

MAPA Meeting - February 2, 2021

Recent and Upcoming Policy Changes

1. Changes to Section 402 to allow the use of recycled materials in surface leveling mixes and will be in accordance with 401.2.2

SECTION 402

PLANT MIX BITUMINOUS SURFACE LEVELING

402.2.3 Reclaimed Asphalt. ~~Recycled asphalt materials may be used and shall be in accordance with Sec 401.2.2. The asphalt binder content of recycled asphalt materials shall be determined in accordance with AASHTO T 164, ASTM D 2172 or other approved method of solvent extraction. A correction factor for use during production may be determined for binder ignition by burning a sample in accordance with AASHTO T 308 and subtracting from the binder content determined by extraction.~~

~~402.2.3.1 Reclaimed Asphalt Pavement. Reclaimed Asphalt Pavement (RAP) may be used in any mixture, except SMA mixtures. Mixtures may be used with more than 30 percent virgin effective binder replacement provided testing according to AASHTO M 323 is included with the job mix formula that ensures the combined binder meets the grade specified in the contract. All RAP material, except as noted below, shall be tested in accordance with AASHTO T 327, Method of Resistance of Coarse Aggregate Degradation by Abrasion in the Micro-Deval Apparatus. Aggregate shall have the asphalt coating removed either by extraction or binder ignition during production. The material shall be tested in the Micro-Deval apparatus at a frequency of once per 1500 tons. The percent loss shall not exceed the Micro-Deval loss of the combined virgin material by more than five percent. Micro-Deval testing will be waived for RAP material obtained from MoDOT roadways. All RAP material shall be in accordance with Sec 1002 for deleterious and other foreign material. The aggregate specific gravity shall be determined by performing AASHTO T 209 in accordance with Sec 403.19.3.1.2 and calculating the G_{se} to which a 0.98 correction factor will be applied in order to determine G_{sb} as follows:~~

$$G_{se} = \frac{100 - P_b}{100 - \frac{P_b}{G_b}} \quad \text{RAP } G_{sb} = \text{RAP } G_{se} \times 0.98$$

~~402.2.3.2 Reclaimed Asphalt Shingles. Reclaimed Asphalt Shingles (RAS) may be used in any mixture specified to use PG 64-22 in accordance with AASHTO PP 53 except as follows:~~

~~For mixtures containing RAS or a combination of RAS and RAP, the RAS contribution shall not exceed 20 percent effective virgin binder replacement. Mixtures containing a combination of RAS and RAP may have a maximum 30 percent effective virgin binder replacement with no virgin binder grade change. Mixtures containing a combination of RAS and RAP may have a 30 to 40 percent effective virgin binder replacement under the following conditions: (1) with a virgin binder grade change from a PG64-22 to a PG 58-28 or (2) with a combination of a PG64-22 binder and a rejuvenator provided testing demonstrates that a PG58-28, meeting the requirements of AASHTO M320, is achieved. Shingles shall be ground to 100 percent passing the 3/8 inch sieve. Waste, manufacturer or new, shingles shall be essential free of deleterious materials. Post consumer RAS shall not contain more than 1.5 percent wood by weight or more than 3.0 percent total deleterious by weight. Post consumer RAS shall be certified to contain less than the maximum allowable amount of asbestos as defined by national or local standards. The bulk specific gravity of RAS used in the job mix formula shall be 2.600. RAS $G_{sb} = 2.600$~~

The gradation of the aggregate may be determined by solvent extraction of the binder or using the following as a standard gradation:

Shingle Aggregate Gradation	
Sieve Size	Percent Passing by Weight
3/8 inch	100
No. 4	95
No. 8	85
No. 16	70
No. 30	50
No. 50	45
No. 100	35
No. 200	25

402.5 Gradation and Deleterious Content Control. In producing mixture for the project, the plant shall be operated such that no deviations from the job mix formula are made. The contractor shall determine on a daily basis, at a minimum, the ~~gradation on the aggregate reclaimed from the RAP by either extraction or binder ignition. The gradation results shall be used to determine the daily specification compliance for the~~ combined gradation and binder content if production exceeds 100 tons per day. Gradation and asphalt content of RAP shall be determined once every 10,000 tons of production. Mixture as produced will be subject to the following tolerances and control:

- (a) The total aggregate gradations shall be within the master range specified in [Sec 402.3](#).
- (b) Material passing the No. 200 sieve shall not vary from the job mix formula by more than ± 2.0 percentage points.
- (c) The deleterious content of the material retained on the No. 4 sieve shall not exceed the limits specified in [Sec 1004.2](#).
- (d) If the plasticity index of any fraction exceeds that of the material approved for the mix design, additional testing may be required.
- (e) The quantity of asphalt binder introduced into the mixer shall be that quantity specified in the job mix formula. No changes may be made to the quantity of asphalt binder specified in the job mix formula without written approval from the engineer. The quantity of asphalt binder determined by calculation or tests on the final mixture shall not vary more than ~~± 0.3~~ to $+0.5$ percent from the job-mix formula.

402.6 Sample Location. The gradations of the total aggregate will be determined from samples taken from the hot bins on the batch-type plants, ~~or from hot bins or combined hot aggregate flow on continuous mixing plants, or~~ from the combined cold feed on dryer-drum plants or ignition residue from plant production. The deleterious content of the total aggregate will be determined from the samples taken from the combined cold feed belt. Samples for plasticity index will be taken from the stockpile. The RAP shall be sampled from the RAP feeding system on the asphalt plant.

2. Changes to UBAWS have been added to the Supplemental Revisions JSP. They include changes to weather limitations, calendar restrictions, and RAP/RAS cannot be used in UBAWS mixes.

This spec change was added to the Supplemental JSP with the January 2021 letting.

~~Delete Sec 413.10.5.5 and substitute with the following:~~

~~**413.10.5.5 Weather Limitations and Calendar Restrictions.** Micro-surfacing shall not be placed when the air or surface temperature is below 50 F; or when the forecasted low temperature for the next 48 hours, as reported by the National Weather Service, is below 40 F; or after October 1 of each calendar year. Temperatures shall be obtained in accordance with MoDOT Test Method TM 20. Micro-surfacing may be placed on a damp surface but shall not be placed on a wet surface with free standing water.~~

Delete Sec 413.30.2.3 and substitute with the following:

413.30.2.3 Reclaimed Asphalt. No reclaimed asphalt pavement or reclaimed asphalt shingles are allowed.

3. Changes to Microsurfacing specification Section 413.10.5.5. This revision is also related to weather and calendar restrictions.

This spec change was added to the Supplemental JSP with the February 2021 letting.

Delete Sec 413.10.5.5 and replace with the following:

413.10.5.5 Weather Limitations and Calendar Restrictions. Micro-surfacing shall not be placed when the air or surface temperature is below 50 F; or when the forecasted low temperature for the next 48 hours, as reported by the National Weather Service, is below 40 F; or after October 1 of each calendar year. Temperatures shall be obtained in accordance with MoDOT Test Method TM 20. Micro-surfacing may be placed on a damp surface but shall not be placed on a wet surface with free standing water.

4. Non-standard JSP for Disadvantaged Business Enterprises (DBE) Program Requirements (NJSP-20-02) will be moving into the General Provisions. Please see the end of the document for a copy of the current JSP language that will transfer to the General Provisions.

5. This revision standardizes the use of the 0.98 Recycled Asphalt Pavement Specific Gravity correction factor for Sec 403 mixtures which has already been adopted for Sec 401 and 402.

403.2.6 Reclaimed Asphalt. A maximum of 30 percent virgin effective binder replacement may be used in mixtures without changing the grade of binder. The asphalt binder content of recycled asphalt materials shall be determined in accordance with AASHTO T 164, ASTM D 2172 or other approved method of solvent extraction. A correction factor for use during production may be determined for binder ignition by burning a sample in accordance with AASHTO T 308 and subtracting from the binder content determined by extraction. The aggregate specific gravity shall be determined by performing AASHTO T 209 in accordance with [Sec 403.19.3.1.2](#) and calculating the G_{se} ~~to use in lieu of~~ which a 0.98 correction factor will be applied to obtain the G_{sb} as follows:

$$G_{se} = \frac{100 - P_b}{\frac{100}{G_{mm}} - \frac{P_b}{G_b}} \quad \text{RAP } G_{sb} = \text{RAP } G_{se} \times 0.98$$

6. Section 109.15.1.1 is being revised to include 402 mixes, for clarification.

109.15.1.1 The price adjustment will be applied to the actual amount of virgin PG asphalt binder used by the Contractor for all asphalt items specified in Sec 109.15.1. For asphalt mixtures that are paid for by the square yard, the price adjustments will be made for applicable equivalent tons, as calculated by the engineer, based upon the plan square yard quantity and thickness converted to tons, excluding the 1:1 wedge. The price adjustment will be applied to all Job Order Contract projects for all quantities of the wet ton and square yard asphalt mix. The percentage of virgin PG asphalt binder as shown in the job mix formula, in accordance with [Sec 401](#), [Sec 402](#), [Sec 403](#) and [Sec 413](#), will be the basis for price adjustments for any asphalt mix type placed on the project. The effective asphalt binder obtained from the use of Recycled Asphalt Pavement (RAP) and/or Recycled Asphalt Shingles (RAS) will not be eligible for adjustment. The Monthly Asphalt Index for PG64-22 will be applied to the asphalt mix for mixes using any PG asphalt binder.

7. Changes to Section 617.20.2.1 requiring the serviceable condition of temporary concrete traffic barriers to be in accordance with the Missouri Quality Standards for Temporary Traffic Control Devices (EPG 616.19). This also includes a helpful flyer in EPG 616.19 related to top deficient work zone devices. The flyer is an attachment at the end of this document.

617.20.2 Material. All material shall be in accordance with [Division 1000](#) Materials Details and [Sec 1064.2.2.1](#).

617.20.2.1 All Type F temporary barrier shall be in a serviceable condition during installation and relocation as determined by the engineer. Reference the *Missouri Quality Standard for Temporary Traffic Control Devices* for evaluation criteria on serviceable condition.

Disadvantaged Business Enterprise (DBE) Program Requirements NJSP-20-02

1.0 Program Applicability. The subsequent sections will apply only to contracts involving U.S. Department of Transportation (USDOT) federal-aid or federal funded participation. Federal-aid or federal funded participation includes, but is not limited to, any funds directly or indirectly received by MoDOT, or authorized for distribution to or through MoDOT, by the USDOT or any operating administration within the USDOT. These provisions will not apply to Commission contracts funded exclusively with state funds, or state and local funds. Any contractor, subcontractor, supplier, DBE firm, and contract surety involved in the performance of a federal-aid contract shall be aware of and fully understand the terms and conditions of the USDOT DBE Program, as the terms appear in Title 49 CFR Part 26 (as amended), the USDOT DBE Program regulations; Title 7 CSR Division 10, Chapter 8 (as amended), and the Commission's DBE Program rules.

2.0 DBE Program Distinguished from Other Affirmative Action Programs. The USDOT DBE Program established by the U.S. Congress is not the same as, and does not involve or utilize, any of the elements or authority of other state or local affirmative action programs, nor does the program rely upon state legislation or gubernatorial executive orders for implementation or authorization, other than the general authority given the Commission in Section 226.150, RSMo. The USDOT DBE Program is implemented by the Commission and MoDOT, through and in conjunction with the FHWA, FTA and FAA, as a "recipient" defined in Title 49 CFR 26.5.

3.0 Policy Regarding DBE Firms. It is the policy of the U. S. Department of Transportation and MoDOT that businesses owned by socially and economically disadvantaged individuals have an opportunity to participate in the performance of contracts funded in whole or in part with federal funds. Consequently, the requirements of 49 CFR Part 26 (as amended) and the Commission's implementing state regulations in Title 7 CSR Division 10, Chapter 8, "Disadvantaged Business Enterprise Program", will apply to any contract funded in whole or part with federal funds.

4.0 Opportunity for DBEs to Participate. Each contractor, subcontractor and supplier working on a contract funded in whole or in part with federal funds shall take all necessary and reasonable steps to ensure that DBEs have an opportunity to compete for and participate in performance on project contracts and subcontracts in which a DBE goal is established.

5.0 Required Contract Provision. The federal-aid contract will include the following provision, as mandated by USDOT at Title 49 CFR 26.13(b):

(a) The contractor, sub-recipient or subcontractor shall not discriminate based on race, color, religion, national origin, or gender in the performance of the contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of USDOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of the contract, which may result in the termination of the contract or such other remedy, as the recipient deems appropriate.

In this provision, "contractor" will be defined as the contractor on the contract; sub-contractor, or material supplier performing the work on or for the project. For the purposes of any federal-aid contract awarded by the Commission, "the recipient" will be defined as either the Commission, or MoDOT, or both. The contractor shall include this same contract provision in every supply contract or subcontract the contractor makes or executes.

6.0 DBE Program Information. DBE Program information may be obtained from the MoDOT External Civil Rights Division, 105 W. Capitol Avenue, P.O. Box 270, Jefferson City, Missouri 65102-0270. Phone (573) 751-7801, Fax (573) 526-0558, E-Mail: dbe@modot.mo.gov. It will be the duty of each contractor, and for the contractor's subcontractors to take the steps necessary

to determine the legal obligations and limitations under the DBE Program, as an element of responsibility. It will be the duty of each certified DBE firm to know, understand and comply with the DBE firm's legal obligations and limitations under the DBE Program, as a requirement of program participation.

7.0 DBE Certification, and the Missouri Unified Certification Program. MoDOT and other certifying agencies within Missouri have partnered to form the Missouri Regional Certification Committee (MRCC) and have developed a Unified Certification Program (UCP) pursuant to 49 CFR 26.81 and 7 CSR 10-8.061. Only DBE firms certified by the MRCC are eligible to perform work on a federal-aid contract for DBE contract goal credit. It is the contractor's responsibility to ensure firms identified for participation are approved certified DBE firms. The MRCC DBE Directory can be found at the following link: <https://www.modot.org/welcome-external-civil-rights>.

8.0 DBE Program-Related Certifications Made by Bidders and Contractors. By submitting a bid on any call involving USDOT federal funded participation, and by entering into any contract on the basis of that bid, the contractor makes each of the following DBE Program-related certifications and assurances to USDOT, to the Commission, and to MoDOT:

(a) The bidder certifies that management and bidding officers have reviewed and understand the bidding and project construction and administration obligations of the USDOT DBE Program regulations at Title 49 CFR Part 26 (as amended), and the Commission's DBE Program rules at Title 7 CSR Division 10, Chapter 8 (as amended).

(b) The bidder agrees to ensure that certified DBE firms have a full and fair opportunity to participate in the performance of the contract funded in whole or in part with federal funds. The bidder certifies that all necessary and reasonable steps were taken to ensure that DBE firms have an opportunity to compete for and perform work on the contract. The bidder further certifies that the bidder not discriminate on the basis of race, color, age, national origin, religion or gender in the performance of the contract, or in the award of any subcontract.

(c) The bidder certifies that if awarded the federal-aid contract, the contractor will make a good faith effort to utilize the certified DBE firms committed to with the awarded contract.

(d) The bidder certifies, that if awarded the federal-aid contract with less than the original DBE contract goal proposed by the Commission in the bid documents, as a result of an approved good faith effort, the revised lower amount shall become the final DBE goal, and that goal will be used to determine any liquidated damages to be assessed at the completion of the project.

(e) The bidder understands and agrees that if awarded the contract the contractor is legally responsible to ensure that the contractor and each DBE, comply fully with all regulatory and contractual requirements of the USDOT DBE Program, and that each DBE firm participating in the contract fully perform the designated tasks, with the DBE's own forces and equipment, under the DBE's own direct supervision and management. The bidder certifies, that if awarded the contract and if MoDOT or the Commission determine that the contractor, a DBE or any other firm retained by the contractor has failed to comply with the DBE Program requirements or federal or state DBE Program regulations, the Commission, through MoDOT, shall have the sole authority and discretion to determine the extent of the monetary value to which the DBE contract goals have not been met at the project completion, and to assess against and withhold monetary damages from the contractor up to the full amount of that breach. The bidder further understands and agrees that this clause authorizes the Commission, through MoDOT, to determine and fix the extent of the damages caused by a breach of any contractual or regulatory DBE Program

requirement and that the damage assessment will be enforced in addition to, and not in lieu of, any other general liquidated damages clause in the contract. By submitting a bid for a federal-aid contract, and by entering into a contract, the bidder irrevocably agrees to such an assessment of liquidated damages for DBE Program purposes, and authorizes the Commission and MoDOT to make such an assessment of liquidated damages against the contractor, and to collect that assessment from any sums due the contractor under the contract, or any other contract, or by other legal process. The bidder makes this certification, agreement and authorization on behalf of itself, for each federal-aid contract.

9.0 Designation of DBE firms to perform on contract. The bidder states and certifies that the DBE participation information submitted in the bid or within the contract designated time is true, correct and complete and that the information provided includes the names of all DBE firms that will participate in the contract, the specific line item (s) that each DBE firm will perform or partially perform, and the creditable dollar amounts of the participation of each DBE. The specific line item must reference the MoDOT line number and item number contained in the proposal. The bidder further states and certifies that the bidder has committed to use each DBE firm listed for the work shown to meet the DBE contract goal and that each DBE firm listed has clearly confirmed to the bidder that the DBE firm will participate in and perform the work, with the DBE's own forces.

(a)The bidder certifies the bidder's understanding that as the contractor on a contract funded in whole or in part by USDOT federal funds, the bidder may not unilaterally terminate, substitute for, or replace any DBE firm that was designated in the executed contract, in whole or in any part, with another DBE, any non-DBE firm or with the contractor's own forces or those of an affiliate, without the prior written consent of MoDOT. The bidder understands it must receive approval in writing from MoDOT for the termination of a DBE firm, or the substitution or replacement of a DBE before any substitute or replacement firm may begin work on the project in lieu of the DBE firm participation information listed in the executed contract.

(1) The bidder further certifies understanding, that if a DBE firm listed in the bid or approved in the executed contract documents ceases to be a certified DBE firm, at any time during the performance of the contract work, and a contract or subcontract with that firm has not yet been executed by the prime and subcontractor, the contractor cannot count any work performed by that firm after the date of the firm's loss of eligibility toward meeting the DBE contract goal. The contractor can pursue efforts to replace the work planned with the decertified firm, with other certified DBEs, in coordination with MoDOT's External Civil Rights Division. However, if the contractor has executed a subcontract with the firm before the DBE lost eligibility and ceased to be a certified DBE, the contractor may continue to receive credit toward the DBE contract goal for that firm's work.

(2) The bidder further certifies the bidder's understanding, that the dollar value of any work completed by a DBE firm prior to approval of the DBE's substitution or replacement, in writing, by MoDOT may not be credited toward meeting the DBE contract goal. No credit toward the DBE goal will be given for any amount withheld from payment to the DBE or "back charged" against monies owed to the DBE, regardless of the purpose or asserted debt.

10.0 Contract Goal Submittal. The bidder may submit the completed "DBE Identification Submittal" information in the bid documents at the same time as, and within the sealed bid, at the time the bid is submitted. However, if that information is not completed and submitted with the initial sealed bid, then as a matter of responsiveness and responsibility, all bidders shall file the completed "DBE Identification Submittal" pages with MoDOT on or before 4:00 p.m. of the third business day after the bid opening date, directly to the External Civil Rights Division, Missouri

Department of Transportation, 105 W. Capitol Avenue, P.O. Box 270, Jefferson City, Missouri 65102-0270. Submission via email and telefax transmittal to MoDOT will be permitted.

Fax no. (573) 526-0558

Email: DBE@MoDOT.Mo.Gov

No extension of time will be allowed for any reason. The means of transmittal and the risk of timely receipt of the information shall be the bidders.

10.1 Good Faith Effort Submittal. If the bidder is not able to meet the Commission's DBE contract goal, the bidder has the opportunity to submit with and as a part of the bid, a true, accurate, complete and detailed written explanation of good faith efforts taken to meet the DBE Contract Goal established in the bid documents. The bidder shall use the "DBE Identification Submittal" sheets for any DBE participation that will be committed towards the goal and an explanation, with any supporting documentation, for the inability to meet the full goal established on the contract. Any Good Faith efforts shall be submitted as part of the bid or within the three business days after the bid opening.

10.2 Bidders Good Faith Efforts Described. MoDOT will consider the quality, quantity, and intensity of the different kinds of efforts that the bidder has made based upon 49 CFR Appendix A to Part 26 and the following additional efforts:

- (a) Providing documentation on any and all past GFE activities for review.
- (b) Past project DBE performance utilization.
- (c) Race neutral methods utilized on completed projects.

All good faith efforts are evaluated on a case-by-case basis whereas any of the numerous good faith elements listed individually or collectively is not a guarantee of approval.

10.3 Administrative Reconsideration of the Bidder's Good Faith Efforts Made as a Part of the Bid Submittal. If MoDOT determines that the apparent low bidder has failed to adequately document in the bid that the bidder made a good faith effort to achieve sufficient DBE participation in the contract work, that firm will be offered the opportunity for administrative reconsideration upon written request, before MoDOT and the Commission reject that bid as non-responsive.

10.4 Forfeiture of Bid Bond possible when: The failure of the apparent low bidder to file the completed and executed "DBE Identification Submittal", listing actual, committed DBE participation equal to or greater than the DBE contract goal percentage specified in the bid, or complete good faith effort participation by 4:00 p.m. on the third business day after the bid opening, will be cause for rejection of that bid. In addition, the bid surety bond or bid guaranty of the apparent low bidder will be forfeited to and become the property of the Commission upon Commission demand, only if the contract is awarded.

- (a) By submitting a bid on a federal-aid project, the bidder accepts and agrees to these provisions, and the disposition of the bidders bid bond or guaranty, upon demand by the Commission.

11.0 DBE Participation for Contract Goal Credit. In addition to participation outlined by 49 CFR part 26, the following shall apply:

- (a) In addition to allowances provided for in the Federal Regulations, a bidder may count toward the DBE contract goal the following expenditures to certified DBE firms that are not "regular dealers" or "manufacturers" for DBE program purposes:

(1) A bidder may count toward the DBE contract goal 100 percent of the fees paid to a certified DBE trucker or hauler for delivery of material and supplies required on a job site, but not for the cost of those materials or supplies themselves, or for the removal or relocation of excess material from or at the job site, when the DBE certified trucking company is not also the manufacturer of or a regular dealer in those material and supplies, provided that the trucking or hauling fee is determined by MoDOT to be reasonable as compared with fees customarily charged by non-DBE firms for similar services. The certified DBE trucking firm shall also perform a CUF on the project and not operate merely as a pass through for the purposes of gaining credit toward the contract DBE goal. Prior to submitting a bid, the bidder shall determine, whether a DBE trucking firm will meet the criteria for performing a CUF on the project.

(2) The bidder will receive DBE contract goal credit for the fees or commissions charged by and paid to a DBE broker who arranges or expedites sales, leases or other project work or service arrangements, provided that those fees are determined by MoDOT to be reasonable and not excessive, as compared with fees customarily charged by non-DBE firms for similar services. A broker will be defined as a person or firm that does not own or operate the delivery equipment necessary to transport materials, supplies or equipment to or from a job site. In most instances, the broker is merely the entity making arrangements for delivery of material, supplies, equipment, or arranging project services. To receive DBE contract goal credit, MoDOT must determine that the DBE broker has performed a CUF in providing the contract work or service.

12.0 DBE Required to Perform a Commercially Useful Function (CUF). The DBE CUF requirements are stated in 49 CFR Part 26, (26.55). Any questions or further information needed for CUF determinations should be directed to MoDOT's External Civil Rights Division.

12.1 Quality Control (QC) and Quality Assurance (QA) Reviews. The prime contractor shall monitor their planned DBE project usage for CUF compliance and provide MoDOT information for areas of concern for further evaluation. MoDOT will perform a QA review, or compliance review, for DBE CUF and project documentation retained by the contractor through project completion. The contractor shall maintain all DBE related information it has received, documented and provided to MoDOT for a period of three years beyond the date of final inspection. MoDOT's determination that a DBE's participation may not count toward the project goal, or good faith effort level approved will be subject to administrative reconsideration.

12.2 MoDOT Makes Final Determination on Whether a CUF Is Performed. MoDOT will have the final authority to determine whether a DBE firm has performed a CUF on a federal-aid contract.

13.0 Verification of DBE Participation at project completion. (Assessment of Liquidated Damages Possible)

13.1 Final Payment from the Commission. Prior to final payment by the Commission, the contractor shall file with the Commission a detailed list showing each DBE used on the contract work, and the work performed by each DBE (Section 105.15.2.1). The list shall show the actual dollar amount paid to each DBE for the creditable work on the contract, less any rebates, kickbacks, deductions, withholdings or other repayments made. The list shall be certified under penalty of perjury, or other law, to be accurate and complete. MoDOT and the Commission will use this certification and other information available to determine if the contractor and the contractor's DBEs satisfied the DBE contract goal percentage specified in the contract and the extent to which the DBEs were fully paid for that work. The contractor shall acknowledge, by the

act of filing the detailed list, that the information is supplied to obtain payment regarding a federal participation contract.

13.2 Failure on the part of the contractor to achieve the DBE participation to which the contractor committed in the contract may result in liquidated damages being imposed on the contractor by the Commission for breach of contract and for non-compliance. If the contract was awarded with less than the original DBE contract goal proposed by the Commission, the revised lower amount became the final DBE contract goal, and that goal will be used to determine any liquidated damages to be assessed. Additionally, the Commission or MoDOT may impose any other administrative sanctions or remedies available at law or provided by the contract in the event of breach by the contractor by failing to satisfy the contractor's DBE contract goal commitment. The contractor will be offered the opportunity for administrative reconsideration of any assessment of liquidated damages determined at the project completion, upon written request. The administrative reconsideration officer may consider all facts presented, including the legitimacy or business reason for back charges assessed against a DBE firm, in determining the final amount of liquidated damages.

14.0 Miscellaneous DBE Program Requirements. In accordance with Title 49 CFR Part 26 and the Commission's DBE Program rules in Title 7 CSR Division 10, Chapter 8, the contractor, for both the contractor and for the contractor's subcontractors and suppliers, whether DBE firms or not, shall commit to comply fully with the auditing, record keeping, confidentiality, cooperation and anti-intimidation or retaliation provisions contained in those federal and state DBE Program regulations. By bidding on a federal-aid contract, and by accepting and executing that contract, the contractor agrees to assume these contractual obligations, and to bind the contractor's subcontractors contractually, at the contractor's expense.

15.0 Data Collection from Bidders for DBE and Non-DBE Subcontractors, Suppliers, Manufacturers and/or Brokering used and not used in bids during the reporting period. MoDOT is a recipient of federal funds and is required by 49 CFR 26.11, to provide data about its DBE program. The information shall consist of all subcontractor quoting received for actual use and of consideration by the prime bidder. MoDOT will be requesting this information from bidding prime contractors and will provide prime bidders a form to submit the data by the last day of each month for the current letting. The information shall only include the names of both DBE and non-DBE companies that the prime bidders received quotes. MoDOT will then contact the DBEs and non-DBE subcontractors and request additional information from DBE and non-DBE subcontractors including current year of gross receipts and number of years in business. The information provided by the prime bidders shall not include any bid quote pricing regardless if it was used or not. This information will aid MoDOT in the determination of the availability of DBEs and will be used in subsequent availability studies.



Quality Standards for Temporary Traffic Control Devices

Device Condition

This field guide highlights a few of the commonly observed non-compliance items. Contractors are responsible to know and follow all standards as documented in the plans, specifications, MoDOT standards, industry standards, and the guidance from MoDOT staff. Unacceptable device placement/practices identified by MoDOT staff shall be corrected.

THE CONTRACTOR SHALL FOLLOW ALL MODOT STANDARDS AND SPECIFICATIONS. SEE SHEET 2 OF 2 FOR LIST OF MODOT STANDARDS AND GUIDELINES.

SIGNING

(Including sheeting on Barricade Panels/Paddles)

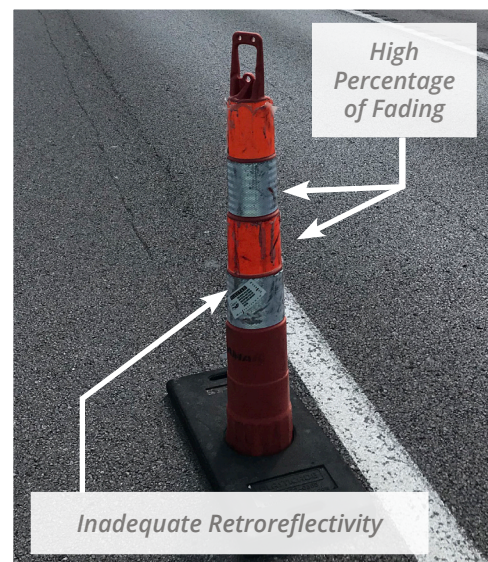


UNACCEPTABLE CONDITION

CONTAINS ANY OF THE FOLLOWING:

- Color fading or surface abrasions
- 25% or more deterioration of any letter/border/symbol day or night
- Bent/deformed from original size
- Debris/rust/residue
- Inadequate retroreflectivity per MUTCD

CHANNELIZERS



UNACCEPTABLE CONDITION

CONTAINS ANY OF THE FOLLOWING:

- Numerous scratches or tears
- 25% or more area with residue, fading, or inadequate/missing retroreflectivity
- Denting that affects overall dimensions or device stability



Any work zone device in unacceptable condition is subject to removal if directed by MoDOT staff.

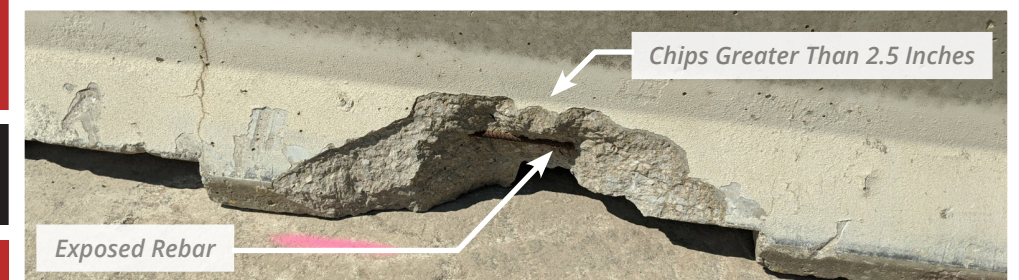
Rejected devices must be removed and replaced as directed by MoDOT staff (see MoDOT Standard Specifications 616.4.2.5).

ARROW BOARDS, WARNING LIGHTS, & CHANGEABLE MESSAGE SIGNS (CMS)

DEVICE	UNACCEPTABLE CONTAINS ANY OF THE FOLLOWING NUMBER OF LIGHTS DIMMED, DAMAGED, OR FAILING:
Arrow Boards	<ul style="list-style-type: none"> • 2 or more lights shall be corrected within one hour (Category 1 Deficiency) • Up to one total light shall be corrected within 96 hours (Category 3 Deficiency)
A, B, C, and Sequential Warning Lights	<ul style="list-style-type: none"> • 10% or more shall be corrected within one hour (Category 1 Deficiency) • Two lights up to 10% shall be corrected within 24 hours (Category 2 Deficiency) • Up to one total light shall be corrected within 96 hours (Category 3 Deficiency)
Changeable Message Signs (CMS)	<ul style="list-style-type: none"> • 10% or more lights per character/symbol shall be corrected within one hour (Category 1 Deficiency) • Two lights up to 10% per character/symbol shall be corrected within 24 hours (Category 2 Deficiency) • Up to one total light shall be corrected within 96 hours (Category 3 Deficiency)

See Missouri Standard Specifications for Highway Construction for additional requirements.

CONCRETE BARRIERS



UNACCEPTABLE CONDITION

CONTAINS ANY OF THE FOLLOWING:

- Spalls, chips, or delamination between 1.5" and 2.5" that have not been adequately repaired
- Spalls, chips, or delamination greater than 2.5" or other defects that are deemed structurally unsound
- Damaged connection loops
- Contains snag points potentially causing vehicle damage



Quality Standards for Temporary Traffic Control Devices

Device Placement and Practices

This field guide highlights a few of the commonly observed non-compliance items. Contractors are responsible to know and follow all standards as documented in the plans, specifications, MoDOT standards, industry standards, and the guidance from MoDOT staff. Unacceptable device placement/practices identified by MoDOT staff shall be corrected.

The following general requirements apply to all devices:

- *Unobstructed* by vegetation or any other material.
- *Visible* from a safe approaching distance as defined by plans, standards, and MoDOT approval.
- *Placed* according to plans, standards, and MoDOT approval.

SIGNING

MODOT STANDARD

- Signs shall not obstruct adjacent lanes or pathways with motorized/non-motorized traffic.
- Unused signs shall be removed, covered, or otherwise not displayed.

MODOT STANDARDS AND SPECIFICATIONS:



Missouri Standard Specifications for Highway Construction
<https://www.modot.org/missouri-standard-specifications-highway-construction>

Missouri Standard Plans for Highway Construction
<https://www.modot.org/missouri-standard-plans-highway-construction>



End Terminals, Crash Cushions and Barrier Systems
<https://www.modot.org/end-terminals-crash-cushions-and-barrier-systems>

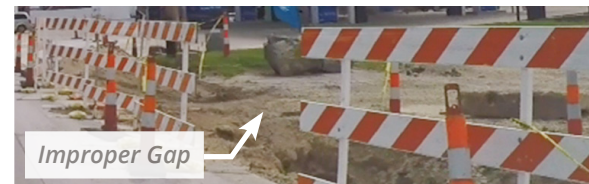
MoDOT EPG Section 616.19 - Quality Standards for Temporary Traffic Control Devices
https://epg.modot.org/index.php/616.19_Quality_Standards_for_Temporary_Traffic_Control_Devices



BARRICADES



ACCEPTABLE

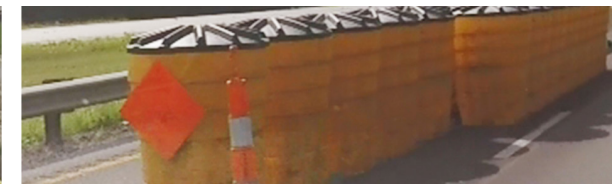


UNACCEPTABLE

MODOT STANDARD

- One barricade for every eight feet of pavement
- Vehicles should not be parked in front of barricades or within the recommended buffer space (See Table 616.3.6 of the EPG)
- Openings shall only be allowed for trucks entering/leaving for a maximum of ten minutes

END TREATMENTS



ACCEPTABLE



UNACCEPTABLE

MODOT STANDARD

- Shall be maintained throughout the duration of the work zone
- Shall be aligned correctly according to all manufacturer's recommendations considering speed and other contributing factors

PERSONAL PROTECTIVE EQUIPMENT (PPE)



ACCEPTABLE



UNACCEPTABLE

Fading/Residue

MODOT STANDARD

- MoDOT safety policies must be practiced at all times, including wearing all MoDOT approved PPE
- If PPE has limited retroreflectivity, significant dirt or damage, significant fading or poor color contrast, it shall be replaced

FLAGGING



ACCEPTABLE



UNACCEPTABLE

MODOT STANDARD

- MoDOT safety policies must be practiced at all times, including wearing all MoDOT approved PPE and using correct flagging procedures
- Flagging operators must be re-certified every four years