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CONTRACTUAL GUIDELINES FOR CONTRACTORS WORKING UNDER PROJECTS FUNDED BY SOUTHEASTERN US DOTS

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Abstract: Transportation projects in the infrastructure sector contribute to approximately 42% of the total expenditures on public construction projects in the US. The main source of funding of these projects is the taxpayer's hard-earned money. The ever-growing problem by transportation projects is that the available funds are less than those required to have a stable and well maintained transportation network. Unnecessary costs in these projects are mainly caused by Conflicts, Claims and Disputes (C2D). According to recent reports, C2D in construction is greatly attributed to poor contract administration. The goal of this paper is to provide better understanding and utilization of contracts that are managed by the Departments of Transportations (DOTs) of 6 southeastern states: Tennessee, South Carolina, North Carolina, Georgia, Alabama and Florida. To this end, the authors: (1) analyzed the standard contract agreements published by these 6 states; (2) highlighted commonalities and differences in key subject areas including bidding, contract award, selection criteria, payment and control work. Usually, local contractors in southeastern areas work in their home states as well as in the neighbouring states. The outcomes of this work is that contractors conducting business in the southeast will benefit greatly from the presented contractual guidelines. This research method could be implemented in other states to cover different regions in the US. Ultimately, this will help in minimizing cost due to conflicts and disputes in projects; thus, making better use of the US taxpayer's money.

1 INTRODUCTION

The US government spends a fair portion of its budget on transportation projects. More than 8 million lane miles represent the US road transportation network (Geddes and Wagner 2013). The Taxpayer's hard-earned money provides the fund for public projects which reflects that efficient utilization of these funds is required. The ever-growing problem in this situation is that the available funds are less than those required to have a stable and well maintained transportation network (ASCE 2013). In addition to the scarcity in monetary resources, two key concerns for large transportation infrastructure projects exist: cost overruns and considerable schedule delays. In the US, the government accountability office declared that 77% of highway projects experience cost overruns (Kaliba et al. 2008). One of the significant solutions to this problem the elimination of unnecessary costs to maximize the benefits of the available moneys.

Unnecessary costs in projects are mainly caused by Conflicts, Claims and Disputes (C2D) (Fenn et al. 1997). Poor contract administration has been attributed to be the main cause for construction disputes according to reports studying the global evolution of construction disputes (ARCADIS 2017). This was also

stressed by Abotaleb and El-adaway (2017) who identified poor contract administration as a major cause of construction disputes. Accordingly, costs and delays in construction projects can be reduced through better understanding and formulating of contracts.

No previous research study has tackled this issue from a contractual point of view by analyzing and comparing the contractual provisions for different Department of Transportations (DOTs). Furthermore, the literature falls short in providing better contract administration to practitioners in the different DOT projects. As such, robust comparisons and guidelines are needed to help contractors understand the different contractual requirements – especially when they are simultaneously executing projects for different DOTs across various states.

2 RESEARCH GOAL

The goal of this paper is to provide better understanding and utilization of contracts that are managed by the DOTs of 6 southeastern states: Tennessee, South Carolina, North Carolina, Georgia, Alabama and Florida. The study should encourage a clearer and more transparent contractual environment. In addition, it provides guidelines to contractors on the key contractual aspects of the different DOTs southeastern states and the best approaches to successfully handle their projects. It will also help contractors in understanding the different requirements of these DOTs. The outcomes of this paper will help in mitigating dispute; which in turn, reduces the possibility of cost overruns and/or schedule delays. Moreover, DOTs will benefit from this research by comparing the contractual provisions among them as well as to how evaluate their contracts from a contractual perspective.

3 BACKGROUND INFORMATION

The government's allocated funds are very low compared to the huge amounts required to maintain and rehabilitate the highway system (Guevara et al. 2017). This problem occurs for two main reasons. First, the requirements for the infrastructure spending has grown significantly during the past years where capital expenditure of all government levels increased from 65 billion dollars in 2000 to 106 billion dollars in 2013. Whereas, in the same period, maintenance governmental expenditure increased from 31 billion dollars to 48 billion dollars (FHWA 2015). Second, taxes associated with vehicles and gasoline caused the reduction of tax revenue per vehicle mile travelled. This results into a significant backlog of capital investments and maintenance costs leading to insufficient funding to be successfully carried out. A grade of D+ was assigned to the US road infrastructure (ASCE 2017). The suggested solution for this issue was to increase funding both from the government side and from the private sector as well to tackle the infrastructure project requirements of the massive backlog for roadway.

The main focus of this study is the contractual environment in the Southeastern DOTs due to the regional and cultural similarities between them. What calls for more attention on this study is that the previously mentioned general funding problem is magnified in these southeastern states. According to statistics by the Federal Highway Administration (FHWA 2015), in 2013, these states received 15.66 billion dollars which equals to 14.9% of the government capital investment and 5.49 billion dollars which represents 11.3% of the government investment in maintenance. While these figures might seem a notable amount of investment, these states collectively amount to 21.1% of the total vehicle miles travelled in the US which represents 631 billion vehicle miles travelled in 2013 (FHWA 2015). In other words, these states require more governmental funding in the future. The undesirable occurrence of schedule delays and/or cost overruns means that funding is not efficiently utilized and the backlog of maintenance and renovation projects will continue to grow. The DOTs that are included in this study are Tennessee, South Carolina, North Carolina, Georgia, Alabama, and Florida. These states were chosen because they had the highest vehicle miles travelled as well as the highest annual capital and maintenance investments in the southeastern region (FHWA 2015). As such, the limited transportation funding allocated to these states needs to be spent efficiently. Having a better understanding of the contractual obligations will result in minimizing disputes and their associated costs. This way, the saved funds could be allocated towards more efficient execution of projects.

4 METHODOLOGY

The authors studied thoroughly the standard specifications of each state. A two-step desktop research methodology was used in this paper that is applied to the standard specifications of six (6) southeastern states. This research has been conducted using the latest version of standard specifications from the DOT of each state; namely:

- Tennessee - Standard Specifications for Road and Bridge Construction 2015 Edition.
- South Carolina - Standard Specifications for Highway Construction 2007 Edition.
- North Carolina - Standard Specifications for Roads and Structures 2018 Edition.
- Georgia - Standard Specifications Construction of Transportation Systems 2013 Edition.
- Alabama - Standard Specifications for Highway Construction 2018 Edition.
- Florida - Standard Specifications for Road and Bridge Construction 2018 Edition.

As such, the authors: (1) analyzed the standard contract agreements used by the above-mentioned states; (2) highlighted commonalities and differences in key subject areas including bidding, contract award, selection criteria, payment and control.

The focus of this research are the provisions related to bidding and award selection criteria, measurement and payment, and project control. Contractors pay particular attention to these provisions while applying for or working on DOTs projects, as they (1) influence whether it is convenient to apply for a specific project, (2) affect whether he/she will be selected for the project, (3) determine the cash flow during the course of the project, and (4) set how a contractor can protect and claim its rights. Ultimately, the study concludes with a discussion on the important contractual clauses that will serve as a guide to both contractors and DOTs to address the critical contractual provisions of projects and to constantly adjust and update their contracts to meet their needs.

5 RESULTS

5.1 Bidding, Award, and Selection Criteria

5.1.1 Prequalification

Prequalification ensures that the bidders provide a proof that they have the abilities such as experience, financial and resources to satisfactorily perform the contract (Bauld 2016). A “prequalification questionnaire” is required to be filled by the contractor and subcontractor in all six states to be prequalified for bidding. Only the DOTs of Georgia (GDOT) and Florida (FDOT) provide an exception for prequalification process. If the bid amount of the project is less than \$250,000 or if the project type is the construction of buildings, FDOT waives the prequalification requirement and it can be waived until the amount of bid reaches \$500,000 only at the sole discretion of the FDOT. GDOT also waives the prequalification on projects with bid amount less than \$2,000,000. A non-prequalified contractor in Georgia can bid on project up to a total aggregate value of \$4,000,000 or as limited by the GDOT. New and small contractors can benefit from the waiver of prequalification; which provides an opportunity for these contractors to bid on projects. On the other hand, the DOT of South Carolina (SCDOT) requires the contractor to obtain a Contractor Performance Score (CPS) from the department. Contractors can submit bids if their CPS is higher than the required CPS for the designated project. If the call for bid does not mention a minimum CPS, all the prequalified contractors can submit bids. Thus, a contractor with a low CPS is limited to a number of projects that it can bid on.

Apart from the usual prequalification requirements, out-of-state contractors are required by the DOT of Alabama (ALDOT) to submit extra documents showing qualification to perform business in the state and to submit a certificate of existence in case of 100% state funded projects. On the other hand, North Carolina DOT (NCDOT) requires contractors to provide different documents such as pre-bid no collusion certificate, debarment certificate, gift ban certificate and safety index rating form which are all required to be submitted no less than four weeks before given letting. The process of prequalification is perceived to be time

consuming due to all the required extra paperwork by these two states as compared to the other Southeastern states.

5.1.2 Interpretation of Quantities

The provided quantities in the plan are meant for the comparison of the bid and no claim can be filed by the contractor because of the variation in the quantities or change in character of work. Adjustment to the bid price occurs only when there is a significant change in the quantity. Usually when a major item increases or decreases beyond certain percentage, significant change will be applied. An adjustment in unit price is allowed in North Carolina if variation of minor item is more than 100% and in case of Georgia, adjustment is made when the total amount of change exceeds the original contract sum by 20%. Therefore, by submitting the bid in all six states the contractor assumes the responsibility that he/she has examined the site and considered all associated uncertainties in his/her bid. In Florida, if the quantity is not provided for a lump sum item, the contractor is responsible for the estimation of the quantity.

5.1.3 Award of Contract

The lowest-bid method is the primary selection criteria for awarding the contracts; where the project is awarded to the qualified contractor having the lowest bid amount. One of the drawbacks of this method is that the technical qualifications are not taken into consideration after the pre-qualification process (Abotaleb and El-adaway 2016). In Alabama, the contract is awarded to the lowest responsible and responsive bidder but it is also based on the dollar value of bidder's contracting capacity and the bidder's net worth. This condition proves to be beneficial if the contractor is a corporate possessing a high monetary value.

The selected bidder shall receive the notice of award of contract within the time specified in each standard specification from the date of opening of the bid. Upon mutual agreement between the successful bidder and the department, this time period can be extended. If the department fails to award the contract, the contractor can withdraw the bid without incurring any penalty. The long time period of 60 days between opening of bid and award of contract by the NCDOT leaves the bidder susceptible to risk of delay or cost overrun. The same applies in case of Florida and Georgia.

5.1.4 Bond Requirement

Table 1 highlights in detail the type and amount of bonds required in each state as well as the allocated time for providing these bonds.

Table 1: Comparison of Bond Requirements

State	Bond Type	Bond Amount (in % of contract amount)	Time (in days)
Tennessee	Performance + Contract Payment bond	100%	10
South Carolina	Performance + Indemnity bond	100% but in no case less than \$10,000	20
North Carolina	Payment bond	100%	14
	Performance bond	100%	
	Payment bond	100%	
Georgia: Resident bidder	Performance bond	100% of penal sum = 120%	15
	Payment bond	110% of penal sum = 132%	
Georgia: Non-resident bidder	Performance bond	100% of penal sum = 120%	
	Payment bond	100% of penal sum = 120%	

	Tax bond	10% of penal sum = 12%	
Alabama	Performance bond	100%	15
	Labor, Materials, Services, Insurance, Feed Stuffs, or Supplies bond	100%	
Florida	Contract bond	100%	10

The highest value of bonds among the 6 states is attributed to the GDOT that adds extra tax bond if the applicant is not based in Georgia. In this case, the aggregated amount of bond is equal to 210% of full penal sum and the penal sum is defined as 120% of original contract amount. The contractor then suffers from a significant financial load. On the other hand, TDOT and FDOT require the bidder to provide a performance bond and a contract payment bond with a sum equal to 100% of original contract amount; this reduces the financial burden on the contractor.

5.1.5 Execution of Contract

The contractor shall sign and return the contract to the department along with the required acceptable bond for the complete execution of contract within the time period assigned in every contract. ALDOT does not consider any contract binding until it is signed by the director and approved by the State Governor. FDOT grants 10 days to contractors to execute/sign the contract. Each delayed day in executing the contract is deducted from the contract duration.

5.1.6 Failure to Execute Contract

The DOT has the right to annul the contract if the contractor fails to execute the contract within the time specified and the proposal guaranty amount shall be forfeited by the contractor as liquidated damages and not as penalty. Consequently, the DOT reserves the right to re-advertise the project, award the bid to the next lowest bidder or to completely cancel the award. If the project is re-advertised, GDOT and ALDOT prohibit the failed bidder to be part of the project. Also, if the contractor fails to execute the project in Alabama, the liquidated damages clause applied is the lesser of the proposal guaranty and the difference between the amount of contract awarded and the next lowest bid, which would increase the loss incurred by the contractor.

5.2 Payment

Changes in executed quantities and alteration of plans are common in the construction industry. Each DOT has its own definition of a significant change, and how to compensate it. Moreover, the method of payment and force account vary from one state to another.

5.2.1 Compensation for Underrun or Overrun of Quantities/Alteration of Plans or Character of Work

When a change in the plan occurs, compensation to the contractor is given for the differing quantities as compared to the original contract. Paying in full the altered quantities is the common basis for compensation by the 6 DOTs.

The amount of increase or decrease in a major item of the work is addressed differently in these states. A change in the unit price is to be made if changes in a major item reach a certain threshold. In Tennessee, South Carolina, Alabama, and Florida, a change to the unit price will occur if the major item is underrun or overrun by more than 25%. In Georgia, a change to the unit price will occur if of the quantity in major items changed by 20%. In North Carolina, if there is an increase or decrease in a major item of 15% and/or an increase in a minor item by 100%, the unit price will change.

A provision that should be noted in South Carolina is when an alteration of plans occurs. In this case, the contractor is not allowed to begin work until a change order is executed or a force account is issued. This could cause the project to be delayed and thus putting more risks on some contractors. In North Carolina, if affected work is equal to or less than \$25,000, then the contractor is allowed to start the work before executing a supplemental agreement. But, if it is above \$25,000, the contractor is not permitted to start the

work until the execution of the supplemental agreement. This provision significantly affects whether a contractor is delayed or not. In Georgia, the engineer can increase or decrease the length or cost of the project by no more than 20%. This provision indicates that the engineer cannot make a major alteration to project plans.

5.2.2 Force Account/Extra Work

If extra work is required by the DOT or the engineer which is not present in the original scope of the contract, the contractor will be compensated for this work on a force account basis. Compensation for a force account work can be classified into different sections of work. In this paper, the authors analyzed 4 important sections which are labor, materials, equipment, and subcontracting/miscellaneous.

First, on the labor side, the current rate of wages for the labor is utilized in each state to reimburse the contractor. What differentiates one state from another is the additional compensation that they give for the labor in the force account. In Florida, no additional compensation for extra work is mentioned. Contractors in this state should be cautious as this means they will only receive the wages of the labor needed for the job.

Second, on the material side, contractors get reimbursed for the actual cost of the material in all 6 states. Still, no additional compensation for the materials supplied is mentioned in Florida.

Third, on the equipment side, while the equipment is in use, the contractors get full compensation of the rental rates for these hours. The standby rates, on the other hand, are treated differently in each state. The equipment that is on site but is not in use will be given the standby rate. No compensation is given for equipment in standby mode in South Carolina, which can be inferred as 0% standby rate in this state. Tennessee and North Carolina are the only states that provide additional compensation for equipment which is described as overheads and profit. The additional compensation in these states is 15% of the equipment cost on force account work.

Lastly, on the subcontracting/miscellaneous, these provisions are not explicitly stated in every state. This section is stated in detail in the state of North Carolina and it provides the highest additional compensation which is 20% of the value of the work. An additional 5% is also provided if the value of the work is above \$10,000.

Based on the force account provision alone, if all the additional compensations are added up from these four sections, then a possible recommendation can be given to help contractors determine which area to work at. For example, the additional compensation in South Carolina in each section is 30% for labor, 15% for materials, and 10% for miscellaneous/subcontracting, which is a total of 55% of additional compensation for force account work. The rest of the summations are shown in table 2.

Table 2: Total Additional Compensation in Percentage for each DOT

Force Account Section	State Department of Transportation					
	TN	SC	NC	GA	AL	FL
Labor	20	30	60	15	25	0
Material	15	15	15	10	15	0
Equipment	15	0	15	0	0	0
Miscellaneous/Subcontracting	5	10	20 + (5 for above \$10,000 work)	5 (but not exceed \$5,000)	5	0
Total Additional Compensation	55	55	110	30	45	0

North Carolina provides the highest reimbursement for force account work with 110% of total additional compensation. On the contrary, Florida provides only the cost with no additional compensation. Another key point that should be taken into consideration is that the price of each force account section may vary depending on the project.

5.2.3 Partial Payment

Partial payments are the payments given to contractors each month for the work that they, or their subcontractors, do. All states make payment to contractors once a month while intermediate or semi-monthly payments is an option that can be made in the states of South Carolina, North Carolina and Georgia. In South Carolina, if a contractor earns more than \$150,000 in a given month, he/she has the option to be paid at intermediate installments. In North Carolina, the partial payments are paid at least once a month and up to twice a month if it is warranted by the engineer. It should be noted that the decision here is solely up to the engineer. In Georgia, payment will be made semi-monthly if a contractor earns more than \$500,000 within 15 days. The other three states do not mention anything other than being paid once a month. This is a critical point especially when it comes to large scale projects. In order to maintain a positive cash flow in such projects, it is more desirable for the contractor to be paid more than once a month. By understanding this key point in all 6 states, contractors would better assess their financial risks and opportunities and have more educated decisions regarding pursuing projects in those states.

Apart from South Carolina, each state has a minimum requirement for what dictates a partial payment. Both Tennessee and Georgia require partial payments to be no less than \$1,000. Alabama requires partial payments to be at least \$2,500. Florida requires partial payments to be at least \$5,000. North Carolina requires no less than \$10,000. This could help contractors in choosing which state to work in. A contractor could be at risk if he/she pursues a small job with a value of \$10,000 or less with a duration of more than a month. In such case, the contractor may not be paid until the final payment.

5.2.4 Final Payment

After the engineer issues a final estimate to the contractor, the contractor can then decide either to accept or disapprove it. There are certain requirements the contractor has to do before receiving the final payment which are different in each state. In Tennessee, the contractor has thirty (30) calendar days to notify the engineer whether the final estimate is acceptable or not. Upon acceptance, claims can be filed by the contractor for up to thirty (30) days after the acceptance. If no claims are filed, then the DOT will make the final payment. In South Carolina, a letter from the surety company giving consent is required before the final payment is made. South Carolina does not provide details as to when this letter should be delivered or how many days are allowed for this process. In North Carolina, the contractor needs to provide all the documentation in accordance with Section 109-10 in the North Carolina standard specifications before processing the final estimate. The time allowed for this process is thirty (30) calendar days. If the final payment has not been issued by the DOT within 120 calendar days after the acceptance date, the contractor may receive interest on the final payment. In Georgia, the contractor has twenty (20) days to review the engineer's final estimate. After acceptance, the contractor has to sign a standard release form and return it within 120 days after delivery. If the standard release form is not executed by the contractor because he disputes the amount in the final payment, the contractor is then eligible for an amount of unliquidated sum and there will be no accrual of interest on the finally determined sum for final payment. In Alabama, a list of final quantities is developed by the engineer within 60 calendar days after the final inspection. A period of 45 calendar days is then allowed for the contractor to submit an agreement or disagreement with the list of final quantities. Subsequently, a final estimate is prepared by the engineer and the contractor has thirty (30) calendar days to sign. In Florida, the DOT pays the final estimate as soon as possible after the final acceptance of the work. The provision 'as soon as possible' is ambiguous, and contractors should ask for more clarification before entering into such agreements. Furthermore, the contractor is given ninety (90) days to submit all the required contract documents to the FDOT. If the contractor fails to do so, the FDOT will suspend the contractor's certificate of qualification. Since this is a suspension, it is still possible for the contractor to work again in this state. If the final payment is delayed, the FDOT will pay the contractor interest in accordance with Section 337.141 of the Florida Statutes.

5.3 Work Control, Acceptance and Claim Procedures

5.3.1 Order of Precedence of Contract Documents

The order of precedence of contract documents is nearly the same with only a minor difference among the studied states. The general precedence is as follows: special provisions, plans, supplemental specifications then standard specifications. These documents are further divided to developmental, technical, project and

standard portions of some documents in different states. Georgia is the only state where supplemental specifications precedes standard plans. This key point calls for careful reading and integration of all project documents together. Taking into consideration that a contract can be modified using special provisions that overrule the project plans, the contractor shall then account for this in the bid price reflecting all contractual rights and liabilities. Finally, as plans take precedence over general conditions, this highlights the importance of the contractor reviewing all plans thoroughly and looking for any possible error. These errors -if found- can lead to disputes, delays and cost overruns.

5.3.2 Maintaining Work until Acceptance

Maintenance of work until accepted is accounted for in the contract amount; which means that it affects the pricing decision of contractors and how they charge their markup. This proves to be crucial when work involves cooperation with other contractors as well as working around existing utilities or road substructure. In that case, the contractor will be liable for any damage within the area of his/her operations to existing utilities, work of others before him/her or other road infrastructure in the nearby area. If the contractor fails to maintain the project, the engineer can give him/her a short notice. If the contractor did not comply within 24 to 48 hours, the engineer can take over maintenance to be performed by another party at the cost of the contractor. This risky provision is included in 4 of the 6 studied states (not included in Florida and Tennessee). This provision includes two key ambiguities which are the definition of “failure to maintain” and the amount of money to be deducted for maintenance. This should be addressed appropriately to avoid disputes regarding the definition of what constitutes failure to maintain and how much money is deducted in such cases. Contractors are advised to request more information from DOTs regarding the amount of the money which is allocated for maintenance as well as having strong background about the other contractors or potential other infrastructure conflicts within their work zones.

5.3.3 Partial Acceptance

All six states allow for partial acceptance which relieves the contractor from maintenance obligation for part, or a section, of the project. There are key ambiguities regarding partial acceptance in most of the reviewed contracts though. North Carolina is the only state that has a clear definition of partial acceptance sections and when partial acceptance occurs in a project. In Tennessee, sections and their requirements are defined at the beginning. Contrarily, partial acceptance in other contracts is solely up to the engineer for the sufficiency of work to constitute a part to be accepted. Another condition can be that the contractor requests acceptance in writing. If the project does not have predetermined sections prior to execution and the decision to accept part of the project is made during construction, this can have significant impact on both the contractor's costs and his/her work execution plan. Thus, it is advised that the process of partial acceptance be well defined and coordinated by the contractor and the engineer.

5.3.4 Final Acceptance

Final acceptance is the process by which project is completed and no longer requires to be maintained by the contractor. Each state has its own requirements for final acceptance. Florida has the simplest process whereas Alabama has the longest and the most detailed process for final acceptance. After final inspection is complete and defects are rectified, a final acceptance certificate is issued, where each state has different requirements to issue notice of final acceptance. These requirements include bonds, communications between different employer personnel, and bonds for observation periods. The required formalities in states like Alabama are both expensive and time consuming. The contractor's cash flow might also be negatively affected by this as the final estimate of payment is withheld until final acceptance, so the contractor might have to secure enough funding. This is the reason why the contractor should be aware of what these requirements are and accordingly adjust for them in the price and schedule of the project.

5.3.5 Claim Procedure

Despite the continuous efforts to avoid claims and disputes to reduce overruns and schedule delays, disputes are an inevitable outcome in construction. By comparing the procedures of handling claims in all six states, the claim procedure shows to be very strict and stringent. This means that the act of not abiding by any rule results into barring the contractor's right for compensation. The contractor should follow the claim processes very strictly and is advised to assign personnel (contract administrators) to follow all

communications and correspondences required by the claim. Delay claims are handled differently in most of the states.

The levels of assessment and evaluation of claims vary greatly; North Carolina, Georgia and Florida assess them by the engineer. South Carolina assess them by the DOT. Tennessee and Alabama have multiple levels for appeal. Having multiple levels allows the claim to be reviewed by multiple people and makes it more likely to make an agreement between the DOT and the contractor. Although Alabama has a very detailed procedure, a great amount of power is given to the Director of the DOT where his/her final decision can dominate all other decisions. This is particularly true since his/her decision is not subject to judicial review. In addition, assigning personnel particularly for dealing with claims is highly recommended. The duties of this personnel are to monitor the process and communications, record substantiating data, and communicate it in a timely manner.

6 CONCLUSION

Improving America's infrastructure is hindered due to the considerable deficit in funding transportation projects. Minimizing the money wasted on settling claims and disputes has become an urgent need so that this money can be efficiently directed towards projects. Mitigating conflicts, claims, and disputes is a viable solution to this problem. One of the main reasons for adversarial relationships in the construction industry is poor contract administration. This paper presents robust contractual understanding for projects funded by 6 southeastern DOTs: Tennessee, South Carolina, North Carolina, Georgia, Alabama and Florida.

This study analyzed the standard specifications of these 6 DOTs and highlighted the key commonalities and differences that are crucial for contractors working under projects funded by any of the aforementioned states. Contractors shall benefit from this study as it assists them in identifying and successfully addressing the key contractual aspects of the different DOTs southeastern states. This enhanced understanding will aid in reducing dispute; which in turn, will minimize the risk of excessive cost overruns and/or schedule delays. Furthermore, the study should help DOTs assess how they can enhance their standard documents. Eventually, this research should promote a more transparent and less conflicting contractual environment. For future research, the approach adopted in this study could be extended to other states and different regions nationwide so as to compare and contrast important contractual matters between different DOTs.

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