LETTING DATE **12-15-26**

HMA JOINT & CRACK SEALING
MP-150-6(711)3--76-06

BENTON COUNTY

IOWA | DOT

REVISIONS

TOTAL 9
PROJECT IDENTIFICATION NUMBER
27-06-150-010
PROJECT NUMBER
MP-150-6(711)3--76-06
R.O.W. PROJECT NUMBER

PLANS OF PROPOSED IMPROVEMENT ON THE

PRIMARY ROAD SYSTEM
BENTON COUNTY
HMA JOINT & CRACK SEALING
From 2 miles north of Vinton to Urbana

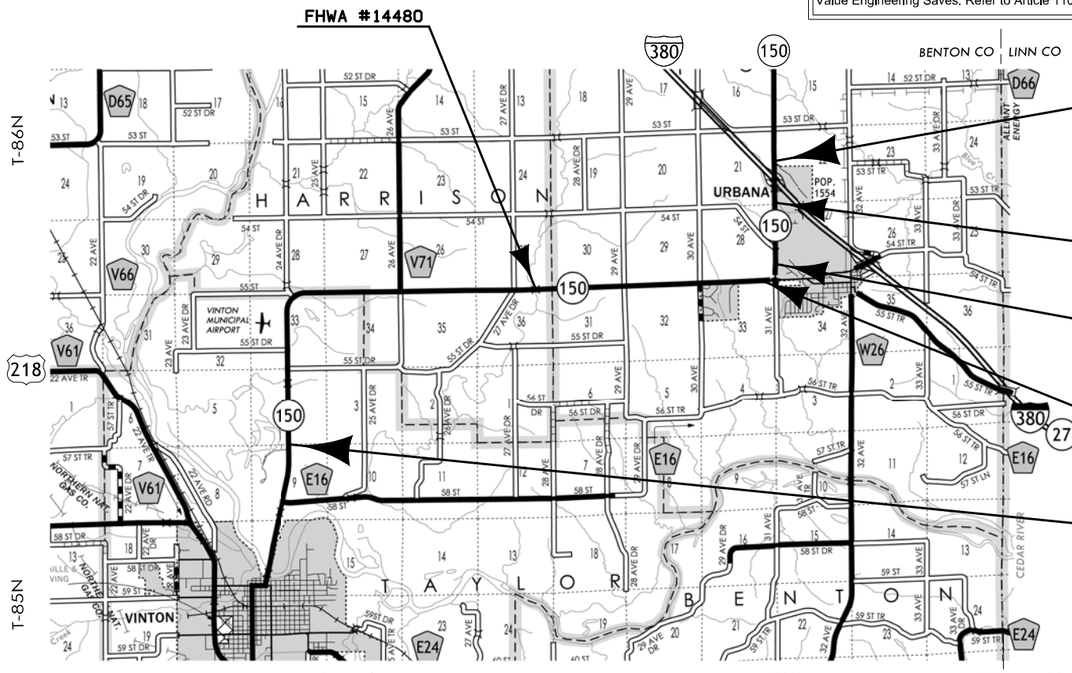
SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.

Value Engineering Saves. Refer to Article 1105.13 of the Specifications.

INDEX OF SHEETS

No.	DESCRIPTION
A Sheet	Title Sheet
A.1	Title Sheet
C Sheets	Quantities and General Information
C.1 - 3	Quantities and General Information
J Sheets	Traffic Control
J.1 - 3	Traffic Control Plan
U Sheets	Detail Sheets
U.1 - 2	Detail Sheets



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DESIGN DATA RURAL

2024	AADT	3,470	V.P.D.
20 –	AADT	--	V.P.D.
20 –	DHV	--	V.P.H.
TRUCKS		6	%
Total Design ESALs		--	

Scan the QR code or click the link below to leave plan quality feedback and help us improve future projects.

Design QR Feedback Link

LOCATION MAP SCALE
0 1 2 3
Miles

ROADWAY DESIGN

LICENSED PROFESSIONAL ENGINEER
Seth M. Kjormoe
24111
IOWA

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

Signature — Date: 9/29/26

Printed or Typed Name: Seth M. Kjormoe

My license renewal date is December 31, 2026

Pages or sheets covered by this seal: ALL

FILE NO.	ENGLISH	DESIGN TEAM Kjormoe/Holub	BENTON COUNTY	PROJECT NUMBER MP-150-6(711)3--76-06	SHEET NUMBER A.1

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ESTIMATED PROJECT QUANTITIES AND REFERENCE NOTES

Roadway Items : MP-150-6(711)3--76-06

Item no.	Item Code	Item	Unit	Quantities Estimated Roadway Items	Estimate Reference Notes
1	2528-8445110	TRAFFIC CONTROL	LS	1	Refer to Tab. 108-23A.
2	2528-8445113	FLAGGERS	EACH	0	See Proposal.
3	2528-8445115	PILOT CARS	EACH	0	
4	2528-8445116	FLAGGER WITH AFAD	EACH	0	See Proposal.
5	2533-4980005	MOBILIZATION	LS	1	
6	2541-1004011	CRACK AND JOINT CLEANING AND SEALING (HMA SURFACES)	MILE	9.7	Refer to the location map for project limits. Refer to the U sheets for typical cross sections. The quantity includes 8.97 miles of 2 lane pavement and 0.46 mile of 3 lane pavement. Paved shoulders shall be included, but the length of paved shoulder regardless of width, will not be measured separately.
7	2541-1005001	SEALER MATERIAL (HMA SURFACES)	LB	23,184	

105_04
10/20/26

STANDARDS

The following Standards apply to construction work on this project.

Number	Date	Title
SI-881	10-20-26	Special Signs for Workzones
TC-1	10-15-19	Work Not Affecting Traffic (Two-Lane or Multi-Lane)
TC-202	04-18-23	Work Within 15 ft of Traveled Way
TC-213	04-18-23	Lane Closure with Flaggers
TC-214	04-18-23	Lane Closure with Flaggers for use with Pilot Car

262_06
9/28/22

UTILITIES (NOT A POINT 25 PROJECT)

This is NOT a POINT 25 project and is not subject to the provisions of IAC 761-115.25.

8/18/2026 1:42:18 PM Renee.Holub@dot.iowa.gov

108_23A
8/15/22

TRAFFIC CONTROL PLAN

1. Through traffic will be maintained on the project at all times.

8/18/2026 1:42:43 PM Renee.Holub@dot.iowa.gov

111_01
10/14/22

COORDINATED OPERATIONS

Other work in progress during the same period of time will include the construction of the projects listed. Coordinate operations with those of other contractors working within the same area.

Project	Type of Work
MP-150-6(710)1--76-06	PCC Patching
MB-150-6(502)1--77-06	Bridge Repair - HMWM Seal
HSIPX-000-T(459)--3L-00	Pavement Markings - Grooved

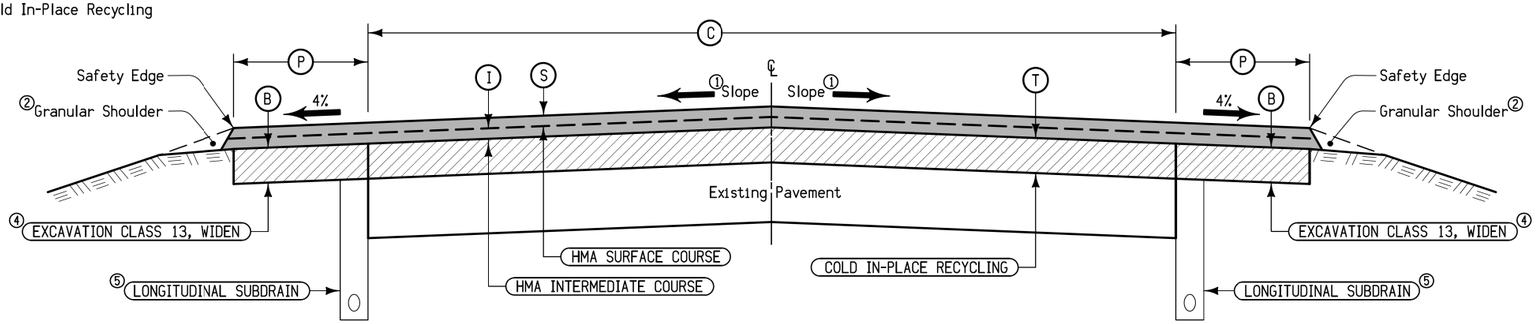
511 TRAVEL RESTRICTIONS

Route	Direction	County	Location Description	Feature Crossed	Object Type	Maint. Bridge No. or Structure ID or FHWA No.	Type of Restriction	Existing Measurement	Construction Measurement	Construction Measurement as Signed	Projected As Built Measurement	Remarks
Iowa 150	Both	Benton	1.8 miles north of junction with County Road V71	Prairie Creek	Traffic Control Device	0608.5S150	Horizontal	32'	13'	N/A		FHWA #14480

2602-A
MODIFIED

= HMA Resurfacing

= Cold In-Place Recycling



Notes:

① Finished slope shall match existing pavement. Section may be modified as directed by the Engineer through areas of special shaping.

Refer to Standard Road Plans for additional requirements through superelevated curves.

② Refer to Typ. 7135 and Typ. 7145.

③ Tack Coat estimated for 2 applications.

④ Cut widening trench to dimensions shown. Fill trench with cold-in-place recycled material. Substitute HMA Base Course for CIPR at county roads. Refer to U sheets.

⑤ Refer to Tab. 104-9.

⑥ Area based on existing pavement width.

DESIGN RATES	
ITEM	RATE
Surface Course	155 lbs./cu. ft.
Intermediate Course	150 lbs./cu. ft.
Tack Coat	0.05 gal./sq. yds.

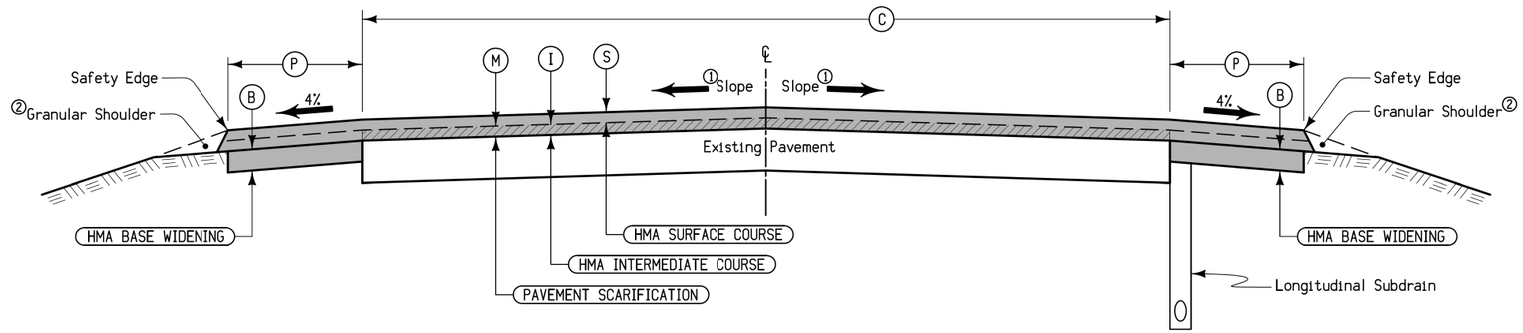
Location			Ⓢ	Ⓘ	Ⓣ	Ⓑ	Ⓒ	Ⓟ	Resurfacing Quantities Per Station						Remarks
									Tack Coat ③	Asphalt Binder	Hot Mix Asphalt (Tons)		Cold In-Place Recycling ⑥	Excavation Cl. 13 Widen	
Road Id	Station to Station		Inches	Inches	Inches	Inches	Feet	Feet	Gallons	Tons	Surface	Intermediate	SY	CY	
IA 150	108+00	382+43	1.5	1.5	5.0	5.0	24.0	3.0	33.4	3.43	29.1	28.1	267	9.3	
IA 150	383+27	536+00	1.5	1.5	5.0	5.0	24.0	3.0	33.4	3.43	29.1	28.1	267	9.3	

TYPICAL CROSS SECTION
HMA RESURFACING WITH
COLD-IN-PLACE RECYCLING

2602-B
MODIFIED

= HMA Resurfacing and Base Widening

= Pavement Scarification



Notes:

① Finished slope shall match existing pavement, except that the minimum allowable slope is 1.5% and the maximum allowable slope is 3.0%. Section may be modified as directed by the Engineer through areas of special shaping.

Refer to Standard Road Plans for additional requirements through superelevated curves.

② Refer to Typ. 7135 and Typ. 7145.

③ Tack Coat estimated for 2 applications. Not a bid item.

④ Shoulder width (P) is typical. Refer to Tab. 112-9.

⑤ Pavement width varies from 24' to 52'.

DESIGN RATES	
ITEM	RATE
Surface Course	155 lbs./cu. ft.
Intermediate Course	150 lbs./cu. ft.
Tack Coat	0.05 gal./sq. yds.

Location			Ⓢ	Ⓘ	Ⓑ	Ⓜ	Ⓒ	Ⓟ ④	Resurfacing Quantities Per Station						Remarks
									Tack Coat ③	Asphalt Binder	Hot Mix Asphalt (Tons)		Base Widening	Excavation Cl. 13 Widen	
Road Id	Station to Station		Inches	Inches	Inches	Inches	Feet	Feet	Gallons	Tons	Surface	Intermediate	Tons	CY	
IA 150	559+00	576+00	1.5	1.5	3.0	1.5	24.0	4.0	35.6	3.66	31.0	30.0	15.0	7.4	
IA 150	576+00	597+85	1.5	1.5	3.0	1.5	⑤	4.0	VAR.	VAR.	VAR.	VAR.	15.0	7.4	

TYPICAL CROSS SECTION
HMA RESURFACING

FOR REFERENCE ONLY
NOT FOR CONSTRUCTION

FILE NO.	ENGLISH	DESIGN TEAM Harle/Storey/Holub	BENTON COUNTY	PROJECT NUMBER NHSX-150-2(28)--3H-06/HSIPX-150-2(29)--3L-06	SHEET NUMBER B.1

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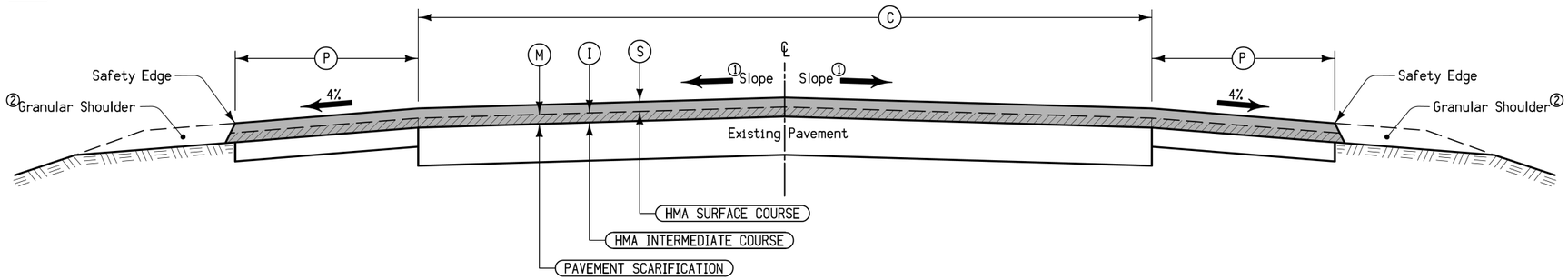
FILE NO.	ENGLISH	DESIGN TEAM Kjormoe/Holub	BENTON COUNTY	PROJECT NUMBER MP-150-6(711)3--76-06	SHEET NUMBER U.1

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2602-C
MODIFIED

= HMA Resurfacing and Base Widening

= Pavement Scarification



Notes:

① Finished slope shall match existing pavement, except that the minimum allowable slope is 1.5% and the maximum allowable slope is 3.0%. Section may be modified as directed by the Engineer through areas of special shaping.

Refer to Standard Road Plans for additional requirements through superelevated curves.

② Refer to Typ. 7135 and Typ. 7145.

③ Tack Coat estimated for 2 applications. Not a bid item.

④ Shoulder width (P) is typical. Actual width may vary.

⑤ Pavement width varies from 24′ to 40′.

DESIGN RATES	
ITEM	RATE
Surface Course	155 lbs./cu. ft.
Intermediate Course	150 lbs./cu. ft.
Tack Coat	0.05 gal./sq. yds.

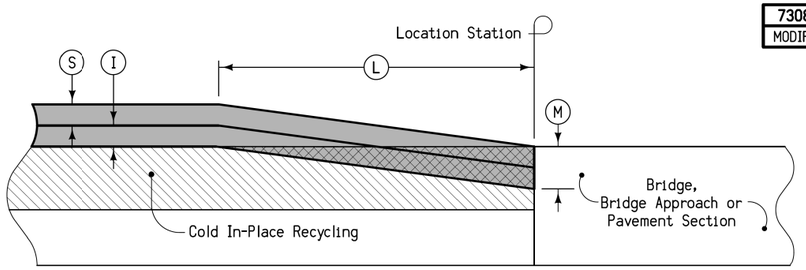
Location			(S)	(I)	(B)	(M)	(C)	(P)④	Resurfacing Quantities Per Station						Remarks
									Tack③ Coat	Asphalt Binder	Hot Mix Asphalt (Tons)		Base Widening	Excavation Cl. 13 Widen	
Road Id	Station to Station		Inches	Inches	Inches	Inches	Feet	Feet	Gallons	Tons	Surface	Intermediate	Tons	CY	
IA 150	597+85	599+13.8 (Bk)	1.5	1.5	---	1.5	24.0	6.0	40.0	4.12	34.9	33.8	---	---	
IA 150	1198+85.59 (Ah)	1200+25	1.5	1.5	---	1.5	24.0	6.0	40.0	4.12	34.9	33.8	---	---	
IA 150	1200+25	1231+25	1.5	1.5	---	1.5	⑤	6.0	VAR.	VAR.	VAR.	VAR.	---	---	

TYPICAL CROSS SECTION HMA RESURFACING

7308-A
MODIFIED

Posted Speed Limit (mph)	Runout Ratio (ft per inch)
45 or More	50
20 to 45	25
Under 20	10 *

* Based on turning maneuvers at side roads and intersections.



Location Station	(L) Feet	(S) Inches	(I) Inches	(M) Inches	Remarks
108+00	150	1.5	1.5	3.0	
382+43	150	1.5	1.5	3.0	
383+27	150	1.5	1.5	3.0	
536+00	150	1.5	1.5	3.0	

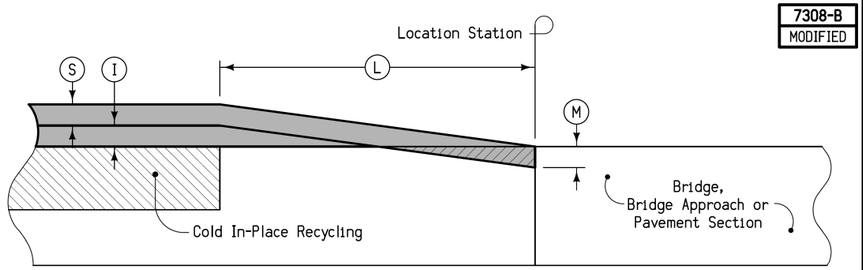
(S) Surface Course
(I) Intermediate Course
(M) Milling

SURFACE NOTCH FOR DOUBLE COURSE RESURFACING

7308-B
MODIFIED

Posted Speed Limit (mph)	Runout Ratio (ft per inch)
45 or More	50
20 to 45	25
Under 20	10 *

* Based on turning maneuvers at side roads and intersections.



Location	(L) Feet	(S) Inches	(I) Inches	(M) Inches	Remarks
County Road V71	30	1.5	1.5	1.5	
Taylor Avenue	30	1.5	1.5	1.5	
Meadow View Drive	30	1.5	1.5	1.5	

(S) Surface Course
(I) Intermediate Course
(M) Milling

SURFACE NOTCH INTERMEDIATE RUNOUT FOR DOUBLE COURSE RESURFACING

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FILE NO.	ENGLISH	DESIGN TEAM Harle/Storey/Holub	BENTON COUNTY	PROJECT NUMBER NHSX-150-2(28)--3H-06/HSIPX-150-2(29)--3L-06	SHEET NUMBER B.2

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