

Design Bureau

1G-14

Pavement Incentive/Disincentive (I/D) Bid Items

Design Manual Chapter 1 **General Information**

Originally Issued: 6-15-21

The Incentive/Disincentive (I/D) bid items for PCC and HMA projects were developed to ensure pavement placed by the contractor meets certain specifications. These items are a result of discussions between the Asphalt Paving Association of Iowa, local agencies, and Iowa DOT staff regarding the use of I/D items for Hot Mix Asphalt (HMA) projects to adjust payment in accordance with the Percent Within Limits (PWL) specifications. The same was decided for the other I/D items.

The quantities for these bid items are estimated based on project pavement quantities and averages of historical I/D payments. Incentive payments can be substantial in some cases. To budget for these, designers include an estimated cost for the incentive/disincentive payments in the original bid price rather than adding these items later by change order. The amount paid will be adjusted in the field based on measurements in accordance with the contract documents. Designers are to add the appropriate bid items to their plans to establish an initial estimate. The unit for the I/D bid items is EACH.

Note: The price for these bid items has been predetermined for estimation purposes to be \$1.00 EACH. Use this value for cost estimating.

HMA I/D Bid Items

Bid items for HMA voids and smoothness should be included on projects with HMA pavement. Refer to the guidelines below for application.

HMA Voids

HMA Voids should be added except in the following situations:

- Total HMA surface mix quantity is less than 2000 tons.
- HMA shoulder only (but, if HMA shoulder is included with roadway HMA pavement, then the bid items still apply).
- Temporary HMA or detour pavements.
- Cold-in Place pavements.
- High Performance Thin lift overlays.
- For items not covered here, refer to the Basis of Payment section of the specifications for the bid item.

Add the following bid items:

2303-7000610 PAYMENT ADJUSTMENT INCENTIVE/DISINCENTIVE FOR HMA MIXTURE LABORATORY VOIDS (FORMULA - BY PAY FACTOR) EACH

2303-7000620 PAYMENT ADJUSTMENT INCENTIVE/DISINCENTIVE FOR HMA MIXTURE FIELD VOIDS FORMULA - BY PAY FACTOR) EACH

Calculation (for both bid items):

Incentive/Disincentive Quantity (each) = 0.50 x tons of total HMA mix (Base, Intermediate, and Surface)

HMA Smoothness

HMA Smoothness should be added for except in the following situations:

- Total HMA surface mix quantity is less than 1000 tons or 5000 square yards.
- Single lift pavement overlays 2 inches thick or less, unless existing surface has been corrected by milling, scarification, or leveling.
- Detour or temporary pavement.
- Crossovers.
- Paved shoulders.
- Patching bid items.
- Areas with diamond grinding as a bid item.
- Sidewalk/Trails.

Note: Paved shoulders may be calculated for smoothness in special circumstances such as when the shoulder will be used as a driving lane during the project's construction or following project's construction.

On Primary Highway and Interstate Projects, add the following bid item:

2317-7000120 ADJUSTMENT INCENTIVE/DISINCENTIVE FOR HMA PAVEMENT SMOOTHNESS (BY SCHEDULE) EACH (for use on primary and interstate projects)

On Non-Primary Highway projects, add the following bid item:

2316-0000120 PAYMENT ADJUSTMENT INCENTIVE/DISINCENTIVE FOR HMA PAVEMENT SMOOTHNESS (BY SCHEDULE) EACH

Calculation (for all project types):

Incentive/Disincentive Quantity (each) = 0.24 x SY of final lift mix (exclude areas outlined above)

Example: On a project with a surface, intermediate, and base course of HMA, the quantity for base and intermediate courses would not be included in the tons of HMA for determining the I/D quantity for smoothness. However, when the intermediate course is the final lift, and there is no surface course, the amount of intermediate course HMA will be used for determining the I/D quantity for smoothness.

PCC I/D Bid Items

Bid items for PCC thickness and smoothness should be included on projects with PCC pavement. Refer to the guidelines below for application.

PCC Thickness

PCC Thickness should be added except in the following situations:

- Total PCC paving quantity is less than 3500 SY.
- PCC sidewalks.
- PCC shoulders.
- PCC overlay pavement.
- PCC detour pavement.
- PCC temporary pavement.
- PCC driveways.

Add the following bid item:

2301-7000110 PAYMENT ADJUSTMENT INCENTIVE/DISINCENTIVE FOR PCC PAVEMENT THICKNESS (BY SCHEDULE) EACH

Calculation:

Incentive/Disincentive Quantity (each) = 1.17 x SY of PCC (exclude areas outlined above)

PCC Smoothness

PCC Smoothness should be added except in the following situations:

- Total PCC paving quantity is less than 5000 SY (excluding the list below).
- Single lift pavement overlays 2 inches thick or less, unless existing surface has been corrected by milling, scarification, or leveling.
- Detour or temporary pavement.
- Crossovers.
- Paved shoulders.
- · Patching bid items.
- · Areas with diamond grinding as a bid item.
- Sidewalk/Trails.

On Primary Highway and Interstate Projects, add the following bid item:

2317-7000110 PAYMENT ADJUSTMENT INCENTIVE/DISINCENTIVE FOR PCC PAVEMENT SMOOTHNESS (BY SCHEDULE) EACH

On Non-Primary Highway projects, add the following bid item:

2316-0000110 PAYMENT ADJUSTMENT INCENTIVE/DISINCENTIVE FOR PCC PAVEMENT SMOOTHNESS (BY SCHEDULE) EACH

Calculation (for all project types):

Incentive/Disincentive Quantity (each) = 0.75 x SY of PCC (exclude areas outlined above)

Chronology of Changes to Design Manual Section:

001G-014 Pavement Incentive/Disincentive (I/D) Bid Items

6/15/2021

NEW New