

DIVISION 1 – SECTION 01100**SUMMARY OF THE WORK, SEQUENCE OF CONSTRUCTION & LIQUIDATED DAMAGES****PART 1 GENERAL**

Related Work:

1. Documents affecting work of this Section include, but are not necessarily limited to Division 0 and Division 1 and other Sections of these Specifications.

1.01 SUMMARY**SUMMARY OF WORK**

- A. The "Project," of which the "Work" of this Contract is a part, is titled TW Bravo Hot Spot 1 – Construction, MSCAA Project 18-1413-03.
- B. The "Work" of this Contract is defined in the Contract Documents to include, but not limited to, demolition of existing pavement and associated infrastructure, grading and drainage, underdrains, Portland cement concrete pavement including subgrade preparation, cement treated base, soil cement subbase, joint sealing, bituminous pavement, airfield signage and markings, airfield electrical lighting and underground ducts, earthwork, erosion control, sodding, and other efforts normally required for taxiway reconstruction.
- C. Airport Improvement Program Project: The work in this contract is included in an Airport Improvement Program Project (which project is subject to receipt of confirmation of federal funds) which is being undertaken and accomplished by the Owner in accordance with the terms and conditions of an agreement between the Memphis-Shelby County Airport Authority and the United States, under the provision of Title 49, United States Code, herein called Title 49, USC, pursuant to which the United States Government has agreed to pay a certain percentage of the costs of the project that are determined to be allowable project costs under that Act. The United States Government is not a party to this contract and no reference in this contract to the FAA or any representative thereof, or to any rights granted to the FAA or any representative thereof, or the United States Government, by the contract, makes the United States Government a party to this contract.
- E. FAA Inspection and Review: The Contractor shall allow any authorized representative of the FAA to inspect and review any work or materials used in the performance of this contract.
- F. Subcontracts: The Contractor shall insert in each of his subcontracts the provisions contained in paragraphs C. and D., of this section and also a clause requiring the subcontractors to include these provisions in any lower tier subcontracts which they may enter into, together with a clause requiring this insertion in any further subcontracts that may in turn be made.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION**3.01 PROJECT PHASING AND COMPLETION**

- A. This is a fixed-duration Contract required to be substantially completed within two hundred and forty (240) calendar days from the Notice to Proceed ("NTP") date. Furthermore, each phase has a required calendar day duration as indicated in the Phasing Plans. The project scope of work is as stated in

Paragraphs 1.01 (A) and (B) above. Final Completion of the project shall be within sixty (60) days of the Substantial Completion Date.

“Substantial Completion” of the project shall be defined as the stage of construction when work is substantially completed. Substantial completion shall occur when: the Work is sufficiently complete in accordance with the Contract Documents, so the Owner can occupy or utilize the Work for its intended use; and when all acceptance testing completed; and when only minor punch list work remains to be done; and, if applicable, a certificate of occupancy has been issued. Substantial Completion will exclude record drawings, O&M manuals, lien waivers, maintenance training, warranties, consent of surety to final payment, and all other required closeout documentation. The Owner will, upon written request of the Contractor, issue a certificate establishing the substantial completion date at any time after substantial completion has occurred.

“Final Completion” of the project shall be defined as work that is 100% complete including all punch list items, record drawings, O&M manuals, lien waivers, maintenance training, warranties, consent of surety to final payment, and all other required closeout documentation. Final Completion shall include Demobilization.

“Demobilization” shall consist of all activities by the Contractor and subcontractors necessary for 100% completion of the work and final contract closeout as listed above and all cleanup work and operations, including but not limited to, removal of personnel, equipment, contractor-owned stockpiles, supplies, and incidentals from the project site; return of any and all airport-issued security identification badges; cleanup of all offices, buildings, batch plant, staging/lay-down areas, and other facilities; and restoration of all areas to preconstruction condition or better or to other condition as stipulated in the project plans and specifications; completion and delivery to the Owner of all contract closeout documentation and any other documentation request by Owner, including but not limited to, Operations and Maintenance Manuals, Warranties, Final Lien-waivers, Owner Controlled Insurance Program closeout paperwork, DBE paperwork, Final Project Record Documents and finalization of any and all punch list items. The Demobilization lump sum amount becomes fixed and will not change for the duration of contract.

- B. The actual NTP date will be negotiated and mutually agreed by both parties (Owner and Contractor) prior to issuance of the NTP. If mutual agreement cannot be reached between the parties, the Owner reserves the right to establish the actual Notice to Proceed date. The NTP letter will state the date on which the Contractor will begin construction and from which date contract time will be charged. Contractor shall be mobilized and on site ready for work on the date stated in the Notice to Proceed.
- C. “Mobilization” shall consist of all preparatory work and operations needed to begin construction activities on the date mutually agreed including but not limited to, movement of personnel, equipment, stockpiles, supplies and incidentals to the project site; the establishment of all offices, buildings, batch plant, staging/lay-down areas and other facilities necessary for work on the project; all other work and operations which must be performed or costs incurred prior to beginning work on the various items on the project site, and utility services for all offices, buildings, batch plant, staging/ lay-down areas, and other facilities. The Mobilization lump sum amount becomes fixed and will not change for the duration of contract.
- D. All days are calendar days.
- E. The work site will be available as described on the plans and applicable sections of these specifications. Unless noted otherwise in the phasing plans, work is permitted 24 hours per day, 7 days per week except that only non-noise producing activities shall be permitted between 11:00 PM and 6:00 AM, except with prior written approval of the Owner.

- F. The Contractor shall proceed with the work at such rate of progress to ensure full completion within the specified total duration and phasing durations. It is expressly understood and agreed, by and between the Contractor and the Owner, that the contract time for the completion of the work described herein is a reasonable time, taking into consideration the average climatic and economic conditions and other factors prevailing in the locality of the work.
- G. If the Contractor experiences weather related delays, he shall submit a report documenting the weather conditions and delays, if any, experienced during any calendar month.
- H. If the Contractor is prevented from working due to any other legitimate reason he shall notify the Owner in writing as per the Lump Sum Construction Contract of the delay and request a corresponding increase in the number of contract days.
- I. The Owner shall be the sole judge as to whether or not a request for a contract time extension is legitimate.
- J. The Owner reserves the right to adjust limits of construction to accommodate the Owner's requirements for maintenance of Airport Operations and Public Traffic with minimum interruption during the construction of this project. Any required adjustment of limits of construction will be at no additional cost to the Owner.
- K. No pavement closures will be allowed between October 15th and January 15th. This is accounted for in the project duration.

3.02 LIQUIDATED DAMAGES

- A. The OWNER and the CONTRACTOR recognize that time is an essential element of this contract and that delay in completing this project will result in damages due to public inconvenience, obstruction to aviation and vehicular traffic, interference with businesses both on and off the airport, increased operational costs to airport users, and increased costs to the OWNER associated with engineering services, inspections, testing, and project administration. It is therefore agreed that in view of the difficulty of making a precise determination of such damages, the CONTRACTOR will pay the OWNER, sums of money in the amounts herein stipulated, not as a penalty, but as Liquidated Damages for not meeting the schedule for specific critical Project Milestones.
- B. If the CONTRACTOR fails to deliver equipment or materials, or perform any services within the times and dates specified in this Contract to achieve the established Milestones, or any extensions granted in writing, the CONTRACTOR shall pay to the OWNER as Liquidated Damages, the sums specified in Table 1, below:

<i>Milestone</i>	<i>Completion Date</i>	<i>Liquidated Damages</i>
Substantial Completion	270 days	\$3,000 per Day or any portion thereof
Phase 1	120 days	\$5,000 per Day or any portion thereof
Phase 2	90 days	\$5,000 per Day or any portion thereof
Phase 3	60 days	\$2,000 per Day or any portion thereof
Final Completion and Demobilization Phase	60 days	\$1,000 per Day or any portion thereof

- D. Application of Liquidated Damages is not a Change to the Contract. The application of any Liquidated Damages to one Milestone shall not effect a change in the subsequent Contract Milestone dates or relieve CONTRACTOR of his responsibility to meet all construction schedules. If multiple Milestone dates are missed, Liquidated Damages for more than one Milestone will be imposed concurrently.
- E. If Liquidated Damages are imposed, the OWNER shall deduct the same from any amounts due the CONTRACTOR at the time Liquidated Damages are imposed. If sufficient amounts are not due to the CONTRACTOR to cover such Liquidated Damages, then the OWNER shall invoice the CONTRACTOR for the amounts due to the OWNER. Such invoices shall become due and payable immediately upon receipt by the CONTRACTOR.
- F. Liquidated Damages are in addition to any other damages or penalties which may be assessed and withheld under other provisions of this contract.

3.03 COMPLETION BONUS

NO completion bonus has been budgeted for this project.

END OF SECTION 01100