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# **1. Functions of the Office of Contracts**

The Office of Contracts is responsible for three major functions of the Iowa Department of Transportation:

1. Estimating and Contract Letting
2. Bid Review Monitoring and Collusion Detection
3. External Civil Rights Compliance

The Office of Contracts is at the focal point where all of the pre-letting activities converge together so contracting can take place for the construction work.

## **2. Letting Process Philosophy**

The following is the Office of Contracts general philosophy used in the letting process.

- Increase competition by contractors.
  1. Create craft specific proposals.
  2. Package contracts to maximize competition.
  3. Set reasonable contract periods.
- Decrease the risk to the contractor.
  1. Establish open contract periods.
  2. Provide good quality plans.
  3. Promote standard use of bid items.
  4. Minimize use of incidental items.
- Provide a level playing field for all bidders.
  1. Avoid statements such as “as directed by the engineer” in the contract documents.
  2. Assure that all contractors have the same information.
  3. Provide uniform application of Standard Specifications.
  4. Provide complete and clear set of contract documents.

- Maintain fair and consistent letting practices
  1. Projects should be let in “good faith” with intentions and money to award.
  2. Negotiations with the low bidder should only be done after the contract has been signed.
  3. Any changes made after the letting should not substantially change the scope of the contract, nor impact which contractors may have bid for the contract.
- Special requests for projects
  1. The Office of Contracts will consider special requests for unique situations.
  2. A reason must document why the situation is unique and not common on many other projects.
  3. The request should be timely, at least with the final plan submittal.
  4. The request should be submitted on a written form, letter or electronically.

## **3. Lettings**

### **Monthly Lettings**

The Iowa DOT's Office of Contracts has 12 highway lettings, the public opening of bids, each year. Monthly lettings are scheduled for the third Tuesday of each month, except for January where the letting is the Wednesday following the third Tuesday. These lettings give contractors the opportunity to bid on approximately 700 projects each state fiscal year. These include interstate, primary and secondary road work and maintenance projects. The Iowa DOT also receives bids on most city projects that involve federal-aid.

Following is the conceptual critical dates schedule for a letting:

- Plan Turn-in to Contracts - First Tuesday, two months prior to letting.
- Last day for designer to initiate plan changes - Third Tuesday, two months prior to letting.
- Establish Bid Order - 1 day prior to DBE Goal Setting.
- DBE Goal Setting - First Tuesday, one month prior to letting.
- FHWA Authorization – Prior to the Third Tuesday, one month prior to letting.
- Last day to request changes by addendum - First Tuesday, month of the letting.
- Letting Date - Third Tuesday of the month, except for January is the Wednesday after the third Tuesday.

## Special Lettings

The DOT occasionally conducts Special Lettings for work that can not be scheduled for a regular monthly letting and doesn't meet the requirements for an Emergency Letting. Special Lettings are initiated by the designer or the district, with a justification that the work can't be scheduled for a regular monthly letting. Considerations for late plan submittal, shorted plan availability to the contractor and accelerated design should be evaluated before a Special Letting is set up. Special Lettings require a legal advisement to be placed in the Des Moines Register. This typically takes 10-14 days. It should be recognized that the steps to conduct a Special Letting are similar to a regular letting, therefore the use of Special Lettings should be minimized.

## Emergency Lettings

There are times when a site will need immediate repair work requiring a quick turnaround from design to construction. In this case, the Office of Contracts will use an emergency letting procedure to contract for the work that meets the requirements in the Iowa Code Article 313.10 Bids - Advertising.

The conditions for using emergency procedure are as follows:

1. The emergency was caused by an unforeseen event causing the failure of a highway, bridge, or other highway structure so that the highway is unserviceable, or where immediate action is necessary to prevent further damage or loss.
2. The department solicits written bids from three or more contractors engaged in the type of work needed.
3. The necessary work should be less than \$1,000,000.00.

Following are some of the details of an emergency letting:

- A notice of the emergency letting is sent to the Association of General Contractors (AGC).
- The range of cost for the emergency letting projects may be included with the notifications.
- An official legal advertisement is not required.
- The DOT determines likely bidders and sends documents to them requesting them to bid.
- More than three contractors are usually contacted.
- The list of contractors is based on those who have done the same type of work within the area of the emergency project.
- Contractors that were not asked to bid can submit a bid if given prior approval to bid.
- The documents are faxed to potential bidders.
- The plan sheets must be readable when reduced to 8 ½ by 11 and faxed.
- No proposal guarantee is required.
- The bid deadline is normally 1-3 days after the invitation to bid has been sent out.
- The contractor is normally expected to start within a week after the letting.

### Project Turn-Around for Letting

The critical milestone for a project to make a letting is to have all of the letting documents available to contractors on advertising date. The advertising date for all regular monthly lettings is the 3<sup>rd</sup> Tuesday of the month prior to the letting. Normally the work to finalize the letting documents begins on the 1<sup>st</sup> Tuesday of the month the letting is being advertised.

Normally projects will be removed from a proposed letting if the project clearances have not be received by the 1<sup>st</sup> Tuesday of the month prior to the letting, however projects may be kept in a letting after this milestone if it is determined it is in the public's best interest to proceed without all clearances (see PIFs in Section 8).

Projects removed from a letting on the 1<sup>st</sup> Tuesday of a month prior to the letting can be postponed one letting. Projects that are removed from the letting after the 1<sup>st</sup> Tuesday of a month prior to the letting will be postponed two months. This two month delay applies regardless if the removal was done prior to advertising, if the project was advertised and withdrawn before letting, or the project went to letting and all bids were rejected.

## **4. Project Number Determination**

A project number is a unique combination of alpha-numeric system prefixes established by various offices within the Iowa DOT, based on the federal numbering system, and assigned to highway construction, maintenance and research, rail, aeronautics, public transit, capital improvement, and other projects. Policy No. 130.01 of the Iowa DOT Policies and Procedures Manual defines the varying segments of these unique numbers and how the Office of Contracts establishes them.

The format for a project number follows a set pattern and can best be described as a combination of several codes. These codes combined in the order given include the following: system prefix letter code, route number code, federal control section number code, chronological sequence of assignment of projects code, mile post number code if applicable, alpha-numeric system prefix code and county number code.

Once a project number is established for a specific project, the number is project specific and will never be used again in the future. This guarantees the accuracy of the Iowa DOT information databases and allows for future retrieval of this information when needed by Iowa DOT personnel. A separate project number should be assigned for work on each roadway so historical roadway costs can be tracked. Work funded with MP funds must have its' own project number.

## **5. Packaging of projects for letting**

The objective of project packaging is to have a project or a group of projects that are optimized according to several factors. One of those factors is the amount of competition obtained for the package. When a package consists primarily of one type of work and is within most contractors bidding capabilities, then there will be a larger number of bidders on the project. More bidders on a package should lead to better bid prices.

### **Craft Oriented Projects**

One way to encourage more bidders on a project is to set up a contract where the bidders will actually be the contractor that accomplishes the work. This allows the contractor to control their own destiny and should eliminate any additional monetary mark-up due to sub-contracting. The industry has requested multiple times in the past that contracts be set up that allows them to bid on their own work and to limit the amount of work that has to be subcontracted out. Often due to staging or other reasons multiple work types must be on the same contract but whenever possible multiple contracts should be let for different work types. If there is coordination needed between several types of work, contract periods or proposal notes can typically be used to help coordinate several projects.

### **Optional Combination**

To obtain the maximum number of bidders the package must be attractive to them, this would mean that it is large enough to entice them to bid but also not too large that it exceeds their bidding capacity. The attractive size range of a package will vary from one contractor to another and also from one type of work to another. At times there will be a group of contractors that only bid smaller projects and others that will only bid very large groups of projects.

To allow both of these contractors to bid, the Office of Contracts will occasionally offer an “optional combination”. For example, four bridges can be let singularly and also all four as one large package. The contractor may choose to bid any of the single bridges and may also choose to bid the package with all four bridges. The Office of Contracts will decide if the four separate projects or the four combined are less expensive. The lowest dollar amount of the responsive bids is what will be awarded. Following are some of the criteria used in packaging various types of work:

### Structures

Iowa has a lot of smaller contractors that build box culverts and bridges. Some of these contractors cannot bid packages that are extremely large; others aren't interested in smaller projects. RCB extensions and new RCB culverts in the same area should be combined on the same project especially if the total dollar cost is under \$250,000.00. Multiple extensions and new culverts should be divided into separate projects if the total cost exceeds \$500,000.00. Culverts should primarily be packaged by location, but if possible, same-sized culverts should be grouped together to help reduce contractors costs.

Bridge projects routinely obtain good competition except for those structures that are very large or very small. Single bridges are usually let as a separate contract except that two dual bridges (same width and length) are usually the same design number and therefore on the same project/contract.

### PCC Pavement

There are two distinct areas PCC pavers specialize in, urban type paving and rural type paving. Some contractors do only one or the other type while others can function well in either area. Generally speaking small PCC paving projects will cost more per area of pavement due to the mobilization costs. More complex construction/traffic staging will increase cost substantially. There does not seem to be a distinct dollar amount where competition increases or decreases, however the Office of Contracts will usually look to split a PCC paving project up into parts if it exceeds about 10 million dollars. These multiple paving projects will then usually be offered as an optional combination.

### HMA Pavement

Smaller HMA paving projects will often have very few bidders. This is common due to the fact that there is usually only one local HMA plant and it may not be economical for another contractor to move in a portable HMA plant. Therefore, whenever possible, HMA projects should be grouped together to try and attract other HMA bidders to an area. When there are more than one or two HMA bidders, the bid prices are usually better.

### Grading

Iowa is fortunate to have an abundance of good grading contractors that do both small and large projects. Most of the smaller contractors can not bid projects over 2.5 to 3 million dollars due to their bonding capacity. Some of the larger contractors do not bid projects lower than 1.5 to 1 million dollars. The Office of Contracts has discovered that better bid prices are obtained from projects worth 2 to 3 million. When a grading project rises above 3 million dollars, the project may be split up into 2 or more projects to increase competition. These multiple grading projects will then usually be offered as an optional combination.

### Other

When contractors can bid on their own work type rather than being a subcontractor, more favorable bid prices are usually obtained. Therefore it is preferred to have small items such as traffic signals, lighting, erosion control, fencing, landscaping let as their own separate projects. However there are times when construction staging or traffic staging will require having some small items included in a larger project of a different work type. Combinations of different work types are at times unavoidable but the designer should try their best to design a project that will separate work types resulting in the same quality project for a lower price.

### Combining Metric and English on a single plan or proposal

There have been occasions when a single project had references to English and Metric on the same plan usually due to different areas being surveyed in different units of measure. On other occasions it has been necessary to combine two or more projects on one proposal/contract and they have different units of measure. Due to limitations in the computer system that the Office of Contracts uses to create the proposals/contracts, all the bid items on a single proposal/contract has to be either all Metric or all English. Therefore it will be necessary to convert some items from English to Metric or vice-versa so that all the bid items in a proposal/contract are in the same units of measure.

### Combining of different routes or different counties on the same plan/proposal

It is acceptable to have multiple projects on a single proposal. It is also acceptable to have multiple projects in a single plan set. There are occasions when construction work is on two different routes or in different counties. To be able to track construction work on different routes it is required that there are separate project numbers for each route that has a significant portion of work on it. Occasionally one project number is acceptable, such as if it involves work at the intersection of two routes. If construction work is in multiple counties and the work is continuous then only one project number/county is acceptable. The designer should indicate on the plan sheet all the counties affected but only the western or southerly most county would be indicated in the project number.

## **6. Type of Work - Subletting of Contract**

In 1993, a task force, consisting of the Offices of Road Design, Program Management, Advanced Planning, Construction, Transportation Inventory, Maintenance, Project Scheduling, Audit, FHWA, Bureau of Information Services, Bureau of Support Services, Transportation Safety, and Contracts, developed a list of major work type categories. Transport, the Office of Contracts computer system, has used these new work type codes since the January 1994 letting. The Bid Item Descriptions, English and Metric contain an updated list of work types.

### Assigning Work Types and Call Groups

The work type on the title sheet of the plan should match the type of work contained in the plan. The designer may need to change the work type on the title sheet if the work type is obviously incorrect. The work type assigned at the project level in Trns•port PES should match as closely as possible to the work type shown on the title sheet of the plan.

The work type assigned at the proposal level in Trns•port PES (which would cause the proposal to be assigned to a call group) should be the work type that represents the type of contractor who would be qualified to bid the proposal. For example, a proposal for Grade and PCC Pavement would end up in the PCC Paving call group. Therefore, a contractor prequalified in P1 (PCC paving) should be able to prime the project. However, the proposal should be assigned Grading if only contractors prequalified in G1 (Grading) could perform the required 30% of the contract total.

### Subletting of Contract

Section 1108 addresses the issue of prosecution and progress of work under contract. Specifically at issue is the subletting of portions of the work under contract by the prime contractor.

Section 1108.01 of the Standard Specification for Highway and Bridge Construction stipulates the conditions under which subcontracting may be done by the prime. A modification to Section 1108.01 may be applicable if it is found that the prime contractor will have difficulty meeting the specification. This modification is proposal specific and can be found in the proposal form in the Proposal special Provisions Text.

## Use of the Subcontract Note 670.13

The note 670.13 shown below allows any portion of a project to be sublet so long as the prime contractor meets the requirements shown in the note. This note should only be used on contracts that are normally done by a project manager, such as building construction or renovation projects.

670.13

\*\*\* SUBCONTRACTING \*\*\*

Replace Article 1108.01 of the Standard Specifications with the following:

The Contractor may request to subcontract any portion of the contract. Written consent of the Contracting Authority is required for all portions of the contract to be sublet, assigned, or otherwise disposed of, except for the furnishing and transportation of materials. Requests for permission to sublet, assign, or otherwise dispose of any portion of the contract shall be submitted in writing to the Contracting Authority on "Subcontract Request and Approval" (form 830231). The Contracting Authority will forward all requests with recommendations to the appropriate Iowa DOT District Office for final disposition. Each request shall be accompanied by a showing that the organization which will perform the work is particularly experienced and equipped for such work. Consent to sublet, assign, or otherwise dispose of any portion of the contract shall not be construed to relieve the Contractor of any responsibilities under the contract.

The Contractor shall designate a Project Manager who shall direct all of the work on this contract. The Project Manager shall be available whenever work is in progress and shall have authority to:

1. Ensure all subcontractors have complied with the EEO/AA requirements of the contract.
2. Ensure all EEO/AA required postings are visible to all persons working on the project.
3. Ensure that non-segregated facilities are provided for all persons working on the project.
4. Coordinate and direct the activities of all subcontractors to ensure timely completion of the project.
5. Negotiate change orders and extra work orders.

## **7. Balancing Work load/Fall-winter letting**

The number of projects available for bid will vary from letting to letting. Usually during the fall and winter lettings (October through March) there will be well over one hundred construction projects per letting for contractors to bid on while in the spring and summer lettings (April through September) the number of construction projects range from thirty to sixty for each letting.

The Iowa DOT tries to let most of their projects, particularly the larger projects, in the fall and winter months to lower the construction cost. By letting projects during this time period, the contractors are given more time to adequately schedule their future work. The number of contractors available to bid on Iowa DOT projects is generally higher during the fall and winter months, and thus the bid prices are more competitive.

The Office of Contracts works with those involved in the projects (within and outside the Iowa DOT) to determine when a project should be let. While most projects are let during the fall and winter lettings, the Iowa DOT tries to balance the workload to avoid a feast or famine situation. It is not good to have all the projects for one work type in one letting; it is better to spread some projects out over multiple lettings. This insures adequate work for contractors and a sufficient number of contractors available to do the work.

## **8. Plan Review by Proposal Section**

The Office of Contracts reviews the plans to see if they are complete and biddable. This review allows a proposal to be generated and helps it to accurately reflect the work in the plans.

Following are things reviewed for each project submitted to Contracts.

- Items on plan versus work type.
- Bid item usage.
- Specifications, Method of Measurement (MOM) and Basis of Payment (BOP) for each bid item.
- Usage of "As directed by the Engineer", this is not normally accepted.
- Items or work that is incidental.

Following is a list of items that may be checked for obvious errors.

- Detail sheets
- Tabulations
- Road / Bridge standards
- Quantities
- Specifications
- Traffic Control Staging

Office of Contracts personnel may make clerical changes to the project plans. The engineer who signed the plan will be notified of the change by either Contracts personnel or other DOT personnel.

Office of Contracts personnel can make minor design changes to the project plans if a letter, e-mail or fax detailing the changes is received from the engineer that signed the plans. The engineer that signed the plan or their designee should make major design changes.

### Bid Item Usage

Following are some details that pertain to the usage of standard and special bid items:

- Use of Categories
  - Separate categories can be used to group items that are funded the same.
  - Separate categories should be used to differentiate between urban and rural.
  - Separate categories differentiate between roadway items and structures. There is usually a separate category for each structure design number.
- Use of standard bid items is encouraged. If a bid item has some unique property but can still fit under the standard bid item a supplemental description can be added to the bid item. This supplemental description will show up in the proposal schedule of prices.
- If a standard bid item can not be used then a 2599 item should be used. The number used is dependent on the unit of measure.
- Care should be taken when using items that cover the entire project or contract. (e.g. mobilization, traffic control, construction survey, incentives, bonuses)
- Alternate bid items need to be shown toward the end of the estimate of quantities. They will be the last bid item on the schedule of prices in the proposal.

## Public Interest Finding (PIF)

There are many State or Federal rules, policies, or procedures that apply to construction contract lettings conducted by the Iowa Department of Transportation (Iowa DOT). However, a limited number of these rules, policies, and procedures contain provisions that permit them to be waived under certain circumstances. A Public Interest Finding (PIF) is documentation of the justification to allow such an exception. As its name suggests, these exceptions are approved if it is in the public's best interest to do so. Usually, an exception is deemed to be in the public's best interest if it is more cost effective than following the established rule, policy, or procedure. Cost effectiveness means that the proposed action results in the lowest overall cost. However, in some situations, other factors may also be considered. A PIF, by its very nature, is an unusual situation. Therefore, the Iowa DOT should approve a PIF only after careful consideration of the specific situation and the precedent that may be set.

The typical conditions that require a PIF include, but may not be limited to, the following:

1. All of the applicable project clearances will not be obtained by the 1st Tuesday, 2 months prior to letting.
2. The contract documents for a Federal-aid contract specify a mandatory borrow area.
3. The contract documents for a Federal-aid contract specify that the contractor shall incorporate into the project materials or products provided by the Contracting Authority.
4. The contract documents for a Federal-aid contract specify a mandatory disposal area for salvaged materials such as millings retained by the owner.
5. The contract documents direct the contractor to provide a single proprietary product.
6. The contracting authority will directly perform some or all of the construction work using its own labor, materials, or equipment; and the Contracting Authority will request Federal-aid participation in this work.
7. The contract documents make publicly owned equipment available for use by the contractor and the Contracting Authority will request Federal-aid reimbursement for the use of this equipment.

The Office of Contracts may advertise a project once without some of the clearances if it is reasonably certain that they will be obtained in time and a PIF is provided. The Office of Contracts will not advertise the same project a second time until all clearances are obtained.

Further guidance for state projects is provided in the Design Manual published by the Office of Design, Iowa Department of Transportation. Further guidance for local systems projects is provided in the Project Development Information Packet for Local Public Agency Federal Aid Projects, Public Interest Findings published by the Office of Local Systems, Iowa Department of Transportation.

## Warranties

Warranties, beyond what is provided by manufacture warranties, are not normally included in contracts let by the DOT. To give the contractors the full advantage (and liability) of providing a warranty, the contractor should be given a lot of latitude in the materials and

construction processes it uses to construct the project. Therefore if a warranty is specified, the work should be constructed on end-result specifications and not a method specification.

### Maintenance Bonds

It is very unlikely that the contractor will have to maintain the project for any specified period beyond the completion of the construction. If a maintenance bond is required, there should be an item in the contract to pay for the cost of the maintenance bond. In addition, the specifications should clearly state the conditions that triggers the beginning of the maintenance period, the duration of the maintenance period, the level of performance that warrants the contractor to perform any maintenance activity, and descriptions of each required maintenance activity to correct defective work. A maintenance bond item is generally not eligible for federal aid.

### Letting Plan Standards

The Reproduction Department has been instructed by those using its services that plan sheets need to be reproduced at 100% of the printed size. This allows designers to produce a plan that is scalable. The space in the margins to allow proper reproduction is as follows: 11" x 17" plan sheets must have a "white border" minimum of 0.25 in (1/4") top and bottom and 0.625 inch (5/8") left and right. If any printing falls within this required "white border" it is in jeopardy of being lost when the sheet is reproduced.

### Printing of Plans

The Iowa Department of Transportation, Office of Contracts implemented the final phase of print on demand during the May 16, 2006 letting. Plans and estimating proposals will be printed as they are ordered instead of being printed en masse at the beginning of the letting and then pulled from shelves as contractors submit requests for documents. It is anticipated that this new process will allow the DOT to print 30% fewer documents than were printed under the old method.

Estimating proposals, plans and cross sections ordered thru Bid Express for the letting will be processed using print on demand. Contractors will be encouraged to review the information included in all mailings to assure that the documents received were the documents that were ordered. If bidding documents are ordered they will be mailed under separate cover.

While print on demand will allow a significant savings in printing costs it may initially result in a slight delay in the delivery of documents to contractors during the early stages in a letting cycle. Orders submitted five weeks prior to a letting used to be processed in one to two business days. With print on demand some orders submitted early in the letting cycle may not be processed for three or four days.

Plans with 50 or more cross sections will have the cross sections printed separately. They will be listed on the order form as available from the Office of Contracts. If there are 49 or fewer cross sections, they will be printed with the plan.

If you have any questions about the new print on demand process, please feel free to call the Office of Contracts at 515-239-1414.

## **9. Cost Estimating**

Before a project is advertised, an estimate is established by the Iowa DOT. One of the purposes of the estimate is to make sure that funding is available for the project. Estimating the cost will help control the limits of the design of the project and also determine what functions of the project can be achieved from available funding.

Estimates are also prepared to make sure that contractors bid submittals are reasonable. After the letting, the low bid is compared with the estimate to check for reasonableness in unit prices and total cost of the project. Each bid item is evaluated and studied to determine what significant differences in unit price occur between the estimate and the low bid. In some cases, these comparisons are used to determine if the project should be awarded or rejected.

It is the State's policy to keep the estimates confidential and not to release them publicly either prior to or after lettings. Also, no information is released publicly which may indicate the actual value of the estimate prior to the letting. The intent of this confidentiality is so that the estimate does not influence the bidders' unit prices and encourage more accurate and competitive prices.

The unit prices for project estimates are achieved by a combination of computer generated statistical results of historical unit prices and research to find data not readily available from historical record.

There are approximately 4,800 current bid items (in both English and Metric) of which there are historical cost records. These data are maintained on the DOT's mainframe computer of which programs are used to sort and analyze the records to generate a unit price. When a computer-generated result is not satisfactory, further research will be done to find a unit price that fits the item of work.

The tool used to generate and enter the unit prices is a mainframe software program called TRNS\*PORT. This program is also used for maintaining the historical records as well as analyzing the bid results

There are several factors to consider when preparing an estimate. One of the factors is the road type. There are five different types of road, interstate, primary, farm to market, urban, and institutional. Unit price items can be influenced by the road type, which can be equated with volume of traffic.

The type of work can also influence unit prices. There are at approximately 170 work types available for use. An example of how price are affected – prices for seeding in a PCC paving project may be significantly different than a price for seeding in an erosion control project.

Quantity of the item also affects unit prices. Typically if there is a large quantity for that item, unit prices will generally be lower than if there were low quantities for that item.

Another factor that affects unit prices is when the project is let. Generally when the project is opened for bid in the fall and winter months where the start date does not take place till the following spring, the unit prices are going to be favorable. Contractors prefer to use this time of year to schedule construction for the next season. If a project is let in the spring or summer and needs to be completed the same year, prices will be higher as the contractors' schedule become much tighter.

Location of the work is another factor to consider. This is especially true for items that require aggregates. In Iowa for example, there are more quarries in the northern half of the states than there are in the southern half. The availability of quarries will affect the unit prices for PCC and HMA paving, subbase items, erosion control items.

## **10. Liquidated Damages**

Liquidated damages are a contract agreed upon amount of damages that will be paid by the contractor should they not be able to complete the contract within the time frame designated in the contract documents.

The Office of Contracts reviews and updates the liquidated damage rates every two years and submits the rates to the Federal Highway Administration (FHWA) for approval per 23 CFR 635.127.

The Office of Contracts calculates the average daily contract administration cost for a group of completed contracts let in the previous two to three years. The average contract administration cost is the sum of all inspection, vehicle, and subsistence expenses for each project divided by the number of working days charged against the project. Based on these average contract administration costs, the Office of Contracts has prepared the Liquidated Damage Schedule in the Appendix. Higher liquidated damages may be assigned to a contract if project specific conditions justify higher liquidated damage amounts. Additional liquidated damages are usually calculated from user costs either from delay from the project or out of distance travel to get around the project.

The liquidated damages set for a contract must be reasonable and not punitive. The charging of days for the contract must also be reasonable. When the contract is complete and the contractor has liquidated damage days assessed, the contracting authority must be able to show that they were damaged.

## **11. Contract Periods/Innovative Contracting**

The Contract Period is the time period allowed in the contract for completion of all work contained in the contract documents. The duration of highway construction projects is critical due to the following factors:

- More projects are being constructed under traffic, resulting in increased exposure of construction workers and motorists to hazards
- Traffic volumes on most roadways are continuing to increase which impacts safety and cost.
- Proper selection of contract time allows optimizing all available resources including construction engineering staff and the available contracting industry.

### **Type of Contract Period**

The basic philosophy of standard contract periods is to allow the contractor as much flexibility as possible in which to complete the contract work. This philosophy allows contractors to schedule their work in an efficient manner, which should result in lower bid prices.

Currently, contract periods fall into four categories: Late Start Date, Specified Start Date, Approximate Start Date, and Completion Date, these four categories of contract periods are defined in Article 1108.02 of the Standard Specifications. The Late Start Date, Specified Start Date and Approximate Start Date utilize working days and the Completion Date utilizes calendar days.

The most common type of Contract Period uses working days and a late start date. The intent is to have projects completed by the end of the following construction season or within one year of letting. There are other innovative methods that may be used that can specialize a contract period. When duration is critical incentive/disincentive, A+B bidding and lane rental provisions may be used. When completion by a certain date is critical a calendar date completion or a no excuse bonus may be used.

### **Instructions for Estimating Contract Time**

The proper establishment of contract Time is a balance between minimizing road user inconvenience and maximizing the most efficient use of the construction industry's available resources, while conforming to the administrative limitations of the contracting authority. Contracts that provide more time than is actually needed for the project may discourage innovative management or construction techniques, encourage contractors to bid more work than can be handled and increase agency costs. However, additional time may also result in lower bid prices and permit smaller, lower volume contractors to bid. Contracts specifying less time than necessary for completion of a project can result in high bid prices and eliminate potential bidders. However, this could also encourage good management, higher productivity and result in lower administrative and engineering costs. The goal of standardized contract periods is that similar projects should be completed in similar time frames across the state.

Important factors that always need to be taken into account in contract time determination are traffic volumes, staging requirements and project complexity. Other factors that may be taken into account when they have a substantial impact on the project or the traveling public are high profile tourism events, agreements with other agencies, environmental constraints, availability of materials (structural steel, traffic signals, signs, etc.) and coordination with other construction projects.

The Office of Contracts has the responsibility for establishing contract time with input from the appropriate field offices. The first step in establishing contract time is to become familiar with the Traffic Control Plan (including Detail Sheets), Staging Plan (including Detail Sheets), items of work and the estimate reference notes. This will give the reviewer an opportunity to become familiar with how the project will be constructed and what items of work may control the completion of the project.

The average production rates shown in the appendix are used to evaluate the number of working days possible for each item.

Based on the knowledge of the project and the reviewer's knowledge of typical construction practices, the amount of overlap or concurrent operations is determined.

Once the amount of overlap has been determined the total number of working days required for the project is calculated. These days are listed on the proposal/contract in increments of 5 days.

Periodically, there is the need to adjust the production rates used on a particular project. Careful thought must go into the reasoning for adjusting the production rates. Some reasons may be special staging, emergencies, unique construction methods, special materials or restricted working conditions.

The comments section at the bottom of the "Estimate of Time Required Form" is for briefly describing the project's traffic control, staging requirements, length, local considerations, start or completion dates, intermediate dates and whether winter free time is allowed.

### Late Start Date

A Late Start Date is used when the site is available anytime after the letting, but completion of the project is not required until a later date. The late start date is defined as a calendar day shown on the proposal form specifying the latest date that a contractor is to commence work. Usually, the assumed completion date for a late start date contract should not exceed the letting date by more than one construction season or calendar year.

A Late Start Date should be utilized on the majority of all contracts. This type of contract period allows the contractor the most flexibility in scheduling work crews. It should be set as late as reasonably possible to allow the contractor to better schedule their projects and order supplies. It has been agreed between the Iowa AGC and the Iowa DOT that bridge projects will normally have a Late Start Date

60 days after the letting or later. Justification is required listing the pertinent reasons. If an earlier start date is desired. Some appropriate reasons include schools or grain elevators on or near the project or impacts to other projects. If a late start date is arbitrarily moved up without proper justification the enforcement of liquidated damages may be jeopardized.

### Specified Start Date

A specified starting date is used when the site will be available and it is necessary for the contractor to start on that date. This type of contract period is also used for projects of exceptionally long duration. For these projects it is not the type of contract period that controls, but the duration of the contract.

The most common uses of specified starting date contracts are for projects that have critical closures of the roadway or if completion is necessary to facilitate the construction of subsequent projects.

### Approximate Start Date

An approximate start date is used when the site may not be available until that date. The contractor can reasonably assume that work could commence on or near that date, although it may require coordination with other contractors. The proposal form should indicate the conditions that do not allow the contract to start immediately.

The approximate starting date contract also allows the contracting authority the opportunity to delay starting work should a conflict arise with scheduling due to uncompleted work by other contractors or the availability of a detour.

### Completion Date Contracts

A completion date type contract is available for projects that are not normal highway projects. These projects would not normally be impacted by the weather. Charging of working days and winter work will not apply. Liquidated damages will be assessed for each calendar day beyond the Completion Date that the contract remains uncompleted. Typical completion date contracts include building renovations, rest area building improvements and any other type improvements where weather does not impact the project.

### Intermediate Contract Periods

Another requirement that may be applied to contracts is the use of an intermediate contract period. Common uses of intermediate periods are:

- Early completion of bridge berms by a grading contractor to enable the bridge contractor to start
- Starting or completing critical stages of a project due to high traffic volumes
- Early completion of certain culverts on a multiple culvert project to allow the placement of fill by the grading contractor

## Field Input

An important element of standardized contract periods is to have policy that is uniform across the state. While uniformity is the key, the process to be used must also be flexible. Local conditions must be considered when they impact traffic volume, staging and project agreements. Input from the office that will administer the contract is necessary to ensure that the contract period is compatible with local conditions. Unique local conditions and administrative limitations or concerns should be addressed when the plans are turned in to the Office of Contracts for letting.

Approximately eight (8) weeks prior to the letting, the Office of Contracts sends a listing of projects scheduled for the letting to the District Engineers, Assistant District Engineers, District Construction Engineers, Local Systems Engineers and the Resident Construction Engineers to review. This listing states the contract period, the number of working days and any intermediate contract periods assigned to each project. These engineers should review the constructibility of the project in relation to the proposed contract period. They should identify any unusual or unique conditions that may affect the proposed contract time and determine if the proposed contract time conforms to all project requirements. Responses are requested within one week. On complex projects, requests and concerns should be submitted by the plan turn-in date (two and a half months prior to letting).

Contract period and working day requests from county and city administered projects are submitted to the Office of Local Systems with the plans. The requests are forwarded to the Office of Contracts upon concurrence by Local Systems. If the request from the county or city differs substantially from the standardized contract period, appropriate justification may be required.

## Tier System

It is recognized that the arrival of cooler weather in the fall is not a simultaneous occurrence across the state. For the establishment of contract periods the following table can be used as a general guideline for completion dates:

	PCC Paving	HMA Paving & Resurfacing	Structures
Northern three tiers of counties	Mid October	Third week in October	Beg. of November
Center three tiers of counties	End of October	Last Week in October	First week in November
Southern three tiers of counties	Mid November	First week in November	Mid November

When work is allowed late into the fall the issue of winter free time needs to be addressed. It is also important to note whether it is intended to allow or require the contractor to work over the winter.

### Critical Path Method (CPM) Scheduling

Projects that involve complex staging or have critical time restraints can utilize CPM scheduling. CPM scheduling should be used on all projects utilizing Incentive/Disincentive for Early Completion.

### Incentive/Disincentive for Early Completion

Incentive/Disincentive should be considered on highway construction projects where traffic movements are adversely affected causing undue delay and operating costs. Critical closure periods may include but are not limited to the following conditions:

- Periods of head-to-head traffic on multi-lane divided highways
- Periods of lane closure on multi-lane divided highways with average daily traffic exceeding 14,000 VPD
- Periods when through traffic on a non-divided highway is directed to an off -site detour with average daily traffic exceeding 7,000 VPD
- Periods of lane closure on a non-divided highway with average daily traffic exceeding 7,000 VPD
- Periods when through traffic is directed to an off -site detour with an out-of distance travel exceeding 10 miles
- Locations that cause severe economic hardship for a local community.

Early completion may be specified for an entire project or for designated portions of a project. Projects on which I/D provisions apply will have the I/D daily rates, the work or portion of the work intended for I/D, the late start date of the designated work, the number of closure days allowed (critical closure period), the total work days for the project and the maximum incentive payment shown in the proposal. The number of closure days will be calculated with consideration of average weather days. A closure day will be counted for each calendar day during the critical closure period.

### A+B Bidding

A+B bidding is a method of awarding a project based on both cost and time. Each bid submitted consists of two parts:

- The "A" portion of the bid is the sum bid for the contract work items.
- The "B" portion of the bid is the time in calendar days proposed by the bidder to complete the project or a portion of the project, multiplied by a daily road user cost determined by the Department.

The contract is awarded based on the sum of the "A" portion and the "B" portion of the bid. The contract amount after award is limited to the "A" portion of the bid.

A disincentive provision is incorporated into the contract (based on road user costs) should the Contractor fail to complete the work in the length of time bid. An incentive provision is also included to pay for acceleration costs and to reward the Contractor for earlier completion.

The use of A+B provisions is primarily intended for critical projects or project phases where traffic inconvenience and delays must be held to a minimum.

The characteristics associated with A+B bidding projects are High traffic volume facilities found in urban areas, projects that will complete a gap in a significant highway system, major reconstruction or rehabilitation on an existing facility that will severely disrupt traffic, major bridges out of service and projects with lengthy detours.

A+B bidding may encourage Contractors in several ways. They may develop detailed well thought out plans in order to bid on the time to complete a project or project phase. They may decide to work overtime, double shifts or at night to reduce construction time. They may develop innovative ways to reduce construction duration at the lowest cost during bid preparation and during construction. A+B bidding may also minimize Road user costs and inconvenience and could reduce the number of congestion related complaints from the road users and local communities.

### Lane rental with Incentive/Disincentive

Lane Rental with Incentive/Disincentive is used to encourage contractors to minimize impacts to the road user during construction. It should be considered on highway construction projects where traffic movements are adversely affected causing undue delay and operating costs. The contractor is assessed a rental rate for each lane and/or shoulder closure. The rental rate will be based on an hourly and/or calendar day basis. The allowed time, rental rate, and maximum incentive will be determined by the contracting authority and stated in the proposal. The rental rate is based on the estimated cost of delay or inconvenience to the road user during the rental period for the area closed to traffic.

Lane Rental with Incentive/Disincentive should primarily be used when traffic will be restricted but still travelling through a construction site. The incentive portion allows the contractor to obtain extra compensation for accelerating the work in the specified area.

For more information refer to the Supplemental Specifications for Lane Rental with Incentive/Disincentive.

### No Excuse Road Opening Bonus

The No Excuse Road Opening Bonus is an innovative contracting method to provide the contractor a predetermined lump sum incentive for re-opening the roadway to traffic a specified calendar date. A No Excuse Road Opening Bonus is intended to compensate the contractor for their additional cost to overcome any delays, regardless of any reason (weather, additional work, utility delays, etc).

The rules for the application of a No Excuse Road Opening Bonus are as follows:

- Use of incentive rather than the threat of liquidated damages to get timely opening on roadways (e.g. the carrot rather than the stick approach).
- Use of the No Excuse Road Opening Bonus should be reserved for special projects. Typical use would be for re-opening sections of roadways, which have been closed and must be available for traffic by a specified date.

- The specified date for opening the roadway should be set so any reasonable contractor would be able to achieve the No Excuse Road Opening Bonus.
- The No Excuse Road Opening Bonus should be used as a bonus, and not be used as a Calendar Completion Date for work or as a method to accelerate the contract!
- The size of the bonus should be a large enough to entice the contractor to expend extra effort to open by the specified date.
- Use of this bonus incentive is unlikely to increase the contract amount. All of the competitive bidders will likely assume they will be receiving this bonus and reduce their bid on other items a similar amount in order to submit a competitive bid.
- Use of the No Excuse Road Opening Bonus should only be used when adequate bidding competition is anticipated.
- The Bid Item for the No Excuse Road Opening Bonus is in section 2528 and is a predetermined Lump Sum amount.

The calendar date specified for the No Excuse Road Opening Bonus should be a catastrophic date where if the roadway is not opened, the intent of the contract is not achieved. This date would normally be a calendar date that the traveling public would be severely impacted even if the roadway is opened a day later. Typical dates would be the Thursday before Labor Day, the Tuesday before Thanksgiving, or the Friday before a major traffic generating event (e.g. State Fair, first day of classes at a school on the project, etc.).

The amount of the No Excuse Road Opening Bonus should be between 1.0% and 2.0% of the project estimate (in \$10,000 increments), with \$20,000 as the lowest bonus. Generally we should not use the No Excuse Road Opening Bonus on projects less than \$1 million.

A note in the proposal should be included such as “The contractor will be paid the Lump Sum amount shown on the Schedule of Prices for “No Excuse Road Opening Bonus” for opening the roadway to traffic on or before the calendar date shown”. The proposal note should state clearly what is considered as the roadway open to traffic (e.g. the number of lanes, if lane daytime lane closure will be allowed, etc.) Any delays due to weather, change orders, overruns of quantities, utility delays, or any other delays will not be considered as justification to modify the calendar date. (NOTE: Any change order should address the cost for the contractor to accelerate the work to ensure the project is not delayed.) The intent of the Bonus is to offer the contractor an incentive to open the road by the calendar date specified, and help defray some of these unexpected costs.

### Specifications / Restrictions Impacting Contract Periods

Following are some specifications that have a significant impact on contract periods:

Hot Mix Asphalt Mixtures (Article 2303.03C):

Road Surface temperature shall be at or above those listed for the applicable course and thickness.

Bituminous Seal Coat (Article 2307.04K):

No work after September 1<sup>st</sup> for primary projects.

No work after September 15<sup>th</sup> for other projects.

Thin Bonded PCC Overlay (Article 2310.07):

The overlay shall be placed when the air and surface temperatures are above 40°F ( 4°C).

Cold-in-Place Recycled Asphalt Pavement (Article 2318.05)

The work must be performed between May 1<sup>st</sup> and October 1<sup>st</sup>.

Slurry Leveling, Slurry Wedge and Strip Slurry Treatment (Article 2319.07)

Slurry mixture shall not be placed after October 1.

Surfacing and Repair and Overlay of Bridge Floors (Article 2413.10):

Temperature restrictions shall be adhered to and the work shall be performed between April 1<sup>st</sup> and October 1<sup>st</sup>.

Crack and Joint Cleaning and Sealing (HMA 2541.05 / PCC 2542.06)

Work shall be completed prior to September 30<sup>th</sup> and when the air and surface temperatures are above 40°F (4°C).

Seeding (Permanent) (Article 2601.04):

The work shall be performed between March 1<sup>st</sup> and May 31<sup>st</sup> and also between August 10<sup>th</sup> and September 30<sup>th</sup>.

Overseeding (Article 2601.04K):

The work shall be performed between March 1<sup>st</sup> and April 1<sup>st</sup>.

Seeding (Stabilized) (Article 2601.05):

The work shall be performed between March 1<sup>st</sup> and September 30<sup>th</sup>.

Plantings (Article 2610.03):

The work shall be performed for:

	Evergreens	Deciduous
Between:	March 1 <sup>st</sup> and April 30 <sup>th</sup>	March 1 <sup>st</sup> and May 15 <sup>th</sup>
Between:	September 1 <sup>st</sup> and 30 <sup>th</sup>	October 1 <sup>st</sup> & November 30 <sup>th</sup>

Steel products will require a lot of lead-time for ordering of materials. Signal poles and light poles will normally take two to four months while structural steel members will normally take four to six months. This required lead-time has taken up to two additional months because of increased demand for materials.

## **12. Flaggers and Pilot Cars**

From 1986 to 1990, the contractor bid the daily unit prices for flaggers and pilot cars. Contractors were unbalancing their bids to take advantage of potential quantity overruns or underruns. In 1991, the department decided to set a predetermined price for flaggers and pilot cars. The calculated price for flaggers is based on the statewide Davis-Bacon wage rate for flaggers. A twelve-hour workday with a 35% overhead cost is assumed. The calculated price for pilot cars will be 150% of the calculated price for flaggers. The predetermined contract price for flaggers and pilot cars will be the calculated price rounded to the nearest \$5.00 increment.

The Davis-Bacon wage rates normally change in January of each year. Therefore, all work let in a calendar year would usually have the same unit prices for flaggers and pilot cars.

### **Established Contract Price for Flaggers and Pilot Cars**

Predetermined unit prices for flaggers and pilot cars are reviewed, recalculated, and adjusted, if necessary, whenever a new Davis-Bacon wage rate is issued. Effective after the January 14, 1997 letting, predetermined unit prices for flaggers and pilot cars are not changed for a specific letting if a new Predetermined Wage Spec is issued by addendum. The new predetermined unit prices will be in assigned and in effect with the next scheduled letting. Effective with the October 03, 2000 letting, any project that is in Scott County (in whole or in part) will use the predetermined units prices based on the Scott County Wage Rate. All other projects will use the predetermined unit prices based on the 'statewide' Wage Rate. The predetermined wage rate specifications and the predetermined unit prices used for flaggers and pilot cars are shown in the estimating proposal form.

## **13. Issuing Bidding Documents**

### **Advertising for Bids**

The state uses *The Des Moines Register* to advertise lettings because it has the widest circulation of any newspaper in Iowa. The legal advertisement is on the first Monday of each month.

In addition to the legal advertisement in the newspaper, the state publishes a *Weekly Letting Report* and also advertises on the Bid Express (www.bidx.com) web site. The *Weekly Letting Report* includes a notice to bidders and itemizes the major quantities of work as they will appear in the proposals. Section B of the *Weekly Letting Report* gives a detailed listing of projects to be let. Section D of the report has a Request for Proposal Form which can be used to order plans, estimating proposals or bidding proposals. The *Weekly*

Letting Report can be ordered by obtaining a subscription form from the Office of Contracts, telephone 515-239-1414 or from the DOT Office Supplies, telephone 515-239-1324.

### Issuing Proposals, Plans and Specifications

The estimating proposal may be requested from the Office of Contracts either by telephone, FAX, mail, in person or on the Bid Express (www.bidx.com) web site. It lists the contract period, schedule of prices, supplemental specifications and special provisions that apply to each project.

Plans may be requested on the Bid Express (www.bidx.com) web site, or from the Office of Contracts either by telephone, facsimile (fax 515-239-1325), in person or by mailing in the request form in the Weekly Letting Report. There is no charge for the first two sets of plans.

The bidding documents may be requested by submitting the request form and Work Under Contract form found in the Weekly Letting Report. The contractor lists all incomplete work the applicant has under contract, both inside and outside of Iowa on the work under contract form. Upon receipt by the Office of Contracts of the contractor's request, an analysis is made of the contractor's potential bidding capacity (maximum qualification minus incomplete contracts equals potential bidding capacity). The contractor's request for proposal forms is then reviewed for the experience, equipment and financial capacity to do the projects requested and approved for submittal of the bidding documents to the contractor.

When a request is honored, the Office of Contracts gives the prospective bidder documents consisting of a bidding document with an estimating proposal, special provisions, and an envelope in which to return the bid. The Office of Contracts places the name and identification number of the bidder on the bidding document.

A contractor may join with another contractor to request to bid a project as a joint venture. Each of the contractors must be pre-qualified with the Iowa DOT. A joint venture's bidding capacity will be the sum of each contractor's maximum qualification minus the sum of each contractor's incomplete contracts. In a joint venture, a letter should be sent to the Office of Contracts requesting the joint venture and designating one contractor as the lead contractor. All contract documents will be sent to the lead contractor. For joint ventures, both contractors must sign the bidding document and bid bond.

Electronic preparation of the bid is allowed, but must be done with the electronic bid system (Expedite) software furnished by the Office of Contracts. Interested parties should contact the Office of Contracts for more information about this software.

To be valid for bidding, the Proposal Schedule of Prices form included with the Estimating Proposal or a computer generated Expedite Schedule of Prices must be included with a Bidding Document.

## Pre-Bid Meetings

Occasionally, the Office of Contracts will hold a pre-bid meeting to help clarify some of the requirements and details of the project. They can be requested either by Contracts, the designer or the engineer that will construct the project. Usually these meetings are for projects where there are complex staging requirements or unusual work in which there is a high likelihood of questions or concerns about the contract documents. Pre-bid meetings should not add any additional detail to the contract documents, however when questions or concerns are not adequately addressed by the contract documents an addendum may be necessary to correct the deficiency.

These meetings are not only for the interested contractors and the designers of the project. Representatives from other departments within the Iowa DOT are encouraged to attend pre-bid meetings. Possible participants are: Specifications, Materials, Construction, Design, Local Systems, Bridges and Structures, Districts, Resident Construction Engineers, City and County representatives.

The pre-bid meeting takes place about two weeks before the project is let which is usually about two weeks after it is advertised. The pre-bid meeting can be held near the project site, it can be held at the District, county or city office or it can be held at the central complex in Ames, Iowa. The announcement for the pre-bid meeting will normally be given in the contract proposal as well as in the Weekly Letting Report.

Minutes from the pre-bid will be taken either by the designer or by an individual from the Office of Contracts. These minutes will be sent out to all bid holders and also to all participants that signed in at the pre-bid. After there is a pre-bid meeting there is usually an addendum issued to address necessary changes. If there is an addendum the minutes will be sent out with the addendum to all bid holders and to all participants that signed in at the pre-bid.

Occasionally there is a request for a mandatory pre-bid meeting. To encourage contractors to bid without their competitors knowing that they are bidding the Iowa DOT allows a bidder to be confidential. The Iowa DOT also allows contractors to request bidding documents up to noon, the day before the letting. A mandatory pre-bid would adversely affect both of these policies therefore mandatory pre-bids are not allowed.

## Publishing of Potential Bidders

Under the Iowa DOT's present policy, the list of contractors holding bidding documents is public starting two weeks prior to the letting. However, a written list will not be mailed or faxed. The information is available by telephoning the Office of Contracts and is also posted on the Bid Express ([www.bidx.com](http://www.bidx.com)) web site. If a contractor wishes to remain anonymous prior to letting, they must make this request when ordering bidding documents.

## Proposal Guarantees

A contractor must submit a proposal guarantee with each bid. This is discussed in Article 1102.11 of the Standard Specification Book. The amount of the guarantee is shown on the bidding proposal. A proposal guarantee can be submitted in the form of a certified check, credit union certified share draft, cashier's check, bank draft on a solvent bank or credit union, or a contractor's bid bond on a form provided by the Iowa DOT. The Iowa DOT contractor's bid bond form is available from the Office of Contracts.

Proposal guarantees are returned by mail to the unsuccessful bidder after the approval for award of contract has been made. Proposal guarantees are returned to the successful bidder after the filing of the contract documents.

## Bid Openings

Bids are received until 10 a.m. the day of the letting at the Iowa DOT. Bids are opened and publicly read at 10:30 a.m. in the Office of Contracts.

After opening, all bids are reviewed for accuracy prior to being read. If the bid is incomplete or irregular, the bid is not read and the reason that it is not read is given at the letting. A letter follows this up to the contractor explaining why the bid was not read. To help prevent contractors from submitting an incomplete bid, the bid envelope has a checklist to remind them to do such things as sign the proposal, enclose the proposal guarantee, bid all items, etc.

# **14. Addenda Criteria**

A priority of the Office of Contracts is to limit the number of addenda that are issued each letting. A risk taken on every addendum issued is that all contractors may not receive the addendum. If there is no verification that each addendum is received prior to the letting, the project may be withdrawn from the letting. A second risk is when we add bid items by addendum and a contractor neglects to bid the added bid item.

Projects should not proceed to letting when there are known issues that have to be addressed by an addendum. Addendums should also be short and concise i.e., they should not be a re-design of the project.

Any proposed change to the contract documents after printing of the plans and specifications requires an addendum. All requests for addenda shall be submitted to the Office of Contracts in writing to assure the accuracy of the request. Addenda written from these requests shall be reviewed and approved by the Proposal Engineer, the assistant Contracts Engineer, or the Contracts Engineer. Addendum information received during the week prior to the letting will be evaluated for need of an addendum versus potential withdrawal of a project if an addendum is issued but not received by all contractors. This week should be reserved to process addenda

and allow time for addenda to reach the contractor.

Any project withdrawn after the Order of Opening Bids has been advertised shall have an addendum written to withdraw it. If possible, the addendum should list the intended date the project will be relet.

Addenda are only routinely sent to prime contractors holding bidding documents. The Office of Contracts verifies that every prime contractor holding bidding documents has received an addendum. Other contractors, sub-contractors and suppliers may request that an addendum be sent to them.

The Office of Contracts is often asked why an addendum is issued at one time but not issued at other times. The following criteria should be considered before an addendum is written.

YES NO

- 1. Can the project be bid as it is presently shown in the contract documents?
- 2. Can the project be built as it presently shown in the contract documents?
- 3. Is the bidding process fair to all bidders (i.e., Do all contractors have the same information)?
- 4. Is it possible to make the corrections after the letting?
- 5. Can the changes be made after the letting without changing the scope of the project?
- 6. Can the changes be made after the letting without a substantial greater cost than if we make the change by addendum?
- 7. Is it preferable to let the project as it is presently shown rather than withdraw the project, make changes, and reschedule the project for another letting?

If any of the above seven are answered NO, then it needs to be considered if there is enough time to process the addendum. To write an addendum, the following conditions should be answered YES. If any of the following questions are answered NO, then the project may be withdrawn.

YES NO

- 1. Is the remaining time before the letting long enough that there will be sufficient time for us to process the addendum and verify the receipt of the addendum to all bidders?
- 2. Is the remaining time before the letting long enough that a bidder would have sufficient time to prepare a bid for the addendum?
- 3. Can a short concise addendum be written which all bidders will easily understand?

When the Office of Contracts withdraws a project from the letting, a reason for the withdrawal will normally be given with the addendum. Following are some standard reasons for withdrawing a project.

1. Errors in Contract Documents.
2. Projects to be repackaged for a future letting.
3. Inconsistencies in project quantities or tabulations.
4. Project plans are to be changed.
5. Right of Way will not be available for construction.
6. All approvals/permits have not been obtained.

## **15. Identical Bid Policy**

Identical bids occur when two or more contractors bid to do the same project for the same total project price. If this occurs, the procedure to award the project is done by the following priority order:

1. If one of the tie bidders had the contract last year, for the same work, at the same location, that bidder would be awarded the contract.
2. If the above rule does not apply, the recommendation award will be determined by “lot”.

## **16. Award Procedures**

### **Analyzing Bids and Approval for Award**

The Office of Contracts determines the lowest responsive bid for each contract being offered based on PPM 500.11. Each bid is examined to determine if the unit bid prices are within reasonable conformance with the engineer’s estimate. Factors considered in the analysis to determine whether to recommend the award or reject all bids include the following:

1. Number of bids submitted on the project(s).
2. Distribution and range of bids received.
3. Urgency of the project(s).
4. Any unbalancing of unit bid items that may be detrimental to the contacting authority.

5. Current market conditions and workloads within the contracting industry.
6. Potential savings if the project(s) were re-advertised for another contract letting.
7. Potential changes to the project(s) or contract period that could affect the bid price.
8. Comparison of the low bidder to the bid prices of the other bidders on the project(s).
9. Comparison of bid prices with similar projects in the contract letting.
10. Justification for significant bid price differences.

The Office of Contracts prepares an “Approval for Award” Staff Action listing the lowest responsive bid for each contract being offered. The Staff Action includes a recommendation for award or rejection for projects let by the Office of Contracts. Bids that exceed the engineer’s estimate are not recommended for an award unless one of the criteria listed in PPM 500.11 is met:

The Iowa DOT policy is to award to the lowest responsible bidder within 30 days of the letting or reject all bids on the project. For DOT contracts, the contracts are mailed to the successful bidder with instructions to return the contract to the Office of Contracts for further processing. For county contracts (let by the Iowa DOT), the contracts are mailed to the County with instructions for processing by the County. For City contracts, the contracts are mailed to the affected City Clerk for further consideration and processing by the City. There should be no discussions between the Contracting Authority/Engineer and the contractor until after the contract is awarded i.e. both the Contracting Authority/Engineer and the contractor have signed the contract.

### Confidential Information

As per Iowa DOT Policy & Procedure Manual Policy No. 500.11, the following applies to releasing information about construction/maintenance contract lettings:

- a. Before and after the letting, the engineer’s estimate is confidential.
- b. The names of the contractors who have an award limit are publicly read before the public reading of the bids. The amount of the award limit is confidential.
- c. The Office of Contracts shall return to the bidder bids received for projects that have been withdrawn and bids received after the deadline for receipt of bids.
- d. Bids determined to be non-responsive shall not be read. The bid totals and the bid tabulations for these bids are confidential.
- e. The Office of Contracts shall provide a list of “corrected bid totals” after all the bid tabulations have been checked and entered into the Department’s computer system.
- f. The bid tabulations for contracts to be awarded shall be made public after the “Approval for Award” Staff Action has been approved.
- g. When all bids for a project have been rejected, the bid tabulations for that project are confidential.

- h. Reports and the analysis used by the Office of Contracts to determine whether a contract should be awarded or all bids rejected are confidential.

### Performance Bond

A performance bond is required on all contracts. The bond is to be at least 100 percent of the contract sum. The bond is held to cover all work included in the contract, whether performed by the prime or a subcontractor.

### Tabulation of Bids

The Associated General Contractors of Iowa (AGCI) has expressed a concern about the Iowa DOT publishing the Bid Tabulations on projects which are later rejected by a local agency (e.g. county or city). The Iowa DOT agrees that it is not appropriate to expose contractors' bids by line item for projects that are rejected. The Iowa DOT and AGCI have reached an agreement when Bid Tabulation information will be available after a letting.

Approximately one week after the letting (e.g. the last week of a month) the DOT will post on the Bid Express website the bid tabulations for primary projects in the current letting which will be awarded. Approximately five weeks after the letting (e.g. the last week of the month after the letting) the DOT will post on the Bid Express website the bid tabs for the city and county projects which have NOT been rejected for the previous month's letting. The DOT will also print and distribute the bid tabs for the previous month's letting for primary contracts that have been awarded and city/county projects which have NOT been rejected.

## Table for Proposal Guaranty and Liquidated Damages per Day

Effective date - July 2008 Letting

Estimated Size of Contract	Proposal Guaranty	Liquidated Damages per day
Less than \$5,000	\$250	\$300
\$5,000 - \$10,000	\$500	\$300
\$10,000 - \$20,000	\$1,000	\$300
\$20,000 - \$40,000	\$2,000	\$400
\$40,000 - \$80,000	\$4,000	\$400
\$80,000 - \$125,000	\$6,250	\$400
\$125,000 - \$250,000	\$12,500	\$400
\$250,000 - \$500,000	\$25,000	\$400
\$500,000 - \$750,000	\$37,500	\$500
\$750,000 - \$1,000,000	\$50,000	\$500
\$1,000,000 - \$1,250,000	\$62,500	\$500
\$1,250,000 - \$1,500,000	\$75,000	\$500
\$1,500,000 - \$2,000,000	\$100,000	\$500
\$2,000,000 - \$2,500,000	\$125,000	\$500
\$2,500,000 - \$3,000,000	\$150,000	\$500
\$3,000,000 - \$3,500,000	\$175,000	\$500
\$3,500,000 - \$4,000,000	\$200,000	\$500
\$4,000,000 - \$5,000,000	\$250,000	\$500
\$5,000,000 - \$7,500,000	\$375,000	\$500
\$7,500,000 - \$10,000,000	\$500,000	\$500
\$10,000,000 - \$15,000,000	\$750,000	\$500
\$15,000,000 - \$20,000,000	\$1,000,000	\$500
\$20,000,000 - \$25,000,000	\$1,250,000	\$500
\$25,000,000 - \$30,000,000	\$1,500,000	\$500
\$30,000,000 and above	Based on contract estimate	\$500

Note: Liquidated Damages may be adjusted based on user costs such as delay or out of distance travel or other justifiable damages pertaining to a contract. Refer to the Liquidated Damages Worksheet to calculate additional damages for an individual contract

## SUGGESTED DAILY CONSTRUCTION RATES - ENGLISH

BID ITEM	UNIT	RATE/DAY
HMA Resurfacing	TON	1500
Backfill, Selected	CY	1800
Backfill, Selected	TON	1200
Base Cleaning and Preparation	MILE	1.5*
Bridge Approach	SY	200
Bridge Construction - Driving Piling	LF	250
Bridge Construction - Reinforcing Steel	LB	5000
Bridge Construction - Structural Concrete	CY	22
Bridge Floor Overlay	SY	1000
Bridge Floor Repair (Class A)	SY	20
Clearing and Grubbing	UNIT	400
Clearing and Grubbing	ACRE	1-2
Cold-In-Place Recycling	SY	12000
Concrete Barrier Rail	LF	60
Concrete Open Rail	LF	50
Cracking and Seating	HEAD START	5 DAYS
Cleaning and Sealing Cracks	MILE	1
Culvert Pipe	LF	150
Curb and Gutter	LF	275
Delineators	EACH	50
Ditch Checks	LF	150
Drilled Shafts - normal depth 50-60'	EACH	2
Earth Shoulder Construction	STA	100
Embankment-In-Place	CY	950
Erosion control - Seeding	ACRE	7.5
Erosion control - Silt Fence	LF	1000
Erosion control - Sodding	SQ	150
Erosion control - Wood Excelsior Mat	SQ	90
Excavation Class 10, Bridges	CY	200-400 *
Excavation Class 10, Roadway and Borrow	CY	2000 or CHART 2
Excavation Class 12	CY	100 *
Excavation Class 20, Bridges	CY	50 *
Excavation Class 20, RCB	CY	200 *
Excavation Class 20, RCB Extensions	CY	50 *
Fence - Chain Link	STA	5
Field Fence - Type 47	STA	10
Gabions	CY	25
Guardrail, Cable	LF	350
Guardrail, Steel Beam	LF	175
Guardrail, Steel Beam (Structures)	LF	100
Intakes	EACH	1.5

\* Increase the Rate per Day when the quantities become large

## SUGGESTED DAILY CONSTRUCTION RATES - ENGLISH

BID ITEM	UNIT	RATE/DAY
Joints - Pressure Relief	LF	30
Lighting – Poles	EACH	0.5
Longitudinal Joint Repair	LF	3000
Longitudinal Subdrain	LF	3000
MSE walls	SF	500
Mowing	ACRE	15
Patches, Full Depth by Area	SY	110
Partial Depth Regular HMA Finish Patches	SY	75-100
Partial Depth Irregular HMA Finish Patches	SY	50-60
Partial Depth PCC Finish Patches	SF	300-350
Pavement Markings	MILE	10
Pavement Scarification	TON	1150
Paving Notch	EACH	2-6 DAYS
PCC, Rural	SY	4000
PCC, Urban	SY	Review Staging
Removal of Pavement < 20000	SY	1000
Removal of Pavement > 20000	SY	4000
Revetment (larger amounts)	TON	400-500
Revetment	TON	200
Salvage and Demo	EACH	1-5 DAYS
Seal Coat	MILE	5 @ 1 LANE, 2.5 @ 2 LANE
Sealing Water Wells	EACH	2
Shoulders, Granular	TON	1500
Sign Footings	EACH	4
Sign Posts	EACH	10
Signs – Large	EACH	5
Signs – Small	EACH	10
Steel Reinforcing (Bridge Floor Repair)	LB	1000
Stone columns/Geopiers	-	8-10 per day
Storm Sewer	LF	150
Structural Concrete - Bridge Floor Repair	CY	3
Structural Concrete - RCB Extension, w/ steel	CY	5.5
Structural Concrete – Single RCB, w/ steel	CY	11.5
Structural Concrete – Triple RCB, w/ steel	CY	11.5
Structural Concrete - Twin RCB, w/ steel	CY	12.5
Structural Plate Pipe Culvert	LF	30
Topsoil Strip, Salvage and Spread	CY	1400
Traffic Signals	EACH	30 for 1st, +10 for additional
Trees and Shrubs < 200	EACH	25
Trees and Shrubs > 200	EACH	50-100
Watering (3500 gal/tank x 4)	MGAL	14
Wick Drains	LF	2300

## SUGGESTED DAILY CONSTRUCTION RATES - METRIC

BID ITEM	UNIT	RATE/DAY
HMA Resurfacing	MG	1300
Backfill, Selected	M3	1350
Backfill, Selected	MG	1100
Base Cleaning and Preparation	KM	2.5*
Bridge Approach	M2	200
Bridge Construction - Driving Piling	M	75
Bridge Construction - Reinforcing Steel	KG	2300
Bridge Construction - Structural Concrete	M3	16
Bridge Floor Overlay	M2	800
Bridge Floor Repair (Class A)	M2	15
Clearing and Grubbing	UNIT	400
Clearing and Grubbing	HA	.5-1
Cold-In-Place Recycling	M2	10000
Concrete Barrier Rail	M	20
Concrete Open Rail	M	15
Cracking and Seating	HEAD START	5 DAYS
Cleaning and Sealing Cracks	KM	1.6
Culvert Pipe	M	50
Curb and Gutter	M	80
Delineators	EACH	50
Earth Shoulder Construction	M	3000
Embankment-In-Place	M3	700
Erosion control - Seeding	HA	3
Erosion control - Sodding	M2	1400
Erosion control - Wood Excelsior Mat	M2	900
Excavation Class 10, Bridges	M3	150-300 *
Excavation Class 10, Roadway and Borrow	M3	1530 or CHART 2
Excavation Class 12	M3	75 *
Excavation Class 20, Bridges	M3	40 *
Excavation Class 20, RCB	M3	150 *
Excavation Class 20, RCB Extensions	M3	40 *
Fence - Chain Link	M	150
Field Fence - Type 47	M	300
Gabions	M3	20
Guardrail, Cable	M	100
Guardrail, Steel Beam	M	60
Guardrail, Steel Beam (Structures)	M	30
Intakes	EACH	1.5

\* Increase the Rate per Day when the quantities become large

## SUGGESTED DAILY CONSTRUCTION RATES - METRIC

BID ITEM	UNIT	RATE/DAY
Joints - Pressure Relief	M	10
Lighting – Poles	EACH	0.5
Longitudinal Joint Repair	M	1000
Longitudinal Subdrain	M	1000
MSE walls	M2	50
Mowing	HA	6
Patches, Full Depth by Area	M2	90
Pavement Markings	M	15000
Pavement Scarification	MG	1050
Paving Notch	EACH	2-6 DAYS
PCC, Rural	M2	3400
PCC, Urban	M2	Review Staging
Removal of Pavement < 16000	M2	800
Removal of Pavement > 16000	M2	3400
Revetment (larger amounts)	MG	400
Revetment	MG	150
Salvage and Demo	EACH	1-5 DAYS
Seal Coat	KM	8 @ 1 LANE, 4 @ 2 LANES
Sealing Water Wells	EACH	2
Shoulders, Granular	MG	1300
Sign Footings	EACH	4
Sign Posts	EACH	10
Signs – Large	EACH	5
Signs – Small	EACH	10
Steel Reinforcing (Bridge Floor Repair)	KG	500
Storm Sewer	M	50
Structural Concrete - Bridge Floor Repair	M3	2
Structural Concrete - RCB Extension, w/ steel	M3	4
Structural Concrete - Single RCB, w/ steel	M3	9
Structural Concrete - Triple RCB, w/ steel	M3	9
Structural Concrete - Twin RCB, w/ steel	M3	9.5
Structural Plate Pipe Culvert	M	10
Topsoil Strip, Salvage and Spread	M3	1050
Traffic Signals	EACH	30 for 1st, +10 for additional
Trees and Shrubs < 200	EACH	25
Trees and Shrubs > 200	EACH	50-100
Watering (13250 L/tank x 4)	KL	53
Wick Drains	M	700