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The Pennsylvania State University
The Graduate School
The Department of Civil Engineering

AN INVESTIGATION OF THE LEGAL CRITERIA GOVERNING
DIFFERING SITE CONDITIONS DISPUTES ON CONSTRUCTION CONTRACTS

A Thesis in
Civil Engineering

~~THESIS~~
~~T 2226~~

by

James E. Teahan

Submitted in Partial Fulfillment
of the Requirements
for the Degree of

Master of Science

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ABSTRACT

Construction contract administrators have no resource available that helps them make correct decisions at the field level regarding differing site conditions disputes. Journal articles, papers and treatises review only a limited number of cases, and often reach superficial or even mistaken conclusions. The existing literature is too exact. It addresses only specific issues and cannot be applied generally to any issues that may arise in a differing site conditions dispute. In fact, the existing literature may promote contract disputes as much as prevent them.

This report is designed to provide contract administrators with a document, based on case law, that can be used in the field to help resolve any differing site conditions dispute. It reveals the reasoning used by the courts in reaching decisions on such disputes, and enables contractors and owners to evaluate the strengths and weaknesses of their positions and to decide whether to settle an unresolved dispute at the field level or pursue it through the courts.

TABLE OF CONTENTS

LIST OF FIGURES	vii
LIST OF TABLES	viii
Chapter 1. INTRODUCTION	1
Background	2
Avenues of Recovery	3
Misrepresentation	4
Differing Site Conditions Clauses	5
Objective	8
Methodology	9
Report Outline	9
Chapter 2. MISREPRESENTATION AND FRAUD	10
Intentional Misrepresentation	11
Summary	13
Chapter 3. UNINTENTIONAL CONCEALMENT	14
The Rule of Unintentional Concealment	14
Information Withheld From Bidders	15
Is the Information Readily Available Elsewhere?	17
Unforeseen Difficulties	22
Summary	24

Chapter 4. IMPLIED WARRANTY: POSITIVE REPRESENTATION	25
The Rule of Implied Warranty	25
Positive Representation	26
Facts Versus Assumptions	26
Risk of Assumptions	28
Summary	31
Chapter 5. IMPLIED WARRANTY: JUSTIFIED RELIANCE	32
Exculpatory Language	34
Positive Versus Informational Representations	36
Site Inspection Clauses	38
Information Provided Outside the Contract ..	40
Bidder's Obligation to Review All Information	44
Proof of Damages	45
Summary	47
Synopsis of Implied Warranty Claims	47
Chapter 6. DIFFERING SITE CONDITIONS CLAUSES	55
DSC Claims Distinguished from Misrepresentation Claims	55
Type I Disputes	57
Type II Disputes	67
Exculpatory Language	72
Exculpatory Language Not Allowed to Prevail	72
Exculpatory Language Allowed to Prevail	75
Other Factors Affecting Exculpatory Language	78
Site Visitation Clauses	80

Proof of Damages	83
Summary	83
Synopses of DSC Claims	85
Chapter 7. CONCLUSIONS	96
Misrepresentation Claims	96
DSC Claims	97
REFERENCES	101
TABLE OF CASES	104
BIBLIOGRAPHY	107

LIST OF FIGURES

<u>FIGURE</u>		<u>PAGE</u>
1	Possible Avenues of Recovery	3
2	Unintentional Misrepresentation Flowchart	49
3	Type I Differing Site Conditions Flowchart ...	86
4	Type II Differing Site Conditions Flowchart ..	87

LIST OF TABLES

<u>TABLE</u>		<u>PAGE</u>
1	Summary of Misrepresentation Cases	99
2	Summary of DSC Clause Cases	100

CHAPTER 1

INTRODUCTION

One of the most common disputes arising on construction projects involves allegations of differing site conditions (DSC); that is, a contractor asserting that the site conditions encountered differed from what he was led to believe existed.

A contractor will base his bid on representations of the site made by the owner, on what he sees of the existing conditions during a site visit, and on what he knows of the local conditions from past experiences. Normally, this amount of information is sufficient to allow a bidder to accurately estimate the difficulty and cost of performing the work; yet, during construction, a contractor may encounter site conditions that were unanticipated and that cause actual construction costs to exceed bid costs.

The facts and issues relevant to a DSC dispute will vary from project to project. There is, however, a body of

common law that is applicable to DSC disputes. Despite factual differences, the common law principles used by courts of law to resolve DSC disputes are consistent. In theory, a set of rules, based on common law, can be developed to predict the outcome of DSC disputes.

Background

The basic responsibility of an owner with respect to the representation of existing site conditions is to make available to all bidders all information in his possession that is relevant to estimating the cost of the work. The basic responsibility of a contractor is to avail himself of all known information regarding the existing site conditions and to make prudent judgments as to the effect the information will have on the cost of performing the work. When either party does not fulfill his obligation, a dispute will likely arise. When it does, the contractor must assert a claim to recover the costs he alleges resulted from the owner's misrepresentation.

Avenues of Recovery

Figure 1 shows the avenues available to a contractor to recover additional costs incurred as a result of differing site conditions.

Two types of DSC claims can be asserted. The first type seeks recovery from outside the limits of the contract and is based on the legal theory of misrepresentation. The second seeks recovery based on the language in the contract via a concealed conditions or DSC clause.

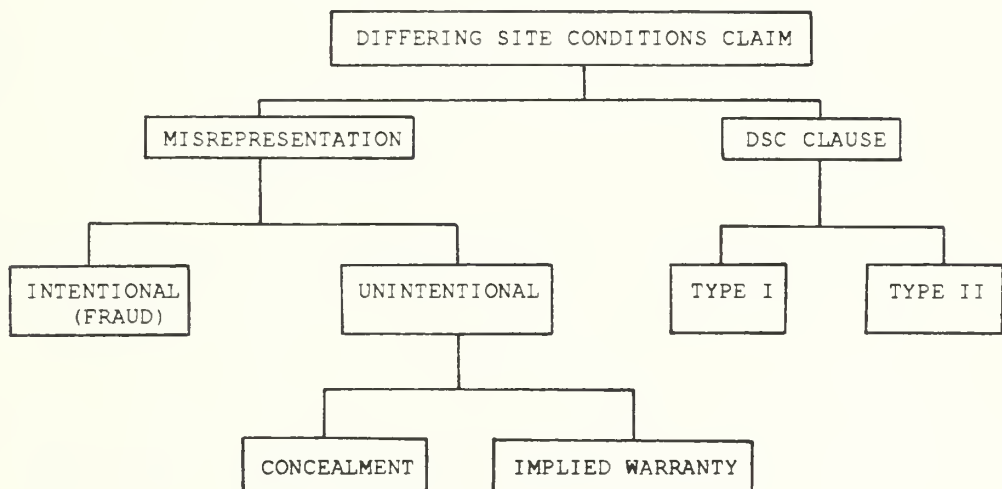


Figure 1: Possible Avenues of Recovery

It is important to note that a misrepresentation claim may be asserted even if the contract contains a DSC clause. In most cases, however, the burden of proof is lighter, recovery is easier through the DSC clause.

Misrepresentation

In the absence of a DSC clause, a contractor must seek recovery under the theory of misrepresentation. Common law holds that the positive representations made by an owner regarding the nature of the work to be performed are impliedly warranted to be correct. To recover under the theory of misrepresentation, a contractor must prove that the site conditions represented in the contract were not an adequate depiction of the actual conditions encountered. The misrepresentation theory also requires proof that the owner's erroneous representations were misleading. Thus, the contractor must show some fault on the part of the owner.

Misrepresentation is the only avenue of recovery if there is no DSC clause in the contract, but recovery via a

misrepresentation claim is difficult because of the burden of proof required. Consequently, if there is no DSC clause in the contract he is bidding on, a contractor will often include in his bid a contingency amount to reduce the financial risk of encountering the unknown. This practice protects the contractor's interest but results in higher bids to the owner.

Differing Site Conditions Clauses

To encourage lower bids, owners sometimes include a DSC clause in their contracts. By including such a clause, the owner assumes the financial risk of encountering changed conditions at the site. In theory, owners are willing to assume this risk to prevent bidders from including a contingency in their bids. By promising to pay for any added costs resulting from changed site conditions, an owner induces lower bids. Only when more difficult conditions are encountered will the owner pay the additional cost.

When properly administered, the DSC clause works to the advantage of both the owner and the contractor. The owner benefits by receiving lower bids on the original contract

work, and the contractor benefits by not having to bear the financial risk of encountering unforeseen conditions.

DSC clauses were first used by the federal government in construction contracts in the late 1920s and have since gained wide acceptance in both the public and private sectors. The federal clause remains the model for DSC clauses used in the public and private sectors. AIA 201-1987 and EJCDC 1910-8 (1983) both include clauses that are similar to the federal clause as do the standard contract forms of many state departments of transportation. The current version of the federal clause is reproduced below.

DIFFERING SITE CONDITIONS

(a) The Contractor shall promptly, and before the conditions are disturbed, give a written notice to the Contracting Officer of (1) subsurface or latent physical conditions at the site which differ materially from those indicated in this contract, or (2) unknown physical conditions at the site, of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inhering in work of the character provided for in the contract.

(b) The Contracting Officer shall investigate the site conditions promptly after receiving the notice. If the conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performing any part of the work under this contract, whether or not changed as a result of the conditions, an equitable adjustment shall be

made under this clause and the contract modified in writing accordingly.

(c) No request by the Contractor for an equitable adjustment to the contract under this clause shall be allowed, unless the Contractor has given the written notice required; provided, that the time prescribed in (a) above for giving written notice may be extended by the Contracting Officer.

(d) No request by the Contractor for an equitable adjustment to the contract for differing site conditions shall be allowed if made after final payment under this contract.¹

The current federal clause recognizes two types of differing site conditions as compensable. A Type I condition occurs when a contractor encounters conditions that differ materially from what the contract documents lead him to believe exist. For example, if a contractor discovers rock while excavating for a foundation and the contract documents state that the soil is sand and clay, the contractor should be entitled to the added costs of excavating rock rather than sand and clay.

A Type II condition occurs when a contractor discovers unusual conditions that do not normally occur in the type of work required by the contract. For example, if a contractor discovers large pieces of concrete in its excavation where none is shown in the contract, the contractor should be entitled to the additional costs for removing and hauling

off the concrete pursuant to the differing site conditions clause.

Type I and Type II differing site conditions clauses allow a contractor to recover for most situations that are truly unforeseeable. They don't, however, allow a contractor to recover for his own misinterpretation of information provided by the owner. Many unsuccessful claims pursued by contractors through the DSC clause are unsuccessful because the contractor misinterpreted information provided by the owner.

Objective

This paper provides contract administrators with a document, based on case law, that can be used in the field to help resolve any differing site conditions dispute. It reveals the reasoning used by the courts in reaching decisions on such disputes, and enables contractors and owners to evaluate the strengths and weaknesses of their positions and to better decide whether to settle an unresolved dispute at the field level or pursue it through the courts.

Methodology

Legal treatises, texts and articles on construction law were reviewed to identify the issues that are relevant to the resolution of DSC disputes. The cases cited in the literature were compiled, reviewed and Shepardized. Court opinions in these cases cited other DSC cases which were also reviewed and Shepardized. Based on the decisions and reasoning discovered in these cases, a flowchart was developed that characterizes the rules of law applied by the courts to DSC disputes.

Report Outline

The report is separated into four parts. Chapter 2 discusses instances of intentional misrepresentation. Chapters 3, 4 and 5 address unintentional misrepresentation: concealment and implied warranty theories. Chapter 6 examines DSC disputes that arise on contracts containing a differing site conditions clause. Finally, chapter 7 offers insights into the implications of the findings of this report.

CHAPTER 2

MISREPRESENTATION AND FRAUD

Black's Law Dictionary defines misrepresentation as:

Any manifestation by words or other conduct by one person to another that, under the circumstances, amounts to an assertion not in accordance with the facts. An untrue statement of fact. An incorrect or false representation. That which, if accepted, leads the mind to an apprehension of a condition other and different from that which exists.²

The intent of the parties involved is irrelevant to determining if a misrepresentation has occurred.

Misrepresentation can occur either intentionally or unintentionally. In either case, a contractor may recover.

This chapter discusses intentional misrepresentation.

Unintentional misrepresentation is discussed in Chapters 3 and 4.

Intentional Misrepresentation

Intentional misrepresentation is fraud and justifies rescission of a contract. The case of *Salinas v. Souza & McCue Construction Co.* (424 P.2d 921) addresses this issue. The contract was for the construction of a sewer line. Soil borings taken at irregular intervals along the centerline were included in the contract. Bidders were required to "examine carefully the site of the work." During construction Souza encountered unstable subsurface conditions that would not support the sewer line. The borings gave no indication that the soil would be unstable. Souza sued to recover his additional costs.

During the trial, the court found that the city's chief engineer was aware, from past experience, of the unstable nature of the soil in the area of the sewer line. The evidence suggested that he directed the city's soil testing firm to take borings at intervals that would avoid the unstable area. Based on this evidence, the court ruled that the city intentionally misrepresented the subsurface condition in order to induce lower bids. The fact that the contract required a site visit was irrelevant to the decision. The court allowed Souza to recover.

It is the general rule that by failing to impart its knowledge of difficulties to be encountered in a project, the owner will be liable for misrepresentation if the contractor is unable to perform according to the contract provisions. ...Even if the (site visit requirement) had specifically directed the bidders to examine subsoil conditions, which it did not, it is clear that such general provisions can not excuse a governmental agency for its active concealment of conditions.³

Proof of fraud is difficult because the contractor must convince the court that the owner deliberately withheld, altered, or misrepresented the existing conditions.

Specifically, a contractor must show that:

1. Information presented to bidders was incorrect or was withheld altogether.
2. The information in question was relevant to estimating the cost of the work.
3. Deliberate action or inaction on the part of the owner caused information to be withheld or incorrect information to be presented.
4. The owner was aware at bid time that the contract contained incorrect information or omitted relevant information.
5. The contractor was damaged by the fraudulent act.

A contractor will almost always be allowed to recover if relevant information is deliberately misrepresented in the contract, and the contractor is misled and damaged by this misrepresentation.

Summary

Fraud cases involving differing site conditions disputes are difficult to prove and rarely seen in construction contracting. Five requirements were listed which must be proved to recover on a fraud claim.

CHAPTER 3

UNINTENTIONAL CONCEALMENT

As shown in Figure 1, under the theory of unintentional misrepresentation, a contractor can pursue additional costs incurred as a result of a differing site condition under two legal concepts: concealment and implied warranty. This chapter discusses unintentional concealment.

The Rule of Unintentional Concealment

To recover based on unintentional concealment, a contractor must show that the owner failed to provide bidders with information in the owner's possession that was relevant to estimating the cost of the work. Where relevant information is withheld and bidders are induced to submit lower bids, the contractor is entitled to recover any added costs that result from the withheld information.

Information Withheld From Bidders

The case of *Christie v. United States* (237 U.S. 234) illustrates the concealment rule. The contract was for the construction of locks and dams on the Warrior River in Alabama. Borings were included in the contract, and they showed that the soil to be excavated was sand, gravel and clay. During construction, Christie encountered stumps, buried logs, and cemented sand and gravel during construction. Christie sued to recover his added costs.

Evidence introduced at the trial showed that during the boring operations, the drill crew encountered impenetrable obstructions. When this occurred, the drill was simply withdrawn from the hole and relocated until an area was found where the drill could penetrate to the required depths. The government's engineer did not see the value of this information to bidders and omitted this fact from the contract. The court found in favor of the contractor:

There could be only one conclusion from these findings. There was a deceptive representation of the material, and it misled. ...It makes no difference to the legal aspects of the case that the omissions from the records of the results of the borings did not have sinister purpose.⁴

In the case of *United States v. Atlantic Dredging Co.* (253 U.S. 1), the court reached a similar conclusion. The

contract called for dredging a portion of the Delaware River. Borings were included in the contract that showed that the material to be dredged was mud and sand. But instead of mud and sand, Atlantic encountered compacted sand, gravel and cobbles during the dredging.

Several months after the contract was awarded, Atlantic learned that the government had encountered impenetrable subsurface obstructions during the boring operation. The field log of the drilling crew contained this information, but the log was never provided to bidders. When Atlantic did see this information, he concluded that impenetrable obstructions would be encountered throughout the site and that the dredging equipment being used was inadequate to complete the work. Atlantic decided to subcontract the remaining portion of the work and sued for his additional costs. The court concluded:

The company did not know of the concealment of the actual test of the borings, and the fact that it, the company, attempted to struggle on against the difficult conditions with its inefficient plant, should not be charged against it. ...It did not know at that time of the manner in which the "test borings" had been made. Upon learning that they had been made by the probe method, it then elected to go no further with the work; that is, upon discovering that the belief expressed was not justified and was in fact a deception. And it was not the less so because its impulse was not sinister or fraudulent.⁵

These two decisions illustrate that the intent of the owner is not relevant to a concealment case. Whether information is withheld intentionally or unintentionally, a contractor can recover if he can show that the information withheld was relevant to estimating the cost of the work and that he was damaged because relevant information was withheld.

Is the Information Readily Available Elsewhere?

Many courts look beyond the contract documents before concluding that relevant information in the owner's possession was concealed. The central issue is the availability of the information alleged to be concealed. Information that is readily accessible from sources other than the contract documents may deny recovery on a concealment claim. Three cases illustrate this concept.

The first is *Wiechmann Engineers v. State Department of Public Works* (107 Cal. Rptr. 529). The contract was for road construction in Modoc County, California. The contract included no information from the soil investigation that was made along the route of the proposed road, but it did advise

bidders that an investigation had been performed and that the resulting report was available for bidders to review.

As required by the contract, Wiechmann's vice president made site visits prior to bidding the work, and, in fact, traveled the entire length of the proposed road. During these visits, the area was clear of snow, and boulders were visible on the surface of the ground. Wiechmann bid the job on the basis of the site investigation alone. He never examined the soil report.

During construction, Wiechmann encountered subsurface boulders that required larger excavation equipment than planned. Wiechmann sued for his additional costs.

Wiechmann claimed that the presence of subsurface boulders was known to the owner and was relevant to estimating the cost of the work. Since there was no representation in the contract documents that boulders would be encountered, Wiechmann claimed that the owner concealed this fact from bidders.

The court agreed that the owner did know that boulders existed below the surface; the soil report showed boulders. The court also agreed that there was no indication in the bid documents that boulders would be encountered. The court ruled, however, that because boulders were visible from a

site visit, Wiechmann could not claim that the presence of boulders had been concealed:

This is not a case in which it reasonably can be contended the state had a duty to warn prospective bidders of boulderous conditions, since the hazard and risk of such a condition was readily apparent as the result of an onsite inspection. ...Onsite observations disclosed...that the work of construction was to be undertaken in a boulderous area and the degree and nature of the condition would be something to consider when submitting a bid.⁶

A contractor cannot recover if the information claimed to be concealed is readily accessible through sources other than the contract documents. A bidder has a duty to avail himself of all relevant information that is readily accessible.

But the courts are restrictive in the power they will allow site visitation clauses to carry. These clauses will be allowed to deny a contractor recovery only if the condition that is claimed to be concealed is readily observable from a site visit. In Wiechmann's case, the court hinted that if the boulders had not been easily visible on the surface of the ground, Wiechmann may have recovered.

Owners cannot hide behind the site visitation clause to disclaim liability for facts that they truly conceal from bidders. In *Atlantic Dredging*, the court was direct about

when an owner cannot rely on a site visitation clause to avoid paying additional costs:

The direction to contractors to visit the site and inform themselves of the actual conditions of a proposed undertaking will not relieve from defects in the plans and specifications.⁷

In *Atlantic Dredging*, the fact that the drill bit encountered impenetrable obstructions was concealed from bidders and could not be ascertained from a site visit. Therefore, the site visitation clause could not be relied on by the owner, and *Atlantic Dredging* recovered.

In *C. W. Blakeslee & Sons, Inc v. United States* (89 Ct.Cl. 226), the court addressed the situation where site information is provided outside the contract. This contract was for the construction of a bridge substructure. No boring logs were included in the contract, but bidders were advised that a soil report and field logs were available for review in the office of the contracting officer. Blakeslee reviewed the soil report but not the field logs. The soil report gave no indication that boulders existed on the site.

During construction Blakeslee encountered boulders. Blakeslee learned after the contract was awarded that the government had to blast boulders out of the way to complete the wash borings shown in the soil report. Neither the fact that the borings were obtained using the wash method nor the

fact that blasting occurred during the boring operation was revealed in the soil report Blakeslee read. Blakeslee considered both of these facts to be relevant to bidding the work, so he sued, claiming concealment.

The court found that although these facts were not revealed in the soil report, they were clearly stated in the field logs that Blakeslee failed to review. In denying recovery, the court stated:

The method of making the borings and the fact that dynamite was used and similar information is recorded in the log book. Plaintiffs knew this but made no effort to consult the log book, which was available to them. Plaintiffs therefore have no one but themselves to blame for the fact that at the time they submitted their bid they did not know that dynamite had been used by the defendant in making the borings and can not be heard to complain that they were misled or damaged by the defendant because of that fact.⁸

The courts will look beyond the representations made in the contract documents before deciding that relevant information has been concealed. Bidders have the duty to examine all readily available information they are aware of.

Unforeseen Difficulties

A contractor cannot recover the additional costs associated with encountering unforeseen difficulties simply because they are unforeseen. The bench-mark case in this instance is *United States v. Spearin* (248 U.S. 132) in which the court ruled that a contractor "will not be excused or become entitled to additional compensation because unforeseen difficulties are encountered."

This rule of law was applied in the case of *MacArthur Bros. Co. v. United States* (258 U.S. 6). The contract was for dredging in connection with the construction of a new canal. Part of the dredging was required by the contract to be performed "in the dry," which dictated the use of a cofferdam. MacArthur devised what he believed to be a cost effective method of constructing the cofferdam, where the cofferdam sheeting would be butted up against an existing pier. The pier, which had been recently built by the government under a separate contract, would then become part of the cofferdam. As it turned out, the new pier was not watertight, and MacArthur's cofferdam was not effective. MacArthur incurred increased costs as a result.

MacArthur sued, claiming that if the pier had been properly constructed, it would have been watertight, and since the pier's construction was improper, the requirement that the work be performed "in the dry" could not be met. MacArthur claimed that the government had a duty to inform him that the pier could not be effectively used as a part of a cofferdam.

The court ruled in favor of the government. There was no evidence presented that the government knew that the new pier was not watertight nor that the government knew of any existing conditions that would impede performance of work "in the dry." The court's opinion was unequivocal:

There was indication of the manner of performance, but there was no knowledge of impediments to performance, no misrepresentation of the conditions, exaggeration of them, nor concealment of them; nor, indeed, knowledge of them. To hold the government liable under such circumstances would make it insurer of the uniformity of all work, and cast upon it responsibility for all of the conditions which a contractor might encounter, and make the cost of its projects always an unknown quantity.⁹

The fact that the pier was not watertight was not necessarily relevant to completing the work. The government did not require the existing pier be used in the cofferdam design. Presumably, if the government had directed that the pier be incorporated into the cofferdam design or if

MacArthur's design was the only design possible, the government would have been obligated to warn bidders that the pier was not watertight. That was not the case. MacArthur could have designed a cofferdam that avoided using the existing pier.

Summary

By claiming concealment, a contractor asserts that the owner did not honor his obligation to present to bidders all site information he had in his possession at bid time. To recover under a theory of concealment, a contractor must prove that:

1. The owner had information on the existing site condition at bid time that was not made available to bidders.
2. The withheld information was necessarily relevant to estimating the cost of the work.
3. The withheld information was not readily available from other sources (site visit, other public documents, etc.).
4. The contractor was damaged by the fact that relevant information was withheld.

CHAPTER 4

IMPLIED WARRANTY: POSITIVE REPRESENTATION

In claiming concealment, a contractor argues that the owner didn't tell him everything he knew, but in claiming a breach of implied warranty, a contractor argues that what the owner told him was wrong. To recover on an implied warranty theory, a contractor must show that information presented in the bid documents as factual was incorrect.

The Rule of Implied Warranty

Courts generally rule that factual statements made in the bid documents imply a warranty to bidders that the statements are correct. The rule of law regarding recovery under a theory of implied warranty is well established:

The general rule may be deduced from the decisions that where plans or specifications lead a public contractor reasonably to believe that conditions indicated therein exist, and may be relied upon in making his bid, he will be entitled to

compensation for extra work or expense made necessary by conditions being other than as so represented.¹⁰

The implied warranty rule is prevalent throughout the case law involving differing site conditions disputes. Crucial to decisions relying on this rule is the determination that a contract contains a "positive representation."

Positive Representation

A positive representation is any factual statement made in the contract. The owner is liable for the accuracy of the facts he presents. Conversely, bidders are responsible for assumptions they make that are based on the owner's facts.

Facts Versus Assumptions

The case of *Elkan v. Sebastian Bridge District* (291 F. 532) highlights the difference between facts and assumptions. The contract was for the construction of a

bridge. The plans contained soil borings, but the borings were not taken at locations where Elkan's excavation was to be done; the borings were taken in locations near, but outside, the area of excavation. The specifications stated: "Borings have been made at the bridge site, and the findings are as indicated on sheet No. 2."

The soil encountered by Elkan during excavation differed from that shown by the borings on sheet No.2 of the contract plans. The difference between the actual condition and the represented condition caused Elkan additional expense, so he sued to recover these costs.

The court recognized that soil borings represent the subsurface condition only at the hole. Elkan's excavations were not made in the same locations as the borings. The court concluded:

Of course, any one would realize that the actual sub-soil conditions might, except where and to the depth shown by the borings, be different than so shown. The actual conditions were hidden. The borings were merely indications, at certain places and to certain depths, from which deductions might be drawn as to actual conditions along the line and to the depths of such borings. Both parties knew that deductions so drawn might prove untrue when the necessary excavations were made.¹¹

The court determined that the borings shown in the plans accurately depicted what the owner knew of the existing subsurface condition, and that Elkan assumed that

those conditions would be encountered during excavation.

That assumption was made at Elkan's own risk.

The mistake of these two appellants is in interpreting the facts to mean that the district stated that the sub-soil conditions which would be encountered by the contractor were such as were shown by the boring sheets. The district made no such statement. It stated that the boring sheets showed truly what had been found by the borings. That statement was true.¹²

The borings themselves are factual and are generally ruled to impliedly warrant the condition at the hole. Assumptions made of the subsurface condition between the holes is made at the contractor's risk.

Risk of Assumptions

Wunderlich v. State of California (423 P.2d 545) was also the result of an incorrect assumption made by the contractor. This was a highway construction contract that involved both cuts and fills. In reference to a hillside adjacent to the work that was available as a source of fill material, the state provided bidders with subsurface test reports and an inter-departmental memo:

The hillside is composed of rather loosely compacted sand and gravel ranging from 4 inches to dust. A layer of blow sand covers the base of the hill and apparently exists in spots on the slope

as some test holes encountered considerable coarse material while others were practically all sand. Tests indicate that after processing, to meet the grading requirements, the material is suitable for imported base material...

This source is well located as far as economy of hauling is concerned considering a single source of material for the entire length of the project. With this in mind, a borrow agreement was negotiated with the property owners by the Right of Way Department for the material on the hillside...¹³

Relying on this memo, Wunderlich bid the job to use the hillside as the sole source of fill material. Once construction began, the company discovered that the hillside contained too much sand to produce a sufficient quantity of acceptable fill. When Wunderlich was forced to import material from farther off site, he sued to recover his additional costs.

At trial, Wunderlich claimed that the test report and memo provided by the state were positive representations that the hillside would produce a sufficient quantity of fill material to complete the job.

The court ruled that neither the test report nor the memo constituted a positive representation that the hillside would produce a sufficient quantity of fill. The court did agree that the memo made a positive assertion that the hillside would produce sufficient fill, but it ruled that

this assertion was reasonably based on the information provided in the test reports. Since the same test reports were also made available to Wunderlich, the court ruled that Wunderlich was free to accept or reject the state's conclusion.

This ruling allows owners to make statements that are intended to help bidders without being liable for the statements if the owner also provides the data he used to reach his conclusions:

If statements "honestly made" may be considered as "suggestive only," expenses caused by unforeseen conditions will be placed on the contractor.¹⁴

The court found that the state's memo reached a reasonable conclusion from the information provided by the test report. The state's conclusion was "honestly made." Because the data used by the state was also given to Wunderlich, the court ruled that the state's memo was "suggestive only," and that Wunderlich was free to draw its own conclusions from that data.

Although the state made a positive representation of the material content of the hill, Wunderlich was not justified in relying on the state's conclusion. He was obligated to draw his own conclusions from the test report.

The *Elkan* and *Wunderlich* decisions illustrate the difficulty of proving that a contract contains a positive representation. From these cases, one can conclude that a "positive representation" is simply what is presented by the bid documents as a fact. Any assumption made by a bidder is made at his own risk. The owner will be held liable only for the accuracy of the facts he presents.

Summary

A positive representation is any statement represented by the contract to be a fact. Factual statements imply a warranty to bidders that the statements are correct. The owner is liable for the facts presented in the contract, but the contractor is liable for any assumptions he draws from those facts.

CHAPTER 5

IMPLIED WARRANTY: JUSTIFIED RELIANCE

If a positive representation can be shown, the contractor must then convince the court that he was justified in relying on that representation when preparing his bid. Deciding when a bidder is justified in relying on a representation in the contract is difficult. The language in the contract is of paramount importance to the decision. The court, in *Wunderlich*, specifically addressed the issue of "justified reliance":

Although there is some evidence that plaintiffs "relied" on the alleged representations as to the character of the [hillside], the question is whether, under the circumstances of the indefinite nature of the statements...the bidder could justifiably rely on the statements. It does not appear that plaintiffs could have done so, and the state is not responsible for the subjective interpretation placed upon the information by bidders.¹⁵

Here, the court pointed to the "indefinite nature" of the statements made in the memo as being sufficient to preclude reliance on them. In the memo, the state provided

Wunderlich conclusions, not facts. The factual information was the soil report. Because the soil report was made available to bidders, they were not justified in relying on the state's conclusions. They were obligated to draw their own. Presumably, if the state had provided the memo without the backup data, Wunderlich would have been justified in relying on the state's conclusions as factual.

The case of *Hollerbach v. United States* (233 U.S. 165) also addressed the issue of "justified reliance." The government contracted with Hollerbach for repairs to an earth dam. The repairs required the existing backing material to be removed and replaced. The contract documents told bidders that the dam was backed with broken stone, sawdust and sediment. During construction, Hollerbach discovered that the dam was actually backed entirely with soft, slushy sediment which made its excavation and removal costlier.

Hollerbach sued for his increased costs on the basis that the contract stated specifically what the dam was backed with; that this statement was factual and constituted a positive representation of the type of material to be removed; and that, because it was factual, he was justified

in relying on it in estimating the cost of the work. The court agreed with Hollerbach:

If the government wished to leave the matter open to the independent investigation of the claimants, it might easily have omitted the specification as to the character of the filling back of the dam. In its positive assertion of the nature of this much of the work it made a representation upon which the claimants had a right to rely without an investigation to prove its falsity.¹⁶

The courts have held repeatedly that bidders are justified in relying on all factual information presented by the contract documents. As was seen in *Wunderlich*, this rule is not extended to conclusions drawn by owners from data that is also made available to bidders. Bidders are required to draw their own conclusions.

Allowing bidders to rely on factual information has placed a burden on owners to insure the accuracy of the facts presented in their contracts. In an attempt to avoid this burden, owners have resorted to using exculpatory language in their contracts to disclaim liability for the facts presented.

Exculpatory Language

Exculpatory language warns bidders not to rely on the site information provided by the owner. An owner obtains

site information for design purposes, not for the purpose of estimating construction costs. Consequently, site information obtained by the owner may be adequate to design the project but inadequate to estimate construction costs. Because they do not want to be liable for construction cost overruns resulting from a bidder's reliance on design data, many owners include language in their contracts that disavows liability for the site information provided.

The court, in *Robert E. McKee, Inc. v. City of Atlanta* (414 F.Supp. 957), best summarized the effect of exculpatory clauses on misrepresentation claims:

State courts...have imposed two implied conditions on a claim for recovery for misinformation. The first requirement is that the bidder is not reasonably able to discover the true facts for himself. ...Thus, the first question that must be asked in each contract case involving misrepresentation is whether the contractor could have discovered the true facts through reasonable investigation. In determining whether such investigation should have been done the court should consider the time constraints involved, the cost of the investigation in comparison to the total bid price, and the detailed nature of the government's data. If the court finds that it would be unrealistic to expect bidders to uncover the error on their own, then the exculpatory clauses should be given no effect.

The second condition placed on a claim for recovery for misrepresentation is the materiality of the misrepresentation itself. Recovery cannot be had for a contractor's own misjudgment based on information which itself is accurate. ...When the contractor has the actual, and accurate, statistics before him when he makes his bid, he

assumes the risk of any deviation in conditions from those indicated by the samples. In other words, if the government does not provide incorrect factual representations, the exculpatory clauses in the contract placing the burden of uncertainty on the contractor should be given full force and effect.¹⁷

Positive Versus Informational Representations

Courts distinguish between "positive representations" and "informational representations." A positive representation is presented as a fact on which a bidder is expected to base his bid. An informational representation is presented "gratuitously" and is intended only to assist a bidder in formulating his bid.

In general, exculpatory language will not prevail over positive representations, but will prevail over informational representations. The case of *Sasso v. New Jersey* (414 A.2d 603) illustrates the judicial attitude toward exculpatory language and "informational representations."

The case resulted from a road construction contract in New Jersey. The contractor contended that he based his bid on a cross-section in the plans showing the existing asphalt

to be 2" thick. The actual thickness of the pavement averaged 3.5". The state claimed that the cross-section used by Sasso was included in the contract only to help visualize the existing construction and was not intended as an as-built depiction of the existing pavement. The state pointed to language in the specification requiring bidders to make their own investigations of the subsurface conditions and disclaiming any responsibility for subsurface information that bidders might obtain from the owner.

The trial court found that the cross-section constituted a positive representation and would not allow the exculpatory clause to prevail. This decision was reversed by the appeals court:

While we might agree with the trial judge that "general exculpatory clauses" will not relieve the State from responsibility for its express representation, it is otherwise where the relevant language of the contract is so straightforward, unambiguous and categorical as this is in placing responsibility for subsurface investigations on the contractor. ...The exculpatory provisions focus directly on subsurface conditions and require the bidder to make its own investigations. ...Under the terms of this contract, the State's representations are merely gratuitous and if plaintiff chose to rely on this information it acted at its peril. To conclude otherwise would virtually insure the profitability of speculative bidding.¹⁸

Site Inspection Clauses

Owners often rely on a site inspection clause to try to deny liability for the site information they provide bidders. A typical site inspection clause requires bidders to visit the site and become familiar with the local conditions before submitting a bid. The case of *Pinkerton and Laws Co., Inc. v. Roadway Express, Inc.* (650 F.Supp. 1151) addresses the role of a site inspection clause in differing site conditions disputes.

The contract was for the construction of a freight terminal. The plans included soil borings and a site visitation clause that required each bidder to make a site inspection before submitting the bid. P&L did make a site visit.

The specifications required compaction to 95% Modified Proctor but contained no information on the natural moisture content of the existing soil. P&L assumed that the existing soil could be compacted to meet the specification requirements and based his bid on this assumption. After award, P&L discovered that the existing soil could not be compacted to 95% Modified Proctor without being dried first. P&L dried and used the existing soil, but this unanticipated

work caused actual costs to exceed bid costs. P&L sued to recover the additional costs.

The court found that P&L was not entitled, under the contract, to recover these costs. The court pointed to the site inspection clause:

Such site inspection clauses impose upon contractors--particularly experienced ones like P&L--a duty to exercise professional skill in inspecting the site and estimating the cost of the work. ...When the contract contains no changed conditions clause and imposes a site inspection requirement on the contract, the risk of uncertainty of subsurface conditions is placed on the contractor.¹⁹

The court went on to say that this pronouncement could be avoided if the contractor could show that the plans and specifications were implied warranted. In this case, the court did not find an implied warranty:

The court can find no positive assertion or representation by Roadway regarding soil conditions that allegedly proved to be incorrect. Indeed, the contract contains no express representations regarding the presence or absence of excess moisture or poor drainage. ...Roadway made no representation that these boring logs provided all information needed by bidders when estimating the cost of excavation and compaction, or even that the logs were correct. Instead, the contract documents directed the contractor to examine the site to ascertain the conditions therein.²⁰

If a contract is silent as to a particular condition, it is impossible to recover additional costs by claiming

"implied warranty" of the plans and specs. To convince a court that contract representations are impliedly warranted, a contractor must first show that there is a representation in the contract. Since P&L's contract made no representation regarding the natural moisture content of the existing soil, the court found that P&L had no recourse from within the contract to recover his additional costs.

Information Provided Outside the Contract

Courts often find that soil borings constitute a positive representation and are, therefore, impliedly warranted. In response many owners purposely to exclude soil borings and other site information from the contract. Still, owners are required to reveal all information in their possession that is relevant to bidding the work. Consequently, owners who do purposely exclude site information from their contracts, often provide the information to bidders outside the contract, usually with a disclaimer for its accuracy.

The courts distinguish between information made available in the contract and information made available

outside the contract. In *A. Teichert & Son, Inc. v. State of California* (48 Cal.Rptr. 225), the court observed:

If the contracting agency furnishes inaccurate project information, such as soil reports, as a basis for bids, it may be liable for damages on a breach of warranty theory. ...If the agency makes geological data available under a disclaimer of responsibility, the contractor bears any loss occasioned by unexpected conditions. ...The contracting agency's disclaimer does not protect it from liability for deliberate misrepresentation or concealment.²¹

In the case of *S&M Constructors, Inc. v. City of Columbus* (434 N.E.2d 1349), the city excluded soil survey information from the contract but made it available to bidders upon written request. The bid documents contained the following disclaimer:

Test borings have been made at several locations along the line of the work involved under the Contract. Copies of the soil report...are available on request. ...Said borings, test excavations and other subsurface investigations, if any, are incomplete, are not a part of the contract documents, and are not warranted to show the actual subsurface conditions.²²

S&M obtained a copy of the soil report and based his excavation bid on that information. S&M encountered subsurface conditions that were not indicated in the soil report and which made excavation more costly than anticipated. S&M sued to recover the additional excavation costs.

Relying on both *Elkan* and *Wunderlich*, the court ruled that the soil reports that the city provided upon request "did not misrepresent the conditions. They were accurate as far as they went." In the absence of fraud or bad faith, the court ruled that the exculpatory language could prevail. It was clear and unambiguous, and therefore, enforceable. S&M could not recover his additional costs.

Another court reached a similar conclusion with similar facts. The case of *Joseph F. Trionfo and Sons. v. Board of Education* (395 A.2d 1207) arose from a contract for the construction of a school. The contract contained the following paragraph:

Bidders shall make their own investigation of existing subsurface conditions; neither Owner or Architect will be responsible in any way for additional compensation for excavation work performed under the Contract due to Contractor's assumptions based on sub-soil data prepared solely for Architect's use.²³

The bid documents stated that a soil investigation had been performed, but no information from that investigation was included in the bid documents. The soil investigation was made available to bidders, but only upon a written request in the following form:

Please forward copies of test boring data sheets for the subject project. The contracting firm herein named releases the Owner and Architect from any responsibility or obligation as to its accuracy or completeness or for any additional

compensation for work performed under the contract due to assumptions based on use of such furnished information.²⁴

When Trionfo encountered a substantial quantity of rock, he sued to recover the additional costs. The court found that the combination of the exculpatory language and the written release made it clear that bidders were not justified in relying on the soil information provided.

As in any case based on a theory of misrepresentation, in order to recover, appellant must establish a right to rely on the information furnished by the owner. We hold as a matter of law that under the circumstances of this case no such reliance was warranted. ...To hold under these circumstances that appellant is entitled to recover would be to hold that the owner furnishing test results merely as an accommodation to bidders is an insurer of their accuracy and would require us to ignore the explicit language in the contract documents and in the release executed by appellant as a prerequisite to obtaining the test boring data.²⁵

Contractors are in a particularly difficult situation when soil information is made available to them only outside the contract. First, making information available outside the contract makes it easier for owners to disclaim liability for the information. Second, if a bidder is made aware that additional site information exists, he will be held responsible for that additional information even if he does not examine it. A bidder cannot ignore site information he knows exists outside the contract.

Bidder's Obligation to Review All Information

The case of *Flippin Materials Co. v. United States* (312 F.2d 408) addressed the issue of a bidder's obligation to review information provided outside the contract. Flippin contracted to provide aggregate material to the government for use on a concurrent project. The government provided Flippin the site from which the material was to be excavated. The bid documents included soil borings and made bidders aware that the complete soil report was available at the government's field office. Flippin did not obtain the complete soil report but based his bid exclusively on the information contained in the bid documents.

During excavation, Flippin discovered cavities in the source material that contained clay deposits. The borings in the contract documents did not show the existence of clay in the rock cavities, but the field logs, which Flippin failed to examine, did. The presence of clay made the excavation and crushing process more expensive. Flippin sued for his additional costs.

Relying on *Hollerbach*, Flippin claimed that the borings shown in the plans constituted a positive representation of

the subsurface condition, and that he was not responsible for researching the accuracy of a positive representation.

The court agreed that a contractor can rely on positive representations made in the contract documents without researching their accuracy, but ruled that Flippin could not ignore the subsurface information in the complete soil report that he was made aware of by the contract:

The cases do not hold that a bidder can rely on some portion of the information supplied by the Government without looking at other Government materials (to which he is directed by the contract documents themselves) which qualify, expand, or explain the particular segment of information on which the contractor intends to rely.

...The fair residue of the opinions is that a contractor cannot call himself misled unless he has consulted the relevant Government information to which he is directed by the contract, specifications, and invitation to bid. As we read them, the decisions of the Supreme Court and of this court do not permit the contractor to rest content with the materials physically furnished to him; he must also refer to other materials which are available and about which he is told by the contract documents.²⁶

Proof of Damages

A contractor who has successfully proven that his contract contained a positive representation on which he was

justified in relying must then show that he was damaged and quantify the damages. This entails proving that:

1. He did rely on the positive representation when formulating his bid and was misled by the erroneous representation in the contract.
2. The condition encountered differed from the positive representation in the contract.
3. The differing conditions resulted in damages that can be reasonably determined.

Actual reliance is often based on an examination of actual bid sheets and other records. Expert testimony can be used to convince a court that the actual site conditions differed from the conditions represented by contract.

Proving damages consists of showing the court how much additional money was spent performing the work as a result of the misrepresentation. Accounting documents are often used. A thorough discussion of proof of damages is outside the scope of this paper, but many legal articles and books address the subject.

Summary

The assertion made by a contractor under a theory of implied warranty is that information presented to him by the owner was wrong. To recover under the theory of implied warranty, a contractor must convince a court that:

1. The contract contained a positive representation of the existing site condition.
2. The contractor was justified in relying on the positive representation made in the contract.
3. The contractor based his bid on the contract's positive representation.
4. The contractor was misled by the contract's positive representation.
5. The contractor was damaged by the misrepresentation.

Synopses of Implied Warranty Claims

Figure 2 shows a flowchart of the recovery process for a DSC claim based on unintentional misrepresentation. It can be used to quickly assess the chances of recovery on any

claim (concealment or implied warranty) being pursued under the theory of unintentional misrepresentation. Included below are synopses of DSC claims pursued under a theory of unintentional representation. The issues presented in these cases, along with the discussion in the first three chapters of this report, will help create an understanding of when the courts will allow recovery.

In *Cruz Construction v. Lancaster Area Sewer Authority* (439 F.Supp. 1202), a sewer contractor encountered rock at a higher elevation than the borings showed. While the contract estimated 8050 cy of rock would have to be removed, Cruz actually removed over 27,000 cy. Cruz sought an increase to his unit price because of the significantly larger volume of rock. The court ruled that Cruz was not justified in relying on the borings because of exculpatory language that disclaimed their accuracy.

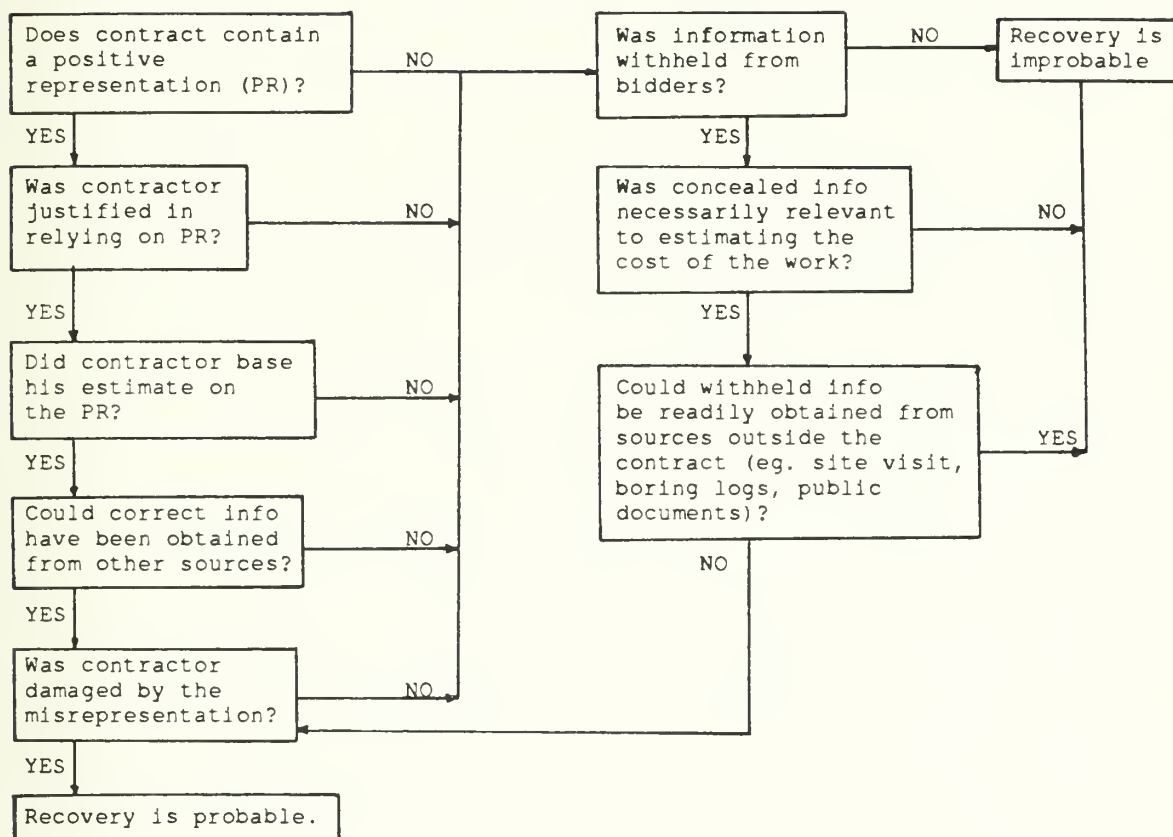


Figure 2: Unintentional Misrepresentation Flowchart

In *Acchione and Canuso v. Commonwealth of PA. Dept of Transportation* (461 A.2nd 765), the contractor's take-off of linear feet of trenching on a highway improvement project was significantly higher than the trenching estimate given in the contract. The contractor called the designer who told him to assume that 50% of the existing utilities were in conduits that could be reused and would not require retrenching. Acchione and Canuso accepted this information and used it in formulating their bid. During construction, they found that most of the existing conduit could not be reused, and they were forced to do more trenching than they bid on. The court ruled in favor of the contractor claiming that the information provided by the designer was "uniquely in the purview of the owner," so the contractor was justified in his reliance on it.

In *Morrison-Knudsen v. State of Alaska* (519 P.2nd 834), the state provided sites from which construction materials could be dredged to use in the construction of an airport. One bidder visited the potential dredge site and concluded that it would not produce enough suitable material. The

bidder informed the state of his conclusion. The contract was awarded to another bidder, Morrison-Knudsen. During construction, M-K could not get enough material from the dredge site. When they found out that the other bidder had warned the state of this prior to bid opening, M-K sued, claiming that the state had an obligation to reveal this information to all bidders. The court ruled in favor of the state since the information was only the opinion of a bidder and was not information that was acquired with special technical assistance supplied by the state.

In *United States v. Gibbons* (109 U.S. 200), the contractor was to rebuild a facility destroyed by fire. A portion of the foundation of the destroyed building remained and was to be built upon on this contract. Gibbons visited the site prior to bid to see how much of the old foundation remained and to determine the scope of new work. During construction the owner discovered that not all of the foundation that remained was stable and directed Gibbons to remove more of the old foundation. Gibbons sued for the added costs of rebuilding more of the foundation than he

anticipated. The court ruled in favor of Gibbons claiming that the portion of the foundation that existed at the time Gibbons made his site visit was a positive representation of the existing site condition on which Gibbons was justified in relying.

Foundation Co. v. State of New York (135 N.E.236) involved a contract for the construction of a dam. The dam was to have a caisson foundation, and the caissons were shown in the contract to rest on bedrock. Borings were made, but they were not a part of the contract. There was no indication anywhere in the contract of the elevation of bedrock at the site. Foundation asked to review the state's borings which showed bedrock no lower than elevation 148. During construction, Foundation had to drill several caissons significantly lower than elevation 148 before it encountered bedrock. Foundation sued for these additional costs. The court ruled in favor of the state claiming that borings provided outside a contract are not impliedly warranted, and any assumptions made from this information was made at Foundation's risk.

In *George F. Pawling Co. v. United States* (62 Ct.Cl. 128) the contractor incurred additional costs as a result of blowouts in his cofferdam. The contract contained no soil borings but did require bidders to make a site visit and discover the nature of the existing conditions for themselves. The court concluded that the blowouts were the result of the nature of the soil under the cofferdam. Since the contract made no representation of this soil, the owner did not misrepresent it. The court ruled in favor of the owner.

In *Mandel v. United States* (424 F.2nd 1252), the contractor encountered water at less than three feet below grade. The borings included in the contract showed that water was no higher than eight feet below grade. The higher water table caused Mandel additional drainage costs. The court found that the government concealed no information. It had no knowledge that the water table would be found higher than eight feet below grade. The court also ruled

that the contract did not warrant, either impliedly or expressly, that water would not be found higher than eight feet below grade; it merely represented what was found in the boring operation. The court ruled in favor of the government.

In *Cook v. Oklahoma Board of Public Affairs* (736 P.2d 140), the court was asked to rule between an owner's concealment and a contractor's inadequate site inspection. The contract for renovations to a fish hatchery included 50 soil borings. None of the borings showed the presence of water despite an engineering report in the owner's possession showing an underground aquifer running through the project site. Contractors were required to make a site visit; Cook did not. Cook based his bid on the borings, and when he encountered water in his excavations, sued to recover his additional costs. Evidence showed that even a cursory pre-bid site investigation would have revealed mud and surface water on the site. The court ruled that the aquifer's presence was not truly concealed since its presence could be surmised from a site visit. Cook was not allowed to recover.

CHAPTER 6

DIFFERING SITE CONDITIONS CLAUSES

The current federal DSC clause and the current AIA and EJCDC clauses all recognize as compensable, two types of differing site conditions. Type I is defined in the federal clause as "subsurface or latent physical conditions at the site which differ materially from those indicated" in the contract. Type II differing site conditions are defined as "unknown physical conditions at the site, of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inhering in work of the character provided for in the contract."

DSC Claims Distinguished from Misrepresentation Claims

As shown in Figure 1, a contract containing a DSC clause gives a contractor an alternative to a

misrepresentation claim to recover unexpected costs resulting from differing site conditions. A DSC clause gives a contractor access through the contract to recover additional costs when differing site conditions are encountered. The clause does not guarantee the accuracy of the information presented in the contract documents, but it does promise that a contractor will receive an equitable adjustment if one is warranted.

With a DSC clause, a contractor does not have to prove that the owner misrepresented the existing site conditions. He only needs to show that the conditions encountered were different from what he expected.

The courts have been quick to distinguish between claims based on misrepresentation and claims based on the DSC clause:

In misrepresentation, the wrong consists of misleading the contractor by a knowingly or negligently untrue representation of fact or a failure to disclose where a duty requires disclosure. ...The claim based upon the modern changed conditions clause is very much different, though it may arise from the same facts and be joined with a claim for misrepresentation.

Misrepresentation is not the issue. ...A finding that the contractor was actively "misled," in the sense that the Government "withheld" or "concealed" information within its grasp, is not essential to proof of a changed condition. ...Fault on the part of the Government is not a necessary element. ...A changed conditions claim, so far as the contract is concerned, is entirely

dependent on what is "indicated" in the contents of the contract documents. ...The causes of an erroneous indication in the contract--whether simple error, negligence or other--are no longer important. An "indication" may be proven, moreover, by inferences and implications which need not meet the test for a "misrepresentation."

...The changed conditions clause eliminates the factual elements of misrepresentation and any need to impose a burden on plaintiff to prove those elements.²⁷

Because it offers advantages to both owners and contractors, the DSC clause has been heralded as an important advance in construction contracting. But despite its advantages and the quickness with which it was accepted by the industry, the DSC clause has not eliminated changed conditions disputes.

Type I Disputes

To recover for a Type I condition, a contractor must show that what was encountered differed materially from what the contract indicated. Type I claims usually deal with the subsurface soil condition. Consequently, the most common Type I dispute is over what the contract "indicates" the subsurface condition to be like.

The court must form its own opinion of what the contract indicates. "The most reliable and most specific indicator"²⁸ of the subsurface condition is the soil borings. Court decisions on DSC clause disputes inevitably turn on the court's interpretation of the borings.

In *Ragonese v. United States* (120 F.Supp. 768), the contractor was impacted by an extensive amount of water entering his sewer pipe trenches. Although the contract contained soil borings, none of the borings showed that water was encountered during drilling. Ragonese bid the job as if groundwater would not be encountered. When groundwater impacted the excavation, Ragonese sought an equitable adjustment to its contract under the differing site conditions clause. Ragonese claimed that by not showing the presence of water in the borings, the government had represented that groundwater intrusion would not be a problem during construction, and the presence of groundwater, therefore, constituted a Type I differing site condition. The court rejected Ragonese's contention:

The plans and specifications set out the character of the soil disclosed by these borings, but said nothing one way or the other about subsurface water. It, therefore, cannot be said that the contractor encountered subsurface or latent conditions materially differing from those specifically shown on the drawings or indicated in the specifications.²⁹

To recover for a Type I differing site condition, a contractor must first show that there was an indication in the contract from which the actual condition differed. If a contract is silent as to any aspect of the existing site conditions, there can be nothing shown on the drawings or indicated in the specifications from which the actual conditions can materially differ.

This legal theory is sound and has been upheld in many subsequent decisions, but the *Ragonese* court's reasoning with regard to the specific dispute may now be obsolete. In a later case, *Woodcrest v. United States* (408 F.2d 406), the court ruled that the absence of a groundwater indication from the borings did indicate that groundwater would not be encountered.

The job was for renovations to a building on a Air Force base. The contract contained soil borings, but the borings showed no groundwater. Woodcrest encountered groundwater in his excavations and was forced to perform extensive dewatering. He sued to recover the additional costs, claiming that this was a Type I DSC. The government argued that this situation could not be considered a Type I DSC since there was no groundwater indication in the

contract from which the actual condition could differ. The court ruled in favor of Woodcrest:

Although no actual representation was made by the Government that there was no ground water, and thus, we cannot say that there was a warranty, the effect upon the contractor of furnishing core boring logs without indicating the ground water shown by such borings may be the same as if a representation had been made. ...The logs furnished the bidder showed no subsurface water, and a contractor's assumption that therefore there was no subsurface water is only one step removed from an actual representation by the Government to that effect. ...There was in effect a description of the site, upon which plaintiff had a right to rely, and by which it was misled.³⁰

This court's ruling probably reflects more modern practices of geotechnical engineering. By not indicating groundwater in the borings, the engineer is making an affirmative indication that groundwater was not encountered. The *Woodcrest* ruling may also reflect a more current judicial attitude toward finding an affirmative indication in the contract. Modern courts do not want to rule against a contractor simply because an affirmative indication can't be found. *United Contractors v. United States* (368 F.2d 585) illustrates this point.

This contract was for the installation of underground utility vaults (utilidors) on an Air Force base. During construction, United was impacted by groundwater in his trenches. The court agreed that the plans given to United

said nothing about water, but found, in other documents given bidders outside the contract, an affirmative indication that ground water did not exist.

The court looked at several sheets of drawings given to bidders that showed existing utilidors on the base. These drawings clearly indicated that the work shown was not a part of United's contract, but they included borings relevant to the construction of the existing utilidors. Although most of these borings showed no groundwater encountered, "a couple indicated water at depths to which United had to dig." On this basis, the court concluded:

United could reasonably look at all the borings furnished by the Government, including those outside its particular project; and the import of the borings was that undue amounts of water would not be met in excavation.³¹

The court ruled that the presence of groundwater in United's utilidor trenches did constitute a Type I differing site condition despite the absence of groundwater information from the borings relevant to his work, despite a statement in the specifications cautioning that "a condition of high ground water exists in this [work] area," and despite the fact that ponds and water ditches were shown in the drawings. Addressing these last two conditions of the contract, the court said:

These two warnings, vaguely suggesting the presence of water, were not adequate to impel plaintiff to anticipate the particular difficulty it had. Their low-key message was muffled by the specific information on subsurface water furnished by the profile drawings. ...The significance of the high ground water warning is not enlarged upon in the evidence. ...To us it appears to be an indefinite caveat without precise content.³²

Based on *Ragonese*, if a contract is truly silent on what will be encountered, a Type I differing site condition will not be recognized. But as shown in *United Contractors*, courts will look carefully at the entire contract (not just the borings) and any other information that may have been provided before concluding that the contract is silent as to any aspect of the existing conditions.

The practice of looking beyond the borings to the intent of the contract as a whole can work to the owner's advantage as well. In *Morrison-Knudsen v. United States* (345 F.2d 535) the contractor encountered permafrost in two excavations where the soil borings showed none existed. The permafrost had to be blasted to be removed. The contractor sued for the additional costs.

The court noted the encounter of permafrost at two locations where the borings showed none, but went on to look at the other borings in the contract. Of the thirteen

borings contained in the plans, seven showed permafrost.

The court concluded:

These data furnished by the defendant to the plaintiff in connection with the bid papers were clearly sufficient to indicate to a reasonably prudent bidder that permafrost was widespread in the area...and might well be encountered in performing the excavation work at the two sites, even though the information which the defendant furnished as to holes 260 and 261 incorrectly showed an absence of permafrost at the particular points where those holes were drilled.³³

Based on other evidence, the court determined that soil borings with regard to permafrost were accurate only within a 10-foot radius of the hole. The court awarded the contractor only the cost of blasting the permafrost encountered within a 10-foot radius of each of the two misleading borings.

In *Morrison-Knudsen*, the court applied a test of "prudence" to its interpretation of the information in the contract. The court asked itself: How would a reasonably prudent contractor interpret the information in the contract? Here, the court determined that such a contractor would have known that he would encounter permafrost throughout the site based on the information in the contract. As a result, *Morrison-Knudsen's* award was significantly reduced.

In *Leal v. United States* (276 F.2d 378), the contractor was not allowed to recover because the court determined that his interpretation of the information contained in the contract was not prudent. The contract was for the construction of a diversion channel and dam embankment on the Caney River in northeast Oklahoma. The contract contained 35 soil borings. Eleven of them showed the letters "WT" at approximately elevation 689. There was no indication in the contract of the meaning of the letters "WT."

During construction, Leal encountered groundwater at a depth of 690 feet. Leal, contending that there was no indication in the contract that groundwater would be encountered, sued to recover his additional costs pursuant to the differing site conditions clause.

The government argued that the letters "WT" indicated "water table," that this abbreviation is common in soil boring logs, and that a reasonably prudent contractor would understand it as such. The court agreed with the government.

The facts...cause us to conclude that [Leal] simply miscalculated and did not heed the warning signs in the specifications and drawings furnished, which information was sufficient to inform an experienced contractor that water would

be encountered. Therefore, it cannot be said that he encountered changed conditions which were compensable...³⁴

Of course, Type I differing site conditions do not have to involve the subsoil. The case of *P. J. Maffei Bldg. Wrecking v. United States* (732 F.2d 913) illustrates this point. Here, the contract was for the demolition and removal of a government-owned pavilion. The building had a structural steel frame, but the contract gave no indication of the amount of steel in the building.

The contract stated that all demolished steel would become the property of the contractor and that bidders should reduce their bids by their estimates of the salvage value of the steel. The quantity of salvageable steel was to be based on visual information obtained from a site visit.

The Invitation for Bids (IFB) stated that as-built drawings of the existing structure might be obtained from the New York Department of Parks, but they also stated explicitly that the Parks Department drawings were not a part of the contract.

Maffei examined the as-built drawings in the offices of the Parks Department and based his estimate of the salvage value of the steel on those drawings. However, Maffei

recovered 20% less steel than estimated, and so sued to recoup the value of the steel not recovered. Maffei claimed that the shortage of steel constituted a Type I differing site condition.

The government argued that the Parks Department drawings were explicitly excluded from Maffei's contract, and that Maffei was not justified in relying on them. The court agreed with the government:

In this case, we cannot accept the view that the Government's reference, in the IFB to structural drawings available from the New York City Parks Department amounted to an "indication," representation, or undertaking by the Government that the dimensions of the steel in the Pavilion were accurately or reliably depicted by the drawings. While it is true that a contract "indication" need not be explicit or specific, the contract documents must still provide sufficient grounds to justify a bidder's expectation of latent conditions materially different from those actually encountered. ...IFB provision 1.2 can be interpreted only as an effort by the Government to direct prospective contractors to information which might prove helpful in formulating their bids, but not as proffering any specific information bearing directly on the steel conditions to be found.³⁵

The court found no indication in the contract of the amount of steel to be recovered. The reference to the Parks Department drawings did not constitute an indication in the contract of the amount of steel to be recovered, since these drawings were explicitly excluded from the contract.

Because the contract contained no indication of the amount of steel to be recovered, Maffei could not claim that the amount of steel recovered differed materially from an indication in the contract.

Type II Disputes

For a contractor to recover for a Type II condition, he must show that he encountered "unknown conditions of an unusual nature differing materially from those ordinarily encountered and generally recognized as inhering in work of the character provided for in the contract." The following cases illustrate Type II conditions.

In *Western Well Drilling v. United States* (96 F.Supp. 377), the court clarified the intent of the DSC clause with respect to a Type II differing site condition:

The term "unusual" does not refer to a geological freak but rather a condition which would not be anticipated by the parties to the contract in entering into their initial agreement.

In general, if a court discovers that neither side in the dispute expected to encounter the conditions that were encountered, the court will likely find that a Type II differing site condition existed.

The contractor in *Loftis v. United States* (76 F.Supp. 816) was successful in convincing a court that he had encountered a Type II condition. The contract was for the extension of runways at a military airfield. There were no soil borings included in the contract, but the contract did require bidders to visit the site prior to submitting a bid.

Loftis visited the site, made a thorough investigation, and concluded that there were no unusual conditions that would impact the cost of the work.

During construction, Loftis encountered unstable subsurface conditions on a portion of the site that required extensive excavation and fill. During the fill operation, water migrated to the surface, and eventually, the area would not support Loftis' earth moving and compaction equipment. The government required that the entire area be mucked out and replaced with acceptable fill. Loftis complied with the government's order, but by the time the work was completed, Loftis had handled 24 times more fill material than he had anticipated.

Loftis sued to recover his additional costs claiming that the unstable subsurface conditions could not have been

anticipated from the information in the contract or from a site visit.

The court agreed that this was a Type II differing site condition. The court relied on the fact that Loftis was an experienced contractor, and that his engineer, who made the site visit and concluded that unusual conditions would not be encountered, had 22 years of experience in heavy construction. The court found that the engineer's conclusion that no unusual conditions would be encountered was reasonable:

The investigations made by plaintiff were as thorough and complete as was possible under the circumstances, and the conclusions reached by plaintiff are shown by the facts established by the record to have been justified and entirely reasonable from the standpoint of good engineering practice and proper construction procedure in connection with embankment fill construction.³⁶

To convince a court that he encountered a Type II condition, a contractor must show:

1. That he did everything he could reasonably be expected to do to ascertain the nature of the existing site conditions. This includes making a site visit and reviewing all information included with or referred to in the contract.
2. That he concluded from all the information made available that unusual conditions would not be

encountered, and that this conclusion was prudently reached by experienced and competent people.

3. That he based his bid on these conclusions.
4. That he encountered conditions that he did not anticipate in his bid.
5. That he was damaged by the actual conditions encountered.

In *Phillips v. United States* (394 F.2d 834) the court ruled that an inadequate design of a storm drainage system constituted a Type II differing site condition. The contract was for a multi-unit housing project at an Air Force base. During construction, Phillips encountered some of the heaviest rainfall ever recorded in the area. The rain turned the site into a quagmire, caused Phillips' work to be delayed, and increased the cost of performance.

Phillips acknowledged that the contract assigned the risk of delays caused by weather to him, but he claimed that the site problems caused by the weather were compounded by an inadequate storm drainage system that was designed by the government.

Witnesses for both sides agreed that large areas of the site became flooded when it rained and remained that way for long periods after the rain stopped. In reviewing the

drawings, the ASBCA concluded that "there was nothing to put a bidder on notice that drainage of the area might become a major problem or that the specified drainage system might prove to be inadequate."³⁷

The government argued that the site inspection clause required bidders to become familiar with the existing conditions, so Phillips was not entitled to recover for the unusual site drainage conditions. The ASBCA rejected this argument saying:

The evidence is clear that nine people visited the site who gave information to the appellant before its bid was submitted. The soil had good bearing qualities. Two places were wet but the reports were that they could be drained effectively. The Board considers that the appellant could rely on the implied warranty that the drainage prescribed by the Government would be effective. ...The Board has no difficulty in determining that the drainage system prescribed in the drawings was inadequate during the construction period causing large areas of the site...to be flooded numerous times during rains and causing the flooded ground to be saturated for prolonged periods. The fact that about half the site would be flood area was an unknown physical condition on the site.³⁸

Here, as in the *Loftis* case, the board looked at all the information available to the contractor at bid time and applied the test of "prudence." From the testimony of witnesses on both sides, and from its own review of the plans and specifications, the board determined that a prudent bidder could not have anticipated the drainage

problems that were encountered. Consequently, the court ruled that this was a Type II condition, and Phillips was allowed to recover his additional costs.

Exculpatory Language

Owners often rely on exculpatory language to avoid liability for the accuracy of the site information they provide in their contracts. If the contract contains a DSC clause, exculpatory language is rarely successful. In general, the courts regard exculpatory language as contradictory to the intent of the differing site conditions clause.

Exculpatory Language Not Allowed to Prevail

The case of *Foster Construction C.A. and Williams Brothers Company v. United States*, (435 F.2d 873) is instructional. This contract was for the construction of a bridge in a remote part of Central America. The contract contained soil borings but also included an exculpatory note

which read: "Drill Hole Data shown for information only. The Bureau of Public Roads does not assume responsibility for the accuracy of the data."

Foster encountered substantially different subsurface material than the borings indicated which increased the cost of performing the work. He sued the government to recover his additional costs pursuant to the differing site conditions clause. The government relied on the exculpatory language as its defense, but the court would not allow the exculpatory language to prevail:

Even unmistakable contract language in which the Government seeks to disclaim responsibility for drill hole data does not lessen the right of reliance. The decisions reject, as in conflict with the changed conditions clause, a "standard mandatory clause of broad application," the variety of such disclaimers of responsibility-- that the logs are not guaranteed, not representations, that the bidder is urged to draw his own conclusions. ...Particular protection is given by the courts to the right of bidders to rely upon drill hole data in the contract, recognized to be the most reliable and the most specific indicator of subsurface conditions.³⁹

This decision is in marked contrast to the *Elkan v. Sebastian Bridge* case discussed earlier. Under similar conditions Elkan could not recover his additional costs when the subsurface material encountered was different from what the borings showed. The distinction between the two cases is the existence of the DSC clause. In *Elkan*, the court

ruled that the only obligation the government had with respect to the borings was to not misrepresent the facts.

The courts recognize that the intent of a DSC clause is to induce lower bids by promising to pay for additional construction costs incurred as a result of encountering unforeseen site conditions. To protect the intent of the DSC clause, the courts will allow it to prevail over broadly worded exculpatory language.

The court, in *Loftis v. United States* (cited earlier), addressed the issue of exculpatory language. The government argued that Loftis was not entitled to an equitable adjustment because of exculpatory language that required all excavation to be performed at the original contract price "even if the subsurface conditions encountered were unknown and unforeseeable." The court found little merit in this argument:

This argument of defendant might be justified if we could ignore the fact that the contract, and of necessity the specifications, also contained Article 4 (the DSC clause). The purpose of specifications and drawings is to supplement the formal contract by delineating the details of the work to be performed there under and not to void an express provision written into the contract.⁴⁰

Again in *United Contractors v. United States* (cited earlier), the government relied on the exculpatory language

in the contract as its defense. However, the decision was not influenced by the exculpatory language:

Broad exculpatory clauses cannot be given their full literal reach, and do not relieve the defendant of liability for changed conditions as the broad language thereof would seem to indicate. ...General portions of the specifications should not lightly be read to override the Changed Conditions clause. It takes clear and unambiguous language to do that, for the provision sought to be eliminated, or subordinated, is a standard mandatory clause of broad application.⁴¹

The court here makes a distinction between broadly and narrowly worded exculpatory language. Consistent with *Foster Construction*, the court did not allow the broadly worded exculpatory clause to prevail over the differing site conditions clause, but the court went on to imply that "clear and unambiguous language" may be allowed to prevail over the DSC clause.

Exculpatory Language Allowed to Prevail

The Engineering Board of Contract Appeals ruled in the case of *James McHugh Construction Company* (ENG BCA No. 4600, 82-1 BCA para. 15,682) that the exculpatory language used in the contract was sufficiently narrow and unambiguous.

The contract was for the construction of subway tunnels for the Washington Metropolitan Area Transit Authority (WMATA). The contract showed that the majority of the tunneling was to be through solid rock. Pre-bid soil reports from WMATA's designer and post-bid reports from WMATA's contract administrator all indicated to McHugh that the compressive strength of the rock, in which the tunnels were to be built, varied from 3,000 to 12,000 psi. McHugh relied on this information in sizing a tunnel boring machine and estimated that the boring machine could achieve a productivity rate of five feet per hour.

During construction, McHugh achieved a significantly lower rate of production with the machine. The lower productivity increased the cost of performance. Upon completion of the operation, McHugh conducted his own tests of the compressive strength of the rock and found that the average compressive strength was approximately twice that indicated in WMATA's pre- and post-bid soils reports. McHugh appealed to the Engineering Board of Contract Appeals to recover his additional expenses.

As a quasi-federal agency, WMATA used the standard federal DSC clause in the contract but modified the clause by adding the following paragraph:

(d) The provisions of this article shall not apply to the rock conditions encountered during the construction of this project. The provisions set forth in Special Provisions Article 2.11.2 "Data Relating to Rock Conditions" shall be applicable thereto.⁴²

The relevant portion of the Special Provisions article entitled "Data Relating to Rock Conditions" read:

(c) The provisions of Article 1.4, Differing Site Conditions, shall not apply to the rock encountered during construction of this project, including rock reinforcement and direct rock support, as herein set forth and specified elsewhere in the Technical Provisions.⁴³

WMATA relied on this exculpatory language in denying liability for any additional costs incurred as a result of the character of the rock. WMATA claimed that its exculpatory language was sufficiently narrow (it addressed only rock) and unambiguous (it left no doubt that rock was being omitted from coverage under the DSC clause) to be enforceable. The Board agreed:

Respondent [WMATA] drew up and offered to the bidding community a contract containing a conspicuous, material deviation from the standard federal form of construction contract. It is difficult to imagine how Respondent could more emphatically have disavowed any intention to relieve its future contractor of the risk of differing rock conditions. The exclusionary language is clearly set forth in the very clause [DSC clause] on which Appellant [McHugh] bases its claim of entitlement. ...It is obvious that WMATA, in planning the project, resolved to break away from federal precedent and make it unmistakably clear that the contractor rather than the owner must bear the risk of adverse subsurface rock

conditions. ...Here, there is no ambiguity or conflict; the disclaimer appears in both the DSC clause and the special provision. ...McHugh entered into the contract freely and voluntarily. When it did so, it accepted the rigorous conditions established by the contract documents. It thereby assumed a contingency of unpredictable proportions-one that WMATA itself was unwilling to risk."

It is important to note that this is a BCA decision and not a court's ruling. A court case dealing with a similar situation could not be found. In essence, though, the Board confirmed the ruling in *United Contractors* that unambiguous and narrowly defined exculpatory language will be allowed to prevail over a differing site conditions clause.

Other Factors Affecting Exculpatory Language

In determining if exculpatory language should be enforced, courts have also looked at the length of time available to bidders to conduct their own subsurface investigations prior to submitting bids. The case of *Al Johnson Construction Company v. Missouri Pacific Railroad Company*, (426 F.Supp. 639) addressed this issue.

The contract was for the construction of a bridge across the Arkansas River for the Missouri Pacific Railroad

Company (MOPAC). The contract contained a DSC clause and included borings taken from the river bed. The contract also contained the following language:

No representations or guarantees are made concerning the completeness of the boring data. Such data indicates an opinion as to materials encountered at the specification location of the respective borings and may not represent materials which will actually be encountered in performing the work.⁴⁵

During construction, Johnson encountered a rock ledge that was not shown in the borings. The ledge required a different and more costly method of cofferdam construction than was originally anticipated. Johnson claimed that the ledge constituted a differing site condition and sued to recover his additional costs. MOPAC relied on the exculpatory language.

During the trial, the court became convinced that MOPAC expected bidders to rely on the subsurface information provided in the contract. The court pointed to the short time (1 month) allowed for bid preparation as evidence that bidders were expected to rely on the information provided:

In view of the abnormal height of the river during the time of bidding and the relatively short time MOPAC allowed for the preparation of bids, it did not expect any of the bidders would make their own borings and subsurface survey.

It would have been virtually impossible for any bidder to make its own borings, analyze them, compute, prepare, and submit its bid in the time

allowed. Under such circumstances, the disclaimers could only be binding against the Contractor on variations in conditions that were of a minor or non-substantial nature and which a contractor could reasonably have been expected to foresee and allow for in the preparation of its bid.⁴⁶

If a court is convinced that an owner intended for bidders to rely on subsurface information presented in the contract, exculpatory language will not be enforced. A short period of time allowed to prepare bids indicates to most courts that the owner intended for bidders to rely on the subsurface information he provided.

Site Visitation Clauses

A form of exculpatory language relied on by owners to defend against contract price increases is the site visitation clause. A typical site visitation clause requires bidders to visit the site and become familiar with the local conditions prior to submitting a bid. In differing site conditions disputes, the courts treat this clause as they do exculpatory language. They will not allow broadly worded site visitation clauses to nullify the intent of the DSC clause.

The court, in *Foster Construction*, addressed the issue of site visitation and the government's policy of including a DSC in its construction contracts:

Faithful execution of the policy requires that the promise in the changed conditions clause not be frustrated by an expansive concept of the duty of bidders to investigate the site. That duty, if not carefully limited, could force bidders to rely on their own investigations, lessen their reliance on logs in the contract and reintroduce the practice sought to be eradicated--the computation of bids on the basis of the bidders' own investigations, with contingency elements often substituting for investigation. ...Clause 2 [the site visitation clause] requires bidders only to ascertain such conditions as may be readily determined by inspection and inquiry, such as the location, accessibility and general character of the site. ...In the cases arising under the modern changed conditions clause, caution continues to be observed that the duty to make an inspection of the site does not negate the changed conditions clause by putting the contractor at peril to discover hidden subsurface conditions or those beyond the limits of an inspection appropriate to the time available. ...The contractor is unable to rely on contract indications of the subsurface only where relatively simple inquiries might have revealed contrary conditions.⁴⁷

There have been instances, however, when a contractor has been denied recovery on the basis of a site visitation clause. The case of *Walsh Bros. v. United States*, (69 F.Supp. 129), is an example. Here, the contract was for the construction of several temporary army barracks on bases in Maine and Massachusetts. Walsh encountered old foundations

below ground while excavating. The foundations required special machinery and additional labor to remove.

Since there was no reference to the foundations in the contract, Walsh claimed that they were a latent and unknown physical condition of the site, and as such, constituted a differing site condition. Walsh sued for his additional costs.

The government argued that the foundations were not a latent condition since parts of them were visible at the surface and would have put a prudent site visitor on notice of what would be encountered underground. The contract required bidders to make a site visit prior to submitting a bid, but, the government pointed out, Walsh never visited the site.

In view of these facts, Walsh was not allowed to recover. The site visitation clause will prevail only in instances where the condition giving rise to the dispute is readily observable from a site visit regardless of whether or not the condition is identified in the contract itself.

Proof of Damages

As in misrepresentation cases, once the technical aspects of the case are proved, the contractor still has the burden of proving damages. The contractor must show first that he was damaged by the differing site condition, and then be able to show, with reasonable certainty, the extent to which he was damaged. A thorough discussion of proof of damages is outside the scope of this paper, but a lot of legal literature addresses the subject.

Summary

A differing site conditions clause provides access through the contract to recover additional costs resulting from encountering the unknown. In general, courts have found that the clause is intended to compensate a contractor for encountering conditions that neither the contractor nor the owner anticipated would be encountered.

To recover for a Type I condition a contractor must show that the conditions encountered differed from the conditions indicated in the contract and that this

difference caused him damage. The courts have found that the soil borings are the most specific representation in the contract of the subsurface condition, but they will look at other parts of the contract before making a determination of what was indicated in the contract.

Recovery for a Type II condition requires evidence that the condition encountered could not have been anticipated. The courts usually apply the test of "prudence" to Type II disputes. A court will ask: What would a reasonably prudent contractor have assumed the existing condition to be like? If a reasonably prudent contractor would not have anticipated the condition encountered, the contractor will usually be allowed to recover. The experience and competence of the people in the contractor's organization that reach the conclusion that unusual conditions would not be encountered is the single most important determination made by the court in a Type II DSC decision.

Exculpatory language generally will not prevail over a differing site conditions clause. The courts recognize that the intent of a DSC clause is to induce lower bids by promising to pay for the unknown if it is encountered. The courts are reluctant to allow exculpatory language to nullify the intent of the differing site conditions clause

after the owner has benefitted from lower bid prices. Only exculpatory language that is unambiguous and which specifically addresses the situation in dispute will be allowed to prevail over a differing site conditions clause.

Synopses of DSC Claims

Figures 3 and 4 are flowcharts that can be used to quickly gauge the potential success of a claim pursued via a differing site conditions clause. Below are synopses of claims pursued via a differing site conditions clause. The issues addressed will help create a better understanding of the situations under which a court will allow recovery.

In *Kaiser Industries v. United States* (340 F.2nd 322), the government provided a quarry from which Kaiser was to procure construction materials. The quarry did not provide a sufficient quantity of material to complete the job. The government provided a second quarry which lasted until the end of the job. Kaiser claimed that he incurred additional

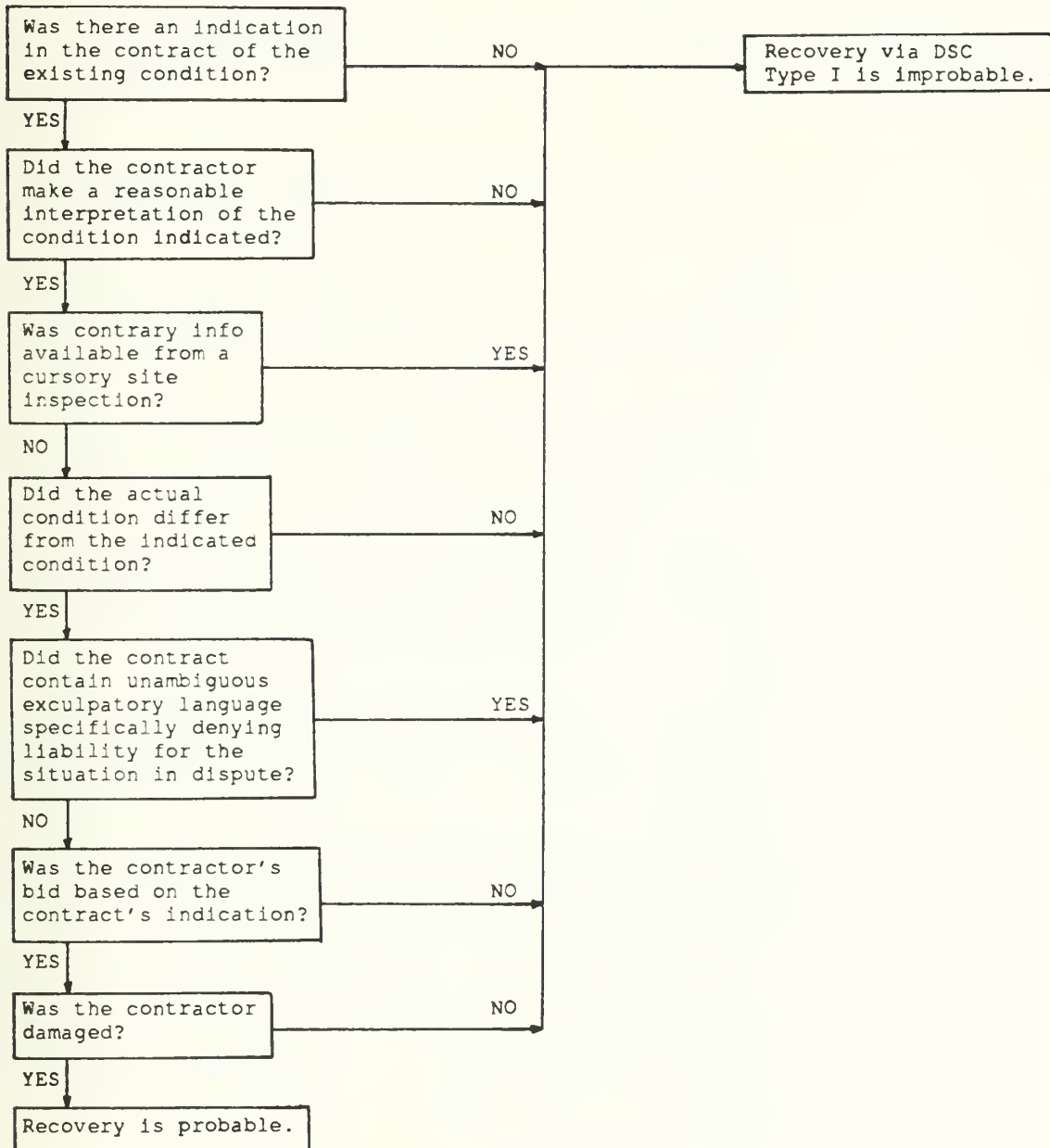


Figure 3: Type I Differing Site Conditions Flowchart

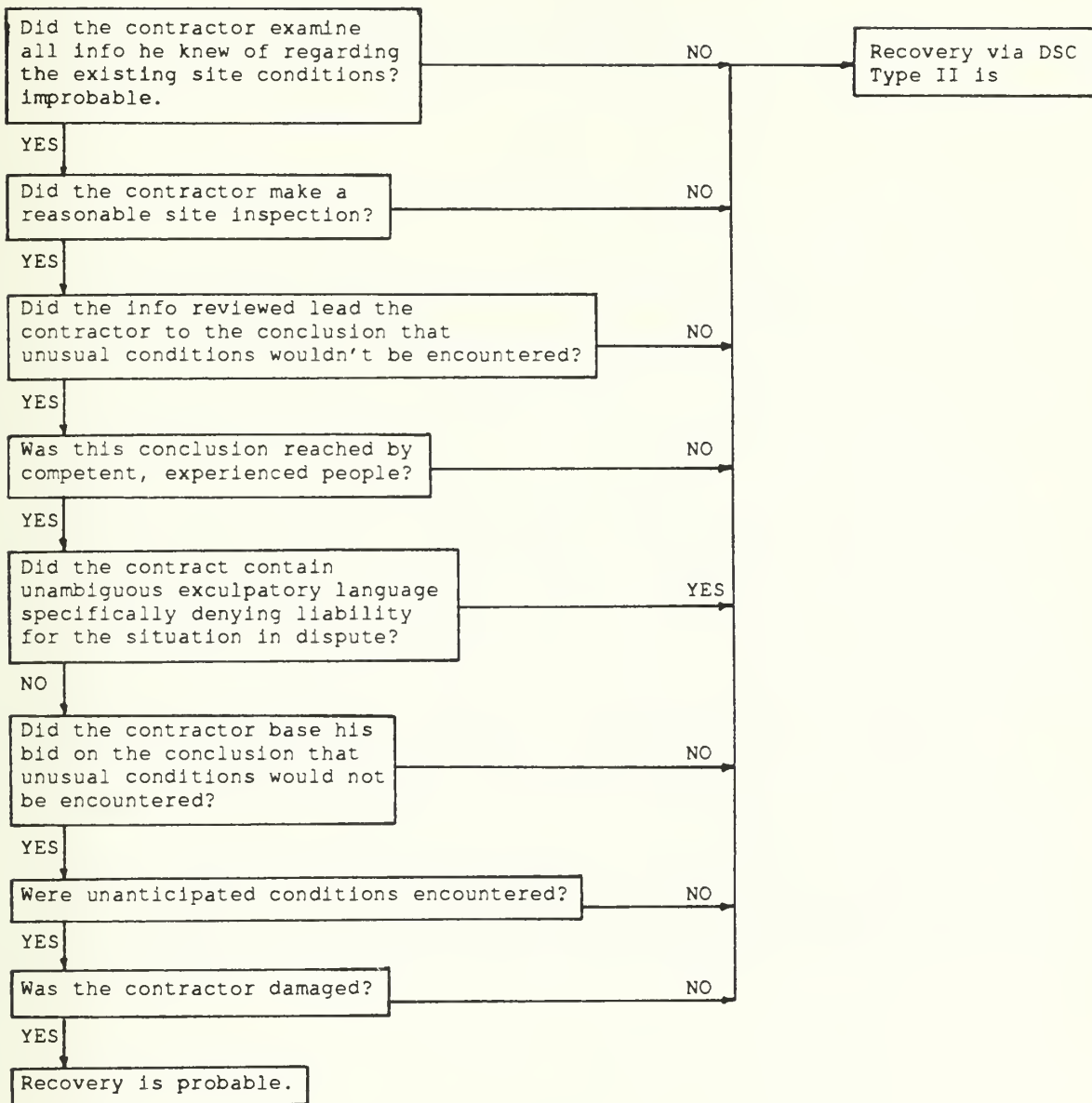


Figure 4: Type II Differing Site Conditions Flowchart

costs looking for materials in the first quarry that didn't exist. The court ruled that this was a Type I condition and awarded Kaiser the additional costs.

In *Blauner Construction v. United States* (94 Ct.Cl. 503) the government dug four test pits on the project site and required bidders to visit the site and make their own judgments of the subsurface conditions. The pits showed granite and irregular elevations within the site. Blauner did not visit the site but based his bid on the borings included in the plans that were made from the pits. Blauner encountered granite in several excavations at higher elevations than the pits and borings showed. The court ruled in favor of the government since the borings and pits both showed no definite elevation at which granite would be encountered.

With similar facts, the court, in *John K. Ruff v. United States* (96 Ct.Cl. 148), reached a different

conclusion. Here, only one pit was dug. It showed the presence of only sand and clay. The borings included in the contract stated that the nearest rock outcrop was two blocks west of the project site. The contractor encountered rock in his excavations. The court concluded that the purpose of the pit and borings was to impress upon bidders that rock would not be encountered. The court found in favor of Ruff.

In the case of *Arundel Corporation v. United States* (515 F.2nd 1116), the contractor claimed that it encountered substantially more rock in his dredging operations than the borings indicated. Arundel hired a local geologist to perform his own borings who claimed that the site actually contained more than 28% rock where the borings showed only 10% rock would be found. After reviewing the reports of both the contractor's and the government's geologists, the court concluded that the difference between the estimates of the amount of rock to be encountered was not material. The contractor's geologist included soft, medium, hard and very hard rock in its definition of rock, while the government's definition included only medium, hard and very hard rock.

Because the difference was one of nomenclature and not materiality, Arundel could not recover.

In the case of *Meltzer v. United States* (77 F.Supp. 1018), the contractor's cofferdam collapsed because it rested on cemented sand and gravel conglomerate. The court ruled that this was a Type I DSC since only 2 of the 25 borings included in the contract showed the presence of conglomerate.

The contractor, in *Fehlhaber v. United States* (151 F.Supp. 817), had to exert much greater time and effort driving piles to the specified distance below grade than the contract led him to believe. The government ultimately revised the specifications and allowed the piles to be driven to shallower depths because of the subsurface condition encountered. Fehlhaber claimed this was a Type I DSC. The government relied on the exculpatory language in the contract to deny liability. The court would not allow

the exculpatory clause to prevail and awarded Fehlhaber his additional costs.

In *Moorhead Construction v. City of Grand Forks* (508 F.2nd 1008), the contract was for the second phase of construction on a sewage treatment plant. Moorhead expected earth embankments to be 90% compacted by the phase I contractor. They were not, and Moorhead incurred additional expenses. The court agreed that this situation was covered by the DSC clause and awarded Moorhead his additional costs.

The contract, in the case of *A. D. and G. D. Fox v. United States* (7 Cl.Ct. 60), was for the construction of a road. The contract contained no soil borings but did give a compaction factor for the existing soil. Fox did not seek further subsurface information from the owner but made assumptions about the existing conditions based on the compaction factor. When Fox encountered more rock than he anticipated, he sued to recover the added costs. The court

ruled that Fox could not make assumptions about the existing soil based on the compaction factor and would not allow Fox to recover.

In *Appeal of Yadkin, Inc.* (PSBCA No. 2051), the contract for construction of a post office facility stated that 5,676 cy of top soil had to be removed and replaced. Yadkin actually removed 7,079 cy. Trial testimony established that a prudent contractor would anticipate as much as a 10% overrun of the quantity stated in the contract when bidding this type of work. The court accepted this testimony and awarded Yadkin the additional costs for only the quantity excavated over 110% of the quantity stated in the contract.

In *Weeks Dredging and Contracting v. United States* (13 Cl.Ct. 193), the contract was for dredging 30 miles of river channel. Although he made a pre-bid site visit, Weeks did not travel the length of the channel to inspect the exposed

river bank. The site visit concentrated on the logistical aspect of getting equipment to the work. Weeks derived the quantities of sand, silt, and gravel he would encounter exclusively from the 156 soil borings provided in the plans. When he encountered a larger percentage of gravel than expected, Weeks incurred higher costs and sued to recover. The court noted that the 156 borings included in the contract were taken randomly over a 30 mile stretch of river. The court concluded that it was unreasonable for Weeks to estimate soil quantities from this information and hinted that Weeks' cost overrun was the result of an inadequate site investigation. Weeks was not allowed to recover.

In *Appeal of Kasler Corporation* (ASBCA No. 30047), the contract was for cleaning existing fuel tanks. The size of the tanks was not explicitly stated in the bid documents, but the tanks were identified with "designators" that led experienced contractors to believe that they were 8500 gallon tanks. Kasler sought clarification prior to bid opening but got no response from the government. After

award, Kasler discovered that the tanks had a 31,000 gallon capacity. Kasler claimed this was a differing site condition. The government denied liability claiming that the capacity of the tanks could have been determined from a site visit. The board ruled that the tank "designators" used in the bid documents constituted a positive representation of the capacity of the tanks and would not allow the site visitation clause to prevail over the positive representation. Kasler recovered.

In *Appeal of Bowie & K Enterprises* (IBCA No. 1788), the contract was for the renovation of buildings for the National Park Service. The drawings stated that the building dimensions shown were approximate. After award, B&K sued for additional costs it incurred as a result of incorrect building dimensions in the plans. The board ruled that a diligent site investigation would have given B&K the correct information. The board relied on the site visitation clause to deny recovery to B&K.

The contract, in *J. E. Robertson v. United States* (437 F.2d 1360), was for renovations to existing utilities in an Air Force building. Part of the work involved the removal of a concrete floor. A detail in the contract showed an existing drain in the floor connected to an existing drain line by a six inch nipple. The contract clearly identified the nipple as being 6 inches long. Robertson made a site visit and measured the thickness of the floor at a hole to be 6 inches. Based on the detail and his own measurements, Robertson based his bid on a six inch thick floor. The floor turned out to be up to 24 inches thick. Robertson sued claiming this was a Type I DSC. The government argued that there was no positive representation in the contract of the floor's thickness from which the actual condition could vary. The court agreed with Robertson. The combination of the detail and the site visit was sufficient to constitute a positive representation of the floor's thickness.

CHAPTER 7

CONCLUSIONS

Claims pursued under a misrepresentation theory are complex and require a contractor to show some fault on the part of the owner before recovery is allowed. To recover on a DSC claim, a contractor need only show that what was encountered differed from what was reasonably expected.

Misrepresentation Claims

Factors relevant to recovery under the theory of misrepresentation are:

1. The owner has a duty to reveal to bidders all information in his possession that is relevant to estimating the cost of the work. This obligation extends to information in the owner's possession

that qualifies information presented in the contract.

2. The owner need not make all relevant information a part of the contract. Relevant information may be provided outside the contract simply for review.
3. An owner's concealment of information need not be "sinister" for a contractor to recover.
4. Bidders have an obligation to obtain, review, and make prudent judgments on all information that is readily accessible.
5. Bidders are allowed to rely on all information presented in the contract as a fact.
6. Exculpatory language can be used to disclaim liability for otherwise factual information.

DSC Claims

Factors relevant to recovery on a claim pursued under a DSC clause are:

1. If a contract is truly silent regarding an existing condition, a Type I DSC can not be recognized.

2. The entire contract (including information provided gratuitously) must be considered in determining what the contract "indicates."
3. Competent and experienced people must make the determination that unexpected conditions won't be encountered for a Type II condition to be recognized.
4. Warnings about conditions must be clear, unequivocal and focused on the specific situation in order to be enforced.

Tables 1 and 2 summarize the results of the cases discussed in this paper. They show a fairly consistent distribution: 24 cases were decided in favor of the owner and 23 in favor of the contractor. The results indicate, however, that a contractor has a much better chance of recovery if his dispute is pursued through a DSC clause. This is probably due to the lighter burden of proof required to recover under the DSC clause.

TABLE 1
SUMMARY OF MISREPRESENTATION CASES

<u>Litigant</u>	<u>Prevailing Party</u>		<u>Reason</u>
	<u>Owner</u>	<u>Contractor</u>	
Acchione & Canuso		X	Implied Warranty
Atlantic Dredg.		X	Concealment
Blakeslee	X		Contractor misjudgment
Christie		X	Concealment
Cook	X		Contractor misjudgment
Cruz	X		Contractor misjudgment
Elkan	X		Contractor misjudgment
Flippin	X		Contractor misjudgment
Foundation	X		Contractor misjudgment
Gibbons		X	Implied Warranty
Hollerbach		X	Implied Warranty
MacArthur	X		Contractor misjudgment
Mandel	X		Contractor misjudgment
Morrison-Knudsen	X		Contractor misjudgment
Pawling	X		Contractor misjudgment
S&M	X		Contractor misjudgment
Sasso	X		Contractor misjudgment
Souza/McCue		X	Fraud
Spearin		X	Implied Warranty
Trionfo	X		Contractor misjudgment
Wiechmann	X		Contractor misjudgment
Wunderlich	X		Contractor misjudgment
	<u>15</u>	<u>7</u>	

TABLE 2
SUMMARY OF DSC CLAUSE CASES

<u>Litigant</u>	<u>Prevailing Party</u>		<u>Reason</u>
	<u>Owner</u>	<u>Contractor</u>	
Arundel	X		Contractor misjudgment
B&K Enterprises	X		Contractor misjudgment
Blauner	X		Contractor misjudgment
Fehlhaber		X	Type I
Foster-Williams		X	Type I
Fox	X		Contractor misjudgment
Johnson		X	Type I
Kaiser		X	Type I
Kasler		X	Type I
Leal	X		Contractor misjudgment
Loftis		X	Type II
Maffei	X		Contractor misjudgment
McHugh	X		Contractor misjudgment
Meltzer		X	Type II
Moorhead		X	Type I
Phillips		X	Type II
Ragonese		X	Type I
Robertson		X	Type I
Ruff		X	Type I
United		X	Type I
Walsh Bros.	X		Contractor misjudgment
Weeks	X		Contractor misjudgment
Western Well		X	Type II
Woodcrest		X	Type I
Yadkin		X	Type I
	<hr/> 9	<hr/> 16	

REFERENCES

1. Federal Acquisition Regulations, Clause 52.236-2,
(APR 84).
2. Henry C. Black, Black's Law Dictionary, p. 903.
3. City of Salinas v. Souza & McCue Construction Co.,
(1967), 424 P.2d 921.
4. Christie v. United States, (1915), 237 U.S. 234.
5. United States v. Atlantic Dredging Co., (1919),
253 U.S. 1.
6. Wiechmann Engineers v. State Department of Public Works,
(1973), 107 Cal.Rptr. 529.
7. United States v. Atlantic Dredging Co., (1919),
253 U.S. 1.
8. C. W. Blakeslee & Sons, Inc., et al. v. United States,
(1939), 89 Ct.Cl. 226.
9. MacArthur Brothers Co. v. United States, (1921),
258 U.S. 6.
10. "Annotation: Contract - Conditions not as Represented,"
76 A.L.R. 268, (1931), p. 269.
11. Elkan v. Sebastian Bridge District, (1923), 291 F. 532.
12. Elkan v. Sebastian Bridge District, (1923), 291 F. 532.
13. Wunderlich v. State, (1967), 423 P.2d 545.
14. Wunderlich v. State, (1967), 423 P.2d 545.
15. Wunderlich v. State, (1967), 423 P.2d 545.

16. Hollerbach v. United States, (1914), 233 U.S. 165.
17. Robert E. McKee, Inc. v. City of Atlanta, (1976),
414 F.Supp. 957.
18. Sasso v. New Jersey, (1980), 414 A.2d 603.
19. Pinkerton and Laws Co., Inc. v. Roadway Express, Inc.,
(1986), 650 F.Supp. 1138.
20. Pinkerton and Laws Co., Inc. v. Roadway Express, Inc.,
(1986), 650 F.Supp. 1138.
21. A. Teichert & Son, Inc. v. State of California, (1965),
48 Cal.Rptr. 225.
22. S&M Constructors, Inc. v. City of Columbus, (1982),
434 N.E.2d 1349.
23. Joseph F. Trionfo & Sons v. Board of Education, (1979),
395 A.2d 1207.
24. Joseph F. Trionfo & Sons v. Board of Education, (1979),
395 A.2d 1207.
25. Joseph F. Trionfo & Sons v. Board of Education, (1979),
395 A.2d 1207.
26. Flippin Materials Company v. United States, (1963),
312 F.2d 408.
27. Foster Construction C. A. and Williams Brothers Company
v. United States, (1970), 435 F.2d 873.
28. United Contractors v. United States, (1966),
368 F.2d 585.
29. Ragonese et al. v. United States, (1954),
120 F.Supp. 768.
30. Woodcrest v. United States, (1968), 408 F.2d 406.
31. United Contractors v. United States, (1966),
368 F.2d 585.
32. United Contractors v. United States, (1966),
368 F.2d 585.

33. Morrison-Knudsen v. United States, (1965),
345 F.2d 535.
34. Leal v. United States, (1960), 276 F.2d 385.
35. P.J. Maffei Bldg. Wrecking v. United States, (1984),
732 F.2d 913.
36. Loftis v. United States, (1984), 76 F.Supp. 816.
37. Phillips v. United States, (1968), 394 F.2d 834.
38. Phillips v. United States, (1968), 394 F.2d 834.
39. Foster Construction C. A. and Williams Brothers Company
v. United States, (1970), 435 F.2d 873.
40. Loftis v. United States, (1984), 76 F.Supp. 816.
41. United Contractors v. United States, (1966),
368 F.2d 585.
42. James McHugh Construction Company, ENG BCA No. 4600,
82-1 BCA para. 15,682.
43. James McHugh Construction Company, ENG BCA No. 4600,
82-1 BCA para. 15,682.
44. James McHugh Construction Company, ENG BCA No. 4600,
82-1 BCA para. 15,682.
45. Al Johnson Construction Company v. Missouri Pacific
Railroad Company, (1976), 426 F.Supp. 639.
46. Al Johnson Construction Company v. Missouri Pacific
Railroad Company, (1976), 426 F.Supp. 639.
47. Foster Construction C. A. and Williams Brothers Company
v. United States, (1970), 435 F.2d 873.

TABLE OF CASES

- Acchione & Canuso v. PA Dept of Transportation,
461 A.2nd 765.
- Ann Granite Company v. United States, 100 Ct.Cl. 53.
- Arundel v. United States, 96 Ct.Cl. 77, 103 Ct.Cl. 688.
- Au & Sons v. Northeast Ohio Sewer District, 504 N.E.2d 1209.
- Blakeslee & Son v. United States, 89 Ct.Cl. 226.
- Blauner v. United States, 94 Ct.Cl. 503.
- Appeal of Bowie & K Enterprises, IBCA No. 1788.
- Burgess Mining v. Bessemer, 312 So.2d 24.
- Chernus v. United States, 110 Ct.Cl. 264, 75 F.Supp. 1018.
- Christie v. United States, 237 U.S. 234.
- City of Salinas v. Souza & McCue Construction, 424 P.2d 921.
- Cook v. Oklahoma, 736 P.2d 140.
- County Asphalt v. New York, 337 N.Y.S.2d 415.
- Cruz Construction v. Lancaster Area Sewer Authority,
439 F.Supp. 1202.
- Elkan v. Sebastian Bridge District, 291 F. 53.
- Fehlhaber v. Unites States, 138 Ct.Cl. 571, 151 F.Supp. 817.
- Flippin Materials v. United States, 312 F.2d 408.
- Foster Construction and Williams Bros. v. United States,
435 F.2d 873.
- Foundation Co. v. State of New York, 135 N.E. 236.
- Fox v. United States, 7 Cl.Ct. 60.
- General Casualty v. United States, 127 F.Supp. 805.
- Goettle v. Tennessee Valley Authority, 600 F.Supp. 7.
- Hedin v. United States, 107 Ct.Cl. 558.
- Hirsch v. United States, 94 Ct.Cl. 602.
- Hollerbach v. United States, 233 U.S. 165.
- Huffman v. United States, 100 Ct.Cl. 80.

Johnson Construction v. Missouri Pacific Railroad Comp.
426 F.Supp. 639.

Kaiser v. United States, 340 F.2d 322.
Appeal of Kasler Corporation, ASBCA No. 30047.
Kiewit v. United States, 109 Ct.Cl. 517, 74 F.Supp. 165.
Kuch and Watson v. Woodman, 331 N.E.2d 350.

Leal v. United States, 276 F.2d 378.
Loftis v. United States, 110 Ct.Cl. 551, 76 F.Supp. 816.
Lowder v. North Carolina Highway Commission, 217 S.E.2d 682.
Lyman Construction v. Village of Gurnee, 403 N.E.2d 1325.

MacArthur Bros. v. United States, 55 Ct.Cl. 181, 258 U.S. 6.
Maffei Building Wrecking v. United States, 732 F.2d 913.
Mandel v. United States, 424 F.2d 1252.
Appeal of McHugh Construction Co., ENG BCA No. 4600, 82-1
BCA para. 15,682.
McKee v. City of Atlanta, 414 F.Supp. 957.
Meltzer v. United States, 111 Ct.Cl. 389, 77 F.Supp. 1018.
Moorhead v. City of Grand Forks, 508 F.2d 1008.
Morrison v. State Highway Commission, 357 P.2d 389.
Morrison-Knudsen v. Alaska, 519 P.2d 834.
Morrison-Knudsen v. United States, 345 F.2d 535.

Pawling & Co. v. United States, 62 Ct.Cl. 125
Phillips v. United States, 394 F.2d 834.
Pinkerton and Laws v. Roadway Express, 650 F.Supp. 1138.
PT&L v. New Jersey Dept. of Transportation, 108 N.J. 539.

Ragonese v. United States, 128 Ct.Cl. 156, 120 F.Supp. 768.
Ranieri v. United States, 96 Ct.Cl. 494.
Remo Engineering Corporation v. New York, 286 N.Y. 657,
36 N.E.2d 695.
Robertson v. United States, 437 F.2d 1360.
Ruff v. United States, 96 Ct.Cl. 148.

S & M Constructors v. City of Columbus, 434 N.E.2d 1349.
Sasso v. State of New Jersey, 414 A.2d 603.
Shepard v. United States, 125 Ct.Cl. 724.
Siesel v. United States, 90 Ct.Cl. 582.
Silas Mason v. United States, 116 Ct.Cl. 1.

Teichert & Son, Inc. v. State of California,
48 Cal.Rptr. 225.
Trionfo & Sons v. Board of Education, 395 A.2d 1207.

United Contractors v. United States, 368 F.2d 585.
United States v. Atlantic Dredging, 253 U.S. 1.
United States v. Gibbons, 109 U.S. 200.
United States v. Smith, 256 U.S. 11.
United States v. Spearin, 248 U.S. 132.

Walsh Brothers v. United States, 69 F.Supp. 125.
Warner Construction v. Los Angeles, 466 P.2d 996.
Weeks Dredging v. United States, 13 Cl.Ct. 193.
Western Well Drilling v. United States, 96 F.Supp. 377.
Wiechmann v. State of California Dept. of Public Works,
107 Cal.Rptr. 529.
Woodcrest v. United States, 408 F.2d 406.
Wunderlich v. State of California, 423 P.2d 545.

Appeal of Yadkin, Inc. PSBCA NO. 2051.

BIBLIOGRAPHY

American Law Reports, Annotated., "Contract - Conditions not as Represented," Volume 76, p. 268.

American Law Reports, Annotated. 2nd ed., "Public Contract - Changed Conditions," Volume 85, p. 211.

Anderson, Leslie L. "Changes, Changed Conditions and Extras in Government Contracting," 42 Illinois Law Review 29.

Bockrath, Joseph T. Dunham and Young's Contracts, Specifications, and Law for Engineers. 4th ed. New York: McGraw-Hill, Inc. 1986.

Cushman, Robert F., John D. Carter, and Alan Silverman, eds. Construction Litigation: Representing the Contractor. New York: John Wiley & Sons, Inc. 1986.

Cushman, Robert F., and Kenneth M. Cushman, eds. Construction Litigation: Representing the Owner. New York: John Wiley & Sons, Inc. 1984.

Diekmann, James E., and Timothy A. Kruppenbacher. "Claims Analysis and Computer Reasoning," Journal of Construction Engineering and Management, Vol. 110, No. 4, 1984.

Hohns, H. Murray. Preventing and Solving Construction Contract Disputes. New York: Van Nostrand Reinhold Company, Inc. 1979.

Jabine, William. Case Histories in Construction Law. Boston: Cahners Books. 1971.

Jervis, Bruce M. and Paul Levin. Construction Law: Principles and Practice. New York: McGraw-Hill, Inc. 1988.

Rubin, Robert A. et al. Construction Claims. New York: Van Nostrand Reinhold Company, Inc. 1983.

Simon, Michael S. Esq. Construction Contracts & Claims.
New York: McGraw-Hill, Inc. 1979.

Simon, Michael S. Esq. Construction Law: Claims &
Liability. Butler, New Jersey: Arlyse Enterprises, Inc.
1982.

Stokes, McNeill and Judith L. Finuf. Construction Law for
Owners and Builders. New York: McGraw-Hill, Inc. 1986.

Sweet, Justin. Legal Aspects of Architecture, Engineering,
and the Construction Process. 3rd ed. St. Paul: West
Publishing Company. 1985.

Sweet, Justin. Sweet on Construction Industry Contracts.
New York: John Wiley & Sons, Inc. 1987.

Vance, John C. and A. Alling Jones, "Legal Effect of
Representations as to Subsurface Conditions," NCHRP
Research Results Digest. Digest 39. June 1972.

Walker, Nathan and Theodor K. Rohdenburg. Legal Pitfalls in
Architecture, Engineering and Building Construction.
New York: McGraw-Hill, Inc. 1968.

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differing site conditions
disputes on construction
contracts.

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