

# AMG WORK PLAN

COMPANY SUBMITTING FORM: ABC Construction, Inc.

JOB NUMBER: 112877, CONTROL SECTION: 47064

PROJECT LOCATION: I-96 and US-23 Interchange

## ITEMS OF WORK

**IDENTIFY THE ITEMS OF WORK COVERED IN SUBSECTION 824.03.C AND 824.03.D OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION. SPECIFY THE LOCATIONS WHERE EACH AMG PROCEDURE WILL BE EMPLOYED AND SUMMARIZE THE PROPOSED AMG PROCEDURE(S) THAT WILL BE UTILIZED TO COVER EACH ITEM OF WORK. ALSO, IDENTIFY THE ANTICIPATED ACCURACY OF EACH OPERATION.**

- **Clearing Stakes** – A bulldozer fitted with GPS will be used to clear the brush from the side slopes of the roadway. This equipment will be able to achieve a positional tolerance within 1'. This will be employed in any areas that require clearing from the POB to POE of the project.
- **Slope Stakes**– A bulldozer fitted with GPS will be used to grade the slopes and the ditch areas of the roadway. This equipment will be able to achieve a positional tolerance within 0.10'. This procedure will be employed for all slope grading from station 124+00 to 295+50 except for the 500' section obstructed by the overpass at 132+00 to 137+00. Conventional stakeout will be required in this area.
- **Subgrade Stakes and Undercut Stakes** – A bulldozer and wheeled grader fitted with GPS will be used to grade the roadway to clay grade. Then the same equipment will be used to place the stone. This equipment will be able to achieve a positional tolerance within 0.08'. After the stone is placed and rough graded a trimming machine will be used to trim the stone to the final grade. This equipment is guided by total stations and is capable of achieving a positional tolerance within 0.02'. This procedure will be employed from the POB to POE on both bounds. Additional control will be required to support this operation – see "Control."
- **Pavement Stakes** – A GOAMCO concrete paving machine will be used to place the concrete on the project. This equipment is guided by total stations and is capable of achieving a positional tolerance within 0.02'. This will be employed from POB to POE on both bounds. Additional control will be required to support this operation – see "Control."

## EXPERIENCE

**PROVIDE A BRIEF SUMMARY OF YOUR PAST EXPERIENCE WITH AMG OPERATIONS. LIST SPECIFIC PROJECTS IF APPLICABLE.**

ABC Construction, Inc. has been using AMG equipment for the past 7 years on various projects throughout the state of Michigan. Most recently ABC utilized AMG operations to reconstruct 8 miles of I-94, from North County Road 365 east to the interchange at M-40 and I-94 near Paw Paw, MI.

## EQUIPMENT

**PROVIDE A DESCRIPTION OF AMG EQUIPMENT AND SUMMARIZE ASSOCIATED EQUIPMENT CALIBRATION PROCEDURES AND FREQUENCIES OF CALIBRATION.**

ABC Construction, Inc. will utilize Trimble GC900 GPS to guide bulldozers and wheeled graders. A site calibration is performed prior to the start of the project and the calibration is loaded into the machines. Daily checks are made between the cutting surfaces of the AMG equipment and an independent GPS rover. AMG equipment is constantly monitored and adjusted for common wear and hydraulic performance.

ABC Construction, Inc. will use 6 Trimble robotic total stations to guide the trimming machine and GOMACO Concrete paver. The total stations used to guide this AMG equipment are sent in for cleaning and calibrating every year. Also a check and adjust program is performed on each total station once a month to ensure proper function. AMG equipment is calibrated throughout the project utilizing the machine reference points.

**CONTROL****PROVIDE A DESCRIPTION OF THE CONTROL NECESSARY TO SUPPORT THE PROPOSED AMG OPERATION(S)**

ABC Construction, Inc. will utilize the existing project control for GPS AMG operations to localize to the site. During the project, additional AMG control will be set to guide the trimmer and paver. This control will be set at a spacing of 500' and will be set in an alternating pattern throughout the project. The vertical accuracy will be within 0.02' and accomplished by differential leveling procedures.

**CONTRACTOR QUALITY CONTROL****PROVIDE A DESCRIPTION OF THE QUALITY CONTROL THAT WILL BE UTILIZED ON THIS PROJECT PER SUBSECTION 824 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION AND THE SPECIAL PROVISION FOR AUTOMATED MACHINE GUIDANCE.**

ABC Construction, Inc. will utilize the following quality control processes, procedures and efforts:

- TBA
- TBA
- TBA

**Primary AMG Contact:**

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