LETTING DATE
Dec 15 2026

PCC Patching
MP-027-5(709)1--76-56

LEE COUNTY

INDEX OF SHEETS	
No.	DESCRIPTION
A Sheets	**Title Sheets**
A.1	Title Sheet
A.2	Location Map Sheet
C Sheets	**Quantities and General Information**
C.1	Estimated Project Quantities & Reference Information
C.2	Project Description
C.3	Existing Pavement
C.4	Full Depth Patches
C.5	Standard Road Plans
C.6	General Information
J Sheets	**Traffic Control and Staging Sheets**
J.1	Traffic Control Plan
J.2	511 Travel Information
J.3	Coordinated Operations

IOWA | DOT

PLANS OF PROPOSED IMPROVEMENT ON THE

PRIMARY ROAD SYSTEM

LEE COUNTY

PCC Patching

IA 27

*1 mi N of the Des Moines River to 0.5 mi S of Co Rd W62/Argyle Rd (NB)

SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.

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

IOWA ONE CALL
1-800-292-8989
www.iowaonecall.com
811 Know what's below. Call before you dig.

REVISIONS

TOTAL 11
PROJECT IDENTIFICATION NUMBER
27-56-027-010
PROJECT NUMBER
MP-027-5(709)1--76-56
R.O.W. PROJECT NUMBER

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

Design QR Feedback Link



DESIGN DATA RURAL			
2025	AADT	3700	V.P.D.
20 --	AADT	--	V.P.D.
20 --	DHV	--	V.P.H.
TRUCKS		32.47	%
Total Design ESALs		--	

INDEX OF SEALS			
SHEET NO.	NAME	TYPE	BID QUANTITY SHEETS
A.1	Anthony J. Klein	Primary Signature Block	C.1

LICENSED PROFESSIONAL ENGINEER
ANTHONY JARED KLEIN
21902
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 9/23/26 Date

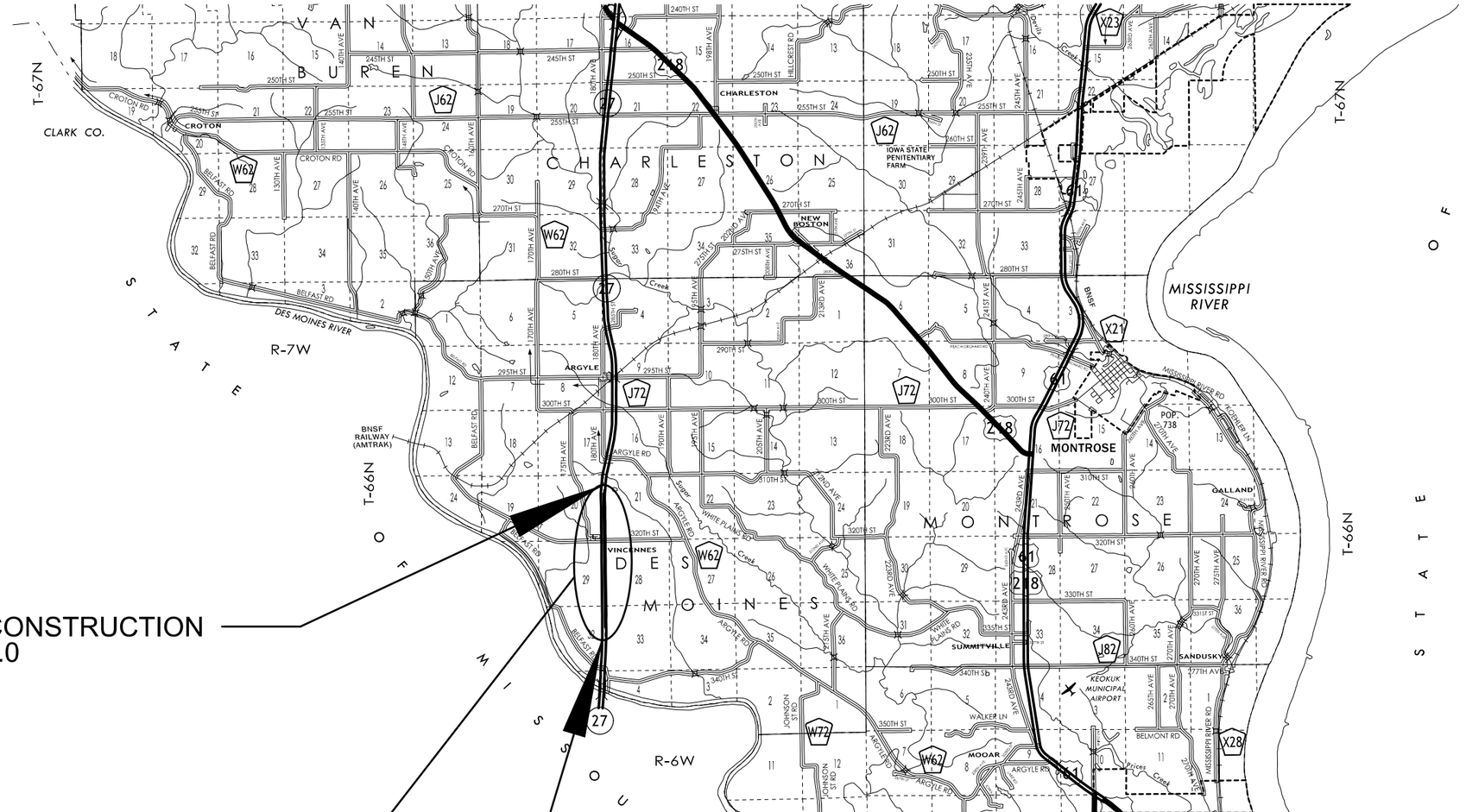
Anthony J. Klein
Printed or Typed Name

My license renewal date is December 31, 20 26

Pages or sheets covered by this seal: ALL SHEETS

FILE NO. .	ENGLISH	DESIGN TEAM McElmeel\Klein\Freitag	LEE COUNTY	PROJECT NUMBER MP-027-5(709)1--76-56	SHEET NUMBER A.1

11:12:26 AM 9/21/2026 rfreita pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5602701027\DistrictDesign\MP-027-5(709)1--76-56\CADD_Files\Sheet_Files\SHT_56-0275-709_A01.dgn



FILE NO. .	ENGLISH	DESIGN TEAM McElmeel\Klein\Freitag	LEE COUNTY	PROJECT NUMBER MP-027-5(709)1--76-56	SHEET NUMBER A.2

11:12:27 AM 9/21/2026 rfreita pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5602701027\DistrictDesign\MP-027-5(709)1--76-56\CADD_Files\Sheet_Files\SHT_56-0275-709_A01.dgn

ESTIMATED PROJECT QUANTITIES AND REFERENCE NOTES

Roadway Items : Roadway Items

Item no.	Item Code	Item	Unit	Quantities Estimated Roadway Items	Estimate Reference Notes
1	2528-8445110	TRAFFIC CONTROL	LS	1	As per current Standard Specification and Road Standards. See Tab 108-23A for additional information.
2	2528-8445113	FLAGGERS	EACH	0	See Proposal.
3	2528-8445115	PILOT CARS	EACH	0	
4	2529-2242304	CD JOINT ASSEMBLY	EACH	2	Refer to Tab. 102-6C on C Sheets for locations and details.
5	2529-2242320	CT JOINT	EACH	2	
6	2529-5070110	PATCHES, FULL-DEPTH FINISH, BY AREA	SY	87.4	Refer to Tab. 102-6C on C sheets for locations and details. Quantity increased by 10% for irregularities.
7	2529-5070120	PATCHES, FULL-DEPTH FINISH, BY COUNT	EACH	7	Refer to Tab. 102-6C on C Sheets for locations and details. Quantity increased by 10% for irregularities.
8	2533-4980005	MOBILIZATION	LS	1	As per current Standard Specifications.
9	2542-1006001	CRACK AND JOINT CLEANING AND FILLING (PCC PAVEMENT)	MILE	2	Joint cleaning and sealing of cross stitched joints.
10	2542-1007000	SEALER MATERIAL (PCC PAVEMENT)	LB	400.8	Sealant for cross stitched joints.
11	2558-0000200	CROSS-STITCHED TIE BAR	EACH	1,336	Refer to Tab. 102-17 on C Sheets.

100_01D
8/15/22

PROJECT DESCRIPTION

This project is for PCC full-depth finish patching and pavement stitching of IA 27 in Lee County.
This project begins 1 mi N of the Des Moines River to 0.5 mi S of Co Rd W62/Argyle Rd (NB)

STANDARDS

The following Standards apply to construction work on this project.

Number	Date	Title
PV-101	10-20-26	Joints
PR-109	10-15-24	Cross Stitching of PCC Pavement
PR-103	10-21-25	Full Depth PCC Patch with Dowels
TC-231	04-18-23	Slow Moving Vehicle Operating in the Traffic Lane
TC-402	04-18-23	Work Within 15 ft of Traveled Way
TC-1	10-15-19	Work Not Affecting Traffic (Two-Lane or Multi-Lane)
TC-418	04-18-23	Lane Closure on Divided Highway

EXISTING PAVEMENT

Line No.	County	Route	Direction of Travel	Begin Ref. Location Sign	End Ref. Location Sign	Year	Type	Project Number	Surface Type	Surface Depth (IN)	Base Type	Base Depth (IN)	Subbase Type	Subbase Depth (IN)	Removal Type	Removal Depth (IN)	Coarse Aggregate Source	Coarse Aggregate Type	Course Aggregate Durability Class	Reinforcement Type	Remarks
1.0	Lee	IA 27	NB		3.45	2005		NHSX-394-1(33)--3H-56	PCC	10.5	GSB	10.5									
2.0	Lee	IA 27	NB		3.50	2017	PCC	MP-027-5(707)0--76-56	PCC	10.0											PCC Patching

FULL-DEPTH PATCHES

Line No.	Count	Station	Reference Location Sign	Direction of Travel	Side	Length (FT)	Width (FT)	Patch Thickness (IN)	Patch Repair or Finish	PCC Patch Type	PCC Patch Quantity (SY)	HMA Patches (SY)	Composite HMA (TON)	Subbase Patches (PR-140) (SY)	Subbase Patch with 'EF' Joint (PR-101) (SY)	Patch Subdrain PR-101 or PR-140 (No.)	'CD' Joints (No.)	'CT' Joints (No.)	'EF' Joints PR-101 (No.)	Anchor Lugs Removal (No.)	Remarks
1.0	1		1.716	NB	Right	6.0	14.0		Finish	PCC With Dowels (PR-103)	9.3										
2.0	1		1.82	NB	Right	6.0	14.0		Finish	PCC With Dowels (PR-103)	9.3										
3.0	1		2.08	NB	Left	6.0	12.0		Finish	PCC With Dowels (PR-103)	16.0										
4.0	1		2.416	NB	Right	6.0	14.0		Finish	PCC With Dowels (PR-103)	9.3										
5.0	1		2.251	NB	Right	22.0	14.0		Finish	PCC With Dowels (PR-103)	34.2						2	2			
6.0	1		2.312	NB	Right	6.0	14.0		Finish	PCC With Dowels (PR-103)	9.3										
Total:											**87.4**						**2**	**2**			

CROSS STITCHING

Refer to PR-109

Line No.	Roadway Identification	Side	Station From	Station To	Begin Milepost	Length (FT)	Existing Pavement Thickness (T) (IN)	Cross-Stitched Tie Bar (EA)	Remarks
1.0	IA 27	NB			1.49	20.00	10.0	11	
2.0	IA 27	NB			1.53	100.00	10.0	51	
3.0	IA 27	NB			1.57	120.00	10.0	61	
4.0	IA 27	NB			1.61	180.00	10.0	91	
5.0	IA 27	NB			1.64	60.00	10.0	31	
6.0	IA 27	NB			1.66	40.00	10.0	21	
7.0	IA 27	NB			1.67	80.00	10.0	41	
8.0	IA 27	NB			1.69	180.00	10.0	91	
9.0	IA 27	NB			1.75	100.00	10.0	51	
10.0	IA 27	NB			1.79	200.00	10.0	101	
11.0	IA 27	NB			1.84	120.00	10.0	61	
12.0	IA 27	NB			1.88	100.00	10.0	51	
13.0	IA 27	NB			1.91	160.00	10.0	81	
14.0	IA 27	NB			1.94	100.00	10.0	51	
15.0	IA 27	NB			1.97	60.00	10.0	31	
16.0	IA 27	NB			2.00	60.00	10.0	31	
17.0	IA 27	NB			2.02	60.00	10.0	31	
18.0	IA 27	NB			2.05	80.00	10.0	41	
19.0	IA 27	NB			2.07	80.00	10.0	41	
20.0	IA 27	NB			2.10	40.00	10.0	21	
21.0	IA 27	NB			2.12	40.00	10.0	21	
21.0	IA 27	NB			2.12	40.00	10.0	21	
22.0	IA 27	NB			2.14	340.00	10.0	171	
23.0	IA 27	NB			2.12	180.00	10.0	91	
24.0	IA 27	NB			2.25	40.00	10.0	21	
25.0	IA 27	NB			2.28	40.00	10.0	21	
Total:						**2620**		**1336**	

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

None Provided

108_23A
8/15/22

TRAFFIC CONTROL PLAN

Maintain traffic on IA 27, and all side roads at all times.

Lane closures are permitted without time restrictions.

511 TRAVEL RESTRICTIONS

Line No.	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
1.0	IA 27	NB	Lee	Within Project Limits		Traffic Control Device		Horizontal	24'	12'			