnaire.

6.015 Because the Tests of Controls procedures within a system correspond directly to that system's control procedures in the Internal Control Structure Questionnaire, the auditor may need to modify the Tests of Controls Programs for any compensating controls considered in the Internal Control Structure Questionnaire. For example, if a control in System A offsets a weakness in System B, that control would not otherwise be tested under the System B Tests of Controls Program. To rely on the offsetting System A control, a test of that control must be added to the System B program.

6.016 Standard Tests of Controls Programs, section 6.400, have been coordinated with the Internal Control Structure Questionnaire with particular attention paid to the special needs of construction contractors. Completing and evaluating the results of these tests may reduce substantive procedures.

Documenting Internal Control Structure Weaknesses

6.017 In completing the Internal Control Structure Questionnaire and the EDP Questionnaires and Evaluation Form in section 6.300 and in performing the tests of controls, the auditor may become aware of deficiencies in the design or operation of the control that could adversely affect the construction contractor's ability to properly record, summarize, and process financial data. SAS No. 60, *Communication of Internal Control Structure Related Matters Noted in an Audit* (AU 325), defines such matters as "reportable conditions" and requires that they be communicated to the construction contractor's audit committee or management. Internal Control Structure related and other matters should be recorded on the Internal Control Structure Reportable Conditions Form under the 17 charges's supervision as they come to the attention of engagement personnel. The situation, problem, and recommendation for each matter should be written as they would be presented in a letter to management.

6.018 A written communication indicating that no reportable conditions were noted should not be issued in accordance with SAS No. 60. However, current economic conditions in the construction industry, i.e., low profit margins, strong competition for existing work, and downward pressure on general and administrative expenses have had various effects on many construction contractors' internal control systems. With fewer people taking on more duties and responsibilities related to a company's internal accounting functions, internal control structures designed to segregate incompatible duties fall victim to budgetary realities.

6.019 The streamlining of internal accounting functions may prove to be both a cost and a benefit to many contractors. Do the costs associated with preserving the integrity of the internal control systems merit the level of risk reduction achieved? Management generally has a better understanding of the cost reduction side of this equation than the associated increase in risk assumed as staffing levels are reduced.

6.020 Notifying management of this associated increase in risk, as well as recommending steps to be taken to reduce this risk, is the primary purpose of written or oral communications of any deficiencies noted in the design or operation of a company's system of internal controls. Some examples of common problems in construction contractor internal control systems are identified in the Sample Communication of Internal Control Matters, section 8.906.

6.100 CONTRACTORS' INTERNAL CONTROL QUESTIONNAIRE

Purpose

6.101 The purpose of the Contractors' Internal Controls Questionnaire (section 6.200) is to guide the auditor in obtaining an understanding of the construction contractor's internal control structure when using the ABC System — that is, the auditor plans to assess control risk at below the maximum and reduce substantive tests by performing tests of controls. Supplemented by narratives and internal control flowcharts, as considered necessary by the engagement partner, the Questionnaire enables the auditor to obtain and document an understanding of the contractor's accounting system, its control environment, and its internal control procedures.

6.102 When control risk is assessed at the maximum, as for a System C, auditing procedures will be performed at or near the balance-sheet date, will be highly reliable, and will include large amounts of individually significant items and large sample sizes. Control risk is assessed at less than maximum for Systems A and B, which permits controls testing and interim testing, performing less reliable procedures, and includes smaller amounts of individually significant items and smaller sample sizes.

6.103 An assessment of control risk is made for each transaction cycle. When the Questionnaire contains "yes" answers to most questions under System A, B, and C, control risk can be assessed at less than maximum and it may be most cost beneficial to perform tests of controls. When few or no "yes" answers are found in System A and B, or when it is most cost-beneficial to perform work as of the balance-sheet date, substantive tests should be performed at year end. Completing this Questionnaire, and evaluating the internal control structure as a System A, B, or C for each major audit area documents the assessment of control risk.

Using the Contractors' Internal Controls Questionnaire

6.104 The Questionnaire should be prepared or updated during planning each year. Client personnel should complete the Questionnaire whenever they are capable of doing so. The in-charge should review the Questionnaire, evaluate control risk by assigning system classifications, and post the System A, B, or C classification to the Contractors' Planning Matrix (Chapter 5, section). The engagement partner should review the Questionnaire before any interim or year-end work is started.

6.105 The Questionnaire is divided into the following seven major audit areas:

I. Cash.
II. Contract receivables confirmations and alternative procedures, and contract revenue tests.
III. Vouching and inspecting fixed assets, search for unrecorded liabilities, purchases cutoff, expense account analysis and vouching, and construction contract costs.
IV. Payroll tests.
V. Physical inventory observation, and inventory pricing and clerical tests:
   Part I — Annual physical inventory count—no perpetual inventory records maintained.
   Part II — Inventory control — perpetual inventory records maintained.
VI. All cycles.
VII. Project administration and evaluation, estimating and bidding, and job site accounting and controls.

6.106 The sections represent groupings of major audit areas that are affected by the same transaction cycles. Section I, Cash, combines the collections and payments portions of Sections II and III, respectively. Sections II and III should be completed first and results transferred to Section I. If the engagement partner believes that reductions in year-end auditing procedures for cash balances are not likely (because of client size, limited number of bank accounts or a limited number of transactions), Section I may be omitted. High reliance should then be placed on year-end tests of cash balances.

6.107 Each of the seven sections is further divided into three levels: Accounting System (System C); Primary Controls (System B); and Secondary Controls (System A). In addition, to the extent that controls under these levels differ among a contractor's departments, they are categorized by department.

6.108 System C will result in control risk being assessed at the maximum or slightly below the maximum for most financial statement assertions. The absence of significant aspects of an effective accounting system may mean the client's system is not auditable or that significant reconstruction of records must take place before the audit begins.

6.109 System B includes an adequate accounting system and significant primary control procedures, which allows control risk to be assessed at a moderate level for some financial statement assertions.

6.110 System A has a well-designed control environment, accounting system, and primary and secondary control policies and procedures. This system allows control risk to be assessed at a moderate or low level for many financial statement assertions.

6.111 To achieve reductions in tests of balances procedures for contract receivables, contract revenues, *and* contract costs, Sections II, VI, and VII must be evaluated as System A or B.

6.112 When appropriate, client personnel should complete the Questionnaire for review by the in-charge. The Questionnaire should be used to select the standard system classification and the related Tests of Controls Programs for each major audit area.

6.113 In the "Personnel" column, insert the name and title of the individual who performs the control procedure. If more than one individual is listed because the question relates to segregation of duties, briefly describe the procedure performed by each. "No" answers represent potential weaknesses. Material weaknesses and reportable conditions should be posted to the Internal Control Structure Reportable Conditions Form.

6.114 The client's systems may contain owner or manager controls. The term "manager," as used in the Questionnaire, describes a person performing internal verification functions. That person may be the general manager, controller, bookkeeper, or other employee.

6.115 The systems selected in this Questionnaire should be transferred to the Contractors' Planning Matrix.

6.200

Contractors' Internal Controls Questionnaire – Section I

Client: ______________________________

Financial Statement Date: ______________________________

INSTRUCTIONS:

Sections II and III should be completed first and results transferred to Section I.

For each item, place a "✓" in either the "Yes" or "No" column to indicate whether the procedure is performed, or in the "N/A" column if the procedure is not applicable to the Company's internal control system. In the "Personnel" column, indicate the name(s) of the client personnel responsible for the procedure.

MAJOR AUDIT AREA: Cash.

TRANSACTION CYCLES:
1. Collections.
2. Payments.

Internal Control Procedures	Personnel	Yes	No	N/A
ACCOUNTING SYSTEM (SYSTEM C)				
Collections				
1. A cash receipts journal is prepared and balanced.	______	______	______	______
2. Records of payments on contracts receivable by customer are maintained (receipts, remittance advices, or duplicate deposit slips).	______	______	______	______
3. The persons who open the mail make a list of cash receipts before the cash or documentation is routed to others.	______	______	______	______
4. Cash receipts are deposited intact.	______	______	______	______
Payments				
1. A cash disbursements journal is prepared and balanced.	______	______	______	______

CONTRACTORS' INTERNAL CONTROLS QUESTIONNAIRE
SECTION I (Continued)

Internal Control Procedures	Personnel	Yes	No	N/A
2. Cash disbursements are made by check (except for petty cash).				
3. Cash disbursements are supported by vendors' invoices or other external documents.				
4. Bank reconciliations are prepared for all accounts.				
PRIMARY CONTROLS (SYSTEM B)				
Collections				
1. A restrictive endorsement is placed on all checks when received.				
2. Collections are deposited intact, daily.				
3. Cash receipts are recorded in the receipts journal as received.				
4. The bank reconciliation is prepared by the owner or manager or someone independent of the cash receipts function.				
5. The cash receipts are posted to a receivables subsidiary ledger.				
6. The subledger is posted, balanced, and reconciled to the general ledger monthly.				
Payments				
1. All checks are signed by the owner or manager.				
2. The check signer compares data on supporting documents to checks.				
3. Checks are recorded in the disbursements journal or other record as prepared.				
4. Checks are prenumbered and accounted for.				

CONTRACTORS' INTERNAL CONTROLS QUESTIONNAIRE
SECTION I (Continued)

Internal Control Procedures	Personnel	Yes	No	N/A
5. An imprest petty cash fund is in use.	____	____	____	____
6. All invoices are approved for payment by the owner or manager.	____	____	____	____
7. Checks are prepared by the owner or manager or persons independent of vendor invoice approval.	____	____	____	____
8. Checks are signed based on approved invoices (not signed in advance).	____	____	____	____
SECONDARY CONTROLS (SYSTEM A)				
Collections				
1. Incoming mail is received, opened and listed by the owner, manager, or a person independent of the cash receipts journal and general journal entry and accounts receivable functions.	____	____	____	____
2. The list of mail receipts is reconciled to deposits by a person who is independent of the functions of handling or recording cash.	____	____	____	____
3. Account codings are reviewed by someone other than the preparer.	____	____	____	____
4. The bank reconciliation is reviewed by the owner or manager.	____	____	____	____
5. A restrictive endorsement is placed on all checks when received.	____	____	____	____
6. Deposits are prepared by a person independent of the mail opening and listing function.	____	____	____	____
7. Items returned by the bank are received and opened by the owner or manager.	____	____	____	____

CONTRACTORS' INTERNAL CONTROLS QUESTIONNAIRE
SECTION I (Continued)

Internal Control Procedures	Personnel	Yes	No	N/A
8. When hiring individuals who will be involved with handling of incoming mail or the handling or recording of cash receipts, a responsible official checks applicants' references and otherwise attempts to evaluate their integrity.	______	______	______	______
Payments				
1. All supporting documents are canceled after check signing by the check signer or independent person to prevent duplicate payment.	______	______	______	______
2. The numerical sequence of checks issued is accounted for by someone independent of the preparation function.	______	______	______	______
3. Checks are mailed by the owner or manager or a person under his/her supervision after signing.	______	______	______	______
4. Cash disbursements are posted to an accounts payable subledger.	______	______	______	______
5. The accounts payable subledger is posted, balanced, and reconciled to the general ledger monthly.	______	______	______	______
6. The bank reconciliation is prepared by the owner or manager or a person independent of the check-signing function.	______	______	______	______
7. Bank reconciliations are reviewed by the owner or manager.	______	______	______	______
8. The check preparation function is independent of purchases journal, general ledger, and accounts payable subledger posting functions.	______	______	______	______
9. Account codings are reviewed by someone other than the preparer.	______	______	______	______

CONTRACTORS' INTERNAL CONTROLS QUESTIONNAIRE
SECTION I (Continued)

Internal Control Procedures	Personnel	Yes	No	N/A
10. Bank statements and enclosures are received and reviewed by the owner or manager before reconciliation.	______	______	______	______
11. A check protector is used.	______	______	______	______
12. Access to blank checks is limited to persons authorized to prepare checks.	______	______	______	______

Other comments:

System selection (circle one):

System A[(1)] System B[(2)] System C[(3)]

Modification of standard tests:

CONTRACTORS' INTERNAL CONTROLS QUESTIONNAIRE
SECTION I (Continued)

	19______	19______	19______	19______	19______
Prepared or Updated by:					
Client	______	______	______	______	______
In-charge	______	______	______	______	______
Reviewed by:					
Engagement Partner	______	______	______	______	______

(1) Represents a decision to assess control risk at a moderate or low level for most financial statement assertions.

(2) Represents a decision to assess control risk at a moderate level for some financial statement assertions.

(3) Represents a decision to assess control risk at the maximum or slightly below the maximum for most financial statement assertions.

Contractors' Internal Controls Questionnaire – Section II

Client: ______________________________

Financial Statement Date: ______________________________

INSTRUCTIONS:

For each item, place a "✓" in either the "Yes" or "No" column to indicate whether the procedure is performed, or in the "N/A" column if the procedure is not applicable to the Company's internal control system. In the "Personnel" column, indicate the name(s) of the client personnel responsible for the procedure.

MAJOR AUDIT AREAS:
1. Contract receivables confirmation, and alternative procedures.
2. Contract revenue tests.

TRANSACTION CYCLE: Contract receivables, billings, and revenues.

Internal Control Procedures	Personnel	Yes	No	N/A
PRIMARY CONTROLS (SYSTEM B--THERE IS NO SYSTEM C)				
Contract Billings				
1. Progress billings are prepared for work performed on contracts.	______	______	______	______
2. Progress billing forms are pre-numbered and filed in numerical sequence.	______	______	______	______
3. A contract revenue journal is maintained.	______	______	______	______
4. Copies of progress billings or customers' statements are mailed periodically.	______	______	______	______
5. Credit memos and/or change orders are prepared for adjustments to contracts.	______	______	______	______

CONTRACTORS' INTERNAL CONTROLS QUESTIONNAIRE
SECTION II (Continued)

Internal Control Procedures	Personnel	Yes	No	N/A
6. The data necessary to prepare and support billings, including costs incurred to date, engineers' estimates of completion, architects' certifications and other pertinent information are accumulated and retained.	______	______	______	______
7. Billings, including retentions, are recorded in a contract revenue journal in the period the right to bill occurs.	______	______	______	______
8. The contract revenue journal is posted to an accounts and contracts receivable subledger maintained by contract.	______	______	______	______
9. The accounts and contracts receivable subledger is posted, balanced, and reconciled to the general ledger monthly.	______	______	______	______
10. Prenumbered credit memos are used.	______	______	______	______
SECONDARY CONTROLS (SYSTEM A)				
Contract Billings				
1. Progress billings are approved by the owner or manager.	______	______	______	______
2. Progress billings are prepared in accordance with the contract and contract cost breakdown and are based on appropriate supporting data such as architect certification, engineer estimates, etc.	______	______	______	______
3. Progress billing forms are accounted for periodically.	______	______	______	______
4. Progress billings are posted to the contract revenue journal by a person independent of the billing and cash receipt functions.	______	______	______	______

CONTRACTORS' INTERNAL CONTROLS QUESTIONNAIRE
SECTION II (Continued)

Internal Control Procedures	Personnel	Yes	No	N/A
5. The person posting the contract revenue journal and general ledger is independent of the accounts receivable subledger posting function and/or some other independent person periodically reconciles the subledger to the general ledger.	______	______	______	______
6. Credit memos are accounted for periodically.	______	______	______	______
7. A monthly aged analysis of contract receivables, including retentions, is reviewed by the owner or manager.	______	______	______	______
8. Management personnel review monthly reports of over/under billings.	______	______	______	______
9. The owner or manager approves all bad debt write-offs.	______	______	______	______
10. Bad debts written off are controlled by a person who does not have access to cash or by the owner or manager.	______	______	______	______
11. All contracts are approved in writing by the owner or manager.	______	______	______	______
12. Billings and percentage calculations are double-checked by a person independent of the preparer.	______	______	______	______
13. Any change orders are approved in writing by an authorized customer representative before the extra work is performed.	______	______	______	______

Other comments:

____
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____

CONTRACTORS' INTERNAL CONTROLS QUESTIONNAIRE
SECTION II (Continued)

System selection (circle one):

System A[1] System B[2]

Modification of standard tests:

____

	19____	19____	19____	19____	19____
Prepared or Updated by:					
Client	____	____	____	____	____
In-charge	____	____	____	____	____
Reviewed by:					
Engagement Partner	____	____	____	____	____

(1) Represents a decision to assess control risk at a moderate or low level for most financial statement assertions.

(2) Represents a decision to assess control risk at a moderate level for some financial statement assertions.

Contractors' Internal Controls Questionnaire – Section III

Client: ____________________

Financial Statement Date: ____________________

INSTRUCTIONS:

For each item, place a "✓" in either the "Yes" or "No" column to indicate whether the procedure is performed, or in the "N/A" column if the procedure is not applicable to the Company's internal control system. In the "Personnel" column, indicate the name(s) of the client personnel responsible for the procedure.

MAJOR AUDIT AREAS:

1. Vouching and inspecting fixed assets.
2. Search for unrecorded liabilities.
3. Purchases cutoff.
4. Expense account analysis and vouching.
5. Construction contract costs.

TRANSACTION CYCLE: Acquisitions and payments.

Internal Control Procedures	Personnel	Yes	No	N/A
ACCOUNTING SYSTEM (SYSTEM C)				
Acquisitions				
1. Vendor invoices, receiving reports, or other documents contain the date goods or services were received.	______	______	______	______
2. Unpaid vendor invoices are filed separately from paid invoices.	______	______	______	______
Payments				
1. A cash disbursements journal for each bank account is prepared and balanced.	______	______	______	______
2. Cash disbursements are made by check (except for petty cash).	______	______	______	______

CONTRACTORS' INTERNAL CONTROLS QUESTIONNAIRE
SECTION III (Continued)

Internal Control Procedures	Personnel	Yes	No	N/A
3. Cash disbursements are supported by vendors' invoices or other external documents.	______	______	______	______
4. Bank reconciliations are prepared timely for all bank accounts.	______	______	______	______
PRIMARY CONTROLS (SYSTEM B)				
Acquisitions				
1. Vendors' invoices or other documents are included as support for all purchases and, if applicable, identify the construction contract to which they apply.	______	______	______	______
2. A purchases journal is in use and transactions are recorded on the accrual basis.	______	______	______	______
3. All purchases are approved by the owner or manager.	______	______	______	______
4. An accounts payable subsidiary ledger is maintained and is reconciled to the general ledger monthly.	______	______	______	______
5. Costs incurred on construction contracts are posted to a separate contract costs subledger.	______	______	______	______
6. The contract costs subledger is posted, balanced, and reconciled to the general ledger monthly.	______	______	______	______
7. Vendors are approved by the owner or manager.	______	______	______	______
Payments				
1. All checks are signed by the owner or manager.	______	______	______	______
2. The check signer compares data on supporting documents to checks.	______	______	______	______
3. Checks are recorded in the disbursements journal or other record as prepared.	______	______	______	______

CONTRACTORS' INTERNAL CONTROLS QUESTIONNAIRE
SECTION III (Continued)

Internal Control Procedures	Personnel	Yes	No	N/A
4. Checks are prenumbered and accounted for.				
5. An imprest petty cash fund is in use.				
6. All invoices are approved for payment by the owner or manager.				
7. Checks are prepared by the owner or manager or persons independent of vendor invoice approval.				
8. Checks are signed based on approved invoices (not signed in advance).				
9. Vendors' invoices are recalculated prior to payment.				
10. The owner or manager authorizes all bank accounts and check signers.				
11. The bank is immediately notified of all changes of authorized check signers.				
12. Voided checks are adequately defaced and are easily accessible for review.				
13. Bank transfers are scheduled, and investigated to ascertain that both sides of the transaction are recorded.				
14. Bank reconciliations are prepared by someone independent of all cash disbursements functions.				

SECONDARY CONTROLS (SYSTEM A)

Acquisitions

Internal Control Procedures	Personnel	Yes	No	N/A
1. Prenumbered receiving reports are prepared as support for purchases and indicate the date goods were received or work was performed.				
2. All supporting documents are marked in a way to prevent re-entry in purchases journal.				

CONTRACTORS' INTERNAL CONTROLS QUESTIONNAIRE
SECTION III (Continued)

Internal Control Procedures	Personnel	Yes	No	N/A
3. Purchases are posted to an accounts payable subledger.	______	______	______	______
4. The accounts payable subledger is posted and reconciled to the general ledger monthly.	______	______	______	______
5. The person posting the purchases journal and general ledger is independent of the accounts payable subledger posting function and/or the owner, manager, or other independent person reconciles the subledger to the general ledger.	______	______	______	______
6. All supporting documents are matched by a person independent of the ordering function, or the owner or manager, before entry in the purchases journal.	______	______	______	______
7. Account codings are reviewed by someone other than the preparer.	______	______	______	______
8. Prenumbered purchase requisitions and purchase orders are prepared as authorization for purchases.	______	______	______	______
9. Approved price lists are in use.	______	______	______	______
10. The numerical sequence of receiving reports is accounted for by a person independent of the preparation function.	______	______	______	______
11. The numerical sequence of purchase requisitions and purchase orders is accounted for by a person independent of the preparation function.	______	______	______	______
12. Accounts payable subledger balances are periodically reconciled to vendors' statements by a person independent of the ordering and payments functions.	______	______	______	______
13. A voucher system with prenumbered vouchers approved by the owner or manager is in use.	______	______	______	______

CONTRACTORS' INTERNAL CONTROLS QUESTIONNAIRE
SECTION III (Continued)

Internal Control Procedures	Personnel	Yes	No	N/A
Payments				
1. All supporting documents are canceled after check signing by the check signer or independent person to prevent duplicate payment.	______	______	______	______
2. The numerical sequence of checks issued is accounted for by someone independent of the preparation function.	______	______	______	______
3. Checks are mailed by the owner, manager, or a person under his or her supervision after signing. (Consider other responsibilities of person mailing checks.)				
4. Cash disbursements are posted to an accounts payable subledger.	______	______	______	______
5. The accounts payable subledger is posted, balanced, and reconciled to the general ledger monthly.	______	______	______	______
6. The bank reconciliation is prepared or reviewed by the owner, manager, or a person independent of the check-signing and -recording functions.	______	______	______	______
7. Bank reconciliations are reviewed by the owner or manager.	______	______	______	______
8. The check preparation function is independent of purchases journal, general ledger, and accounts payable subledger posting functions.	______	______	______	______
9. Account codings are reviewed by someone other than the preparer.	______	______	______	______
10. Bank statements and enclosures are received and reviewed by the owner or manager before reconciliation.	______	______	______	______
11. A check protector is used.	______	______	______	______

CONTRACTORS' INTERNAL CONTROLS QUESTIONNAIRE
SECTION III (Continued)

Internal Control Procedures	Personnel	Yes	No	N/A
12. Access to blank checks is limited to persons authorized to prepare checks.	______	______	______	______

Other comments:

____

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____

System selection (circle one):

System A[1] System B[2] System C[3]

Modification of standard tests:

____

____

____

	19____	19____	19____	19____	19____
Prepared or Updated by:					
Client	______	______	______	______	______
In-charge	______	______	______	______	______
Reviewed by:					
Engagement Partner	______	______	______	______	______

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(1) Represents a decision to assess control risk at a moderate or low level for most financial statement assertions.

(2) Represents a decision to assess control risk at a moderate level for some financial statement assertions.

(3) Represents a decision to assess control risk at the maximum or slightly below the maximum for most financial statement assertions.

Contractors' Internal Controls Questionnaire – Section IV

Client: ______________________________

Financial Statement Date: ______________________________

INSTRUCTIONS:

For each item, place a "✓" in either the "Yes" or "No" column to indicate whether the procedure is performed, or in the "N/A" column if the procedure is not applicable to the Company's internal control system. In the "Personnel" column, indicate the name(s) of the client personnel responsible for the procedure.

MAJOR AUDIT AREA: Payroll tests.

TRANSACTION CYCLE: Payroll and personnel.

Internal Control Procedures	Personnel	Yes	No	N/A
ACCOUNTING SYSTEM (SYSTEM C)				
1. A payroll journal is prepared and balanced.	______	______	______	______
2. Payroll disbursements are made by check.	______	______	______	______
3. Labor is classified by category, such as contract, administrative, etc.	______	______	______	______
4. Employees' time records are maintained.	______	______	______	______
5. W-4 forms are maintained.	______	______	______	______
6. Employees' earnings records are maintained.	______	______	______	______
7. A payroll bank account reconciliation is prepared.	______	______	______	______
8. Wage rates are authorized by the owner or manager (at least verbally).	______	______	______	______
9. Adequate records are maintained to allow allocation of payroll costs to specific contracts.	______	______	______	______

CONTRACTORS' INTERNAL CONTROLS QUESTIONNAIRE
SECTION IV (Continued)

Internal Control Procedures	Personnel	Yes	No	N/A
PRIMARY CONTROLS (SYSTEM B)				
1. Time cards are prepared by employees.	____	____	____	____
2. The owner or manager approves:				
a. Rates of pay.	____	____	____	____
b. Withholdings.	____	____	____	____
c. Changes in above.	____	____	____	____
3. The payroll bank account reconciliation is prepared by someone independent of payroll preparation and check signing.	____	____	____	____
4. Payroll checks are prenumbered and accounted for.	____	____	____	____
5. Checks are recorded in the payroll journal as prepared.	____	____	____	____
6. Payroll journals are posted at least monthly to employees' earnings records.	____	____	____	____
7. Payroll checks are signed by the owner or manager.	____	____	____	____
8. Time cards are approved by a foreman, manager, or owner.	____	____	____	____
9. The payroll bank account reconciliation is approved by the owner or manger.	____	____	____	____
10. Payrolls relating to construction contracts are posted to a separate contract cost subledger.	____	____	____	____
11. Payroll expense recorded in the contract cost subledger is reconciled monthly to payroll expense in the general ledger.	____	____	____	____

CONTRACTORS' INTERNAL CONTROLS QUESTIONNAIRE
SECTION IV (Continued)

Internal Control Procedures	Personnel	Yes	No	N/A
SECONDARY CONTROLS (SYSTEM A)				
1. A time clock is used to record time or time is logged by someone independent of payroll preparation, check signing, and distribution functions.	______	______	______	______
2. An imprest payroll bank account is used.	______	______	______	______
3. All payroll calculations are checked by an independent person.	______	______	______	______
4. Employees' earnings records are periodically reconciled to the general ledger by persons independent of payroll preparation and distribution.	______	______	______	______
5. Account codings are reviewed by someone other than the preparer.	______	______	______	______
6. Adequate personnel files are maintained.	______	______	______	______
7. Payroll checks are accounted for by a person independent of the preparation function.	______	______	______	______
8. Payroll is prepared by persons independent of time card approval, check signing, and check distribution.	______	______	______	______
9. The payroll bank account reconciliation is reviewed by the owner or manager.	______	______	______	______
10. Unclaimed payroll checks are followed up by the owner or manager.	______	______	______	______
11. The determination of payroll overhead that is allocated to contracts is reviewed by the owner or manager.	______	______	______	______

CONTRACTORS' INTERNAL CONTROLS QUESTIONNAIRE
SECTION IV (Continued)

Other comments:

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System selection (circle one):

System A[1] System B[2] System C[3]

Modification of standard tests:

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____

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	19____	19____	19____	19____	19____
Prepared or Updated by:					
Client	____	____	____	____	____
In-charge	____	____	____	____	____
Reviewed by:					
Engagement Partner	____	____	____	____	____

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(1) Represents a decision to assess control risk at a moderate or low level for most financial statement assertions.

(2) Represents a decision to assess control risk at a moderate level for some financial statement assertions.

(3) Represents a decision to assess control risk at the maximum or slightly below the maximum for most financial statement assertions.

Contractors' Internal Controls Questionnaire – Section V Part I

Client: ______________________________

Financial Statement Date: ______________________________

INSTRUCTIONS:

For each item, place a "✓" in either the "Yes" or "No" column to indicate whether the procedure is performed, or in the "N/A" column if the procedure is not applicable to the Company's internal control system. In the "Personnel" column, indicate the name(s) of the client personnel responsible for the procedure.

MAJOR AUDIT AREAS:
1. Physical inventory observation.
2. Inventory pricing and clerical tests.

TRANSACTION CYCLE: Annual physical inventory count—no perpetual inventory records maintained

Internal Control Procedures	Personnel	Yes	No	N/A
ACCOUNTING CONTROLS (SYSTEM C)				
1. An annual physical inventory is taken and adequate count records (tags or sheets) are maintained.	______	______	______	______
2. Adequate records of inventory pricing and summarization are maintained.	______	______	______	______
3. The inventory count is taken, checked, or supervised by the owner or manager.	______	______	______	______
PRIMARY CONTROLS (SYSTEM B)				
1. Inventories that are obsolete, consigned, or charged to contract costs are excluded from the count.	______	______	______	______
2. Good physical cutoff procedures are utilized to ensure an accurate count and recording of inventory.	______	______	______	______

CONTRACTORS' INTERNAL CONTROLS QUESTIONNAIRE
SECTION V—Part I (Continued)

Internal Control Procedures	Personnel	Yes	No	N/A
3. Physical inventory counters are given adequate instructions for an accurate count.	_____	_____	_____	_____
SECONDARY CONTROLS (SYSTEM A)				
1. Written inventory instructions are prepared and used.	_____	_____	_____	_____
2. The receiving department inspects the quantity and quality of materials when receiving reports are prepared.	_____	_____	_____	_____
3. Inventories are stored under good physical controls.	_____	_____	_____	_____
4. The following functions are double-checked on a test basis by an independent person:				
a. Original inventory counts and recording of quantities.	_____	_____	_____	_____
b. Pricing of inventory items.	_____	_____	_____	_____
c. Extending and footing of inventory sheets and/or summaries.	_____	_____	_____	_____
d. Tracing from:				
(1) Page totals to summaries.	_____	_____	_____	_____
(2) Summaries to page totals.	_____	_____	_____	_____

Other comments:

____

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____

CONTRACTORS' INTERNAL CONTROLS QUESTIONNAIRE
SECTION V—Part I (Continued)

System selection (circle one):

System A[1] System B[2] System C[3]

Modification of standard tests:

____
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____
____

	19___	19___	19___	19___	19___
Prepared or Updated by:					
Client	___	___	___	___	___
In-charge	___	___	___	___	___
Reviewed by:					
Engagement Partner	___	___	___	___	___

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(1) Represents a decision to assess control risk at a moderate or low level for most financial statement assertions.

(2) Represents a decision to assess control risk at a moderate level for some financial statement assertions.

(3) Represents a decision to assess control risk at the maximum or slightly below the maximum for most financial statement assertions.

Contractors' Internal Controls Questionnaire – Section V Part II

Client: ____________________

Financial Statement Date: ____________________

INSTRUCTIONS:

For each item, place a "✓" in either the "Yes" or "No" column to indicate whether the procedure is performed, or in the "N/A" column if the procedure is not applicable to the Company's internal control system. In the "Personnel" column, indicate the name(s) of the client personnel responsible for the procedure.

MAJOR AUDIT AREAS:
1. Physical inventory observation.
2. Inventory pricing and clerical tests.

TRANSACTION CYCLE: Inventory control—perpetual inventory records maintained

Internal Control Procedures	Personnel	Yes	No	N/A
PRIMARY CONTROLS (SYSTEM B--THERE IS NO SYSTEM C)				
1. All inventory movements and inventory withdrawals are recorded in the perpetual records and the general ledger.	______	______	______	______
2. Construction and production activity are controlled by reports of the construction and production processes.	______	______	______	______
3. Excess, obsolete, and slow-moving inventories are periodically identified and removed from the perpetual records and the general ledger.	______	______	______	______
4. Prenumbered raw material requisitions are prepared for all raw materials used in production.	______	______	______	______

CONTRACTORS' INTERNAL CONTROLS QUESTIONNAIRE
SECTION V—Part II (Continued)

Internal Control Procedures	Personnel	Yes	No	N/A
5. Withdrawals from inventory are based on prenumbered contract or finished inventory requisitions and/or prenumbered shipping reports.	______	______	______	______
6. All inventory write-offs are approved by the owner or manager.	______	______	______	______
7. All perpetual records are compared to physical counts at least annually.	______	______	______	______
8. Physical inventory counters are given adequate instructions.	______	______	______	______
9. Physical inventory records are posted to the date of the count to obtain a good cutoff.	______	______	______	______
SECONDARY CONTROLS (SYSTEM A)				
1. All classes of inventory are stored under good physical safeguards.	______	______	______	______
2. Materials costs, labor charges, and overhead costs are recorded in the perpetual records and the general ledger.	______	______	______	______
3. For a standard cost system:				
a. Significant variances are reported in a timely manner.	______	______	______	______
b. Standards are reviewed at least annually.	______	______	______	______
c. The system interfaces with the general ledger.	______	______	______	______
4. Periodic physical counts are made and agreed to perpetual records by persons independent of the inventory and warehousing functions or by the owner or manager.	______	______	______	______

CONTRACTORS' INTERNAL CONTROLS QUESTIONNAIRE
SECTION V—Part II (Continued)

Internal Control Procedures	Personnel	Yes	No	N/A
5. Written instructions are prepared and used for periodic physical counts.	______	______	______	______
6. The receiving department inspects the quantity and quality of materials when receiving reports are prepared.	______	______	______	______
7. The following documents are periodically accounted for:				
a. Raw material requisitions.	______	______	______	______
b. Labor charge documents.	______	______	______	______
c. Contract requisitions.	______	______	______	______
d. Completed production orders.	______	______	______	______
8. The following functions are checked on a test basis by an independent person:				
a. Completion of raw materials, finished goods, and contract requisitions.	______	______	______	______
b. Labor distributions.	______	______	______	______
c. Overhead allocations.	______	______	______	______
d. Production activity reports.	______	______	______	______
e. Posting of above to perpetual records.	______	______	______	______
f. Year-end summarization of labor, materials, and overhead from the perpetual records.	______	______	______	______
g. Footing of page totals and summary sheets.	______	______	______	______
h. Tracing from:				
(1) Summaries to page totals.	______	______	______	______
(2) Page totals to summaries.	______	______	______	______

CONTRACTORS' INTERNAL CONTROLS QUESTIONNAIRE
SECTION V—Part II (Continued)

Internal Control Procedures	Personnel	Yes	No	N/A
9. All construction and production activities are based on prenumbered contract or production orders approved by the owner or manager.	______	______	______	______
10. Material and labor costs charged to inventory, contracts, or production are controlled by bills of materials and charges approved by management.	______	______	______	______
11. Perpetual records are periodically reconciled to the general ledger by an independent person.	______	______	______	______

Other comments:

System selection (circle one):

System A[1] System B[2]

Modification of standard tests:

(1) Represents a decision to assess control risk at a moderate or low level for most financial statement assertions.

(2) Represents a decision to assess control risk at a moderate level for some financial statement assertions.

CONTRACTORS' INTERNAL CONTROLS QUESTIONNAIRE
SECTION V—Part II (Continued)

	19____	19____	19____	19____	19____
Prepared or Updated by:					
Client	____	____	____	____	____
In-charge	____	____	____	____	____
Reviewed by:					
Engagement Partner	____	____	____	____	____

Contractors' Internal Controls Questionnaire – Section VI

Client: ____________________

Financial Statement Date: ____________________

INSTRUCTIONS:

For each item, place a "✓" in either the "Yes" or "No" column to indicate whether the procedure is performed, or in the "N/A" column if the procedure is not applicable to the Company's internal control system. In the "Personnel" column, indicate the name(s) of the client personnel responsible for the procedure.

AUDIT AREAS: All cycles.

TRANSACTION CYCLES: All cycles.

Internal Control Procedures	Personnel	Yes	No	N/A
GENERAL CONTROL ENVIRONMENT AND ACCOUNTING SYSTEM:				
1. The financial condition of the company is sound.	______	______	______	______
2. Financing sources other than the owner are available.	______	______	______	______
3. Management's attitudes about income taxes and business risks are conservative.	______	______	______	______
4. Management understands the importance of control procedures.	______	______	______	______
5. Management understands and uses financial statements and reports prepared by accounting personnel.	______	______	______	______
6. Accounting personnel have experience and training appropriate for their jobs and understand their responsibilities.	______	______	______	______

CONTRACTORS' INTERNAL CONTROLS QUESTIONNAIRE
SECTION VI (Continued)

Internal Control Procedures	Personnel	Yes	No	N/A
7. Management and accounting personnel are competent, possess high integrity, and are concerned about the quality of their work.	______	______	______	______
8. Documents, records and assets are physically controlled to prevent their destruction or unauthorized use.	______	______	______	______

9. Describe the following features of the control environment:

   a. The organization of management, accounting, and operations personnel (or attach an organization chart).

   ____
   ____
   ____
   ____

   b. Management's attitudes and practices that may affect the risk of misstatements in the financial statements. Consider such factors as deteriorating operations creating a need for working capital, financial statement ratios influencing lenders' decisions, motivation of management to reduce income taxes, and management's history of taking unnecessary business risks.

   ____
   ____
   ____
   ____

   c. In case of an absentee owner, the manager's compensation method and whether it is reasonable.

   ____
   ____
   ____
   ____

   d. The owner's awareness of the importance of a good accounting system, performing owner/manager controls, and understanding and use of related financial information.

   ____
   ____
   ____

CONTRACTORS' INTERNAL CONTROLS QUESTIONNAIRE
SECTION VI (Continued)

e. The accounting personnel, their positions and length of employment, their education and experience, and their job performance.

f. How the client achieves an adequate cutoff of transactions when the financial statements are prepared.

g. How the client's financial statements are prepared, including the way in which major accounting estimates are made.

h. How the client monitors compliance with statutory and contractual requirements.

CONTRACTORS' INTERNAL CONTROLS QUESTIONNAIRE
SECTION VI (Continued)

10. How are transactions processed?

Transactions	Describe How Transactions are Initiated, Including the Documents Used	Describe How Transactions are Recorded and Summarized
Contract Revenues		
Contract Billings		
Collections		
Contract costs		
Acquisitions		

CONTRACTORS' INTERNAL CONTROLS QUESTIONNAIRE
SECTION VI (Continued)

Transactions	Describe How Transactions are Initiated, Including the Documents Used	Describe How Transactions are Recorded and Summarized
Payments		
Payroll		
Other		

CONTRACTORS' INTERNAL CONTROLS QUESTIONNAIRE
SECTION VI (Continued)

11. What is the form of the client's accounting records?

Records	Form of Records: Manual	Form of Records: Computer	Personnel Responsible
Journals:			
Cash:			
Receipts	M	C	______________
Disbursements	M	C	______________
Petty Cash	M	C	______________
Contract:			
Revenues	M	C	______________
Billings	M	C	______________
Costs	M	C	______________
Sales	M	C	______________
Purchases	M	C	______________
Payroll (and related records)	M	C	______________
General	M	C	______________
______________	M	C	______________
______________	M	C	______________

CONTRACTORS' INTERNAL CONTROLS QUESTIONNAIRE
SECTION VI (Continued)

Records	Form of Records: Manual	Form of Records: Computer	Personnel Responsible
Ledgers:			
General	M	C	____________
Receivables:			
Contract	M	C	____________
Other	M	C	____________
Accounts payable	M	C	____________
Perpetual inventory	M	C	____________
Fixed assets	M	C	____________
Construction contracts	M	C	____________
Insurance	M	C	____________
Payroll	M	C	____________
Subcontracts	M	C	____________
____________	M	C	____________
____________	M	C	____________

CONTRACTORS' INTERNAL CONTROLS QUESTIONNAIRE
SECTION VI (Continued)

Internal Control Procedures	Personnel	Yes	No	N/A
ACCOUNTING SYSTEM (SYSTEM C)				
1. A general journal is prepared and balanced.				
2. A general ledger is posted and balanced.				
3. General journal entries are adequately supported.				
4. An adequate chart of accounts is in use.				
5. All employees in a position of trust are adequately bonded.				
6. All employees in a position of trust are required to take vacations.				
7. Personal transactions are identified, and excluded from business transactions.				
PRIMARY CONTROLS (SYSTEM B)				
1. The owner or manager participates in the day-to-day operations of the business.				
2. Adequate reports and financial information are available to and reviewed by the owner or manager.				
3. All journal entries are approved by the owner or manager.				
SECONDARY CONTROLS (SYSTEM A)				
1. Budgets are prepared and used to control operations.				
2. Fixed asset records are maintained, periodically reviewed, checked to assets, and reconciled to the general ledger.				
3. Hazard insurance coverage is periodically reviewed to determine adequacy.				

CONTRACTORS' INTERNAL CONTROLS QUESTIONNAIRE
SECTION VI (Continued)

Internal Control Procedures	Personnel	Yes	No	N/A
4. All accounting records, securities, and other valuable papers and records are adequately safeguarded.	_______	_______	_______	_______
5. Restrictive loan covenants and other agreements are periodically reviewed to determine compliance.	_______	_______	_______	_______

Other comments:

____
____
____
____
____
____
____
____

Modification of standard tests:

____
____
____
____
____
____
____
____

	19_____	19_____	19_____	19_____	19_____
Prepared or Updated by: In-charge	_______	_______	_______	_______	_______
Reviewed by: Engagement Partner	_______	_______	_______	_______	_______

Contractors' Internal Controls Questionnaire – Section VII

Client: ______________________________

Financial Statement Date: ______________________________

INSTRUCTIONS:

For each item, place a "✓" in either the "Yes" or "No" column to indicate whether the procedure is performed, or in the "N/A" column if the procedure is not applicable to the Company's internal control system. In the "Personnel" column, indicate the name(s) of the client personnel responsible for the procedure.

MAJOR AUDIT AREAS:
1. Project administration and evaluation.
2. Estimating and bidding.
3. Job site accounting and controls.

TRANSACTION CYCLE: Construction contract revenues and costs.

Internal Control Procedures	Personnel	Yes	No	N/A
PRIMARY CONTROLS (SYSTEM B--THERE IS NO SYSTEM C)				
Project Administration and Evaluation				
1. Field superintendents, engineers, project managers, etc., as applicable, are required to periodically file various progress and field reports on the status of the project.	______	______	______	______
2. A daily job site conditions log is maintained on a current basis.	______	______	______	______
3. Correspondence files are maintained for each project.	______	______	______	______
4. Variances in amounts of subcontracts issued from amounts used in cost estimates are reviewed and accumulated to measure deviation of actual costs from estimated costs.	______	______	______	______
5. Prenumbered purchase orders are prepared.	______	______	______	______

CONTRACTORS' INTERNAL CONTROLS QUESTIONNAIRE
SECTION VII (Continued)

Internal Control Procedures	Personnel	Yes	No	N/A
6. Purchase orders are accounted for periodically.	____	____	____	____
7. Purchase orders specify delivery dates and items.	____	____	____	____
8. Suppliers' acceptance of purchase terms is documented on purchase orders.	____	____	____	____
9. Progress reports, field reports, and other status reports are reviewed regularly by field and management personnel.	____	____	____	____
10. Payments to subcontractors are based on work performed and determined by comparison to various field reports.	____	____	____	____
11. All charges to jobs are coded by job operation to facilitate comparisons of actual with estimated cost.	____	____	____	____
12. Actual costs incurred plus estimated costs to complete are compared with estimated costs and total contract prices on a regular basis by accounting personnel.	____	____	____	____
13. A job site conditions log is maintained on a daily basis.	____	____	____	____
Estimating and Bidding				
1. Detailed estimates are prepared.	____	____	____	____
2. Estimates are detailed by job operation and account number so they can be compared to actual costs incurred.	____	____	____	____
3. Detailed estimates are prepared for contract change orders.	____	____	____	____
4. A preprinted estimate summary including job operation and account numbers is used.	____	____	____	____

CONTRACTORS' INTERNAL CONTROLS QUESTIONNAIRE
SECTION VII (Continued)

Internal Control Procedures	Personnel	Yes	No	N/A
5. Detailed estimate sheets are produced in support of summaries and are retained.	______	______	______	______
6. Quantities of material and hours of labor in bid estimates are reviewed by someone other than the preparer and compared to contract specifications.	______	______	______	______
7. Estimated material costs are checked against vendor price lists, price quotations, subcontractors' bids, or other supporting documentation.	______	______	______	______
8. When equipment is assigned to a job, a written receipt is issued and the individual is held accountable for the equipment's return or disposition.	______	______	______	______
9. Estimated labor rates, payroll taxes, and fringe benefits are compared against union contracts and other supporting documentation.	______	______	______	______
10. Estimated equipment costs are determined from standard rates charged to jobs for equipment rentals and owned equipment.	______	______	______	______
11. Estimates are reviewed for possible contingency provisions, such as material cost increases, increases in labor rates, unusual circumstances, etc.	______	______	______	______
12. Change orders are incorporated into job estimates, progress schedules, and cost comparison reports.	______	______	______	______
Job Site Accounting and Controls				
1. Time records of job site employees are prepared and include appropriate account coding.	______	______	______	______
2. Any unclaimed wages are properly controlled by office or management personnel.	______	______	______	______

CONTRACTORS' INTERNAL CONTROLS QUESTIONNAIRE
SECTION VII (Continued)

Internal Control Procedures	Personnel	Yes	No	N/A
3. All chargeable time for equipment is accounted for and reported to accounting personnel.	______	______	______	______
4. Hours reported are coded by job operation and account number to facilitate job cost accounting.	______	______	______	______
5. Prenumbered purchase orders are used at job sites for purchase of materials.	______	______	______	______
6. Prenumbered receiving reports are used at job sites as evidence of receipt of materials.	______	______	______	______
7. Prenumbered job site receiving reports are accounted for periodically.	______	______	______	______
SECONDARY CONTROLS (SYSTEM A)				
Project Administration and Evaluation				
1. A job plan is developed and approved by the owner or manager; the plan indicates that the contractor has access to the necessary equipment, personnel, and materials and that these items will be available at required dates.	______	______	______	______
2. The job foreman is familiar with the engineering and work-method decisions and assumptions made in job estimating and bidding.	______	______	______	______
3. Subcontracts are awarded to the lowest acceptable bidder.	______	______	______	______
4. Based on competitive bids obtained during estimate and bid activity, purchase orders are issued to the lowest acceptable bidder.	______	______	______	______
5. The owner or manager reviews and evaluates regularly the status of each contract in progress to estimate the profit or loss.	______	______	______	______
6. Plans and specifications are double-checked by management, any ambiguous items are clarified,				

CONTRACTORS' INTERNAL CONTROLS QUESTIONNAIRE
SECTION VII (Continued)

Internal Control Procedures	Personnel	Yes	No	N/A
and recommendations are made for changes in the plans when appropriate.	______	______	______	______
7. The job progress schedule (timing, responsibility, and coordination among subcontractors and prime contractors) is prepared and agreed to.	______	______	______	______
8. Progress reports, field reports, and other status reports are reviewed and approved in writing by the owner or manager.	______	______	______	______
9. Conferences with project engineers and architects are documented in writing.	______	______	______	______
10. Payments to subcontractors are approved by job superintendents.	______	______	______	______
11. The owner or manager reviews and approves monthly schedules comparing costs to date, plus estimated costs with total contract prices.	______	______	______	______
12. A daily log of events taking place is maintained at each job site, and is reviewed by management for potential construction claims and back charges.	______	______	______	______
Estimating and Bidding				
1. Estimates are approved by owner or manager.	______	______	______	______
2. Estimates are double-checked for clerical accuracy.	______	______	______	______
3. Estimates are double-checked against contract specifications, plans, and drawings to provide assurance that the estimates of contract costs reflect all relevant cost elements.	______	______	______	______
4. Estimates are reviewed by management for completeness and reasonableness.	______	______	______	______

CONTRACTORS' INTERNAL CONTROLS QUESTIONNAIRE
SECTION VII (Continued)

Internal Control Procedures	Personnel	Yes	No	N/A
5. For each phase of work to be subcontracted, cost estimates are obtained from more than one subcontractor.	______	______	______	______
6. The owner or manager approves all contracts and change orders.	______	______	______	______
7. Subcontractors' acceptance of change orders is approved in writing.	______	______	______	______
8. All items on the estimate summaries are completed or lined out.	______	______	______	______
9. Subcontractors included in estimates are reviewed for creditworthiness and high quality.	______	______	______	______
10. Performance bonds are obtained from subcontractors.	______	______	______	______
11. During the bid process, consideration is given to developing high margins where change orders are expected and low margins where change orders are not expected.	______	______	______	______
12. All awarded contracts are approved in writing after careful evaluation and comparison with other bids to determine whether the bid amount was too low.	______	______	______	______
13. Analysis on all bidding activity, whether awarded or not, is prepared and summarized monthly and on year-to-date forms and reviewed by management. (Information should include project, client's bid amount, low bid amount, dollar and percent difference, and to whom the contract was awarded.)	______	______	______	______
14. Estimates for change orders are rechecked and approved in writing by management.	______	______	______	______

CONTRACTORS' INTERNAL CONTROLS QUESTIONNAIRE
SECTION VII (Continued)

Internal Control Procedures	Personnel	Yes	No	N/A
Job Site Accounting and Controls				
1. Construction tools and equipment on job sites are adequately safeguarded and accounted for periodically.				
2. Payroll is paid by check at the job site and distributed by the job foreman or superintendent.				
3. If payroll is paid in cash, office and management personnel periodically make controlled job site payroll distributions.				
4. Materials purchased at the job site are approved by the owner or manager before ordering.				
5. An inventory of equipment is maintained at the job site and periodically compared to the accounting records.				
6. Non-chargeable equipment time is approved by the job foreman or superintendent.				
7. Hours reported on time records are approved in writing by the job foreman or superintendent.				
8. The hiring and firing of job site employees is reviewed by office and management personnel and properly documented.				
9. Prenumbered job site purchase orders are accounted for periodically.				
10. The owner or manager visits the job site periodically to verify reported progress.				

CONTRACTORS' INTERNAL CONTROLS QUESTIONNAIRE
SECTION VII (Continued)

Other comments:

System selection (circle one):

System A[1] System B[2]

Modification of standard tests:

	19____	19____	19____	19____	19____
Prepared or Updated by:					
Client					
In-charge					
Reviewed by:					
Engagement Partner					

(1) Represents a decision to assess control risk at a moderate or low level for most financial statement assertions.

(2) Represents a decision to assess control risk at a moderate level for some financial statement assertions.

6.300 INTERNAL CONTROLS OVER COMPUTER PROCESSING

6.301 SAS No. 55, *Consideration of the Internal Control Structure in a Financial Statement Audit,* requires the auditor to obtain an understanding of an entity's internal control structure, including the controls over computer processing. This understanding of computer processing controls, which is required even when the System's Walk-through Approach is used, enables the auditor to design effective substantive tests. This section describes how the auditor can obtain this required understanding, and how it may be documented in the working papers. It also describes typical tests of computer processing controls.

6.302 Today's computer environment is very diverse. Many entities use microcomputer systems to maintain all of their accounting records. Larger entities use mainframe computers that are often linked to microcomputer work stations. This section may be used to evaluate the computer controls for clients that have a sophisticated computer system, as well as those that use microcomputers and purchased software products.

6.303 Sections 6.304 - 6.306 explain the various types of computer controls that may be established by a client. Tests of computer controls are addressed in sections 6.318 - 6.326. Sections 6.322 - 6.332 describe the auditor's consideration of computer controls when a client has a significant accounting application that is processed by a service organization (e.g., a data processing service center, mortgage servicer, or benefit plan servicer). The following elements of documentation assistance are included in this section:

- The Microcomputer Questionnaire (section 6.315) — is designed to document the required understanding of computer processing controls in audit engagements in which the client's computer system is comprised of only microcomputers and purchased software products. If the computer system has some of the controls included in the Questionnaire, the procedures used to obtain an understanding of the computer processing controls will usually provide evidence that will support a lower assessed level of control risk.
- The General Computer Controls Questionnaire and the Application Computer Controls Questionnaire (sections 6.316-6.317) — designed to document the auditor's understanding of computer systems that are more sophisticated (e.g., when the client develops its own software).
- Service Organization Application Controls Questionnaire (section 6.338) — designed to document the auditor's understanding of the controls at a service organization when it is necessary to obtain and understand those controls and a service auditor's report is not available.
- The Service Auditor Report Evaluation Form (section 6.339) — designed to document the auditor's evaluation of the report of a service auditor when it is necessary to obtain an understanding of the controls applied at a service organization.

Computer System Controls

6.304 To evaluate a client's internal control structure, the auditor should have a general understanding of the different computer system controls. In this section the two major types of computer controls — general controls and application controls — are briefly described.

6.305 General controls affect all applications and include:

a. Adequate segregation of computer-related duties, e.g., computer operation, programming, and data input,

b. Controls over the development and testing of programs and systems,

c. Procedures to prevent unauthorized changes to existing programs and systems,

d. Controls over access to programs and data, and

e. Controls over computer operations.

6.306 Application computer controls are those that relate only to a specific accounting application, such as payroll. Application controls include those that relate to input, processing, and output of specific information. For example, application controls for payroll would include:

- Controls to ensure the accuracy of the input of hours and wage rates, such as reviews of credit reports.
- Controls over the accuracy of payroll checks and reports, such as reconciliation of control totals, or supervisory review of checks and reports.

Practice Tip:

General controls affect all computer applications. If a client has weak general controls, the auditor generally cannot place any reliance on application controls.

Obtaining an Understanding of Computer System Controls

6.307 As a part of planning the audit, the auditor should identify those account balances, transaction classes, and disclosure components of the financial statements that involve significant computer processing. This will define the scope of the auditor's review of computer system controls. If the systems are very complex, it may be useful to prepare flowcharts documenting significant computer applications. The information in these flowcharts may be obtained from prior knowledge of the client's business, discussions with client personnel, and reference to prior year's workpapers.

Practice Tip:

Flowcharts generally should be prepared only when the computer system is very complex and the auditor is planning to assess control risk at a moderate or low level.

6.308 Procedures to Obtain Understanding. The auditor obtains an understanding of computer-related controls through procedures such as inquiry, observation, and inspection of documents. For example, to obtain an understanding of the design of the computer system used to generate the general ledger, the auditor may make inquiries of appropriate personnel about input, processing, and output control procedures, and inspect application software documentation. The auditor may inquire about data security and database backup procedures, and inspect any control reports or logs. The auditor also may observe users of the system in actual performance of their duties and review the resultant documents and records.

6.309 The nature and extent of the auditor's understanding will vary from client to client, and is influenced by the size and complexity of the client's computer system and procedures. The auditor's prior experience with the client and assessments of inherent risk and materiality of the various account balances and transaction classes may also effect the nature and extent of the audit procedures performed to obtain an understanding of the computer controls.

6.310 Documenting Computer System Controls. The Microcomputer Questionnaire (section 6.315) may be used to document the client's controls when the computer system consists of microcomputers and purchased software products. This is the only computer questionnaire that should be completed for such clients.

6.311 For clients with more sophisticated computer systems, the auditor may complete:

- The General Computer Controls Questionnaire (section 6.316)
- The Application Computer Controls Questionnaire (section 6.317)

6.312 The General Computer Controls Questionnaire documents controls over the client's computer system environment. The areas addressed include data processing management issues, systems development practices, and policies regarding end-user developed systems. If the client does not develop any application software internally, many of the questions in this questionnaire will not apply.

6.313 The Application Computer Controls Questionnaire is used to document the nature of each major computer application. The information prepared to document the understanding of the internal control structure elements will vary depending on the size and complexity of the client and its computer systems.

6.314 In some cases, the auditor may find it necessary to prepare additional materials to adequately document complex applications. Block diagrams, flowcharts, database structure listings, video display layouts (screen shots), and narratives are sometimes used to document the flow of transactions through a complex system. Copies of key input forms, computer prepared documents, and reports also may help to describe the nature of the computer processing. For very complex computer systems, the auditor should consider having a computer specialist to participate in the review.

6.315

Microcomputer Questionnaire

Client: ____________________

Financial Statement Date: ____________________

INSTRUCTIONS:

This questionnaire should be used to document controls when a client uses microcomputers and one or more purchased, standard, UNMODIFIED accounting packages to process accounting information.

1. Names and models of computers: ____________________

2. Name of operating system: ____________________

3. Name and version of software:

   Package 1 ____________________
   Package 2 ____________________
   Package 3 ____________________
   Package 4 ____________________

4. Major reports generated from software:

   Package 1 ____________________
   Package 2 ____________________
   Package 3 ____________________
   Package 4 ____________________

5. Key operators and their responsibilities:

Key Operator	Responsibilities

MICROCOMPUTER QUESTIONNAIRE (Continued)

Are any of their duties incompatible?_____ Explain. ______________________________

____

____

6. Describe any controls, such as user ID numbers, passwords and locking on/off switches that are used to prevent unauthorized access to programs and accounting data. ______________________________

____

____

____

7. Describe controls that insure that all transactions are processed and that the same data is not processed twice.

____

____

____

____

____

____

8. Are users adequately trained and provided with adequate instructions on how to use the computer system? Yes ________ No ________

9. Who is responsible for reviewing the reports generated from the microcomputer?

Report	Reviewer

10. Have procedures been developed for periodic back-up of files? ______________________________

____

11. Are backup files stored in a secure location? ______________________________

____

12. Has management considered developing a disaster plan, including arrangements for emergency equipment, facilities, insurance, etc.? Yes ___ No ___

MICROCOMPUTER QUESTIONNAIRE (Continued)

Note:

The inquiry, observation, and inspection procedures used to obtain an understanding of the computer system are usually sufficient to support an assessment of control risk at less than the maximum.

Additional tests should be performed only if the auditor wishes to further reduce the level of control risk. For the System's Walk-Through Approach, no additional tests should be performed.

13. Tests of Controls

    Describe any *additional* tests of microcomputer controls performed (e.g., inspection of evidence of review of computer output):

    ____

    ____

    ____

    ____

    ____

14. Summary of Findings

    Describe the major control strengths noted:

    ____

    ____

    ____

    ____

    Describe the major control weaknesses noted:

    ____

    ____

    ____

    ____

15. The auditor's understanding of computer controls, and the results of the tests of controls should be considered in the auditor's assessment of control risk for all financial statement assertions that are affected by computer processing.

MICROCOMPUTER QUESTIONNAIRE (Continued)

Note:

Computer processing controls usually have an impact on the existence, completeness, and dollar value of related transactions and balances. For example, if the client has good internal controls over processing of sales and cash receipts, the auditor may reduce the extent of the tests of existence, completeness and gross dollar value of accounts receivable (e.g., the number of confirmations mailed may be reduced).

	19____	19____	19____	19____	19____
Prepared or updated by:					
Client	________	________	________	________	________
In-Charge	________	________	________	________	________
Reviewed by:					
Engagement Partner	________	________	________	________	________

6.316

General Computer Controls Questionnaire

Client: ____________________

Financial Statement Date: ____________________

INSTRUCTIONS:

This questionnaire should be completed and updated annually to document controls that are global to the client's computer system environment. For each item, place a "✓" in the "Yes" or "No" column to indicate whether the procedure is performed or in the "N/A" column if the procedure is not applicable to the client's control system. When you've completed the questionnaire, review your "Yes" and "No" responses and determine how they impact your assessment of control risk. The effects of any "No" answers should be considered and documented in the space provided. Also, "No" answers should be considered for required communication of internal control structure related matters as material weaknesses and reportable conditions. (See Chapter 6, section 6.) **(If the client's computer system uses only unmodified software products and the system is not complex, this questionnaire should not be completed. See section 6.315 for the Microcomputer Questionnaire.)**

Organizational Controls

	Yes	No	N/A
1. If available, attach a copy of the management information systems (MIS) department organization chart.	____	____	____
2. Does the MIS department have adequate organizational status to be independent of the other organizational groups that it serves?	____	____	____
3. Have written job descriptions been prepared for all key positions in the MIS department?	____	____	____
4. Have procedures been established to ensure that MIS department employee qualifications are matched to the specific requirements for each employee's position?	____	____	____
5. Are system operations, input, database control functions, and system development activities performed by separate individuals?	____	____	____
6. Are operations personnel periodically rotated between jobs or applications?	____	____	____

GENERAL COMPUTER CONTROLS QUESTIONNAIRE (Continued)

	Yes	No	N/A
7. Are operations personnel required to take vacations?	____	____	____
8. Are operations personnel prohibited from initiating transactions or making master file (table) changes?	____	____	____
9. Are departments (groups) that initiate changes to database master information provided a report showing changes actually made?	____	____	____
Application Development Controls (includes standard spreadsheets, databases used for computer applications, Lotus programs, etc.)			
10. Have formal documentation standards and procedures been established?	____	____	____
11. Have standards for systems development and programming been developed?	____	____	____
12. Have formal operator and user instructions been developed?	____	____	____
13. Have formal program testing procedures been established for new applications and revisions to existing applications?	____	____	____
14. Are programs tested by persons independent of the programmer(s) who developed the software?	____	____	____
15. Are the data used for testing and the results of testing maintained for supervisory review and historical purposes?	____	____	____
16. Are personnel that test programs prohibited from testing new or revised programs on live data files?	____	____	____
17. Have procedures been developed for the documentation of requests for program changes?	____	____	____
18. Are program change requests approved in writing by a supervisory level person?	____	____	____

GENERAL COMPUTER CONTROLS QUESTIONNAIRE (Continued)

	Yes	No	N/A
Operations Controls			
19. Have procedures been established to monitor operator/user adherence to prescribed instructions?	____	____	____
20. Are adequate computer operation logs maintained for batch processing of transactions?	____	____	____
21. Are adequate computer controls (transaction logging, etc.) established over interactive processing of transactions?	____	____	____
22. Is a schedule prepared of applications to be processed, and reports and documents to be produced?	____	____	____
23. Are control procedures over report distribution adequate?	____	____	____
24. Have procedures been established to prohibit computer operators or users from having access to system or program logic documentation?	____	____	____
Data, Program and Facilities Backup Controls			
25. Have procedures been established for the periodic backup of critical data and programs from all centralized computers and file servers?	____	____	____
26. Is the backup media (diskettes, tapes, tape cartridges, etc.) stored at a secure location?	____	____	____
27. Have procedures been established for the restoring of backed up data and programs in the event of a system failure?	____	____	____
28. Has the client's ability to restore critical data and programs been tested?	____	____	____
29. Has a written disaster recovery plan been developed and have arrangements for emergency equipment and facilities been made?	____	____	____
30. If necessary, are virus tests performed on a regular basis?	____	____	____

GENERAL COMPUTER CONTROLS QUESTIONNAIRE (Continued)

31. Tests of Controls:

> **Note:**
>
> Inquiry observation, and inspection procedures are typically the only procedures that are used to test general controls. Therefore, the procedures used to obtain an understanding of the general controls are usually sufficient to support an assessment of control risk at less than the maximum.
>
> Additional tests should be performed only if the auditor wishes to further reduce the level of control risk. For the System's Walk-Through Approach, no additional tests should be performed.

Describe any additional procedures designed to test general computer controls:

____

____

____

____

____

32. Summary of Findings:

Describe the major control strengths in the general controls:

____

____

____

Describe the major control weaknesses in the general controls:

____

____

____

33. This evaluation of general computer controls and the evaluations of application computer controls should be considered in the assessment of control risk for the financial statement assertions that are affected by computer processing.

GENERAL COMPUTER CONTROLS QUESTIONNAIRE (Continued)

	19____	19____	19____	19____	19____
Prepared or updated by:					
In-Charge	________	________	________	________	________
Reviewed by:					
Engagement Partner	________	________	________	________	________

6.317

Application Computer Controls Questionnaire

Client: ____________________

Financial Statement Date: ____________________

INSTRUCTIONS:

This form should be completed and updated annually for each significant accounting application by the in-charge or a computer specialist, and reviewed by the engagement partner. Additional documentation obtained from the client, vendors, and others should be included in the workpapers with this form. **(If the client's computer system uses only unmodified software products and the system is not complex, this form should not be completed. See section 6.315 for the Microcomputer Questionnaire.)**

Attach copies of any computer input screens, input documents, and reports that are considered necessary to document the internal controls.

Application Name: ____________________
System Name: ____________________

Application Narrative: (describe in non-technical terms what the application does)

____
____
____
____

Describe how critical this application is to the mission of the client. Discuss the impact on the client of not having this application operational.

____
____
____
____

APPLICATION COMPUTER CONTROLS QUESTIONNAIRE (Continued)

Section 1 — Technology Employed by the Application

Computer Hardware

Mainframe (centralized) Computer: ______________________________

File server(s): ______________________________

Stand Alone Workstations: ______________________________

Other Significant Hardware Devices (e.g. point of sale terminals, bar code readers, image scanners, etc.): ______________________________

Systems Software

Mainframe (centralized) computer: ______________________________

File server(s): ______________________________

Stand Alone Workstations: ______________________________

Application and Utility Software

Name (including version #): ______________________________
Vendor: ______________________________

Name (including version #: ______________________________
Vendor: ______________________________

APPLICATION COMPUTER CONTROLS QUESTIONNAIRE (Continued)

Name (including version #): ______________________________
Vendor: ______________________________

Name (including version #: ______________________________
Vendor: ______________________________

Section 2 — Application Database/File Structure

List the major master files/tables in the application and a brief description of their contents: ________

____
____
____

List the key transaction files/tables in the application and a brief description of their contents: ______

____
____
____
____

ATTACH COPIES OF EACH FILE OR TABLE STRUCTURE LISTING

Section 3 — Master File/Table and Transaction Entry

Describe the nature of the transaction including:

Significant Source Documents and Contents

____
____
____
____

Input Screens

____
____
____
____

Retention Policy

____
____
____
____

APPLICATION COMPUTER CONTROLS QUESTIONNAIRE (Continued)

Who is responsible for reviewing the completeness and accuracy of the input?

Describe forms, logs, reconciliation's, etc. used to control input.

Form	Description

Describe the controls established to insure that all transactions are processed and that the same data is not processed more than once.

Section 4 — Report, Query and Other Output

Describe the nature of computer output including:

Printed Documents

Listings, journals, subsidiary ledgers, ledgers, summaries, etc.

Control reports and listings

APPLICATION COMPUTER CONTROLS QUESTIONNAIRE (Continued)

Describe the tests made by accounting or user personnel to verify the accuracy of the information processed.

Describe the procedures for error correction and reprocessing.

Describe the retention policy.

Section 5 — Personnel

Identify all persons performing any computer or accounting function related to the application.

Name and Job Title	Related Duties

Do any of the above persons have other duties that are incompatible?

Is segregation of duties adequate for the application?

APPLICATION COMPUTER CONTROLS QUESTIONNAIRE (Continued)

Is cross-training of personnel adequate to provide for vacations, emergency leaves and unplanned terminations?

Section 6 — Custody of Assets and Authorization of Transactions

Do computer operations, programming or other computer systems personnel have access to client assets or the ability to authorize transactions?

Section 7 — Security

Describe how the following security features of the operating system and/or network operating system are implemented for this application.

Software:

User numbers and password protection

File and subdirectory user and group rights assignment

Hardware/Operating System:

Disk mirroring, duplexing, transaction tracking and other data protection and error recovery features.

Describe any other security features

APPLICATION COMPUTER CONTROLS QUESTIONNAIRE (Continued)

Section 8 — Tests of Controls

Note:

The inquiry, observation, and inspection procedures used to obtain an understanding of the computer system are usually sufficient to support and assessment of control risk at less than the maximum.

Additional tests should be performed only if the auditor wishes to further reduce the level of control risk. For the System's Walk-Through Approach, no additional tests should be performed.

Describe any additional procedures designed to test application computer controls:

____
____
____
____
____
____

Section 9 — Summary of Findings

The application computer controls analyzed in this questionnaire (in conjunction with your evaluation of general computer controls) should be considered in determining the assessed level of control risk for the related financial statement assertions.

Describe the effect of your understanding and the tests of controls performed on your assessment of control risk for the related financial statement assertions:

____
____
____
____

	19____	19____	19____	19____	19____
Prepared or updated by:					
Client	________	________	________	________	________
In-Charge	________	________	________	________	________
Reviewed by:					
Engagement Partner	________	________	________	________	________

Tests of Controls

6.318 In addition to obtaining an understanding of the internal control structure, the auditor may perform tests of controls. These tests provide evidential matter to support an assessed level of control risk below the maximum. Tests of controls may be directed toward the effectiveness of the design of internal control structure policies and procedures, or they may be directed toward the effectiveness of operation of the policies and procedures during the period under audit.

6.319 Microcomputer Systems. Tests of controls in a microcomputer environment are not significantly different from those in a manual accounting environment. Control over a microcomputer can be achieved in one of two ways:

- Adequate segregation of duties exists, and access to the computer system is controlled to prevent changes in programs and data by unauthorized employees, or
- Adequate segregation of duties does not exist or access to the computer system is not adequately controlled, but these weaknesses are mitigated by the fact that appropriate personnel (e.g., the owner/manager) perform a detailed review of the computer reports.

6.320 These controls can generally be tested with observation, inquiry, and inspection of computer reports. The Microcomputer Questionnaire (section 6.315) may be used to document the auditor's tests of controls in a microcomputer environment.

6.321 Sophisticated Computer Systems. In more sophisticated computer systems, the auditor will generally begin by testing general controls. If these controls are weak, no reliance can be placed on application controls.

6.322 General controls over computer systems are generally tested by observation, inquiry, and inspection of documents and control logs. Controls that are most significant include:

- Segregation of duties within the MIS department, so that individuals with knowledge of programs and programming language cannot make unauthorized changes in programs or data,
- Procedures for developing and testing, and implementing new programs, and
- Security controls to prevent unauthorized changes to data by users, e.g., passwords and control logs.

6.323 The procedures used to obtain an understanding of the general controls generally are sufficient to obtain evidence about their operating effectiveness.

6.324 Applications controls are designed to assure the accuracy and completeness of specific data. The controls that are most significant to the auditor include:

- Controls that prevent unauthorized changes to data, such as passwords, user numbers, and control reports,

- Controls that insure the accuracy of data input, such as validity tests of data as it is entered into the system, review of edit reports that summarize changes to data, and control totals,
- Procedures for correcting and reprocessing data that was entered incorrectly, such as follow-up procedures on computer error reports,
- Training of user personnel about how to input data, and
- Adequate user instructions (i.e., in user manuals).

6.325 Application controls in sophisticated computer systems can be tested in a number of ways. The most common approach to testing application controls is described below:

- Observation and inquiry about the use of passwords and the application of validity tests as actual data is entered,
- Inspection of computer output, including error reports and related follow-up,
- Inspection of documents that evidence the review of computer output by appropriate personnel, and
- Inquiry about the training of user personnel and inspection of user instructions.

6.326 The procedures performed in obtaining an understanding of application controls generally are sufficient to allow control risk to be assessed at a level below the maximum. If the client's general and application controls are very effective, these procedures may be sufficient to justify a moderate level of control risk for the related assertions. If the auditor wishes to further reduce the level of control risk, he or she may add tests of controls to the General Applications Computer Controls Questionnaires.

Processing of Transactions by Service Organizations

6.327 SAS No. 70, *Reports on the Processing of Transactions by Service Organizations,* provides guidance to the auditor when his or her client uses a service organization to process a significant application. The Statement also provides guidance for auditors who issue reports on the processing of transactions by service organizations for use by other auditors, but for purposes of this discussion, we will focus on the guidance for auditors whose clients use the service organization.

6.328 When auditing a client that uses a service organization, the auditor should consider the significance that the service organization's policies, procedures, and records have on the client's financial statements. Factors the auditor considers include:

- The financial statement assertions affected by the service organization's processing,
- The nature of the services provided by the service organization,
- The client's internal control policies and procedures that are applied to the transactions processed by the service organization and the availability of auditable data in the client's possession,
- The terms of the contract between the client and the service organization, and

- The service organization's capabilities, including its —
  - Record of performance
  - Insurance coverage
  - Financial stability.

6.329 In many situations the client will have adequate controls over the data processed by the service organization. In these circumstances, there is no need to obtain an understanding of the controls at the service organization. As an example, a client that uses a service bureau to process payroll will usually have adequate controls to provide reasonable assurance that the service bureau is processing the payroll transactions accurately. These controls might consist of a review and testing of the payroll records that are received from the bureau.

6.330 An understanding of the controls at the service organization is generally needed only when the service organization both authorizes and processes transactions. An example of this organization would be a trust (e.g., a pension trust), in which the servicing financial institution makes investment decisions and maintains records of the transactions.

6.331 When the auditor decides that an understanding of the service organization's controls is necessary, this understanding may be obtained by:

- Reviewing manual or system documentation held by the client that describes the service organization's controls over the client's transactions, or
- Obtaining a report from a service auditor who performed procedures at the service organization for the benefit of multiple users.

6.332 In rare circumstances, the auditor may decide that it is necessary to perform procedures at the service organization to gain the required understanding of internal control.

6.333 If the auditor decides that an understanding of the controls at the service organization is necessary and a report by the service auditor is not available, he or she may complete the Service Organization Application Controls Documentation Form, shown in section 6.338.

6.334 If a service auditor report is available, it will be of one of the following two types:

- a report on policies and procedures placed in operation, or
- a report on policies and procedures placed in operation and tests of operating effectiveness.

6.335 **Report on Policies and Procedures Placed in Operation.** This report addresses the policies and procedures that the service organization has put into effect in the processing of the client's transactions. More specifically, it addresses (1) whether the policies and procedures were suitably designed to achieve specified control objectives, and (2) whether they have been placed in operation as of a specified date. This type of report is useful for obtaining an understanding of the controls at the service organization, but it does not provide evidence to reduce the assessed level of control risk.

6.336 Report on Policies and Procedures Placed in Operation and Tests of Operating Effectiveness. In addition to describing the service organization's controls over the client's transactions, this report addresses the effectiveness of the related controls during the period specified. Therefore, this type of report provides evidence that may allow the user auditor to reduce the assessed level of control risk.

6.337 Evaluating the Service Auditor Report. The Service Auditor Evaluation Form, shown in section 6.339, may be used to evaluate a service auditor report.

6.338

Service Organization Application Controls Questionnaire

Client: ______________________________

Financial Statement Date: ______________________________

INSTRUCTIONS:

This form should be used when (1) the service organization both authorizes and maintains records of significant transactions, and (2) there is no service auditor's report available. The information should be used to evaluate the need to visit the service center to perform a detailed evaluation of the center's internal controls, to document information obtained during the visit and to identify any material weaknesses for follow-up.

This form should be completed by the in-charge, or computer specialist and reviewed by the engagement partner.

Any weaknesses or strengths noted should be evaluated by the auditor in assessing control risk.

Section 1 — General Information

Name of service center: ______________________________

____

Address: ______________________________

____

Name of individual(s) in client's organization responsible for service center application:

____

____

____

____

Is there a formal agreement? _____ If so, obtain copy.

Is there insurance protection for the following:

1. Program or software destruction? _____

SERVICE ORGANIZATION APPLICATION CONTROLS QUESTIONNAIRE (Continued)

2. Loss of data? _____

3. Business interruption? ______

4. Errors and omissions? _____

Application Narrative: (describe in non-technical terms what the application does) ________________

Describe how critical this application is to the client. Discuss the impact on the client of not having this application operational. ________________

Section 2 — Technology Employed by the Application

Computer Hardware

Provide a general description of the service organization's hardware that is used to process client transactions: ________________

Systems and Application Software

Provide a general description of the service organization's systems and application software that is used to process client transactions: ________________

SERVICE ORGANIZATION APPLICATION CONTROLS QUESTIONNAIRE (Continued)

Section 3 — Transaction Entry

Describe the nature of the transaction including:

Significant Source Documents and Contents

Input Screens

Retention Policy

Who is responsible for reviewing the completeness and accuracy of the input?

SERVICE ORGANIZATION APPLICATION CONTROLS QUESTIONNAIRE (Continued)

Describe any forms, logs, reconciliations, etc. used to control input.

Form	Description

Describe the controls established to insure that all transactions are processed and that the same data is not processed more than once.

Describe how information is submitted to the service organization.

Section 4 — Report, Query, and Other Output Received From the Service Organization

Describe the nature of computer output including:

Printed Documents

SERVICE ORGANIZATION APPLICATION CONTROLS QUESTIONNAIRE (Continued)

Listings, journals, subsidiary ledgers, ledgers, summaries, etc.

Describe any tests made by service organization personnel to verify the completeness and the accuracy of the information processed.

Describe any tests made by user accounting or other user personnel to verify the completeness and the accuracy of the information processed.

Describe the procedures for error correction and reprocessing.

SERVICE ORGANIZATION APPLICATION CONTROLS QUESTIONNAIRE (Continued)

Section 5 — Information Retained by the Service Organization

Describe significant documents, transaction files, master tables/files, etc. retained by the service organization and the security and retention procedures employed.

Section 6 — Custody of Assets and Authorization of Transactions by the Service Organization

Describe the nature of service organization personnel's access to client assets and ability to authorize transactions.

Section 7 — Security

Describe the segregation of duties related to the processing of the client's transactions.

SERVICE ORGANIZATION APPLICATION CONTROLS QUESTIONNAIRE (Continued)

Describe how the following security features of the operating system and/or network operating system are implemented for this application.

User numbers and password protection

Describe any other security features.

Section 8 — Summary of Findings

Describe the major control strengths noted.

SERVICE ORGANIZATION APPLICATION CONTROLS QUESTIONNAIRE (Continued)

Describe the major control weaknesses noted.

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Note:

Additional tests should be performed only if the auditor plans to rely on the controls of the service organization in assessing control risk for the client. For the Systems Walk-Through Approach, no additional tests should be performed.

Describe the effect of your understanding and the tests of controls performed on your assessment of control risk for the related financial statement assertions.

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	19____	19____	19____	19____	19____
Prepared or updated by: In-Charge	________	________	________	________	________
Reviewed by: Engagement Partner	________	________	________	________	________

6.339

Service Auditor Report Evaluation Form

Client: ______________________________

Financial Statement Date: ______________________________

INSTRUCTIONS:

This form should be used when (1) the service organization both authorizes and maintains records of significant transactions, and (2) there is a service auditor's report available.

This form should be completed by the in-charge or computer specialist and reviewed by the engagement partner.

Include a copy of the service auditor's report in the workpapers.

Section 1 — General Information

Name of service center: ______________________________

____

Address: ______________________________

____

Name of individual(s) in client's organization responsible for service center application:

____

____

____

____

____

Is there a formal agreement? _____ If so, obtain copy.

Is there insurance protection for the following:

1. Program or software destruction? _____

2. Loss of data? _____

SERVICE AUDITOR REPORT EVALUATION FORM (Continued)

3. Business interruption? ______

4. Errors and omissions? _____

Application Narrative: (describe in non-technical terms what the application does) ____________________

Describe how critical this application is to the client. Discuss the impact on the client of not having this application operational: ____________________

Section 2 — Service Auditor

Name of the service auditor: ____________________

Does the Service Auditor have a good reputation? _______

Section 3 — The Service Auditor's Report

A. Describe the type of report issued by the service auditor. ____________________

B. Describe the major control strengths in the service organization's processing.

C. Describe the major control weaknesses in the service organization's processing.

SERVICE AUDITOR REPORT EVALUATION FORM (Continued)

Note:

Section 3, item D. and Section 5 should be completed only if the auditor plans to rely on the controls of the service organization in assessing control risk for the client. These items should not be completed for the System's Walk-Through Approach.

D. If the service auditor performed tests of the operating effectiveness of controls, identify those tests that will be relied upon in assessing control risk for the client.

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____
____

Section 4 — Client Involvement

A. Describe any control procedures performed by client personnel to test the accuracy of service organization processing.

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____
____

Section 5 — Summary of Findings:

Describe the effect of your understanding and the tests of controls performed on your assessment of control risk for the related financial statement assertions:

____
____
____
____

	19____	19____	19____	19____	19____
Prepared or updated by: In-Charge	______	______	______	______	______
Reviewed by: Engagement Partner	______	______	______	______	______

6.400 TESTS OF CONTROLS PROGRAMS – CONSTRUCTION CONTRACTORS

6.401 The Contractors' Tests of Controls Programs are designed to interface with the sections of the Contractors' Internal Controls Questionnaire in Chapter 6, section 6.200, and should be used for the ABC Approach to construction contractor audits. Similar to the Internal Controls Questionnaire, the Tests of Controls Programs contain the three levels of controls: System C (accounting system), System B (primary controls), and System A (secondary controls). As a result, the auditor should complete the Tests of Controls Programs that correspond to the systems selected in the Internal Controls Questionnaire.

6.402 Because the Tests of Controls procedures within a system correspond directly to that system's control procedures in the Internal Controls Questionnaire, the auditor may need to modify the Tests of Controls Programs for any compensating controls considered in the Internal Controls Questionnaire. For example, if a control in a System A offsets a weakness in System B, that control would not be tested under the System B Tests of Controls Program. To rely on the offsetting System A control, a modifying test of that control must be added to the System B program.

6.403 The programs are divided into the following sections:

I. Cash.
II. Contract receivables confirmations and alternative procedures, and contract revenue tests.
III. Vouching and inspecting fixed assets, search for unrecorded liabilities, purchases cutoff, expense account analysis and vouching, and construction contract costs.
IV. Payroll tests.
V. Physical inventory observation, and inventory pricing and clerical tests.
VI. All cycles.
VII. Project administration and evaluation, estimating and bidding, and job site accounting and controls.

6.404 **Professional Standards.** AICPA Statement on Auditing Standards (SAS) No. 55, *Consideration of the Internal Control Structure in a Financial Statement Audit* (AU 319), requires the auditor to make and document an assessment of control risk. When control risk is assessed at less than the maximum, SAS No. 55 requires satisfactory results from tests of controls to achieve reductions in tests of balances.

6.405 **Using the Tests of Controls Programs.** After completing the Contractors' Internal Controls Questionnaire, the system's classifications (A, B, or C) should be posted to the Contractors' Planning Matrix, which should be used as a guide to select, assemble and modify the various sections of the Test of Controls and Tests of Balances Programs. Guidance for sample size selection for tests of controls is located in Chapter 5.

6.406 All program steps should be initialed in the "Done By" column and dated by engagement personnel when completing the work. The "Done By" column can also be marked "N/R" for steps not required, or "N/A" for steps not applicable.

Tests of Controls Programs — Construction Contractors

Section I: System A

Client: ______________________________

Financial Statement Date: ______________________________

MAJOR AUDIT AREA: Cash.

TRANSACTION CYCLE: Collections.

Procedure	Done By	Date	W/P Ref.
1. Determine by inquiry, observation, or inspection that the incoming mail is received, opened, and listed by the owner, manager, or a person independent of the deposit, cash receipts, and general journal entry and accounts receivable functions.	___	___	___
2. Examine evidence or observe that persons reconciling bank accounts are independent of the cash collections function or that the reconciliation is reviewed by the owner or manager.	___	___	___
3. Examine evidence of monthly balancing of the receivables subledger to the general ledger.	___	___	___
4. Examine approval of account codings on _____ daily cash receipts listing.	___	___	___
5. Determine by inquiry, observation, or inspection that items returned by the bank are received and opened by the owner or manager.	___	___	___
6. Select a sample of _____ entries in the cash receipts journal and trace amount and date to supporting daily cash receipts listings.	___	___	___
7. Select a sample of _____ daily cash receipts listings and:			
a. Foot each listing.	___	___	___
b. Trace to posting in cash receipts journal and compare for name, date, and amount.	___	___	___
c. Determine proper account coding and trace to cash receipts journal.	___	___	___

TESTS OF CONTROLS PROGRAMS – CONSTRUCTION CONTRACTORS
SECTION I: SYSTEM A (Continued)

Procedure	Done By	Date	W/P Ref.
d. Obtain supporting authenticated detailed deposit slip and remittance advices and:			
(1) Trace deposit slip total to bank statement noting agreement of date and amount.	____	____	____
(2) Compare total and individual amounts on deposit slips and remittance advices to daily cash receipts listing.	____	____	____
e. Trace individual amounts to postings in the receivables subledger noting agreement of names, dates, and amounts.	____	____	____
8. Scan the cash receipts journal for a period of _____ months and investigate any unusual entries.	____	____	____

Modification of analytical procedures and tests of balances (cross-reference related TOC step above) and reasons therefor:

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____
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____

Prepared by: ______________________________ Date: ______________
(In-charge)

Received by: ______________________________ Date: ______________
(Engagement Partner)

Tests of Controls Programs — Construction Contractors

Section I: System B

Client: ______________________

Financial Statement Date: ______________________

MAJOR AUDIT AREA: Cash.

TRANSACTION CYCLE: Collections.

Procedure	Done By	Date	W/P Ref.
1. Test the footings in the general ledger cash account and investigate any debit entries not posted from the cash receipts journal.	___	___	___
2. Foot and crossfoot the cash receipts journal for _____ months, trace totals to postings in the general ledger and, if available, control totals for postings to receivables subledger. If no control totals are available, consider agreeing totals to an adding machine tape of the cash receipts postings to individual customer cards.	___	___	___
3. Select a sample of _____ entries in the cash receipts journal and trace amount and date to supporting duplicate deposit slips.	___	___	___
4. Select a sample of _____ duplicate deposit slips and remittance advices and perform the following steps:			
a. Foot each deposit slip.	___	___	___
b. Trace deposit slip amounts to posting in cash receipts journal and compare for name, date, amount, and proper account coding.	___	___	___
c. Trace duplicate deposit slip total to bank statement noting agreement of date and amount.	___	___	___
d. Trace individual amounts on deposit slip to postings in the accounts receivable subledger noting agreement of names, dates, and amounts.	___	___	___
e. Agree amounts on remittance advices to duplicate deposit slips.	___	___	___
5. Scan the cash receipts journal for a period of _____ months and investigate any unusual entries.	___	___	___

TESTS OF CONTROLS PROGRAMS – CONSTRUCTION CONTRACTORS
SECTION I: SYSTEM B (Continued)

Procedure	Done By	Date	W/P Ref.
6. Other procedures: ____________	____	____	____

Modification of analytical procedures and tests of balances (cross-reference related TOC step above) and reasons therefor:

Prepared by: ______________________ Date: ____________
(In-charge)

Received by: ______________________ Date: ____________
(Engagement Partner)

Tests of Controls Programs — Construction Contractors

Section I: System C

Client: ____________________

Financial Statement Date: ____________________

MAJOR AUDIT AREA: Cash.

TRANSACTION CYCLE: Collections.

Procedure	Done By	Date	W/P Ref.
1. Test the footings in the general ledger cash account and investigate any debit entries not posted from the cash receipts journal.	____	____	____
2. Foot and crossfoot the cash receipts journal for _____ months and trace totals to postings in the general ledger.	____	____	____
3. Select a sample of _____ daily entries in the cash receipts journal and trace amount and date to supporting duplicate deposit slips.	____	____	____
4. Select a sample of _____ duplicate deposit slips and perform the following steps:			
a. Foot each deposit slip.	____	____	____
b. Trace to posting in cash receipts journal and compare for name, amount, and proper account coding.	____	____	____
c. Trace duplicate deposit slip to bank statement noting agreement of amount.	____	____	____
d. Agree to remittance advices, if available.	____	____	____
5. If accounting system is extremely weak, consider reconciling receipts per books to receipts per bank statement for _____ months (a proof of cash format should be used; beginning and ending balances need not be traced to supporting records and documents).	____	____	____
6. Scan the cash receipts journal for the year and investigate any unusual entries.	____	____	____

TESTS OF CONTROLS PROGRAMS – CONSTRUCTION CONTRACTORS
SECTION I: SYSTEM C (Continued)

Procedure	Done By	Date	W/P Ref.
7. Other procedures: ____________________	____	____	____

Modification of analytical procedures and tests of balances (cross-reference related TOC step above) and reasons therefor:

Prepared by: ______________________ Date: ______________
(In-charge)

Received by: ______________________ Date: ______________
(Engagement Partner)

Tests of Controls Programs — Construction Contractors

Section II: System A

Client: ______________________________

Financial Statement Date: ______________________________

MAJOR AUDIT AREAS:
1. Contract receivables confirmations and alternative procedures.
2. Contract revenue tests.

TRANSACTION CYCLE: Contract receivables, billings and revenues.

Procedure	Done By	Date	W/P Ref.
1. Determine by inquiry, observation, or inspection that progress billings are prepared in accordance with the contract and contract cost breakdown and are based on appropriate supporting data such as architect certification, engineer estimates, etc.	___	___	___
2. Examine evidence that the following prenumbered documents are accounted for periodically:			
a. Progress billings.	___	___	___
b. Credit memos.	___	___	___
3. Select a sample of _____ progress billings and inspect for evidence of:			
a. Owner or manager approval.	___	___	___
b. Double-checking of billing and percentage calculations by a person independent of the preparer.	___	___	___
4. Determine by inquiry, observation, or inspection that progress billings are posted to the contract revenue journal by a person independent of the billing and cash receipts functions.	___	___	___
5. Determine by inquiry, observation, or inspection that the person posting the contract revenue journal and general ledger is independent of the accounts receivable subledger posting function and/or some other independent person periodically reconciles the subledger to the general ledger.	___	___	___

TESTS OF CONTROLS PROGRAMS – CONSTRUCTION CONTRACTORS
SECTION II: SYSTEM A (Continued)

Procedure	Done By	Date	W/P Ref.
6. Inspect evidence that a monthly aged analysis of contract receivables, including retentions, is reviewed by the owner or manager.	____	____	____
7. Inspect evidence that a monthly report of over-/under-billings is reviewed by management personnel.	____	____	____
8. Inspect evidence the owner or manager approves all bad debt write-offs.	____	____	____
9. Determine by inquiry or observation that bad debts written off are controlled by the owner, manager, or a person who does not have access to cash.	____	____	____
10. Select a sample of _____ contracts and inspect for owner or manager approval in writing.	____	____	____
11. Select a sample of _____ change orders and inspect evidence of written approval by an authorized customer representative before the extra work is performed.	____	____	____
12. Select _____ numerical series of _____ progress billings prepared during the year, account for the numerical sequence, and compare to entries in the contract revenue journal for name, date, and amount.	____	____	____
13. Select a sample of _____ entries in the contract revenue journal, obtain copies of the progress billings, and perform the following:			
a. Determine that copies have been mailed to customers.	____	____	____
b. Inspect supporting data including evidence of costs incurred to date, engineers' estimates of percentage of completion, architects' certification, and other pertinent information.	____	____	____
c. Inspect evidence of owner or manager approval.	____	____	____
d. Determine that billings are recorded in the contract revenue journal in the correct period.	____	____	____
e. Trace progress billings to posting in contract receivables subledger for name, date, and amount.	____	____	____
14. Select _____ numerical series of _____ change orders and/or credit memos, and account for numerical sequence.	____	____	____
15. Select a sample of _____ change orders and/or credit memos and perform the following:			

TESTS OF CONTROLS PROGRAMS – CONSTRUCTION CONTRACTORS
SECTION II: SYSTEM A (Continued)

Procedure	Done By	Date	W/P Ref.
a. Inspect for owner or manager approval.	____	____	____
b. Determine that change orders or credit memos have been properly reflected in progress billings, contract field and status reports, and reports for estimating contract's profit or loss.	____	____	____
16. Other procedures: ______ ______ ______ ______ ______ ______	____	____	____

Modification of analytical procedures and tests of balances (cross-reference related TOC step above) and reasons therefor:

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Prepared by: ______________________ Date: ____________
(In-charge)

Received by: ______________________ Date: ____________
(Engagement Partner)

Tests of Controls Programs — Construction Contractors

Section II: Systems B and C

Client: ______________________________

Financial Statement Date: ______________________________

MAJOR AUDIT AREAS:
1. Contract receivables confirmations and alternative procedures.
2. Contract revenue tests.

TRANSACTION CYCLE: Contract receivables, billings and revenues.

Procedure	Done By	Date	W/P Ref.
1. Select _____ numerical series of _____ progress billings prepared during the year, account for the numerical sequence and compare to entries in the contract revenue journal for name, date, and amount.	___	___	___
2. Select a sample of _____ entries in the contract revenue journal, obtain copies of the progress billings, and perform the following:			
a. Determine copies have been mailed to customers.	___	___	___
b. Inspect supporting data including evidence of costs incurred to date, engineers' estimates of percentage of completion, architects' certification, and other pertinent information.	___	___	___
c. Inspect evidence of owner or manager approval.	___	___	___
d. Determine that billings are recorded in the contract revenue journal in the correct period.	___	___	___
e. Trace progress billings to posting in contract receivables subledger for name, date, and amount.	___	___	___
3. Select _____ numerical series of _____ change orders and/or credit memos, and account for numerical sequence.	___	___	___
4. Select a sample of _____ change orders and/or credit memos and perform the following:			
a. Inspect for owner or manager approval.	___	___	___
b. Determine that change orders or credit memos have been properly reflected in progress billings, contract field and status reports, and reports for estimating contract's profit or loss.	___	___	___

TESTS OF CONTROLS PROGRAMS – CONSTRUCTION CONTRACTORS
SECTION II: SYSTEMS B AND C (Continued)

Procedure	Done By	Date	W/P Ref.
5. Obtain the contract revenue journal for _____ months, foot and crossfoot, and trace postings to the general ledger.	____	____	____
6. Examine evidence or observe that persons reconciling bank accounts are independent of the cash collections function or that the reconciliation is reviewed by the owner or manager.	____	____	____
7. Examine evidence of monthly balancing of the receivables subledgers to the general ledger.	____	____	____
8. Other procedures: ______ ______ ______ ______	____	____	____

Modification of analytical procedures and tests of balances (cross-reference related TOC step above) and reasons therefor:

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Prepared by: ______________________ Date: ______________
(In-charge)

Received by: ______________________ Date: ______________
(Engagement Partner)

Tests of Controls Programs — Construction Contractors

Section III: System A

Client: ______________________

Financial Statement Date: ______________________

MAJOR AUDIT AREAS:
1. Vouching and inspecting fixed assets.
2. Search for unrecorded liabilities.
3. Purchases cutoff.
4. Expense account analysis and vouching.
5. Construction contract costs.

TRANSACTION CYCLE: Acquisitions and payments.

Procedure	Done By	Date	W/P Ref.
Acquisitions			
1. Determine by inquiry, observation, or inspection that the persons posting the purchases journal and general ledger are independent of the accounts payable and contract costs subledgers posting functions and/or the owner, manager, or other independent person reconciles or reviews the reconciliation of the subledgers to the general ledger.	___	___	___
2. Determine by inquiry, observation, or examination that all supporting documents are matched by a person independent of the ordering function, or by the owner or manager, before entry in the purchases journal, and billings from subcontractors are approved by job superintendents.	___	___	___
3. Examine evidence of the monthly balancing of the accounts payable and contract costs subledgers to the general ledger.			
4. Examine evidence of an independent review of purchases account codings.	___	___	___
5. Examine evidence, or observe, that approved vendors' price lists are being used.	___	___	___
6. Examine evidence, or observe, that the numerical sequence of receiving reports is being accounted for.	___	___	___

TESTS OF CONTROLS PROGRAMS – CONSTRUCTION CONTRACTORS
SECTION III: SYSTEM A (Continued)

Procedure	Done By	Date	W/P Ref.
7. Examine evidence, or observe, that the numerical sequence of purchase orders and/or purchase requisitions is being accounted for.	___	___	___
8. Examine evidence, or observe, that accounts payable subledger balances are periodically reconciled to vendors' statements by a person independent of the ordering and payments functions.	___	___	___
9. Examine evidence, or observe, that the receiving department inspects the quantity and quality of materials when receiving reports are prepared.	___	___	___
10. Select a sample of _____ receiving reports issued during the year and trace to vendor invoices and entries in the purchases journal. Compare —			
a. Type of merchandise	___	___	___
b. Name of vendor	___	___	___
c. Dates received	___	___	___
d. Quantities	___	___	___
e. Amounts	___	___	___
11. Select a sample of _____ entries in the purchases journal and perform the following:			
a. If paid, trace check number to entry in cash disbursements journal. If unpaid, investigate reasons.	___	___	___
b. Obtain vendor invoice, receiving report, purchase order, and/or purchase requisition and perform the following:			
(1) Compare names, dates, and amounts.	___	___	___
(2) Review invoice for approval of purchase by owner or manager.	___	___	___
(3) Review receiving report for proper approval.	___	___	___
(4) Review purchase order and/or purchase requisition for proper approval.	___	___	___
(5) Verify prices and recalculate footings and extensions on invoices.	___	___	___
(6) Compare quantities and descriptions.	___	___	___
(7) Check propriety of account codings.	___	___	___
(8) Determine that supporting documents are canceled to prevent reuse.	___	___	___

TESTS OF CONTROLS PROGRAMS – CONSTRUCTION CONTRACTORS
SECTION III: SYSTEM A (Continued)

Procedure	Done By	Date	W/P Ref.
(9) Determine that contracts and operations account numbers are properly identified on supporting documents.	___	___	___
(10) Determine that subcontractors' billings have been approved by job superintendents or are based on field status reports.	___	___	___
12. Other procedures: ______ ______ ______ ______ ______	___	___	___
Payments			
1. Examine evidence to determine that supporting documents are being approved and canceled at time of check signing.	___	___	___
2. Examine evidence or observe that the numerical sequence of checks is accounted for by someone independent of the preparation function.	___	___	___
3. Inquire or observe that checks are mailed by the owner, manager, or someone under his/her supervision after signing.	___	___	___
4. Examine evidence, inquire, or observe that the bank reconciliation is prepared by the owner, manager, or a person independent of the check signing function or that the reconciliation is reviewed by the owner or manager.	___	___	___
5. Determine by inquiry, observation, or inspection that the check preparation function is independent of the purchases journal, general ledger, and accounts payable and contract costs subledgers posting functions.	___	___	___
6. Determine by inquiry, observation, or inspection that items returned by the bank are received and opened by the owner or manager.	___	___	___
7. Determine by observation or inspection that a check protector is in use.	___	___	___

TESTS OF CONTROLS PROGRAMS – CONSTRUCTION CONTRACTORS
SECTION III: SYSTEM A (Continued)

Procedure	Done By	Date	W/P Ref.
8. Select a sample of _____ entries in the cash disbursements journal and perform the following procedures:			
a. Obtain paid check and:			
(1) Examine signature and endorsement.	___	___	___
(2) Compare to entry for payee, date, and amount.	___	___	___
b. Obtain supporting documents and:			
(1) Determine that documents agree with disbursement and that vendor and nature of purchase are proper.	___	___	___
(2) Examine for owner or manager approval for payment. For payments to subcontractors, examine for job superintendent approval.	___	___	___
(3) Compare vendor name and amount to entry.	___	___	___
(4) Determine if discount was taken where appropriate.	___	___	___
(5) Examine approval of disbursement account coding.	___	___	___
(6) Determine if supporting documents are canceled to prevent duplicate payment. (Note — a System A normally includes a purchases journal. Additional supporting documents are examined in the acquisitions controls tests.)	___	___	___
c. Trace _____ postings to the accounts payable subledger.	___	___	___
d. Trace _____ postings to the contract costs subledger.	___	___	___
9. Count _____ petty cash funds on a surprise basis, examine vouchers and supporting documents, and reconcile to general ledger balance.	___	___	___
10. Other procedures: ____ ____ ____ ____ ____	___	___	___

TESTS OF CONTROLS PROGRAMS – CONSTRUCTION CONTRACTORS
SECTION III: SYSTEM A (Continued)

Modification of analytical procedures and tests of balances (cross-reference related TOC step above) and reasons therefor:

Prepared by: ______________________ Date: ______________
(In-charge)

Received by: ______________________ Date: ______________
(Engagement Partner)

Tests of Controls Programs — Construction Contractors

Section III: System B

Client: ____________________

Financial Statement Date: ____________________

MAJOR AUDIT AREAS:
1. Vouching and inspecting fixed assets.
2. Search for unrecorded liabilities.
3. Purchases cutoff.
4. Expense account analysis and vouching.
5. Construction contract costs.

TRANSACTION CYCLE: Acquisitions and payments.

Procedure	Done By	Date	W/P Ref.
Acquisitions			
1. Test by observation and inquiry that the owner or manager approves purchases.	___	___	___
2. Test by observation and inquiry that vendors' or subcontractors' invoices or other documents are included as support for all purchases and subcontracted work.	___	___	___
3. Examine evidence that vendors and subcontractors are approved by the owner or manager.	___	___	___
4. Test propriety of account codings.	___	___	___
5. Test that contracts and operations account numbers are properly identified on supporting documents.	___	___	___
6. Test that subcontractors' billings have been approved by job superintendents or are based on field status reports.	___	___	___
7. Test postings to the contract costs subledger.	___	___	___

TESTS OF CONTROLS PROGRAMS – CONSTRUCTION CONTRACTORS
SECTION III: SYSTEM B (Continued)

Procedure	Done By	Date	W/P Ref.
8. Other procedures: ______________________ ______________________ ______________________ ______________________ ______________________	____	____	____
Payments			
1. Examine evidence that checks are signed only by the owner or manager.	____	____	____
2. Test by observation and inquiry that the owner or manager reviews supporting documents before signing checks.	____	____	____
3. Examine evidence that checks are prenumbered and accounted for.	____	____	____
4. Test by observation and inquiry that checks are prepared by the owner, manager or a person independent of vendor invoice approval.	____	____	____
5. Test postings from cash disbursements journal to contract cost records.	____	____	____
6. Other procedures: ______________________ ______________________ ______________________ ______________________ ______________________	____	____	____

TESTS OF CONTROLS PROGRAMS – CONSTRUCTION CONTRACTORS
SECTION III: SYSTEM B (Continued)

Modification of analytical procedures and tests of balances (cross-reference related TOC step above) and reasons therefor:

Prepared by: ______________________ Date: ______________
(In-charge)

Received by: ______________________ Date: ______________
(Engagement Partner)

Tests of Controls Programs — Construction Contractors

Section III: System C

Client: ______________________

Financial Statement Date: ______________________

MAJOR AUDIT AREAS:
1. Vouching and inspecting fixed assets.
2. Search for unrecorded liabilities.
3. Purchases cutoff.
4. Expense account analysis and vouching.
5. Construction contract costs.

TRANSACTION CYCLE: Acquisitions and payments.

Procedure	Done By	Date	W/P Ref.
Acquisitions			
1. Examine evidence that payments are approved by the owner or manager.	___	___	___
2. Other procedures: ______ ______ ______ ______	___	___	___
Payments			
1. Examine evidence that cash disbursements are supported by vendors' invoices or other external documents.	___	___	___
2. Examine evidence that bank accounts are reconciled.	___	___	___
3. Test postings from the cash disbursements journal to the contract cost subledger.	___	___	___
4. Check propriety of account codings.	___	___	___
5. Test that contracts and operations account numbers are properly identified on supporting documents.	___	___	___

TESTS OF CONTROLS PROGRAMS – CONSTRUCTION CONTRACTORS
SECTION III: SYSTEM C (Continued)

Procedure	Done By	Date	W/P Ref.
6. Test postings from cash disbursements journals to contract cost records. (Note — a System C normally does not contain a purchases journal. Consequently, all tests of controls support will be concentrated in this step. The sample size, therefore, may be larger than normal. An extensive search for unrecorded liabilities, especially for costs of *completed* contracts, will also be performed at the balance-sheet date.)	___	___	___
7. Other procedures: __________	___	___	___

Modification of analytical procedures and tests of balances (cross-reference related TOC step above) and reasons therefor:

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Prepared by: ____________________ Date: ____________
(In-charge)

Received by: ____________________ Date: ____________
(Engagement Partner)

Tests of Controls Programs — Construction Contractors

Section IV: System A

Client: ____________________

Financial Statement Date: ____________________

MAJOR AUDIT AREAS: Payroll tests.

TRANSACTION CYCLE: Payroll and personnel.

Procedure	Done By	Date	W/P Ref.
1. Observe that a time clock is used to record time or that time is logged by persons independent of payroll preparation, check signing, or distribution functions.	____	____	____
2. Examine evidence of double-checking payroll rates and calculations by an independent person.	____	____	____
3. Examine evidence of periodic reconciliation of employees' earnings records to the general ledger by persons independent of the payroll preparation and distribution functions.	____	____	____
4. Select _____ payroll labor distributions and examine evidence that account codings are reviewed by someone other than preparer.	____	____	____
5. Select _____ personnel files and examine written evidence of the following:			
a. Wage rate authorization.	____	____	____
b. W-4 form signed by the employee.	____	____	____
c. Withholdings authorizations signed by the employee and approved by the owner or manager.	____	____	____
6. Examine evidence or observe that payroll checks are accounted for by a person independent of the preparation function.	____	____	____
7. Examine evidence that the payroll bank account reconciliation is reviewed by the owner or manager.	____	____	____

TESTS OF CONTROLS PROGRAMS – CONSTRUCTION CONTRACTORS
SECTION IV: SYSTEM A (Continued)

Procedure	Done By	Date	W/P Ref.
8. Examine evidence that payroll expense recorded in the contract cost subledger is reconciled monthly to payroll expense in the general ledger.	____	____	____
9. Examine evidence that the allocation of payroll overhead to contracts is reviewed by the owner or manager.	____	____	____
10. Select a sample of _____ series of _____ duplicate payroll checks and:			
a. Account for the numerical sequence.	____	____	____
b. Trace to payroll journal entries for name, date, and amounts.	____	____	____
11. Select a sample of _____ entries in the payroll journal, obtain canceled checks, time cards (hours), and personnel files (rate and withholding information) and:			
a. Recompute gross pay. Scan withholdings and other deductions for reasonableness.	____	____	____
b. Examine time cards for approval by foreman, owner, or manager.	____	____	____
c. Examine check for signature of owner or manager.	____	____	____
d. Examine or obtain owner or manager approval of rates of pay and withholdings.	____	____	____
e. Compare signature on W-4 form to check endorsement.	____	____	____
f. Trace postings to employees' earnings records.	____	____	____
g. Check account classification.	____	____	____
12. Obtain _____ unissued payroll checks and control distribution to employees. Determine the following:			
a. Proper identification.	____	____	____
b. Employee satisfaction with net pay computations.	____	____	____
13. Test postings from the payroll journal to the contract costs subledger.	____	____	____
14. Other procedures: ______________________ ______________________ ______________________ ______________________ ______________________	____	____	____

TESTS OF CONTROLS PROGRAMS – CONSTRUCTION CONTRACTORS
SECTION IV: SYSTEM A (Continued)

Modification of analytical procedures and tests of balances (cross-reference related TOC step above) and reasons therefor:

Prepared by: ______________________ Date: ______________
(In-charge)

Received by: ______________________ Date: ______________
(Engagement Partner)

Tests of Controls Programs — Construction Contractors

Section IV: System B

Client: ____________________

Financial Statement Date: ____________________

MAJOR AUDIT AREAS: Payroll tests.

TRANSACTION CYCLE: Payroll and personnel.

Procedure	Done By	Date	W/P Ref.
1. Test by observation and inquiry that time cards are prepared by employees.	___	___	___
2. Test by observation and inquiry that time cards are approved by a supervisor, manager, or owner.	___	___	___
3. Test by observation, inquiry, and inspection that the owner or manager approves rates of pay, withholding, and changes thereto.	___	___	___
4. Examine evidence that the payroll bank account is reconciled by someone independent of payroll preparation, approvals, and check signing or by the owner or manager.	___	___	___
5. Examine evidence that payroll checks are prenumbered and accounted for.	___	___	___
6. Test account classifications of entries in the payroll journal.	___	___	___
7. Test postings from the payroll journal for _____ pay periods and trace totals to the general ledger and a sample of _____ journal postings to the contract costs subledger.	___	___	___
8. Reconcile payroll expense in the contract costs subledger to payroll expense in the general ledger.	___	___	___
9. Test the allocation of payroll overhead to contracts.	___	___	___

TESTS OF CONTROLS PROGRAMS – CONSTRUCTION CONTRACTORS
SECTION IV: SYSTEM B (Continued)

Procedure	Done By	Date	W/P Ref.
10. Other procedures:			
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Modification of analytical procedures and tests of balances (cross-reference related TOC step above) and reasons therefor:

Prepared by: ______________________ Date: ______________
(In-charge)

Received by: ______________________ Date: ______________
(Engagement Partner)

Tests of Controls Programs — Construction Contractors

Section IV: System C

Client: ______________________

Financial Statement Date: ______________________

MAJOR AUDIT AREAS: Payroll tests.

TRANSACTION CYCLE: Payroll and personnel.

Procedure	Done By	Date	W/P Ref.
1. Review selected payroll journals and personnel records.	___	___	___
2. Test postings from the payroll journal to the contract costs subledger.	___	___	___
3. Reconcile payroll expenses in the contract costs subledger to payroll expense in the general ledger.	___	___	___
4. Test the allocation of payroll overhead to contracts.	___	___	___
5. Other procedures: ______________________	___	___	___

Modification of analytical procedures and tests of balances (cross-reference related TOC step above) and reasons therefor:

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TESTS OF CONTROLS PROGRAMS – CONSTRUCTION CONTRACTORS
SECTION IV: SYSTEM C (Continued)

Prepared by: ______________________ Date: ____________
(In-charge)

Received by: ______________________ Date: ____________
(Engagement Partner)

Tests of Controls Programs — Construction Contractors

Section V: System A

Client: ______________________

Financial Statement Date: ______________________

MAJOR AUDIT AREAS:
1. Physical inventory observation.
2. Inventory pricing and clerical tests.

TRANSACTION CYCLE: Inventory control — perpetual inventory records maintained.

Procedure	Done By	Date	W/P Ref.
1. Observe that all classes of inventory are stored under good physical safeguards:			
a. Raw materials.	___	___	___
b. Work-in-process.	___	___	___
c. Finished goods.	___	___	___
2. Examine evidence or observe that physical counts are made and agreed to perpetual records by persons independent of the inventory control cycle, or that they are supervised by the owner or manager.	___	___	___
3. Examine copies of instructions for periodic physical counts.	___	___	___
4. Examine evidence or observe that the receiving department inspects the quantity and quality of materials when receiving reports are prepared.	___	___	___
5. Examine evidence that the following documents are periodically accounted for:			
a. Raw material requisitions.	___	___	___
b. Labor charge documents.	___	___	___
c. Completed orders:			
(1) Contract	___	___	___
(2) Production	___	___	___
d. Finished inventory requisitions.	___	___	___

TESTS OF CONTROLS PROGRAMS – CONSTRUCTION CONTRACTORS
SECTION V: SYSTEM A (Continued)

Procedure	Done By	Date	W/P Ref.
6. Examine evidence or observe that the computations on the documents following are double-checked on at least a test basis by foremen or other independent persons:			
a. Completion of raw material requisitions.	____	____	____
b. Labor charge documents.	____	____	____
c. Completed records:			
(1) Contract	____	____	____
(2) Production	____	____	____
d. Finished inventory requisitions.	____	____	____
e. Perpetual records posting.	____	____	____
7. Examine evidence of reconciliation of perpetual records with the general ledger by an independent person.	____	____	____
8. Select a sample of the following, examine evidence of double-checking of computations and account coding by an independent person, and trace to the perpetual records and the source for general ledger entry:			
a. Raw material requisitions. Sample size _____.	____	____	____
b. Labor charge documents. Sample size _____.	____	____	____
c. Completed records approved by the owner or manager:			
(1) Contract. Sample size _____.	____	____	____
(2) Production. Sample size _____.	____	____	____
d. Finished inventory requisitions. Sample size _____.	____	____	____
9. Select a sample of _____ perpetual inventory records and perform the following:			
a. Trace all postings to raw material requisitions, labor charge documents, completed contract or production bills of materials and charges, finished inventory requisitions, inventory adjustments approved by the owner or manager, and the source of the general ledger entries.	____	____	____
b. Examine owner or manager approval of related bills of materials and charges.	____	____	____

TESTS OF CONTROLS PROGRAMS – CONSTRUCTION CONTRACTORS
SECTION V: SYSTEM A (Continued)

Procedure	Done By	Date	W/P Ref.
c. Foot the inventory records.	___	___	___
d. Recalculate unit costs on the records.	___	___	___
e. Review record for evidence of obsolete or slow-moving items.	___	___	___
f. Recalculate overhead charged to the record, if applicable.	___	___	___
10. For _____ dates, agree the perpetual records control totals, if available, to the general ledger. If not available, see step 2.	___	___	___
11. For _____ periods, recompute standard labor, material, and overhead costs charged to production.	___	___	___
12. Account for the numerical sequence of_____ series of _____ for the following:			
a. Raw material requisitions.	___	___	___
b. Labor charge documents.	___	___	___
c. Completed records:			
(1) Contract	___	___	___
(2) Production	___	___	___
d. Finished inventory requisitions.	___	___	___
13. Other procedures: ______________________________ ______________________________ ______________________________ ______________________________ ______________________________	___	___	___

Modification of analytical procedures and tests of balances (cross-reference related TOC step above) and reasons therefor:

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TESTS OF CONTROLS PROGRAMS – CONSTRUCTION CONTRACTORS
SECTION V: SYSTEM A (Continued)

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Prepared by: ______________________ Date: ____________
(In-charge)

Received by: ______________________ Date: ____________
(Engagement Partner)

Tests of Controls Programs — Construction Contractors

Section V: Systems B and C

Client: ______________________________

Financial Statement Date: ______________________________

MAJOR AUDIT AREAS:
1. Physical inventory observation.
2. Inventory pricing and clerical tests.

TRANSACTION CYCLE: Inventory control — perpetual inventory records maintained.

Procedure	Done By	Date	W/P Ref.
1. Test by observation and inquiry that inventory counters are given adequate instructions.	____	____	____
2. Test by observation and inquiry that adequate cut-off procedures are utilized to ensure an accurate count.	____	____	____
3. Test by observation and inquiry that obsolete and consigned goods are excluded from the count.	____	____	____
4. Other procedures: ______________________________	____	____	____

Modification of analytical procedures and tests of balances (cross-reference related TOC step above) and reasons therefor:

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TESTS OF CONTROLS PROGRAMS – CONSTRUCTION CONTRACTORS
SECTION V: SYSTEMS B AND C (Continued)

Prepared by: ______________________ Date: ____________
(In-charge)

Received by: ______________________ Date: ____________
(Engagement Partner)

Tests of Controls Programs — Construction Contractors

Section VI: Systems A, B and C

Client: ______________________________

Financial Statement Date: ______________________________

MAJOR AUDIT AREAS: All.

TRANSACTION CYCLES: All.

Procedure	Done By	Date	W/P Ref.
1. Obtain and review operations budgets.	___	___	___
2. Observe adequate safeguards over the following:			
a. Accounting records.	___	___	___
b. Securities and other valuable papers.	___	___	___
c. Other records.	___	___	___
3. Examine evidence that fixed assets records are periodically reviewed, checked to assets, and reconciled to the general ledger.	___	___	___
4. Other procedures:			
______________________________			
______________________________			
______________________________			
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______________________________	___	___	___

Modification of analytical procedures and tests of balances (cross-reference related TOC step above) and reasons therefor:

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TESTS OF CONTROLS PROGRAMS – CONSTRUCTION CONTRACTORS
SECTION VI: SYSTEMS A, B AND C (Continued)

Prepared by: ______________________ Date: ______________
(In-charge)

Received by: ______________________ Date: ______________
(Engagement Partner)

Tests of Controls Programs — Construction Contractors

Section VII: System A

Client: ______________________

Financial Statement Date: ______________________

MAJOR AUDIT AREAS:
1. Project administration and evaluation.
2. Estimating and bidding.
3. Job site accounting and controls.

TRANSACTIONS CYCLE: Construction contract revenues and costs.

Procedure	Done By	Date	W/P Ref.
Project Administration and Evaluation			
1. Determine by inspection that progress schedules for equipment, personnel, and materials are developed and approved by the owner or manager. Also determine that subcontractors have agreed to the schedules.	___	___	___
2. Determine by inquiry and observation that job foremen are familiar with engineering and work-method decisions and assumptions made in job estimating and bidding.	___	___	___
3. Inspect or observe the owner or manager's periodic evaluation of each contract in process to estimate profit or loss.	___	___	___
4. Determine by inspection, observation, or inquiry that plans and specifications are double-checked by management, that ambiguous items are clarified, and that changes are recommended where appropriate.	___	___	___
5. Select _____ progress, field, and status reports and inspect evidence of owner or manager approval.	___	___	___
6. Determine by inquiry or inspection that conferences with project engineers and architects are documented in writing.	___	___	___
7. Determine by inspection that the owner or manager reviews monthly schedules comparing costs to date plus estimated costs with total contract prices.	___	___	___

TESTS OF CONTROLS PROGRAMS – CONSTRUCTION CONTRACTORS
SECTION VII: SYSTEM A (Continued)

Procedure	Done By	Date	W/P Ref.
8. Select _____ contract status reports for jobs in progress during the year and inspect for evidence of review by office and management personnel.	____	____	____
Estimating and Bidding			
1. Select a sample of _____ contract estimates and perform the following:			
a. Inspect for initials evidencing:			
(1) Owner or manager approval.	____	____	____
(2) Double-checking of calculations.	____	____	____
(3) Estimates are double-checked against contract specifications, plans and drawings.	____	____	____
(4) Estimates are reviewed by management personnel for completeness and reasonableness.	____	____	____
b. Inspect evidence that estimates were obtained from more than one subcontractor for each phase of the work.	____	____	____
c. Determine that detailed estimates have been prepared for contract change orders.	____	____	____
2. Select a sample of _____ contracts in process and change orders, obtain all documentation and perform the following:			
a. Inspect the owner or manager approval of all contracts and change orders.	____	____	____
b. Determine by inquiry or inspection that contracts were approved after comparison to other bids to determine if amount was too low.	____	____	____
c. Inspect the subcontractor's approval of change orders.	____	____	____
d. Determine that all items on the estimate summaries are either completed or lined out.	____	____	____
e. Determine that the estimates for change orders are double-checked and approved in writing by management.	____	____	____
f. Determine that subcontracts were awarded to the lowest bidder.	____	____	____
g. Determine that purchase orders for contract materials were issued to the lowest bidder.	____	____	____
h. Determine by inquiry or inspection that subcontractors included in estimates are reviewed for creditworthiness and high quality.	____	____	____

TESTS OF CONTROLS PROGRAMS – CONSTRUCTION CONTRACTORS
SECTION VII: SYSTEM A (Continued)

Procedure	Done By	Date	W/P Ref.
i. Determine that performance bonds were obtained from subcontractors.	____	____	____
j. Review margins on bids to determine if high margins were used in areas where change orders were expected and low margins were used where change orders were not expected.	____	____	____
3. Inspect monthly analysis of all bidding activity for management approval.	____	____	____
4. Select _____ monthly reports comparing costs to date plus costs to complete with bid estimates and contract prices and perform the following:			
a. Determine that field status reports were used to prepare estimates of costs to complete.	____	____	____
b. Determine that all change orders are included on the reports.	____	____	____
c. Determine that all variances are explained and documented.	____	____	____
d. Trace a sample of _____ accounts for costs to date to construction contract subledger.	____	____	____
e. Trace a sample of _____ contracts' bid estimates to supporting summary and detailed estimates:			
(1) Determine that detailed estimates have been prepared for all contract change orders.	____	____	____
(2) Determine that quantities of material and hours of labor on bid estimates have been reviewed and compared to contract specifications by someone other than preparer.	____	____	____
(3) Test the mathematical calculations on _____ detailed bid estimates and trace to summaries of bid estimates.	____	____	____
(4) Select a sample of _____ materials costs categories on detailed bid estimates and trace to supporting calculations and documentation. Evaluate the reasonableness of these costs.	____	____	____
(5) Select a sample of _____ labor costs categories on detailed bid estimates and compare to calculations, union contracts, or other supporting documentation. Evaluate the reasonableness of these costs.	____	____	____
(6) Select a sample of _____ equipment costs categories on detailed bid schedules and compare calculations to rental rates or rates charged for owned equipment. Evaluate the reasonableness of these costs.	____	____	____

TESTS OF CONTROLS PROGRAMS – CONSTRUCTION CONTRACTORS
SECTION VII: SYSTEM A (Continued)

Procedure	Done By	Date	W/P Ref.
Job-Site Accounting and Controls			
1. Inspect evidence that the following documents at the job site are accounted for periodically:			
a. Purchase orders.	____	____	____
b. Receiving reports.	____	____	____
2. Determine by inquiry if the owner or manager visits the job site periodically to verify reported progress.	____	____	____
3. Inspect evidence that office and management personnel have reviewed the hiring and firing of job site personnel.	____	____	____
4. Determine by inspection if hours reported on time records are approved by a job foreman or superintendent.	____	____	____
5. Determine by inquiry or observation if job-site payrolls are distributed by the job foremen or superintendents.	____	____	____
6. Make inquiry or observation to determine cash payroll distributions are periodically controlled by office or management personnel.	____	____	____
7. Determine by inspection or inquiry that tools and equipment at job sites are adequately safeguarded and accounted for periodically.	____	____	____
8. Determine by inspection or inquiry that an inventory of equipment at the job site is periodically compared to accounting records.	____	____	____
9. Inspect evidence or inquire whether non-chargeable equipment time is controlled and approved by the job foreman or superintendent.	____	____	____
10. Obtain job site records for equipment usage, select a sample of _____ time charges, and trace to job billing records and postings in contract costs subledger.	____	____	____
11. Other procedures: ______ ______ ______ ______ ______	____	____	____

TESTS OF CONTROLS PROGRAMS – CONSTRUCTION CONTRACTORS
SECTION VII: SYSTEM A (Continued)

Modification of analytical procedures and tests of balances (cross-reference related TOC step above) and reasons therefor:

Prepared by: ______________________________ Date: ______________
(In-charge)

Received by: ______________________________ Date: ______________
(Engagement Partner)

Tests of Controls Programs — Construction Contractors

Section VII: Systems B and C

Client: ______________________________

Financial Statement Date: ______________________________

MAJOR AUDIT AREAS:
1. Project Administration and Evaluation.
2. Estimating and Bidding.
3. Job-Site Accounting and Controls.

TRANSACTIONS CYCLE: Construction contract revenues and costs.

Procedure	Done By	Date	W/P Ref.
Project Administration and Evaluation			
1. Select _____ contract status reports for jobs in progress during the year and inspect for evidence of review by office and management personnel.	____	____	____
Estimating and Bidding			
1. Select _____ monthly reports comparing costs to date plus costs to complete with bid estimates and contract prices and perform the following:			
a. Determine that field status reports were used to prepare estimates of costs to complete.	____	____	____
b. Determine that all change orders are included on the reports.	____	____	____
c. Determine that all variances are explained and documented.	____	____	____
d. Trace a sample of _____ accounts for costs to date to contract costs subledger.	____	____	____
e. Trace a sample of _____ contracts' bid estimates to supporting summary and detailed estimates:			
(1) Determine that detailed estimates have been prepared for all contract change orders.	____	____	____
(2) Determine that quantities of material and hours of labor on bid estimates have been reviewed and compared to contract specifications by someone other than the preparer.	____	____	____

TESTS OF CONTROLS PROGRAMS – CONSTRUCTION CONTRACTORS
SECTION VII: SYSTEMS B AND C (Continued)

Procedure	Done By	Date	W/P Ref.
(3) Test the mathematical calculations on _____ detailed bid estimates and trace to summaries of bid estimates.	____	____	____
(4) Select a sample of _____ materials costs categories on detailed bid estimates and trace to supporting calculations and documentation. Evaluate the reasonableness of these costs.	____	____	____
(5) Select a sample of _____ labor costs categories on detailed bid estimates and compare to calculations, union contracts, or other supporting documentation. Evaluate the reasonableness of these costs.	____	____	____
(6) Select a sample of _____ equipment costs categories on detailed bid schedules and compare calculations to rental rates or rates charged for owned equipment. Evaluate the reasonableness of these costs.	____	____	____

Job-Site Accounting and Controls

Procedure	Done By	Date	W/P Ref.
1. Obtain job site records for equipment usage, select a sample of _____ time charges, and trace to job billing records and postings in contract costs subledger.	____	____	____
2. Other procedures: ______________________________ ______________________________ ______________________________ ______________________________ ______________________________	____	____	____

Modification of analytical procedures and tests of balances (cross-reference related TOC step above) and reasons therefor:

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TESTS OF CONTROLS PROGRAMS – CONSTRUCTION CONTRACTORS
SECTION VII: SYSTEMS B AND C (Continued)

Prepared by: ______________________ Date: ______________
(In-charge)

Received by: ______________________ Date: ______________
(Engagement Partner)

6.500

Internal Control Structure Reportable Conditions Form

Client: ______________________________

Financial Statement Date: ______________________________

INSTRUCTIONS:

This form should be completed by the in-charge or supervised staff, and reviewed by the engagement partner for all audit engagements. The information should be used to complete the required communication of internal control structure related matters and other matters.

The Contractors' Internal Control Structure Questionnaire, the Contractors' System's Walk-Through Documentation Form, the tests of controls procedures, or any internal control flowcharts or narratives are the primary sources for identifying reportable conditions. Reportable conditions represent deficiencies in the design or operation of the internal control structure. A reportable condition may be of such a magnitude that it is considered a material weakness. These items should be identified as such on the form. Other operational or administrative suggestions that are not considered reportable conditions may also be included on this form.

The form is designed to include the documentation source of the conditions, the audit areas affected by the conditions and a format for writing comments.

Prepared by: ______________________________ Date: ______________
(In-charge)

Reviewed by: ______________________________ Date: ______________
(Engagement Partner)

REPORTABLE CONDITIONS

Documentation Source	Audit Areas Affected by Condition	Situation	Problem	Recommendation	Has this issue been discussed with management?	Will this issue be included in the management letter?

Notes:

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References are to section numbers.

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