

SECTION 00555

PROSECUTION AND PROGRESS

PART 1 GENERAL

1.1 RELATED SECTIONS

- A. Section 00570: Definitions.
- B. Section 00727: Control of Work.
- C. Section 01282: Payment.
- D. Section 01355: Environmental Protection.

1.2 PRECONSTRUCTION CONFERENCE

- A. Engineer schedules and conducts at the earliest date following award and execution of the contract.
- B. Purpose is to permit a general and open discussion between the Department, Contractor, utility, railroad, and other invited parties.
- C. Topics of discussion could include:
 - 1. Partnering
 - 2. Contract plan and specification requirements
 - 3. Contractor's plan, schedule, and stages for completing work
 - 4. Utility and railroad companies plan of alteration
 - 5. Coordination between utilities and railroads
 - 6. Stages for completing work
 - 7. Anticipated traffic problems and traffic handling procedures
 - 8. External equal employment opportunity specifications
 - 9. Field office and laboratory requirements
 - 10. Project safety
 - 11. Wage rates, etc.
- D. Topics to receive special attention and emphasis:
 - 1. Environmental commitments

2. Permit requirements
 3. Erosion control measures
 4. Maintenance of Traffic
- E. Contractor supplied items:
1. List of Suppliers
 2. List of Subcontractors
 3. Accident Prevention Plan
 4. Erosion Control Plan
- F. Before Contractor begins work on the project:
1. Traffic Control Plan
 2. 511 information
- G. Before Work Begins on Item:
1. Subcontract (if item is subcontracted)
 2. Certificates of Compliance
- H. Before first estimate
1. CPM Schedule
 2. C400, Schedule of Payments
 3. Certified Payrolls (Federal Aid Projects Only)

1.3 NOTICE TO PROCEED

- A. Proceed with the work after receipt of written notice from the Department.
- B. Notify the Engineer at least 5 calendar days before beginning work.
- C. Contract time begins 10 calendar days after the date of the Notice to Proceed.
- D. Contract Time Option (when included in the proposal):
1. Include a completed "Contract Time Option Form" stipulating the date for beginning contract time. Stipulate a beginning date within the construction season and not later than the date established on the form.
 2. Contract time is on a working day basis under this Section, articles, "Determining Contract Time," and "Extending Contract Time."
 3. Contract time charges begins on the date selected, and the original number of allowable working days remains in effect.

4. To change the submitted Contract Time Option, request in writing a minimum of 15 calendar days before the submitted Contract Time Option begin date. Obtain written approval from the Department before deviating.

1.4 SUBLETTING CONTRACT

- A. Obtain written approval of the Department before subletting, selling, transferring, assigning or disposing any portion of the Contract or Contracts.
- B. Sublet no more than 50 percent of the total contract work bid amount.
- C. Subcontracts whether committed to in writing or by an informal, unwritten arrangement or transfer of the Contract, or any part of it or its obligations, do not relieve liability under the Contract and bonds. As part of its contract with the Department, the Contractor accepts liability for any claims for damages or liability resulting from an act or omission of any person who carried out work on its behalf, whether that working relationship is codified into a subcontract or carried out by an informal, unwritten agreement. The Contractor agrees to indemnify the Department for any damages or liability, including attorney's fees and court costs, that may be incurred by such a person.
- D. Do not allow subcontract work to begin until approved by Engineer.
- E. In computing the percentage of subcontracted work, Department considers an item as subcontracted in its entirety unless otherwise designated in the subcontract.
 1. Department uses the accumulated percentages of all approved subcontracts to assure that the maximum subcontracted limitation is not exceeded.
 2. To determine the amount of work subcontracted, the Department uses the total dollar amount of the items subcontracted, as specified in the Contract Bid Proposal, divided by the original contract amount less "specialty items."
 3. If the prime Contractor is to perform a portion of an item, the Department determines the amount of work subcontracted by using the dollar amount of the item agreed to between the prime Contractor and the subcontractor, excluding bonds, insurance, profit, and office transaction, etc. performed by the Contractor.
- F. Provide for a reduction in retained monies commensurate with the percentage held as retainage as provided for in Section 01282, article, "Progress Payments."

- G. Include a statement agreeing on a method of distribution of any adjustments due to price increases or decreases using applicable price adjustment specifications for fuel, cement, common carrier rates, etc.

1.5 PROGRESS SCHEDULES

- A. Submit a progress schedule as the basis for establishing critical construction operations and monitoring project progress.
- B. Use the form specified in this Section, article, "Critical Path Method Schedule Prepared by the Contractor," unless otherwise specified.
- C. Prepare the Anticipated Monthly Payment Schedule using the dates and accomplishment shown on the Critical Path Method (CPM) Baseline schedule.
- D. Prepare the Monthly Payment Schedule:
 - 1. Submit the proposed Monthly Payment Schedule before the date established for the first partial payment.
 - 2. Use form provided at the Preconstruction Conference.
 - 3. Include both monthly and semi-monthly payments when anticipated due to the volume of work on the project.
 - 4. Include all months during the life of the contract when payments are anticipated.
 - 5. Support and coordinate schedule with the CPM Baseline Schedule.
 - 6. Include dates of contract start, suspension, completion and milestones that impact payments.
- E. Submit Revised Payment Schedule within 30 days of notification by the Engineer. Payment Schedule Revisions are required when:
 - 1. Actual Payments vary 10 percent or more (plus or minus) from the submitted Payment Schedule and the variance is sustained for 60 days.
 - 2. Contract start, suspension, completion and milestones dates change.
 - 3. Change Orders are approved increasing or reducing the contract amount sufficient to vary actual payments 10 percent or more (plus or minus) from the accepted Payment Schedule.

1.6 CRITICAL PATH METHOD SCHEDULE PREPARED BY THE CONTRACTOR

- A. Required for all contracts unless otherwise specified in special provision.

- B. Plan and record project construction with conventional Critical Path Method (CPM) schedule.
 - 1. Use CPM for coordinating and monitoring all work under the Contract including all activities of subcontractors, vendors, and suppliers.
- C. The Department uses the schedule to:
 - 1. Monitor the progress of construction.
 - 2. Compare the work performed to the contract time and phasing requirements.
 - 3. Assign necessary resources for inspection and administration of the Contract.

1.7 CRITICAL PATH - INTERIM BASELINE SCHEDULE

- A. Submit an interim baseline schedule to the Engineer at or before the pre-construction meeting describing the activities occurring during the first 60 days of the project.
- B. Provide two prints and one 3-1/2 inch diskette compatible with Primavera Project Planner or Suretrak Project Manager or in a form that can be restored into Primavera without requiring a conversion program.
- C. Provide:
 - 1. Detail plan of work in accordance with the Contract time and phasing requirements specified in the Contract.
 - 2. Sequence of early operations, submittals, working drawings and procurement of materials.
 - 3. Describe the activities to be accomplished and their interdependencies.
 - 4. Assign a responsibility code to each activity corresponding to the subcontractor or trade responsible for performing the work.
 - 5. Assign a phase code to each activity corresponding to the location of sub-parts or phases of the work.
- D. Derive all data supporting time extension requests from the Baseline CPM Schedule. Do not use the Interim Baseline Schedule for time extension analysis.
- E. Engineer reviews the Interim Baseline Schedule and gives comments within seven calendar days of receipt.

- F. Use the Interim Baseline Schedule and the Engineer's comments to prepare the Baseline CPM Schedule.
- G. After receiving Notice to Proceed, proceed with work described in the 60-day preliminary schedule that does not conflict with the contract time and progress requirements.

1.8 CRITICAL PATH - BASELINE CPM SCHEDULE

- A. Submit a Baseline CPM Schedule for approval on or before the date established for the first partial payment.
- B. Provide two prints and one 3 1/2 " diskette compatible with Primavera Project Planner or Suretrak Project Manager or in a form that can be restored into Primavera without requiring a conversion program.
- C. Include in the Baseline CPM Schedule:
 - 1. Critical Path using all allotted contract time. Submit a Resource loaded schedule if proposing an early completion date.
 - 2. Complete logical plan for executing the work. Establish relationships or dependencies between all activities.
 - a. Activities must represent the detailed project scope of work.
 - b. Show actual workdays estimated to perform each activity including consideration of weather impacts and seasonal limitations.
 - c. Tie each activity to Contract Bid Items with coding in the Baseline CPM Schedule.
 - d. Describe work activities so that each item is easily identified. For each activity:
 - Assign a Responsibility code and Phase code
 - Identify the trade or entity performing the work
 - Identify the proposed number of work days
 - Identify manpower involved by trade and work location
 - 3. Include Calendar(s) used to develop CPM schedule (description of workdays per week, hours per shift, shifts per day)
 - 4. Designate the scheduled "Data Date" as the day prior to the first working day of the contract.
- D. The Engineer reviews the schedule within seven calendar days of receipt and, if needed, arranges for a job site meeting with the Contractor for discussion of the schedule.

1. Failure to provide a baseline schedule may result in withholding all Contract payments until an acceptable schedule is received.
2. Review of the schedule does not bind the Department or constitute acceptance of any individual time period for scheduled activities.

1.9 CRITICAL PATH - SCHEDULE UPDATES

- A. Engineer and Contractor hold monthly job site progress meetings to update the Baseline CPM schedule. They review progress to verify actual start and finish dates of completed activities, remaining duration of uncompleted activities, and the sequence of activities.
 1. Submit the following:
 - a. A bar chart grouped by PHASE listing all activities, early/late and actual start and finish dates, remaining durations, percent complete and Total Float.
 - b. A pure logic or PERT diagram on standard, individual D-size sheets (24 inches X 36 inches).
 - c. A narrative report with progress analysis. Include a description of problem areas, current and anticipated delaying factors and impact, if necessary. Explain corrective actions taken and proposed recovery plan, if requested by the Engineer.
 - d. A backup of the schedule on 3 1/2" computer diskette.

1.10 CRITICAL PATH - SCHEDULE REVISIONS

- A. Either Contractor or Department may request revisions to the accepted Baseline CPM Schedule. Do not revise Baseline CPM Schedule without the Engineer's prior written approval.
- B. A revised baseline schedule is considered necessary under the following conditions.
 1. The Engineer determines there is reasonable doubt that milestones or the Contract completion date will not be met.
 2. There is a significant change in the Contractor's operations that will affect the critical path.
 3. Actual prosecution of the work differs from that represented on the latest schedule update.
 4. There are additions, deletions, or revisions to activities required by Contract modification.

- C. The Engineer reviews the revised baseline schedule within seven calendar days of receipt. If the Engineer rejects the revised baseline schedule, submit again within seven calendar days. When approved, the revised Baseline Schedule becomes the basis for the next submitted schedule update.

1.11 CRITICAL PATH - REQUIREMENTS

- A. Failure to provide schedule updates or a revised baseline schedule may result in withholding all subsequent Contract payments until an acceptable schedule is received.
- B. As determined by CPM analysis, only Department-caused delays in activities affecting milestone dates or contract completion dates are considered for a time extension.
- C. When requesting a time extension of any milestone or contract completion date, furnish documentation to enable the Engineer to determine whether a time extension is appropriate under the terms of the Contract.
- D. Adjust contract completion time under this Section, articles, "Determining Contract Time," and "Extending Contract Time."
- E. Float time in the schedule is a shared commodity between the Department and the Contractor.

1.12 LIMITATION OF OPERATIONS

- A. Minimize traffic interference:
 - 1. Conduct the work to minimize interference with traffic.
 - 2. Finish a section of roadway if it is essential to public convenience before starting work on any additional sections as specified in the Contract.
- B. Sundays or holidays: Perform no work without written approval except repair or servicing of equipment, protection of work, maintenance or curing of concrete, or maintenance of traffic.
- C. Night work:
 - 1. Give five calendar days notice before starting night work.
 - 2. Provide adequate lighting for performing satisfactory inspection and construction operations.

3. Control noise and vibration under the provisions of Section 01355, article, "Noise and Vibration Control."

1.13 CHARACTER OF WORKERS

- A. Provide sufficient resources to complete all work of the Contract and employ workers with the skill and experience necessary to perform the work.
- B. Remove any person employed who performs the work in an improper or unskilled manner, or who is intemperate or disorderly. Rehire these employees only with the Engineer's written permission.
- C. Failure to remove any employee(s) or to furnish suitable and sufficient personnel to perform the work may result in a written notice to suspend the work.

1.14 METHODS AND EQUIPMENT

- A. Use equipment of the size and mechanical condition to perform and produce the specified work.
- B. Do not damage the roadway, adjacent property, or other highways.
- C. Use of methods or equipment other than those specified only with the Engineer's written permission.
 1. Describe in writing the proposed methods and equipment to be used and the reasons for the change.
 2. Once approval is received, produce work meeting project requirements.
 3. Discontinue use of alternate methods or equipment if the Engineer determines that the work does not meet contract requirements.
 4. Remove and replace or repair deficient work to return it to specified quality at no cost to the Department.
 5. Department does not change the basis of payment for a change in methods or equipment.

1.15 DETERMINING CONTRACT TIME

- A. The Bid Documents and Contract state the "Contract Time," which is days allowed for completing the Contract.

1. The Engineer furnishes a monthly statement showing the number of days charged to the Contract for the preceding month and the number of days remaining for completion of the Contract.
 2. The statement is considered correct and accepted unless a written protest is submitted to the Engineer before the next monthly statement, documenting the reasons the monthly statement is considered incorrect.
 3. Immediately review and resolve any dispute with the Engineer.
- B. Determining Contract Time
1. Working Day: Determined Contract time on a working day basis under Section 00570, article, "Terms," line, "Working Day."
 2. Calendar Day: Determined Contract time on a calendar day basis under Section 00570, article, "Terms," line, "Calendar Day."
 - a. Department excludes Calendar days elapsing between the effective dates of any orders of the Engineer to suspend and resume work that are not the fault of the Contractor.
 - b. Weather is not considered an authorized suspension.
 3. Completion Date: Calendar completion date is the date the Engineer completes final acceptance under Section 00727, article, "Project Acceptance - Final." The Department does not consider time extensions:
 - a. If the Notice to Proceed is made within 30 calendar days after the opening of Bid Proposals, or
 - b. The Notice to Proceed is delayed due to the Contractor's failure to submit required information or return the signed Contract.
 4. Terminating Contract Time Charges: Daily time charge ceases when substantial completion is accepted following Section 00570, article, "Terms," line, "Substantial Completion."
 5. Time charges resume if items covered by "Substantial Completion" or work identified during final inspection are not completed within an agreed period of time or at the discretion of the Engineer.

1.16 EXTENDING CONTRACT TIME

- A. Overruns: Department increases contract time commensurate with the amount of added work as determined by the final estimate.
- B. Extra Work: Additional contract time may be included on approved change orders. Added time covered by change order is excluded from the Overtime computation on the final estimate.

1. Request in writing to add "Contract Time" due to extra work. Include in a "Change Order" covering the proposed extra work if approved by the Engineer.
 2. Time added to calendar day and completion date contracts is in calendar days.
 3. Time added to working day contracts is in working days.
- C. Partial Suspension: Suspension of work on some items as ordered by the Engineer is considered a partial suspension.
1. Applicable only to working day or calendar day contracts.
 2. Engineer determines the time charged for each day on partial suspensions not the fault of the Contractor as the greater of:
 - a. 0.15 day
 - b. The quotient (rounded to hundredths) obtained by dividing the sum of the bid amount for the specific items of work not suspended by the total value of original contract amount.
- D. Request for Time Extension:
1. Request time extension in writing before the expiration of the contract time. Provide justification for the extension.
 2. Extensions may be justified for delays beyond the control and fault of the Contractor including delivery of critical materials caused by national emergency, strikes, embargoes, area-wide shortages, or abnormal reasons.
 3. Extensions are not justified for the following:
 - a. Delay in material delivery due to financial considerations, delayed placement of orders, or other conditions within the Contractor's control.
 - b. Insufficient contract time or work suspension for non-compliance with the contract requirements.

1.17 INCENTIVE/DISINCENTIVE

- A. The Contract includes an incentive/disincentive provision detailing applicable dates and work stages covered by the provision if the Department determines that it is in the public's interest to complete the project at the earliest possible date.
- B. Department increases or decreases payment by the amount established for each calendar or working day the project or phase is open to unrestricted continuous traffic as specified in the Contract.

- C. Engineer determines unrestricted continuous traffic under Section 00570, article, “Terms,” “Unrestricted Continuous Traffic.”
- D. Relating to liquidated damages, this Section, “Failure to Complete on Time,” remains in effect and is applicable to the total contract time.
- E. Department pays the earned amount of incentive in the progress payment, and deducts the amount of disincentive from progress payments.
- F. Reimburse the Department within 30 calendar days of notice that payment is due for the difference should the amount of disincentive or liquidated damages exceed the amount due for completed work.
- G. The Engineer grants no time extension:
 - 1. For delays in material deliveries unless it can be shown that such delays are industry wide.
 - 2. For quantity overruns, or adverse weather conditions.

1.18 FAILURE TO COMPLETE ON TIME

- A. Department deducts from any money due the sum specified in the following Schedule of Liquidated Damages (Table 1) for each calendar day or working day that any work remains uncompleted after the specified contract time or approved extension has elapsed. See Section 00570, article, “Terms,” “Liquidated Damages.”

**Table 1
Schedule of Liquidated Damages**

Original Contract Amount		Daily Charge	
From more than	To and including	Calendar Day Fixed Date	Work Day
\$0	\$25,000	\$150	\$210
25,000	50,000	235	330
50,000	100,000	425	600
100,000	500,000	850	1170
500,000	1,000,000	1120	1560
1,000,000	2,000,000	1500	2100
2,000,000	5,000,000	2200	3100
5,000,000	10,000,000	2950	4100
10,000,000	20,000,000	3500	4900
20,000,000	30,000,000	3960	5540
30,000,000		4700	6570

- B. Allowing the continuation and completion of the work after the specified contract completion time or approved extension has elapsed does not waive the Department's rights under the Contract.

- C. Time charges may be suspended on working day or calendar day contract after the Department determines that the Contract is substantially complete under Section 00570, article, "Terms," line, "Substantial Completion."
 - 1. Assessment of liquidated damages continues until all contract work is completed for a specified calendar completion date contract.

 - 2. Contractor is not entitled to any reduction beyond the administrative review process in Section 00727, article, "Procedures for Resolutions of Disputes," and article, "Procedures for Resolution of Claims."

1.19 TERMINATION FOR DEFAULT

- A. Termination can occur if the Contractor:
 - 1. Fails to begin the work under the Contract within the time specified.
 - 2. Fails to perform the work with sufficient resources to assure the prompt completion of the work.

3. Fails to perform the work in accordance with the Contract requirements or neglects or refuses to remove and replace rejected materials or unacceptable work.
 4. Discontinues the prosecution of the work.
 5. Fails to resume work within the time specified upon notification from the Department.
 6. Becomes insolvent, or is declared bankrupt, or commits any act of insolvency or bankruptcy.
 7. Allows any final judgment to remain unsatisfied for a period of 10 calendar days.
 8. Makes an assignment for the benefit of creditors without the Department's approval.
 9. Fails to comply with Contract requirements including minimum wage payments or EEO requirements.
 10. Is a party to fraud.
- B. The Engineer may declare the Contract in default by written notice to the Contractor and the Surety advising them of the actions required for remedy.
- C. Comply with the written notice within 10 calendar days of receipt or the Department has full power and authority to terminate the Contract.
- D. The Department may appropriate or use any or all materials and equipment at the project site and enter into another contract for completion of the work according to the terms and provisions thereof, or use such methods as determined by the Department to complete the Contract.
- E. All costs and charges incurred by the Department, including the cost of completing the work under the Contract, are deducted from monies owed or that may be owed the Contractor. Should the expense exceed the sum that would have been payable under the Contract, the Contractor and Surety are liable and must pay the Department the amount of the excess.

1.20 TERMINATION OF CONTRACT FOR CONVENIENCE OF THE DEPARTMENT

- A. The Department may by written order terminate the Contract or any portion thereof after determining that for reasons beyond the Contractor's or the Department's control, the Contractor is prevented from proceeding with or completing the work and that termination would be in the public interest.

- B. Reasons for termination may include, but are not limited to:
1. Executive Orders of the President relating to prosecution of war or national defense.
 2. National emergency that creates a serious shortage of materials.
 3. Orders from duly constituted authorities relating to energy conservation.
 4. Restraining Orders or Injunctions obtained by third-party citizen action resulting from national or local environmental protection laws or where the issuance of such order or injunction is primarily caused by acts or omissions of persons or agencies other than the Contractor.
- C. When the Department orders termination of a Contract effective on a certain date, the Department pays for all completed items of work as of that date at the Contract bid price.
1. Department pays for partially completed work either at agreed prices or by force account methods.
 2. Department pays for items that are eliminated in their entirety as provided in Subsection 01282, article, "Eliminated Items."
- D. Materials obtained by the Contractor that have not been incorporated into the project may be:
1. Purchased from the Contractor at the option of the Department at actual cost delivered to a prescribed location.
 2. Disposed of as mutually agreed.
- E. Contractor may submit a claim for additional costs not covered in the Contract after receipt of Notice of Termination from the Department.
1. Submit within 60 calendar days of the effective termination date.
 2. Include cost items such as:
 - Reasonable idle equipment time
 - Mobilization efforts
 - Bidding and project investigative costs
 - Overhead expenses attributable to the project terminated
 - Reasonable profit on work completed
 - Subcontractor costs not otherwise paid for
 - Actual idle labor cost if work is stopped in advance of termination date
 - Guaranteed payments for private land usage as part of original Contract
 - Any other direct cost the Contractor has incurred

- 3. The negotiated settlement figure reached with the Contractor does not include loss of anticipated profits.
- F. Make cost records available to the Department for determining the validity and amount of each item claimed, and for providing a basis for negotiating an equitable settlement.
- G. Termination of a Contract or portion thereof does not relieve the Contractor of contractual responsibilities for the work completed, nor does it relieve the Surety of its obligation for and concerning any just claim arising out of the work performed.

1.21 SAFETY REQUIREMENTS

- A. Adhere to the requirements and responsibilities of the UDOT Construction Safety and Health Manual. Obtain a copy from the Department.
- B. Allow access to all areas of work on the project, upon presentation of credentials to the Contractor for any inspector or officer of Utah OSHA, UDOT Risk Management, or other legally responsible agency involved in safety or health administration without delay and without presentation of an inspection warrant.
- C. Immediately correct any conditions that do not comply with the foregoing provisions.
 - 1. The Engineer issues a stop work order when either site conditions and/or work practices present an imminent danger (i.e. may result in serious injury, death or extensive property damage) until those conditions and/or practices are corrected.
 - a. A stop work order does not provide relief from completing the project within the specified contract completion time.
 - 2. The Engineer will issue a start work order when satisfactory corrective action is taken.

PART 2 PRODUCTS Not used

PART 3 EXECUTION Not used

END OF SECTION