



Basic Construction Management for Local Governments

AGENDA

- **Project Documentation Requirements**
- **Contract Work Orders**
- **Claims**
- **Discussion**

CREDITS

National Highway Institute (NHI)
Managing Highway Contract Claims:
Analysis and Avoidance

Project Documentation Requirements

Goals for Project Documentation

- **Provide a permanent record of the project**
- **Prevent and defend against claims**
- **Determine pay items/quantity of work**
- **Provide transparency to the public**
- **Ensure proper execution of the contract**

Goals for Project Documentation

VDOT's Seven Rights (7R's) of Quality Control:

1. **The Right Material**
2. **Put in the Right Way**
3. **At the Right Time**
4. **In the Right Place**
5. **In the Right Quantities**
6. **Having the Right Documentation**
7. **Then, making the Right Payment to the Contractor.**

Effective documentation creates a **clear and factual** record of project events as they occur

- Date
- Weather
- Contractor's Equipment
- Contractor's Staff
- Daily Staff
- Work Items & Location
- Materials
- Pay Items/Quantity of Work
- All Communications
- Safety
- Damage
- Visitors to the Job Site
- Delays (caused by utilities or other delays)
- Change Conditions
- Notice of Intent to file Claim

PROJECT DOCUMENTATION

- **To be effective, documentation must be prepared during the construction process**
- **Records created after the fact generally will not receive consideration**

PROJECT DOCUMENTATION to be **MAINTAINED** in the **PROJECT FOLDER**

- **Internal department correspondence, e-mails, and notes from relevant phone calls**
- **Correspondence between the Contractor and the Department**
- **Project related meeting minutes and memoranda**

PROJECT DOCUMENTATION

- **With such records readily available for review, a Contractor's NOI or Claim can be evaluated objectively**
- **Reasonable requests can be approved without delay, and unreasonable requests can be successfully denied**

PROJECT DOCUMENTATION (cont)

- **Deviations in approved and updated progress schedules as they compare to actual progress should be noted**
- **Changes in the logic or sequence of work should be recorded**
- **Maintaining a log of schedule changes could be useful if a detailed analysis is required**

PROJECT DOCUMENTATION (cont)

- **Actual results of material tests, field density tests, concrete cylinder compression tests, etc. should be referred to as necessary**
- **Samples should be retained for future use when deemed appropriate**

PROJECT DIARY ENTRY EXAMPLE #1

Said inspector told the contractor the curb that he installed last week on southbound lane needed to be corrected before payment could be made.

SUGGESTED IMPROVEMENT

Project Diary Entry - Example #1

I told Mr. XXX, the contractor's superintendent, that corrective action was needed on the CG-7 between Station ___ and Station ___ due to local irregularities in the top of the curb exceeding 1" in 10 feet. (Section 502.03c)

Advised the contractor that I need a plan for correction by 4-1-06.

No payment made due to defect.

PROJECT DIARY ENTRY

EXAMPLE #2

Subcontractor on project again trying for the fourth time to pour footer on Wall 5. I tried to talk to him about the rebars moving when he pours the concrete, but he told me not to tell him how to do his job and said something that sounded like a swear under his breath.

SUGGESTED IMPROVEMENT

Project Diary Entry - Example #2

Sub-contractor XXX on the project today forming footer on Wall 5 at Station _____. The last 3 times he tried to form the same footer he was unable to maintain the proper spacing on the rebar. I spoke with Mr. XXX, the contractor's superintendent, and informed him of this situation.

PROJECT DIARY ENTRY

EXAMPLE #3

Spoke with contractor today about all the rain lately. Every time he gets ready for a pour, it rains. He said that if it keeps up he doesn't know how he is going to finish the project on time. I told him to keep trying.

SUGGESTED IMPROVEMENT

Project Diary Entry - Example #3

Mr. XXX, the contractor's superintendent, alleged that the rain was affecting his concrete pours and if the rain keeps up he doesn't know how he is going to finish the project on time. I advised him that this was a fixed date contract and weather was a contractor's risk and would not be given consideration for a time extension. (Section 108.09(b))

PROJECT DIARY ENTRY

EXAMPLE #4

Mr. XXX from Materials was on project today and said something had to be done with the pavement at the intersection of _____ . I think it looks as good as the rest of it, but he is the boss, so I told the contractor to fix it. Contractor said he is going to file a claim and I told him I understood, but I am doing what I was told.

SUGGESTED IMPROVEMENT

Project Diary Entry - Example #4

Mr. XXX, from District Materials was on the project today and noted that the pavement at the intersection of _____ did not meet the strait edge requirements or the 2” required thickness, numerous areas only had $\frac{3}{4}$ ” (Section 315.07)

Advised Mr. XXX, the contractor’s superintendent, I need a plan for correction by 4-1-06.

No payment made due to defect.

SUGGESTED IMPROVEMENT

Project Diary Entry - Example #4

Contractor indicated possible claim. I advised him to follow specifications 105.19 Submission and Disposition of Claims in order to protect his rites.

I advised Construction Manager and Area Construction Engineer of pending NOI.

COMMON PROJECT DIARY ENTRY

The contractor was performing all grading operations in accordance with the specifications.

VIDEO

Documentary video from the Office of the Attorney General

Contract Work Orders

ORIGINAL CONTRACT VS. CHANGE ORDER



LEARNING OUTCOMES

- **Definition of a Change**
- **Types of Changes**
- **Difference between a directed and constructive change**
- **Components of a Work Order/Claim**

ANALYSIS OF A WORK ORDER

In order to analyze a work order, it must be broken down into three fundamental components

3 FUNDAMENTAL COMPONENTS

- **Entitlement**
- **Impacts**
- **Costs**

ENTITLEMENT

Was there a change?

Who is responsible for the change?

DEFINITION OF CHANGE

A change is the difference between the contract requirements at the time of bid and the requirements imposed during the construction

CHANGES ARE CERTAIN

Changes may be **Directed** or **Constructive**

Examples of causes of changes include:

- **Errors and omissions**
- **Differing site conditions**
- **Design changes**

DIRECTED CHANGES

A **directed change** is an order to the contractor adding or deleting work to the contract or modifying the manner or method of work performance

- Initiated by the owner
- Understood by owner to be a change

Examples of directed changes include:

- **Addition or deletion of work**
- **Changes in hours of operation**
- **Changing the contract time available to perform the work**

CONSTRUCTIVE CHANGES

A **constructive change** is a change that results from the action or inaction of the owner and was not intended by the owner to be a change

- Results from owner's actions or inactions
- Not easily recognized; often at the heart of a dispute

Examples of constructive changes include:

- **Failure on the part of the owner to disclose material information (superior knowledge)**
- **Impossible or impractical of performing the work as designed (constructability)**
- **Joint occupancy or use before completion**

ATTRIBUTES OF A CHANGE CLAUSE

- **Right to modify the contract**
- **Provides for a continuation of work**
- **Functional system to implement changes**

TYPES OF CHANGES

UTIL	Delays caused by utility issues
CHAR	Changes per Section 104.2 (Character of Work)
ADD	Additional work not originally planned
PLAN	Plan error or omission
CONT	Error or omission in contract document
VALU	Contractor Value Engineering Proposal
LEG	Local, State or Federal government proposal
POL	Changes in VDOT Policy
VDOT	Late NTP or VDOT caused delay
MISC	Does not fit into other categories
NBID	Items specified in contract with set unit price, not bid on by Contractor
RENEW	Renewing/Extending time limit on a renewable contract

SIGNIFICANT CHANGE IN THE CHARACTER OF THE WORK

- **Character of work differs in kind or nature**
- **Quantity varies significantly**
 - **FHWA 23 CRF 635.109**

DIFFERING SITE CONDITIONS

- **Type I – Subsurface or latent physical conditions that differ materially from those indicated in the contract**
- **Type II – Unknown or unusual conditions that differ materially from those ordinarily encountered**
 - **FHWA 23 CRF 635.109**

SUSPENSION OF WORK

- **Allows Owner to stop work**
- **May require timely, written notice**
- **Exclude profit**
 - **FHWA 23 CRF 635.109**

EXTRA WORK

- **Item of work not provided for in the contract**
- **Essential to the satisfactory completion of the contract within its intended scope**

ELIMINATED WORK

- **Provides a vehicle for owner to delete elements of the work**

IMPACTS

The effect of the change on the project

Time/schedule

Money

Safety/Mobility

CRITICAL PATH

- **The critical path is the continuous chain of activities within a project that require the longest time to complete**
- **Only delays to the project's critical path can delay the project completion date**

DELAYS

1. **Critical Delays**
2. **Non-Critical Delays**
3. **Excusable Delays**
4. **Non-Excusable Delays**
5. **Compensable Delays**
6. **Non-Compensable Delays**

CRITICAL DELAYS

Those that affect activities on the project's critical path

NON-CRITICAL DELAYS

**Those that affect non-critical work,
activities with float relative to the project's
critical path**

EXCUSABLE DELAYS

Those for which the contractor is entitled to a time extension. The issues that cause excusable delays are typically unforeseeable and are not the contractor's fault or responsibility. The contractor may be entitled to cost recovery

NON-EXCUSABLE DELAYS

Those that are usually foreseeable and avoidable. Typically, the contractor is at fault or responsible and, therefore, the contractor is not entitled to a time extension or cost recovery

COMPENSABLE DELAYS

Those that are excusable and the responsibility of the owner, potentially resulting in entitlement in cost recovery in addition to a time extension

EXAMPLES OF COMPENSABLE DELAYS

- **Work additions**
- **Suspension of work**
- **Differing site conditions**
- **Untimely response by owner**

NON-COMPENSABLE DELAYS

Those for which the contractor is not allowed to receive cost recovery

- **All non-excusable delays are non-compensable**
- **Excusable delays that are not the fault or responsibility of the owner are also typically non-compensable**

TYPICAL EXAMPLES OF NON-COMPENSABLE DELAYS

- **Strikes**
- **Floods and fires**
- **Acts of God**
- **Unusually severe weather**

INEFFICIENCIES

Inefficiencies results when more resources (i.e. labor hours) are used to accomplish the same amount of work or less work is performed with no change in resources

Note that inefficiencies are NOT based on planned efficiencies

ACCELERATION

Acceleration is an action or actions taken to improve upon the anticipated project completion date. Typically, acceleration entails a change in the schedule, a change in sequence, or a change in resources

TYPES OF ACCELERATION

- 1. Directed Acceleration**
- 2. Constructive Acceleration**

DIRECTED ACCELERATION

- **Direct by owner to meet a new, earlier project completion date**
- **Directed by owner to mitigate delay**
- **Initiated by contractor to mitigate its delay**

CONSTRUCTIVE ACCELERATION

- The contractor experiences an excusable delay
- The contractor makes a timely request for an extension of contract time
- The owner fails or refuses to grant additional time for an excusable delay
- The owner maintains insistence for on-time completion
- The contractor actually accelerated the work and incurred increased costs

AVOIDING ACCELERATION CLAIMS

- **Consider side effects of acceleration**
- **Work/Change orders should address cost and time, when applicable**
- **Accelerate critical work only**
- **Determine cost-effective solution**
- **Give time extensions when due**

COSTS

The resulting cost of the impacts with the change.

ESTIMATING

The process of determining the anticipated cost of materials, labor, and equipment of a proposed item or project

ESTIMATING OPTIONS

- **Historical Average price costing**
- **Force Account**
- **Rational Estimating**

CHANGE ORDER PROCESS

- **The LPA must develop a process for managing change orders and include the process within their contract documents for any federal-aid project (LAP Manual 13-36)**
- **In the absence of developing a process the LPA could utilize VDOT's (See CD 2010-01)**

- **The LAP must notify the VDOT CPM when processing change orders if:**
 - **Federal-aid**
 - **State-aid projects that require additional state funding or a design exception**

Claims Notice of Intent (NOI)

Notice of Intent (NOI) to File a Claim

A written statement by the Contractor that informs the Engineer of the intent to seek additional time and/or monetary compensation for a specific event when it occurs and that states the nature of the claimed damages and the act or omission by the Department which caused the damage

Notice of Intent to File a Claim Contractors should . . .

- **Be submitted as soon as the Contractor becomes aware of a changed condition or problem situation**
- **Be clearly labeled “Notice of Intent to File Claim”**
- **In writing and separate from other correspondence**

Notice of Intent to File a Claim Contractors should . . .

- **Summarize the act or omission**
- **List the specifications, plan or contract items in question**
- **Indicate the type of damages (time/money)**

A CLAIM

A Claim is essentially the same thing as a Notice of Intent. It deals with the same type of issues that remain unresolved at the time the final estimate is paid

CLAIMS PROCESS

- **A written process that is a part of the contract**
- **Should be reviewed and approved by the OAG or local government attorney**
- **Should have a certification from the contractor to satisfy the Va. Governmental Frauds Act**
- **Review Section 105.19 of the Road and Bridge Specifications-Submissions and Deposition of Claims**

DISCUSSION