

2020 UPDATES

Standard Specifications

for

Road and Bridge Construction

AUGUST 2016



Prepared by

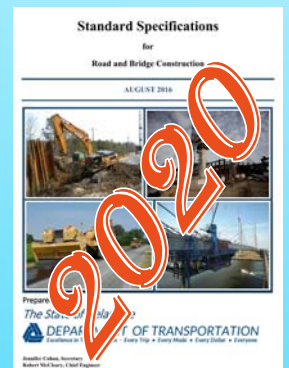
The State of Delaware

DEPARTMENT OF TRANSPORTATION
Excellence in Transportation - Every Trip • Every Mode • Every Dollar • Everyone

Jennifer Cohan, Secretary
Robert McCleary, Chief Engineer

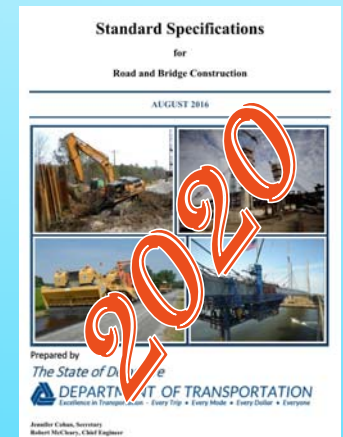
SCHEDULE

- **Division 100** final review
- **Division 200** Summary shared
- **Division 300** Summary shared
- **Division 400** Summary shared
- **Division 500** Summary shared
- **Division 600** creating summary
- **Division 700** Summary shared
- **Division 800** creating summary
- **Division 900** Summary shared
- **Division 1,000** final review



HOW THE NEW STANDARDS WILL BE PRESENTED.

- Written to the contractor
- Removed passive voice
- Replaced with active voice
- Use Imperative mood



ACTIVE VOICE

~~The Passive Voice~~



The passive voice is used to show interest in the person or object that experiences an action rather than the person or object that performs the action.

"Sam cooks the food"

(Active)



(Passive)

The food is cooked by Sam"

TENSE	ACTIVE VOICE	PASSIVE VOICE
Present Simple	Sam cooks the food	The food is cooked (by Sam)
Past Simple	Sam cooked the food	The food was cooked (by Sam)
Future Simple	Sam will cook the food	The food will be cooked (by Sam)
Present Continuous	Sam is cooking the food	The food is being cooked (by Sam)
Past Continuous	Sam was cooking the food	The food was being cooked (by Sam)
Going to	Sam is going to cook the food	The food is going to be cooked (by Sam)
Present Perfect	Sam has cooked the food	The food has been cooked (by Sam)
Past Perfect	Sam had cooked the food	The food had been cooked (by Sam)
Used to	Sam used to cook the food	The food used to be cooked (by Sam)
Would Always	Sam would always cook the food	The food would always be cooked (by Sam)
Infinitive	Sam has to cook the food	The food has to be cooked (by Sam)
Modals	Sam should cook the food	The food should be cooked (by Sam)

When to use the Passive Voice

When the object receiving the action is more important than the actor.
 When we do not know or do not want to mention who is doing the action.
 When we want to make statements more polite or formal.

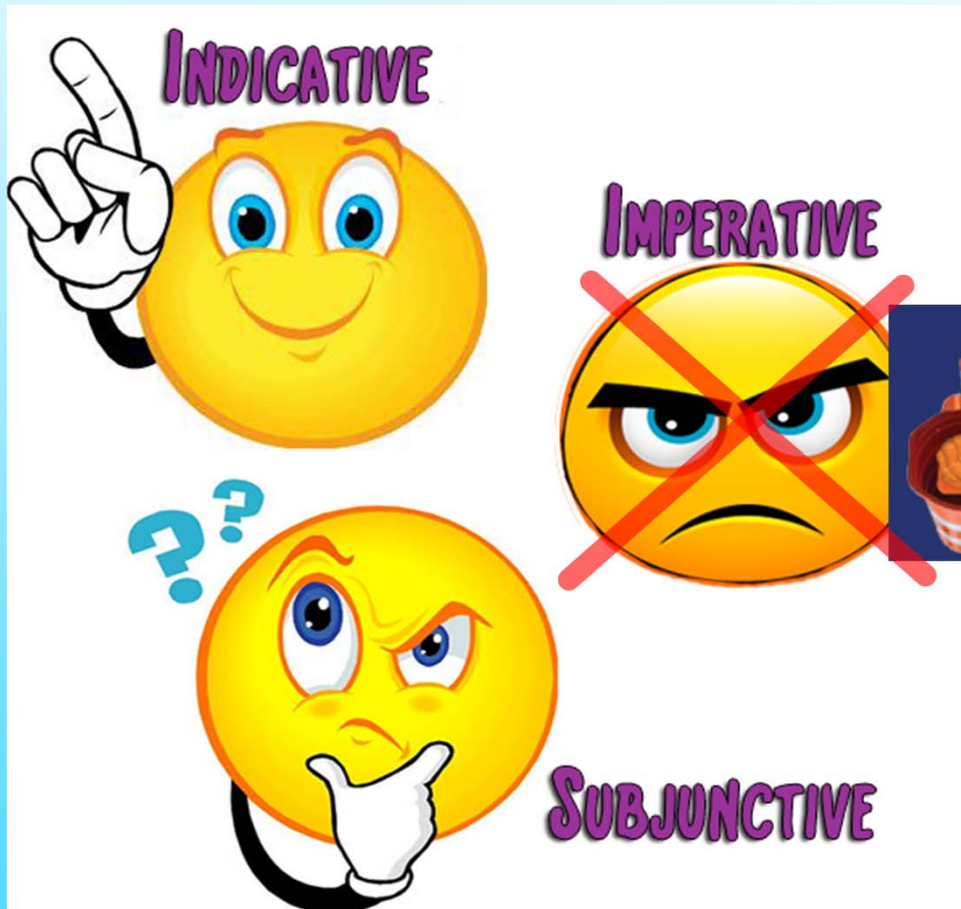
(by Sam)?

In passive sentences, the thing receiving the action is the subject of the sentence and the thing doing the action is optionally included near the end of the sentence.

THE BOOK IS FOR THE CONTRACTOR; THEREFORE, WHO IS ADDED **IF** NOT THE CONTRACTOR

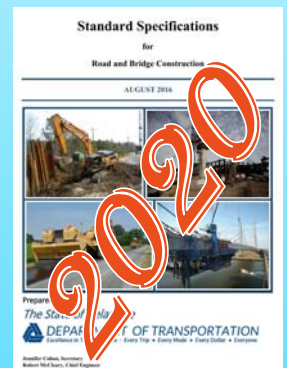


IMPERATIVE MOOD



EXPRESS COMMAND

EXAMPLE: NO SMOKING.

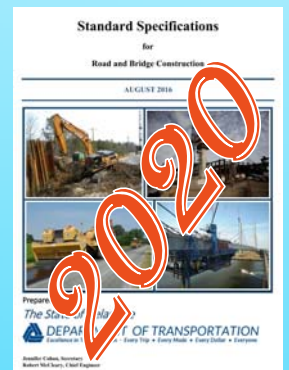


***INCIDENTAL...**

Currently used 341

2020 INCIDENTAL

ref. < 50



READABILITY

401.5 Basis of Payment.

- A. The Department will pay for the accepted quantity of bituminous pavement materials at the contract unit price per ton for:
 - 1. Providing, preparing, and placing all materials, including tack coat, joint sealant, and safety edge;
 - 2. removing material from around manholes, drainage valves, and similar features; and
 - 3. removing and replacing excess asphalt cement.
- B. The Department will pay for Superpave Type B, placed instead of Superpave Type BCBC, at the contract unit price for Superpave Type BCBC. The Department will make the asphalt cement cost adjustment based on the virgin asphalt of the Superpave Type B.
- C. The Department will make adjustments to payments in accordance with Special Provision 401699.
- D. The Department will consider the quantity of the safety edge as incidental to the paving items.
- E. The Department will apply any incentive or disincentive pay adjustments as established by this specification.

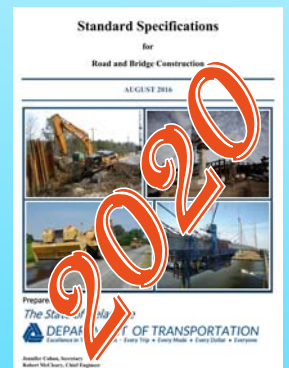
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FORMAT

Section 000 – Title

- **000.1 – Description.**
 - short and brief
- **000.2 – Materials.**
 - item materials
- **000.3 – Construction.**
 - how to construct
- **000.4 – Method of Measurement.**
 - measurement
- **000.5 – Basis of payment.**
 - payment information



000.1 – Description

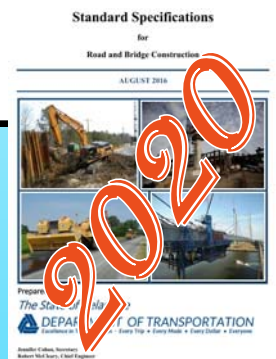
DIVISION 400 – BITUMINOUS MATERIALS

SECTION 401 – BITUMINOUS PAVEMENT

~~401.1~~ 401.1 Description.

~~Construct one or more courses of bituminous pavement on either a prepared foundation or an existing surface course. Construct butt joints by saw cutting and removing the existing hot laid bituminous concrete or Portland cement concrete pavement to provide an area to butt the new hot laid bituminous concrete pavement against the existing pavement.~~

This work consists of providing and placing bituminous pavement.



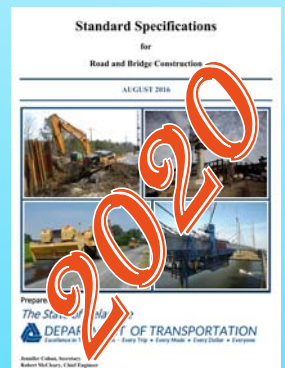
000.2 – Materials

901.2 Materials

Not applicable.

501.2 Materials.

A. Insulation materials	Section 610.03.D.3.d
B. Reinforcing steel	Section 611, Section 1037
C. Fine aggregate	Section 1003
D. Coarse aggregate	Section 1004
E. Ground granulated blast furnace slag (GGBFS)	Section 1020
F. Fly ash	Section 1020
G. Water	Section 1021
H. Portland cement	Section 1022
I. Air-entraining admixtures	Section 1022
J. Chemical admixtures	Section 1022
K. Curing materials	Section 1022
L. Embedded hardware:	
1. Load-transfer devices	Section 1037
2. Tie bars - hook bolts, bent bars or W-bolts	Section 1037
3. Coated dowel bars	Section 1037
4. Tie bolts - hook bolts or W-bolts	Section 1037



000.3 – Construction

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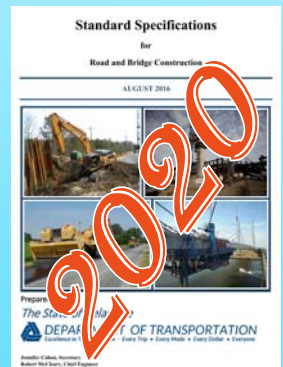
401.03 Construction

- A. Mix Design.
- B. Delivery of Mixture.
- C. Hauling Equipment.
- D. Paver.
- E. Rollers.
- F. Weather Limitations.
- G. Preparing Base or Excising Surface.
- H. Tack Coat.
- I. Placement.
- J. Compaction.
- K. Compaction Testing.
- ~~L. Material Production.~~
- M. Joints.
- N. Surface Tolerances.

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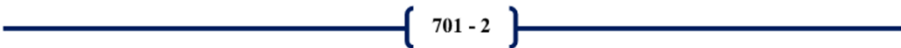
401.3 Construction.

- A. Before Paving
- B. Mix Design.
- C. Delivery of Mixture.
- D. Hauling Equipment.
- E. Paver.
- F. Rollers.
- G. Weather Limitations.
- H. Preparing Base or Existing Surface.
- I. Tack Coat.
- J. Placement.
- K. Compaction.
- L. Compaction Testing.
- M. Joints.
- N. Wearing Surface.



000.4 – Method of Measurement

701.04 Method of Measurement. The Engineer will measure Portland Cement Concrete Curb and Integral Portland Cement Concrete Curb as the number of linear feet measured along the linear face of acceptably installed and completed



PORTLAND CEMENT CONCRETE CURB, MEDIAN, ETC.

SECTION 701

curb as specified. Any curb showing cracks shall be replaced in sections that have a minimum length of 10 feet, at no cost to the Department.

Item 701026 - Portland Cement Concrete Monolithic Median will be measured as the number of linear feet measured along the centerline of the median.

Curb openings will be measured as the number of curb openings installed.

Not Measured and Paid
Has been relocated

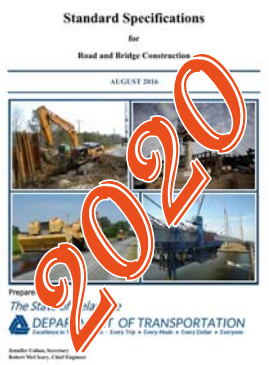
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701.3
Construction

L. For cracked or damaged curbs, remove and replace within the joint sections in accordance with Section 701.3.J.

701.5 Basis
of Payment

A. Price and payment shall constitute full compensation for:
12. removing and replacing cracked or damaged curb.



000.5 – Basis of Payment 2020

701.5 Basis of Payment.

A. Price and payment shall constitute full compensation for:

1. Excavating within the template of the item;
2. removal and disposal of existing materials;
3. foundation preparation;
4. providing and placing materials;
5. compaction;
6. forms and forming;
7. supplying, placing, finishing, and curing PCC;
8. expansion joint material;
9. sealing and saw cutting
10. backfilling;
11. removing surplus materials; and
12. removing and replacing cracked or damaged curb.

B. The Department will pay for:

1. Excavation and embankment outside the template of the item in accordance with Section 202 at the direction of the Engineer or contact.
2. Rock removal in accordance with Section 202.
3. Undercut excavation in accordance with Section 202.

C. For curb removal and replacement, the Department will pay for:

1. PCC removal in accordance with Section 211;
2. saw cutting in accordance with Section 762; and
3. bituminous pavement patching in accordance with Section 402 in addition to the curb item.

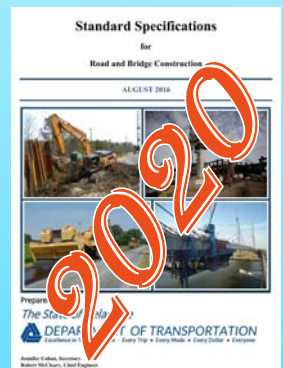
701.05 Basis of Payment. Price and payment for the Item(s), supplying and placing GABC, concrete, Portland cement concrete, expansion, sealing and removal and replacement of cracked and/or damaged to complete the Work.

Excavation and embankment outside the template of Rock removal shall be paid under Section 202.

Undercut excavation shall be paid under Section For removal and replacement of curb; P.C.C. 762 and Bituminous Pavement Patching is paid

Note: Curb and sidewalk components are not approved by the Engineer.

Any additional Material used to meet grades due

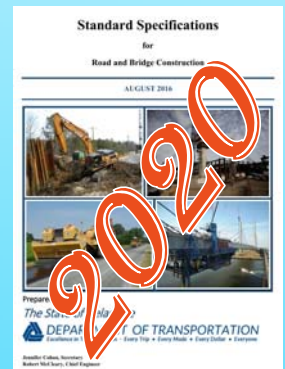


LOOKING AHEAD

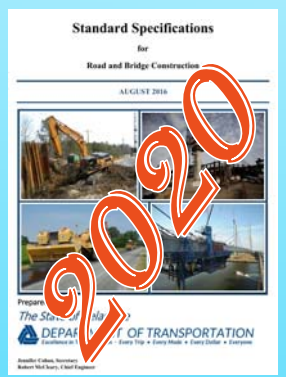
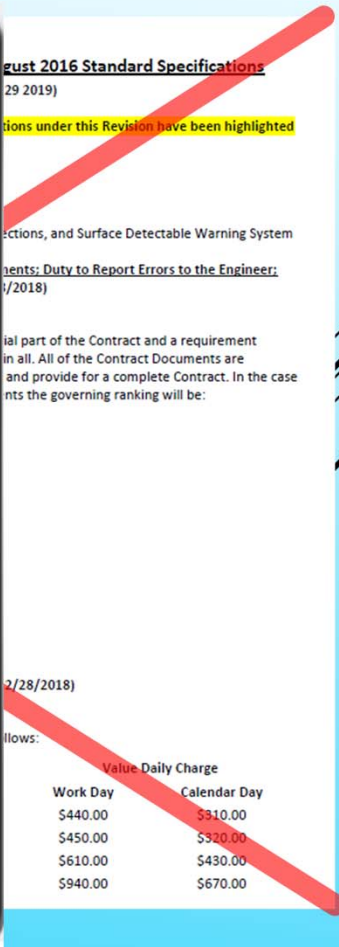
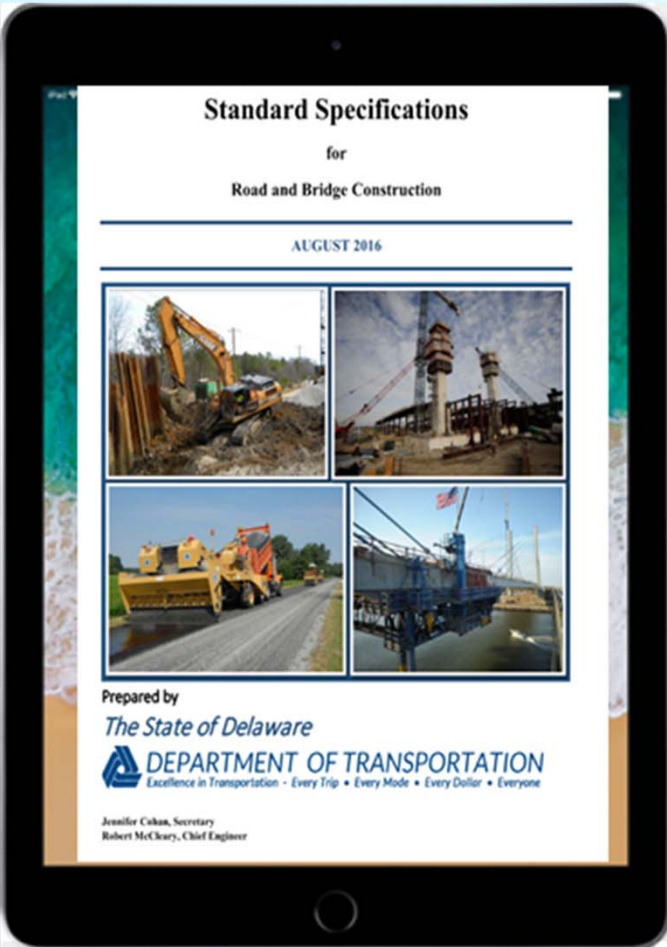
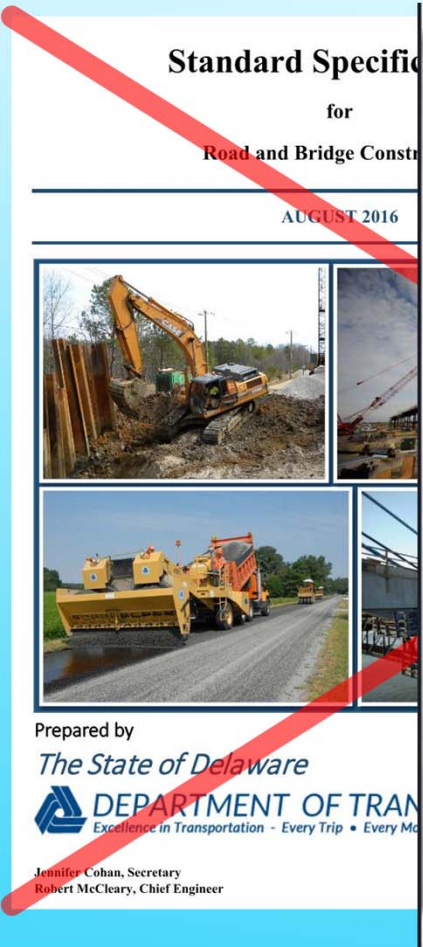
REVIEW

Each individual Contract Document is an essential part of the Contract and a requirement occurring in one is binding as though occurring in all. All of the Contract Documents are intended to be complementary and to describe and provide for a complete Contract. In the case of a discrepancy between the Contract Documents the governing ranking will be:

- A. General Description
- B. General Notices
- C. Plans
- D. Special Provisions
- E. Standard Construction Details
- F. Standard Specifications
- G. Electronic Design Data Files



LOOKING AHEAD



THANK YOU

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