

## Section 1.2

# CONTRACT DURATION AND ALTERNATIVE CONTRACTING TECHNIQUES

### 1.2.1 Purpose

The purpose of this section is to provide a uniform methodology for establishing contract durations on construction contracts.

### 1.2.2 Authority

[Sections 20.23\(4\)\(a\)](#), [337.015\(5\)](#), and [337.18, F. S.](#), [Plans Preparation Manual](#), Topic Nos. [625-000-007](#) and [625-000-008](#).

### 1.2.3 Scope

This document was created to assist the District Scheduling Engineer and/or the Construction Consultant Engineering and Inspection services in establishing contract duration and to assist in determining which type of contract technique would be used on that project.

### 1.2.4 Background

Project duration is an integral part of every construction project let by the Florida Department of Transportation (Department). In the past, the time was set based on historical information of how long it took to complete similar projects. The methodology and forms used were rather rigid and implied that tasks followed one behind the other with no opportunity for two or more tasks to be performed concurrently.

The Department has instituted changes that affect the establishment of the contract duration. These changes place emphasis on decreased project duration and the overall time required from conception to completion of the construction improvement to decrease user costs and the cost of contract administration. The methods, outlined in this procedure, allow the District Construction Offices more flexibility in establishing contract duration.

## 1.2.5 Definitions

**Acquisition Period or Procurement Time:** A number of calendar days allowed prior to the first day that time is charged to a contract. This period is to allow time for acquisition of some materials on specialized contracts.

**Compressed Time or Time Priority:** Compressed time is achieved by increasing the normal production rates. The contractor will have to make corresponding increases in the hours worked as well as crew size and equipment to complete the project within the shortened time. Compressed time is used when projects must be completed by a certain date or there are special considerations relating to traffic congestion or high public visibility.

**Contract Duration:** The number of calendar days allowed for the completion of a contract, excluding additional time granted for inclement weather or for holidays or special events.

**Critical Path Method (CPM) Schedule:** A special provision for critical path scheduling is used for more complex projects. With large projects, compressed time, or incentive/disincentive projects the Department is looking for assurance that the contractor will manage the project in a manner that will assure timely completion. Management at this level of complexity is very difficult without a tool like **CPM**. The **CPM** schedule will also provide additional documentation needed for negotiating contract changes and claims.

**Flextime:** Flextime allows a contractor an additional amount of time after the notice to proceed to begin work. The day the project work starts is set by the contractor within a window of time established in the special provisions. The extra time allowed the contractor is used for scheduling materials, equipment, subcontractors and acquiring materials. Flextime may be granted where material procurement is needed for items such as mast arms, signalization equipment, etc. When this special provision is used, the contractor is not given an additional material acquisition period before contract time begins. The contractors are provided the additional flexibility, and flextime jobs normally will have fewer overruns and time extensions. The negative side of flextime is that it pushes out the calendar date for the completion of the project.

**Incentive/Disincentive:** The total "incentive payment" or "disincentive deduction" is a dollar per day amount which the contractor will be entitled to or charged based upon the accrued amount multiplied by the time (calendar days) established in the contract for the contractor to complete a specified activity or to complete the project. The time begins with the first chargeable day and ends with the completion of the project or the specified activity or milestone.

**Lane Rental:** The Contractor is permitted to “rent” travel lanes during construction in order to decrease the production duration, and minimize the amount of time lanes are closed to traffic.

**Liquidated Savings:** A Savings intended to encourage the contractor to finish a project early by providing a financial incentive for each day the project is completed prior to the approved project duration.

**No Excuse Bonus:** A Bonus paid to the contractor as an incentive to complete a project within set number of calendar days or a specified time frame (calendar date) regardless of any problems or unforeseen conditions that may arise.

**Phase III Review:** One of the last technical reviews of a set of roadway plans prior to being let to bid. At this review, all plan sheets are complete with the exception of the quantities for maintenance of traffic pay items. The only work remaining will be to reply to comments that result from the Phase III review, which is also known as biddability review. All phases are described in the [Plan and Preparation Manual \(PPM\), Chapter 2, Volume II](#). If the plans are available at Phase II for biddability review then, those items may be reviewed during this period.

**Production Rates:** A ratio of units of work to a period of time; (i.e., 1,500 square yards/day or X yards/hour.)

**Special Working Hours:** Certain hours of the day or limited days of the week when work can be performed. These limitations are usually site specific and can increase the duration of the construction contract.

**Streamline Projects:** This alternative type was developed to simplify the administration of the contract by selecting minor projects that were less than \$2,000,000 dollars and less than 2,000 tons of asphalt. There are two types of Streamline projects: 1.) Streamline Plan Quantity and 2.) Streamline Lump Sum.

**Time plus Money Bidding:** Shortens the contract time by allowing each contractor to bid the number of days in which the work can be accomplished.

## 1.2.6 General Considerations

The Department establishes the contract duration on each construction contract. Several factors must be considered when establishing contract duration, such as:

1. Historical records of contractor performance on similar work.

2. Importance of the project to the implementation of Department Work Program.
3. Emergency conditions.
4. Annoyances in residential areas.
5. Traffic disruption and delay in high traffic areas and coordination with MOT plans.
6. Coordination with other activities, such as existing utilities and installation of new utilities.
7. Political sensitivity and public awareness.
8. Cost of Construction & Engineering Inspection (CEI) activities.
9. Projects under \$2,000,000 dollars and less than 2,000 tons of asphalt.

Many of these factors can conflict with others and not all of them will have the same importance for each project.

The contract duration shall be established in conjunction with design's Phase III review. If there are quantity changes following the Phase III review, the contract duration may require revision. It must, in any case, be firmly established in sufficient time for the Design Project Manager to calculate the quantities for the maintenance of traffic pay items before the Phase IV review. (see [PPM Volume I, Section 16.4](#) for additional Plans Phase Reviews.)

To assist the engineer establishing the contract duration, the Department has established guidelines for production rates. These guidelines will be periodically revised and improved. Questions regarding the setting of contract duration should be directed to the District Scheduling Engineer.

Every effort should be made to involve the Resident Office in the Phase Review and in establishing the contract duration.

## **1.2.7 Initiating Specifications/Alternative Contracting Techniques**

### **(a) District Level Responsibilities**

The first step in setting duration for a contract is to determine if any special provisions apply. Establishing the contract duration requires familiarity with the project specifications and may require the addition of other specifications. Make sure these do not conflict with Department objectives or with local ordinances.

**NOTE:** Any contract utilizing the special provision(s) shown below such as; Flextime, Incentive/Disincentive, No Excuse Bonus, A+B, Lane Rental, and Liquidated Savings shall be pre-approved by the appropriate authority as detailed in the Usage Notes on the applicable Specifications Workbook.

Examples of these are:

### **1. Flextime**

Flextime start time is a contracting method intended to minimize disruption to the public. The contractor can use this additional time to mobilize sub-contractors, to coordinate with utilities, to submit shop drawings, to acquire material and equipment, and maximize all resources for the project. Flextime should also be used in cases where material procurement will dictate the start or finish of a project. Project duration for flextime projects can be minimized as a result of the opportunity for efficiency in building the project.

Flextime is meant to be used on minor projects where the extra time allowed to the contractor will result in reduced impact to the traveling public. If flextime is used, general time added to the contract duration should be eliminated, meaning that of normal schedules such as 8am-5pm, Monday – Friday (normal 5 (five) day work week). On a flextime job, contract time for utility conflicts should be included in the contract duration only if the utilities cannot relocate during the flextime period. The contractor must know by specification requirement what utility relocation must occur during flextime.

Flextime should not be used if its use will negatively affect the health, safety, or welfare of the public or an early completion date for a project critical to the Department's work program. Flextime should not be used if the physical condition or capacity problems that will be improved by the project need to be addressed immediately. On projects that would be inspected by consultant firms, consideration should be given to the impact of the flex-time on the consultant staffing and any price considerations.

The District Scheduling Engineer initiates the request to include a flextime contract provision with consultation with the Resident Engineer and the District Specifications Office.

The flextime period shall not exceed 120 days, unless otherwise approved by the Chief Engineer.

### **2. Special Working Hours & Periods**

The District Scheduling Engineer shall coordinate the establishment of any restriction of working hours and periods of time with the District Traffic Operations Office and the Resident/Operations Office that will administer the construction contract. The District Scheduling Engineer will also coordinate with the District Specifications Office.

### **3. Special Events**

The District Scheduling Engineer should seek the input of the Resident Office that will administer the construction contract and the Public Information Office regarding any

special events that may impact the project. The District Scheduling Engineer should coordinate with Design Project Manager to identify Special Events which may restrict any or all contract operations and list such Special Events in the Contract Plans or in the Request for Proposal on Design-Build projects.

#### **4. Schedule**

The District Scheduling Engineer will determine the type of scheduling to be required for each specific project; e.g., bar charts, **CPM**, etc., and coordinate with the District Specifications Office to include the correct Special Provisions to require this type of schedule. A bar chart is allowed to be used only for the smallest projects (i.e., under \$1 million), however, **CPM** schedules are encouraged. **CPM** schedules are required for large and complex projects; e.g., those over \$5 million, urban projects with three (3) or more traffic phases or others deemed appropriate such as alternative contracting projects, buildings, Variable Message Sign(s), etc. **CPM** schedules are not required but are encouraged on simple projects such as 3R (Resurfacing, Rehabilitation, Restoration) or minor bridges, unless there are unusual conditions.

#### **5. Compressed Time or Time Priority**

The District Secretary or his delegate initiates and approves a list of time priority projects. This determination should be made early so that it will influence the design of the project and the times negotiated on the utility relocation agreements. Placement on the list of time priority projects will be considered in the establishment of the project duration and the coordination with the District Specifications Office.

#### **6. Incentive/Disincentive**

One of the most important considerations for justifying the use of an Incentive/Disincentive (I/D) provision is whether payment for early completion of the project or portion of the project is cost beneficial to the traveling public. This means that if the project is completed in a timely manner there will be limited disruptive effects, due to the construction project providing substantial safety, health and welfare to the traveling public. The I/D monetary amount set for a selected project shall be supported by an estimated cost of damages expected to be mitigated by early completion of the overall project or critical phase of work.

The amount of such I/D payment or such additional damages shall be established in the contract based on an analysis of the cost savings to the traveling public or revenue projections for a revenue-producing project. This determination of whether to use an I/D provision is made when developing the daily amount of I/D payment. This analysis may be done by using the departments model software and may be verified if there is a need by an approved process such as "QUEWZ-98", FHWA approved "Quickzone", ADOT model, software to calculate the daily I/D amount. The District level shall be responsible to determine if the use of these software packages or an equivalent process will be a

reasonable representative cost analysis and shall be pre-approved by the State Construction Office. **Detailed calculations must be maintained and available for any further analysis.** Further guidelines for calculating the cost may be found in **AASHTO's (Red Book) "Manual on User Benefit Analysis"**. If the per day amount exceeds \$50,000 then that amount will require approval by the Director, Office of Construction.

The beginning and ending dates (calendar day or contract date) for which the I/D applies must be clearly identified in the special provisions. The project schedule should clearly show the beginning and ending milestone dates for I/D work. If the I/D clause applies to the complete contract then this should be stated in a special provision and shown on the contractor's schedule. Contract work items or any portion of the contract work items that are to be considered for I/D must be identified.

There are two other special provisions to consider for I/D provisions. Lane Rental and A + B Bidding allow for I/D payments or deductions. This incentive payment or disincentive deduction shall not exceed the dollar amount established in the provision. The total allowable number of Lane Rental Days is determined by the Engineer. If the Contractor uses less Lane Rental Days than allowed then the Department will pay an incentive at an established amount in the contract. If the Contractor uses more Lane Rental Days than allowed, the Department will make a disincentive deduction established in the provision. A+B Bidding incentive payment or disincentive deduction shall be an established amount set in the provisions and will be based on original contract time.

There may be a re-evaluation of the incentive/disincentive amount if the contract amount changes from the original estimate or if the scope of work changes. You should be sure to review the incentive/disincentive amounts and make the appropriate adjustments. Also retain any documentation created to reflect these changes.

Each "Plans to Tallahassee" package for projects containing I/D provisions shall include a calculation sheet, attached to the District's recommendation for construction contract time, which documents the basis for the incentive/disincentive provisions. Impact cost estimates are to be included whenever it is feasible to calculate their value. In other words, the I/D and the monetary amount is set based on the Road User Cost to determine the damages or cost savings to the traveling public. This documentation shall be kept in the project file.

Projects containing the I/D Special Provision and which are Federal Aid participating shall have a copy of the justification sheet/s (back-up documentation) included with the contract documents for FHWA approval. The "justification sheet/s" should include several factors such as Daily Road User Cost, Accident Rates, CEI Cost, Maintenance Cost and other justifications such as impacts to community services or access to residential or business areas during construction.

When the Specifications Office preparing the project specifications reviews the project specification package, jobs with an I/D special provision must be identified. This will be detailed on the Transmittal of Plans, Specifications and Estimates Package sheet. (see [PPM Volume I, Chapter 20, Exhibit 20-A](#))

After the letting and the contract is being processed for award, the Contracts Administration Office shall make an I/D notation on the "Availability of Funds" memorandum which is sent to the Office of Comptroller, Contract Funds Management Section. The I/D notation shall include the maximum number of allowable dollars (\$). The Office of Comptroller, Contract Funds Management Section will encumber an amount that includes the awarded construction cost and the maximum amount of the incentive cost that can be charged to the contract.

On those projects containing the I/D Special Provision, which are Federal Aid oversight, prior to issuing payments to the contractor for any portion or the full I/D amount, FHWA approval must be obtained.

**Adjusting contract time during the I/D phase defeats the purpose of an I/D clause, and is not allowed.**

## **7. No Excuse Bonus**

No Excuse Bonuses should be used only on projects that have the highest levels of impact on abutting businesses and the traveling public. A designation Level of [Community Awareness 4](#) is a prerequisite. The No Excuse Bonus concept can be used to achieve particular milestones or for total project completion by a certain contract day or a specified date. The Scheduling Engineer must provide a maximum number of days and set the bonus date based on calendar date or an actual contract day.

Projects containing the No Excuse Special Provision and which are Federal Aid participating shall have a copy of the justification sheet/s (back-up documentation) included with the contract documents for FHWA approval. The "justification sheet/s" should include several factors such as Daily Road User Cost, Accident Rates, CEI Cost, Maintenance Cost and other justifications such as impacts to community services or access to residential or business areas during construction.

On those projects containing the No Excuse Special Provision, which are Federal Aid oversight, prior to issuing payments to the contractor for any portion or the full I/D amount, FHWA approval must be obtained.

## **8. Time plus Money (A+B)**

This provision is used on projects that may have a significant level of community impact, Level of [Community Awareness 3](#). Bidding Time plus Money provides the potential for decreasing contract time. A dollar per day figure must be calculated by the Department and included in the bid documents. A maximum number of days the contractor may bid must be provided.

## **9. Lane Rental**

Use Lane Rental to minimize lane closures. Lane rental should be used where lane closures will severely inconvenience the traveling public, (for example, on Interstates, ramps, urban arterials, etc). Maximum daily lane rental fee shall be established in the contract based on an analysis of the cost savings to the traveling public or revenue projections for a revenue-producing project. The dollar value of each lane rental day is established by the Department and included in the bid documents. Since the intent is to reduce lane closures, project duration should be calculated normally.

Projects containing the Lane Rental Special Provision and which are Federal Aid participating shall have a copy of the justification sheet/s (back-up documentation) included with the contract documents for FHWA approval. The "justification sheet/s" should include several factors such as Daily Road User Cost, Accident Rates, CEI Cost, Maintenance Cost and other justifications such as impacts to community services or access to residential or business areas during construction.

On those projects containing the Lane Rental Special Provision, which are Federal Aid oversight, prior to issuing payments to the contractor for any portion or the full I/D amount, FHWA approval must be obtained.

## **10. Liquidated Savings**

The contractor will be rewarded for each calendar day the contract is completed and accepted prior to the expiration of the allowable contract time. The daily amount of liquidated savings should be equal to the liquidated damages.

Projects containing the Liquidated Savings Special Provision and which are Federal Aid participating shall have a copy of the justification sheet/s (back-up documentation) included with the contract documents for FHWA approval. The "justification sheet/s" should include several factors such as Daily Road User Cost, Accident Rates, CEI Cost, Maintenance Cost and other justifications such as impacts to community services or access to residential or business areas during construction.

On those projects containing the Liquidated Savings Special Provision, which are Federal

Aid oversight, prior to issuing payments to the contractor for any portion or the full I/D amount, FHWA approval must be obtained.

## **11. Damage Recovery and ITS Damage Recovery**

This provision is similar to Lane Rental provisions to assess a fee to the Contractor for not having all lanes open to traffic at a designated time as defined in the Traffic Control Plans. The dollar values are set for the first 30 minutes with proportional fees for each additional 30 minutes with a cap on the cost not to exceed a set amount within the 24 hour period. The dollar value of each assessment is established by the Department and included in the bid documents. These fees may be calculated using the Department's Road User Cost program.

The ITS Damage Recovery is also similar to Lane Rental provisions that assess a fee to the Contractor for not restoring Department ITS and related components in a designated time as defined within this Special Provision. The dollar values are set for the first 30 minutes with proportional fees for each additional 30 minutes with a cap on the cost not to exceed a set amount within the 24 hour period. The dollar value of each assessment is established by the Department and included in the bid documents. These fees may be calculated using the Department's Road User Cost program.

## **12. Streamline Contracts**

Streamline Contracts will be contracts that are less than \$2,000,000 dollars with less than 2,000 tons of asphalt. There are two types of these contracts, 1.) Streamline Plan Quantity and 2.) Streamline Lump Sum. These are similar to the conventional Plan Quantity and Lump Sum projects with the exception of simplifying the administration of the contract. (See [Section 5.15.3 of this Manual](#) for additional information).

There may be exceptions to the use of Streamline Contracting, such as any project where the scope of work cannot be clearly defined in the contract documents that may have unknown variables such as, spalled areas on a bridge repair project or concrete rehabilitation project. Any exceptions shall be authorized by the DCE and noted on the Contract Time Memo.

## **13. Special Notices/Directions to Contractor**

- (A) Inform contractor if contract time is reduced from normal.
- (B) Inform contractor if additional contract time is supplied for anticipated utility conflicts.

- (C) Direct contractor to begin project by a specific day.
- (D) Inform contractor if work by others will be underway at either end or within the project limits, contractor will coordinate with other contractors. Include proper Special Provision with the contract.

## 1.2.8 Establishing Contract Durations

### (a) District Level Responsibilities

The [Guidelines for Establishing Contract Duration](#) is published on the State Construction Office's web page under the title "Engineering Areas/Scheduling Engineer." This guide also contains a set of production rates for many of the activities that occur in highway/bridge construction projects. Production rates for all possible activities are not included, nor are all production rates used in each construction job. The production rates may have to be supplemented with information from other sources and should be tempered with good engineering judgment and past experience with similar work. Other sources could be information provided from contractors and or suppliers relating to unique activities or resources. Establishing a project's duration can be accomplished with the following steps:

1. Review the project plans with special emphasis on maintenance of traffic. Verify that the work to be performed in each phase of the projects Traffic Control Plan is constructible as shown. These phases should have been agreed upon at the production phase. If the project has more than one phase, determine what work can be done in each of the phases.
2. List the required activities for each phase. This list does not need to be exhaustive but does need to include all controlling items of work or activities on the critical path. Most schedules are calculated using Primavera software and activities (items of work) are detailed in order to establish critical path on a project. Some are very detailed and others aren't, depending on the complexity of a project. These controlling items determine the time which in essence is the critical path. Some use a standard bar chart, others use more complex charts that tie dates and activities to drive the critical path.
3. List each quantity of the unit of work that will be used as a basis for estimating the duration of that activity; e.g., for storm sewers this would be the number of linear feet of pipe, etc.

On a project with more than one phase, use only that quantity associated with that phase. If the list of pay items show, for instance, 10,000 cubic yards of excavation for a project, that has two phases, that have approximately the same amount on each phase, put 5,000 cubic yards as the unit of work for excavation in Phase 1 and 5,000 cubic yards as the unit of work for excavation in Phase 2. Extreme accuracy is not required. It is only necessary that the parts of a quantity of a pay item sum to the whole, but a percent or two of error on any phase will not affect the results. For a project with two phases, this may be a 50%-50% split for a particular pay item. This is just as accurate as using a 45%-55% split.

4. Use the production rates and charts to convert the units of work into workdays. Do this for each activity in each phase. These rates and activities may be recorded on [Form No. 700-010-04, Estimate of Contract Time.](#)
5. Review the appropriate approved Utility Work Schedule and or Agreements to determine what part of the requested utility adjustment potentially impacts the Contractor's work. A delay occurs only if the prime contractor cannot work as a result of utility conflicts or due to other unforeseeable conditions as spelled out in [Supplemental Specifications 8-7.3.2.](#) Assume good cooperation between the utility and the contractor during the actual construction of the project. Utility relocation duration should be handled as an activity if they will contribute to the project duration.
6. Multiply each of the workdays by a factor of 1.40 to convert them to contract days.
  - (1) The factor of 1.40 is based on 5 (five) working days per week. Implicit in this factor is the assumption that the contractor will use "normal" crews and equipment, and will work a "normal" workday.
  - (2) If special provisions modify the time requirements of the project, then it may be appropriate to use another factor based on number of allowable working days and allowable working hours, either larger or smaller. For a project with incentive/disincentive, a factor of 1.0 or less could be used. This would be based on the assumption that the contractor would work 7 (seven) days per week with extended work hours. On the other hand, if the special provisions curtail the number of hours per day the contractor may work, the factor used may be larger than 1.40.

On Compressed Time or Time Priority Projects, the Scheduling Engineer may assume longer working hours, multiple crews, and 6 (six) or 7 (seven) day work weeks to accomplish a decrease in the project duration. Projects

containing a No Excuse Bonus provision should have reduced project durations. Projects with a Liquidated Savings provision should be calculated using a 6 (six) day work week.

On A+B projects, the maximum number of days is calculated using normal production rates and 5 (five) day work week.

When using a computerized scheduling software package, workdays will be converted to calendar days using the calendar function in the program.

The report(s) from the scheduling software and/or non-computerized form should show, as a minimum, for each activity: id, description, quantity (of work), unit (of work), duration, early start, early finish, and days of total float.

## 1.2.9 Documentation

### (a) District Level Responsibilities

On each worksheet establishing Project Duration, add the Financial Project ID, county name, the contract time, and the name and phone number of the person who established the contract duration. Also provide the back up documentations of how time was established. ([Form No. 700-010-04, Estimate of Contract Time](#)).

Schedules are considered a part of the "Plans to Tallahassee" package. Instructions for submitting the complete "Plans to Tallahassee" package are included in [Volumes 1](#) and [2](#) of the *Plans Preparation Manual, Topic Nos. [625-000-007](#) and [625-000-008](#)*.

## 1.2.10 Prosecution

### (a) District Level Responsibilities

The contract duration is not final until the project is bid. Up to this point in time, the project duration can be influenced by changes in design or by other external reasons. The designer (Project Manager) and the District Scheduling Engineer shall coordinate all changes that would affect the contract duration.

The Design Project Manager and or Utility Project Manager should notify the District Scheduling Engineer when revisions or changes are made, such as approved Utility Work Schedule changes. These revisions/changes could impact the contract duration that was established by the Scheduling Engineer.

## **1.2.11 Training**

The training of staff for establishing Contract Duration will usually be the responsibility of each District. However, there are times when the State Construction Office may coordinate or suggest a particular course or class to attend in helping to calculate Contract Time.

## **1.2.12 Forms**

To assist in calculating contract time on a project [Form No. 700-010-04, Estimate of Contract Time](#) may be used. See **Section 1.2.8(a) 4 & 6** above for detail in using this form.

## **GUIDELINES FOR COMMUNITY AWARENESS PROCESS**

This guideline is for the use of the District Construction Offices. Some, if not all districts have internal procedures for Community Awareness activities. These plans are not uniform from district to district. This guideline is meant to supplement and complement district procedures.

### **1. Definition**

Community Awareness is a term used to describe both the minimization of negative impacts to the community and traveling public of a construction project and the Department activities that take place to keep the community informed.

### **2. Team Approach**

Several districts have already developed quality control plans that require a multi-disciplinary team approach to plans development. In addition to this various offices in the Central Office are recommending a team approach to solve specific deficiencies in our project development process. Community Awareness is one of those things for which a team is being recommended. It will be interesting to see how each district handles all of these recommendations to form teams. Instead of several teams, the District probably will identify some, but not all, of the projects that require a team to guide it along its way. There will be a core team that will continue during the duration of the project with additional people providing expertise as required.

The importance of this team approach is that it allows the district construction offices to have input to the project beginning with the definition of what the project will be until the project is let.

### **3. Involvement in Project Development**

**Scope Development and Definition:** Several districts, as part of their District Quality Control Plans, have required the participation of the District Construction Office in establishing the scope of each project. Subsequent reviews have indicated that an incomplete scope at the very start as one of the Department's major problems. Projects with scopes that evolve as the project develops will contribute to extra cost, rework, and poor quality control on the plans. Worse, in terms of community involvement, they can create conditions that will be difficult to overcome during the construction process. The District Construction Office needs to take advantage of every opportunity offered to it to be on a team or otherwise prevent problems on our construction projects - beginning with scope development.

**Define level of Community Awareness needed:** The Department has developed a "Commitment Compliance Tracking System" to record commitments made during project development. The District Construction Offices need to take advantage of this new system. At scope development, a level of public concern should be associated with the

project from level 1, the least, to level 4, the most. The level definition is provided below to assist in this designation. The designation of a particular level of concern does not, however, designate or restrict required actions. This designation should be entered into the Commitment Compliance Tracking System.

- **Level 1:** Project is not controversial, causes negligible access impacts and traffic disruption. Examples are work outside the roadway, simple rural resurfacing, some signal work, pavement markings, bridge or other maintenance.
- **Level 2:** Project has general public acceptance, little impact on access and reasonable degree of traffic disruption. Examples are urban resurfacing, bridge repairs, and median revisions (not access control) that require lane closures.
- **Level 3:** Project is controversial, will significantly impact traffic flow or will adversely affect access to properties (temporarily or permanently). Examples are parking removal, median opening closures, traffic signal removal, roadway widening, major reconstruction, and projects with detours.
- **Level 4:** Project involves interstate work including maintenance work, road widening, temporary ramp closures, construction of new interchanges, and major reconstruction. Also included in Level 4 are all projects that require total closure, either temporary or permanent, of roadways, bridges, or railroad crossings.

**Designate Time Critical Project:** For numerous reasons, including minimizing community impact, there are projects that the districts desire to be performed in a period of time much less than that which would be normally established for a project duration. For this desire to be realistically attained the district should designate the project as “Time Critical” as early as practicable. This should also be recorded on the Commitment Compliance Tracking System. This should be a signal to the designer to give short project duration a priority consideration when designing the project. This should also be a signal for utility relocations to be started early and for utility relocation agreements to contain expedited times.

#### **4. Design Phase**

**Plans Reviews:** Access management driveways and median openings: Decisions on access management and median openings are made very early in the design process. These decisions cause some of the more contentious issues during construction, but there probably is not anything the construction personnel can do about them.

The Phase I Plans Review is the most important phase review for minimizing community impacts. Major decisions are made at this stage that cannot be ameliorated during construction. Decisions that effect MOT, access, and drainage are made and cannot be undone in future phases.

This phase review package should contain a Conceptual Maintenance of Traffic Plan. This plan should be reviewed to assure minimum impact on abutting property owners. Any condition that would make it difficult to provide simple and direct access to property on both sides of the road should be avoided. The reviewer should make sure that the designer has attempted to strike some happy medium between a small number of MOT phases, of long length and duration, and a higher number of MOT phases of short length and duration. A smaller number is conducive to a shorter overall project duration. MOT phases of short duration cause less inconvenience to abutting businesses.

Another aspect of the plans that merits careful review is any change in vertical alignment. On an urban reconstruction or widening the designer should maintain the existing alignment to the extent possible. Changes in vertical alignment make it very difficult to maintain access on the main roadway and even on side streets. Lowering the alignment can also cause unforeseen utility relocations if there is not sufficient cover for mainline utilities and service connects after the grade is lowered. Access to property on side streets will also be affected when grades are changed on the main roadway.

The combination of MOT and vertical alignment will also impact drainage during the construction process. The reviewer should make sure that the designer does not set up a situation where water will pond on the project or where a heavy rain will cause delays. Additional guidance on plans phase reviews is in the Construction Project Administration Manual Chapter 1, Section 1, Plans Review and Comments.

**Specifications:** The District Construction Office can recommend that special provisions, that help minimize community impact, be included in the specification package for the project. Examples of this are restricted working hours, night work, contractor suspended operations on specific days, day certain starting and day certain project completion, restricted work length (train spec), and alternative contracting methods.

**Project Duration:** The District Construction Office establishes the project duration. They have the option of shortening this project duration if it will minimize the community impact of the project. Additional guidance for establishing project duration is included in the Construction Project Administration Manual Chapter 1, Section 2, Contract Duration and Alternative Contracting Techniques.

**Alternative Contracting:** The Department has developed a battery of innovative contracting schemes to minimize community impact. Examples are Incentive/Disincentive and no excuse bonuses. These schemes also require that special provisions are included in the specification package. Additional guidance is contained the Alternative Contracting User's Guide.

## 5. Construction Phase Best Practices

The Project Engineer/ Project Manager must develop a Community Awareness Plan as early as practicable. If a Consultant CEI will be involved, community awareness activities must be included in the scope of services. The extent, of which, is dependent on the Level of Concern. On Level of Concern 3 or 4 projects, the Project Engineer/Manager should consult with the District PIO or Community Awareness Coordinator when developing the plan or RFP and scope.

Listed below are the minimal elements for a Community Awareness Plan:

- Date of the plan and each revision
- Name of the person initiating the plan
- A brief, but detailed, description of the project and summary of traffic impact.
- Description of the community and properties affected by the project.
- Discussion of any removal any off street parking (if any) and how it will affect adjacent properties and businesses.
- Special features/amenities that will be included in the project, including, but not limited to, landscaping by whom and who will maintain it.
- A list of known community concerns and a strategy for addressing them. (*Where appropriate*)
- A list of all PD&E and Right of Way commitments made to the public and how they will be addressed. (*Where appropriate*)

An additional topic should to added to the pre-construction conference agenda. On projects where there are known community concerns, these should be addressed. The contractor should be requested to assist the Department to minimize public complaints by keeping access to business well maintained and to keep the stock piling of materials in front of businesses to a minimum. The contractor should also be requested to remove trash as soon as possible. (*All projects*)

1 month prior to construction start: "Dear Neighbor" flyer with construction dates and specific project impact to traffic information. This flyer should contain the name of the contractor, contractor's superintendent, and FDOT Project Engineer, with field office locations and the appropriate telephone numbers. The preferred method for distributing

this flyer is for the Project Engineer to hand deliver door to door. *(All projects)*

1 week prior to construction: News release of project start date, pertinent project information and specific traffic information. This is usually done working through the District PIO and the District Community Awareness Coordinator. *(All projects)*

Throughout construction: The project Engineer should keep the District Public Information Office(PIO) and the Public Information CEI, if there is one, informed of all issues affecting the public. Weekly news releases with specific traffic impact should be issued by the PIO and Public Information CEI. *(All Projects)*

Other elements that may be considered:

2 to 4 weeks prior to construction start: Pre-construction public information meeting/open house for all interested persons to review plans, construction schedule, and traffic impacts, particularly dates of total closure. Conducting additional meetings during the project as milestones are reached should also be considered. Meetings can be open house style, held at field office locations or locations close to the project. Project staff may also make presentations at local community or homeowner association meetings. *(Level of Concern 3 and 4)*

A newsletter may be used to keep those interested informed about the current project status and specific issues. *(Level of Concern 3 and 4)*

An internet site to supplement other forms of notification and to provide another means for input of questions and concerns. *(Level of Concern 3 and 4)*

Information kiosks can be used to provide information to the general public on projects of community wide interest. *(Level of Concern 4)*

Supplemental meetings with Home Owner Associations, the Chamber of Commerce, or other interested groups can be held upon request. *(Level of Concern 3 and 4)*.

## **6. Listen and Be Responsive:**

On the construction project, it is important that every DOT/CEI employee be willing to listen to problems and complaints from property owners and the traveling public. When possible try to do something about the problem the people are complaining about. When it is not possible to do something, such as median closings, limited driveways and loss of parking, be sympathetic and try to explain the reasons for these changes.

All communications with abutting businesses and residents should be recorded. When possible, all concerns should be responded to in writing.

Acknowledgements: This guideline was drafted using, to a large degree, the content of the Community Awareness guidelines from Districts 4 and 7.