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DJECT NO.	SHEET NO.	TOTAL SHEETS	
1 50011	2		
I -3091A			



DJECT NO.	SHEET NO.	TOTAL SHEETS	
1 50011	3		
1–3091A			

-USE RAMP TYPICALS #1 AND #1A FOR ALL RAMPS AT EXITS 100,

-USE RAMP TYPICALS #2 AND #2A FOR ALL RAMPS AT EXITS



DJECT NO.	SHEET NO.	TOTAL SHEETS	
1 50014	4		
1-3891A			

-USE RAMP TYPICALS #1 AND #1A FOR RAMPS AT EXITS 112, 116, AND 118.

- USE RAMP TYPICALS #1 AND #1A FOR BOTH WEST BOUND RAMPS AT EXIT 111.

- USE RAMP TYPICALS #1 AND #1A FOR EAST BOUND ON-RAMP AT EXIT 111 AND USE TYPICAL #2 AND #2B FOR THE EAST BOUND OFF-RAMP AT EXIT 111.



DJECT NO.	SHEET NO.	TOTAL SHEETS
C0014	5	
-589IA		

NOTE

I-40 FROM MILE MARKERS 92.9+/- TO 94.7+/-

	PAVEMENT SCHEDULE
C1	PROP. APPROX. $1\frac{1}{2}$ " ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5D, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
F1	ULTRA-THIN BONDED WEARING COURSE
V <u>1</u>	FINE MILL ASPHALT PAVEMENT, 5/8" DEPTH
V <u>2</u>	MILL ASPHALT PAVEMENT, 1 ⁻¹ ½″ DEPTH
т	SHOULDER RECONSTRUCTION AS DIRECTED BY ENGINEER
Z <u>1</u>	MILLED RUMBLE STRIPS
U	EXISTING PAVEMENT

PRO I-



OJECT NO.	SHEET NO.	TOTAL SHEETS
59014	6	
-3091/1		

NOTES

I. I-40 FROM MILE MARKERS 94.7+/- TO 95.2+/-

2. REPAIR CONCRETE JOINTED SLABS AS DIRECTED BY THE ENGINEER, SEE STD. DRWG. 700.01, 700.02, 700.03, and 700.05

3. BRIDGES TO BE RESURFACED SAME AS MAIN-LINE

	PAVEMENT SCHEDULE
C1	PROP. APPROX. $1^{1}\!\!/_{2}$ " ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5D, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
F1	ULTRA-THIN BONDED WEARING COURSE
V <u>1</u>	FINE MILL ASPHALT PAVEMENT, 5/8" DEPTH
V <u>2</u>	MILL ASPHALT PAVEMENT, $1.1/2''$ DEPTH
VЗ	DIAMOND GRIND CONCRETE PAVEMENT
Т	SHOULDER RECONSTRUCTION AS DIRECTED BY ENGINEER
Z <u>1</u>	MILLED RUMBLE STRIPS
U	EXISTING PAVEMENT



DJECT NO.	SHEET NO.	TOTAL SHEETS
_5801 <i>4</i>	7	
50711		

NOTES

I. I-40 MILE MARKERS 95.2+/- TO IO4+/- EBL 95.2+/- TO IO3.8+/- WBL IO5.9+/- TO II9.2+/- EBL IO5.5+/- TO II9.2+/- WBL

2. REPAIR CONCRETE JOINTED SLABS AS DIRECTED BY THE ENGINEER, SEE STD. DRWG. 700.01, 700.02, 700.03, and 700.05

3. BRIDGES TO BE RESURFACED SAME AS MAIN-LINE

PAVEMENT SCHEDULE		
F1	ULTRA-THIN BONDED WEARING COURSE	
V <u>1</u>	FINE MILL ASPHALT PAVEMENT, 1-1/2" DEPTH	
V <u>2</u>	FINE MILL ASPHALT PAVEMENT, 5/8" DEPTH	
V3	DIAMOND GRIND CONCRETE PAVEMENT	
Т	SHOULDER RECONSTRUCTION AS DIRECTED BY ENGINEER	
Z <u>1</u>	MILLED RUMBLE STRIPS	
U	EXISTING PAVEMENT	



DJECT NO.	SHEET NO.	TOTAL SHEETS	
C0014	8		
-589IA			

NOTES

I. I-40 MILE MARKERS I04+/- TO I04.9+/- EBL I05.5+/- TO I05.9+/- EBL I03.8+/- TO I04.9+/- WBL

2. REPAIR CONCRETE JOINTED SLABS AS DIRECTED BY THE ENGINEER, SEE STD. DRWG. 700.01, 700.02, 700.03, and 700.05

3. BRIDGES TO BE RESURFACED SAME AS MAIN-LINE

PAVEMENT SCHEDULE		
C1	PROP. APPROX. 2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5D, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.	
F1	ULTRA-THIN BONDED WEARING COURSE	
V <u>2</u>	FINE MILL ASPHALT PAVEMENT, 1-1/2" DEPTH	
٧3	DIAMOND GRIND CONCRETE PAVEMENT	
т	SHOULDER RECONSTRUCTION AS DIRECTED BY ENGINEER	
Z <u>1</u>	MILLED RUMBLE STRIPS	
U	EXISTING PAVEMENT	



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OJECT NO.	SHEET	NO.	TOTAL SHEETS
–5891A	9		
		I	
NOTE	<u>'S</u>		
ROM MIL	_E MARKERS		
/- TO 10)5.5+/-		
IS NOT	BE RESURFACI	ED	
/- TO 10)5.5+/-		
E-IN DE	TAIL AT BRIDO	GE	
4-/		-EXISTING CON BRIDGE DECK	CRETE
			- — —]
CONC ENT 		BRIDGE	>
	FTAII AT RI	RIDCE	I.
BE LISED T	O WEDGE FOR TIE-	-IN AT APPRO	<u> </u>
AS APP	ROVED BY ENGINEE	IR.	Acti
D		$\mathbf{C}\mathbf{O}$	
D	UKKE		
	PAVEME	NT SCHEDUI	LE
F1	ULTRA-THIN BONDED WE		
V <u>1</u>	FINE MILL ULIKA-TH	IN PAVEMENI, 5.	O DEPTH
Т	SHOULDER RECONSTRUC	CTION AS DIREC	TED BY ENGINEER
Z <u>1</u>	MILLED RUMBLE STRIF	PS	
	EXISTING PAVEMENT		



–5891A	10
	DETAIL A VARIOUS LOCATIONS
BU	PAVEMENT SCHEDULE
F1	ULTRA-THIN BONDED WEARING COURSE
V1	FINE MILL ULTRA-THIN PAVEMENT, 5/8" DEPTH
T	SHOULDER RECONSTRUCTION AS DIRECTED BY ENGINEER
	EXISTING PAVEMENT

SHEET NO.

TOTAL SHEETS



OJECT NO.	SHEET NO.	TOTAL SHEETS
1 59014	11	
I-389IA		

<u>ر</u>	Bl	URKE COUNTY
		PAVEMENT SCHEDULE
	C1	PROP. APPROX. 2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5D, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
	F1	ULTRA-THIN BONDED WEARING COURSE
	V1	FINE MILL ULTRA-THIN PAVEMENT, 1-1/2" DEPTH
	Т	SHOULDER RECONSTRUCTION AS DIRECTED BY ENGINEER
	U	EXISTING PAVEMENT



MILLING DETAIL AT BRIDGE

WHERE BRIDGES WILL BE MILLED THEN RESURFACED MILL 1 1/2 +/-" OFF EXISTING PAVEMENT OR AS DIRECTED BY ENGINEER BRIDGE #'s 112,114,130,132,149,150,160, 162,163,164,167,168



TIE-IN DETAIL AT BRIDGE #'s 140 & 142 AT EXIT 105

DJECT NO.	SHEET NO.	TOTAL SHEETS
60014	12	
–389IA		

ACSC MAY BE USED TO WEDGE FOR TIE-IN AT APPROACH AS APPROVED BY ENGINEER.



			PRO	J. REFERENCE NO.	SHEET NO.
				1-5891A	13
	GENE	RAL NOTES :			
	1.	THE 20" TRIPLE TUBULAR CORRUGA BE FABRICATED BY WELDING TWO (RAIL ELEMENTS AS SHOWN AND THE NCDOT STANDARD SPECIFICATIONS	ATED BEAM RA 2) 20" TRIP E GUARDRAIL EXCEPT AS N	IL SECTION SH LE CORRUGATED SHALL CONFORM OTED AND SHOW	HALL D BEAM 4 TO THE VN ON
	2.	THE PLANS. 20" TRIPLE TUBULAR CORRUGATED	BEAM RAIL S	HALL BE 10	
SLOTS	3.	DAGE. POSTS, BASE ANGLES AND/OR BASE AND OFFSET BLOCKS SHALL CONFOR OF ASTM A-36. SHIMS SHALL MO	E PLATES, 6" RM TO THE RE ET THE REQUI	DIA. TUBES, QUIREMENTS REMENTS OF	
	4.	POSTS, BASE ANGLES AND/OR BASE AND SHIMS SHALL BE GALVANIZED	E PLATES, TU IN ACCORDAN	BES, BLOCKS ICE WITH ASTM	
	5.	A-123. POSTS ARE TO BE PLUMB. SHIMS ROADWAY EDGE OF THE BASE ANGLE NECESSARY FOR POST ALIGNMENT.	MAY BE USED S AND/OR BA PROVIDE ON	BENEATH THE SE PLATES AS E 1/8 * AND	[WO
	6.	1/16 STEEL SHIMS FOR 25 % OF ''BP'' POST HEIGHT TO BE DETER	RMINED IN TH	UN THE BRIDGE E FIELD BY TH	iE
	7.	PROPOSED RAIL POST MAY BE SHIP REINFORCING STEEL. STANDARD S	TED SLIGHTL SLOTS MAY BE	Y TO CLEAR USED IN THE	
	8.	RAIL TO ALLOW ADJUSTMENT. HOLES SHALL BE DRILLED HORIZOY DRILL OR A ROTARY IMPACT DRILL PERMITTED. CARBIDE TIPPED BI REINFORCING STEFL IS ENCOUNTER	TAL OR VERT . IMPACT T S SHALL BE RED. AN APP	ICAL USING A OOLS WILL NO USED UNLESS BOPBLATE BIT	ROTARY BE
RAD.	9.	FOR DRILLING THROUGH REINFORCI WHEN NECESSARY. THE CONTRACTO DRILL THROUGH REINFORCING STEE POST SPACINGS AS SHOWN ON THE	NG STEEL SH DR SHALL BE L AT TIMES. PLANS SHALL	ALL BE USED PREPARED TO BE CHECKED	
		CORRUGATED BEAM RAIL. STANDAR	וב ∠ש" (RIPL RD SLOTS WIL א SLOTS WILL	L BE ALLOWED.	
	10.	PERMITTED. ALL CONCRETE DAMAGED BY THIS W	ORK SHALL B	E REPAIRED TO	
	11.	THE SATISFACTION OF THE ENGINE VERTICAL SLOTS IN THE 6 TUBE	ER.	OME VERTICAL	
	12.	OF RAIL HEIGHT OF RAIL HEIGHT IN U OF RAIL HEIGHT OF 1'-11" ABOVE THE SIZE OF FILLET WELDS SHALL	RIDING SUR	FACE. THE REQUIREN	IENTS
		OF THE CURRENT AASHTO 'STANDAF BRIDGES.' ELECTROSLAG WELDING	ND SPECIFICA	TIONS FOR HIC E PERMITTED.	HWAY
	13.	LAP BEAM RAIL JOINTS IN DIRECT	ION OF TRAF	FIC.	
RU					
E					
BEAM					
CTURER'	S				
E USED HALL IZEN	AS				
THE					
i					
RETE RA	ΊL				
ASTM A	A-307 A-153.				
			CONTRACT	STANDADD	e – – – – – – – – – – – – – – – – – – –
		A Office	ND DEVEL	OPMENT UN	5 IT
			DOETT (TTNC
			RIDGE F	AIL WI	
		ORIGINAL	BY: <u>C.O. CU</u>	JEVAS DATE:	
		MODIFIED CHECKED I FILE SPEC	BY BY jhowerton\	DATE DATE guardrail\tubul	arthriebeam













PROJ. REFERENCE NO. SHEET NO. I-5891A 15 15 LEGEND W-TR GUARDRAIL TRANSITIONAL *``A'' _ _USE* SECT ION ST ANDARD GUARDRA I L "B'' = -USE20" TRIPLE CORRUGATED STEEL BEAM GUARDRAIL *"C" _ _ USE* TABLE 2 FLAT PLATE WASHER DIMENSIONS TYPE DESCRIPTION В Α 3" 1 1/2" STANDARD WASHER " Ø HOLE 15/16 3%6 ″ ₽ FLAT PLATE WASHER - TYPE 6 1 1/2 " 1 1/2 " 3/6 " P

> "NOTE D": BOLTS ON EXPANSION SIDE OF TUBULAR BEAM SPLICE SHALL BE TIGHTENED FINGER TIGHT.DOUBLE NUTS SHALL BE USED AND TIGHTENED AGIANST EACH OTHER TO PREVENT THE NUTS FROM BECOMING LOOSE ON THE BOLT.



SUMMARY OF QUANTITIES																												
											005700000-E	019600000-Е	0314000000-E	1245000000-E	129700000-E	133000000-E	15242000	1575000000	157700000-	170400000-6	173700000-E	1839140000-E	184000000-E	189100000-	189100000	189100000	189100000	188100000-E
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES I	LANE TYPE FIN	L WAR	/ MIX LENG	TH WID	TH UNDERCUT	GEOTEXTILE	SELECT	SHOULDER	MILLING	INCIDENTAL	ASPHALT	ASPHALT	POLYMER	PATCHING	PATCHING	ULTRA-THIN	MILLED	GENERIC	GENERIC	GENERIC	GENERIC	GENERIC
							SUR	ACE ASPI	IALT		EXCAVATION	FOR SOIL	MATERIAL,	RECONSTRUCTI	ASPHALT	MILLING	CONC	BINDER FOR	MODIFIED	EXISTING	CONCRETE	BONDED	RUMBLE	PAVING	PAVING	PAVING	PAVING	PAVING ITEM,
							TEST	NG REQU	IIRED			STABILIZATION	CLASS IV	ON	PAVEMENT, 1-		SURFACE	PLANT MIX	ASPHALT	PAVEMENT	PAVEMENT	WEARING	STRIPS	ITEM,	ITEM, FINE	ITEM, FINE	ITEM,	JOINT
							REQU	RED							1/2" DEPTH		COURSE,		BINDER FOR		SPALLS	COURSE	(ASPHALT	DIAMOND	MILLING	MILLING (1	REPAIR OF	CONSTRUCTIO
																	TYPE		PLANT MIX				CONCRETE)	GRINDING	(5/8")	1/2")	JOINTED	N, REPAIR,
																	\$9.5D							PCC			CONCRETE	AND SEALING
																								PAVEMENT			SLABS	
									м	FT	CY	SY	TONS	SMI	SY	SY	TON	TON	TON	TON	SF	TON	LF	SY	SY	SY	SY	LF
				I-40 EBL AND WBL FROM MM92.95-																								
I-5891A	Burke	1	I-40	MM 119.13	1 - 5	2	MD N	N	0 26.1	8 24	995	3,975	1,900	2.00	22,500	8,000	11,020	628	3,240	2,200	1,000	54,000	611,870	654,820	605,000	760,000	3,975	1,047,712
FOR PROJ NO.	I-5891A								26.1	8	995	3,975	1,900	2.00	22,500	8,000	11,020	628	3,240	2,200	1,000	54,000	611,870	654,820	605,000	760,000	3,975	1,047,712
GRAND TOTA	L								26.1	8	995	3,975	1,900	2.00	22,500	8,000	11,020	628	3,240	2,200	1,000	54,000	611,870	654,820	605,000	760,000	3,975	1,047,712

												2473000000-N	248900000-E	261900000-E	303000000-E	306000000-E	307500000-E	31200000	3215000000-	321000000-1	3287000000-N	3317000000-N	336000000-E	460000000-N	460000000-	460000000	744400000	60000000	6071010000-E	525500000-N
PROJECT NO	COUNTY	MAP NO	D ROUTE	DESCRIPTION	TYP NO	LANES	S LANE TYPE	FINAL	WARM MIX	LENGTH	WIDTH	GENERIC	GENERIC	4" CONCRETE	STEEL BM	STEEL BM	TRIPLE	20"	GUARDRAIL	GUARDRAIL	GUARDRAIL	GUARDRAIL	REMOVE	GENERIC	GENERIC	GENERIC	INDUCTIVE		WATTLE	PORTABLE
								SURFACE	ASPHALT			DRAINAGE	DRAINAGE	PAVED DITCH	GUARDRAIL	GUARDRAIL,	CORRUGATED	TUBULAR	ANCHOR	END UNITS,	END UNITS,	ANCHOR	EXISTING	TRAFFIC	TRAFFIC	TRAFFIC	LOOP	TEMPORAR		LIGHTING
								TESTING	REQUIRED			ITEM, REMOVE	ITEM, REMOVE			DOUBLE	STEEL BM	TRIPLE	UNITS, TYPE	TYPE CAT-1	TYPE TL-3	UNITS, TYPE	GUARDRAIL	CONTROL	CONTROL	CONTROL	SAWCUT	Y SILT		
								REQUIRED				AND REPLACE	AND REPLACE			FACED	GUARDRAIL	CORRUGA	ш			B-77		ITEM,	ITEM,	ITEM,		FENCE		
								-				CONCRETE	4" CONCRETE					TED STEEL						SEQUENTIAL	WORK ZONE	WORK				
												APRON	PAVED DITCH					BM						FLASHING	DIGITAL	ZONE				
												-						GUARDRA						WARNING	SPEED LIMIT	PRESENCE				
																		IL						LIGHTS	SIGNS	LIGHTING				
										MI	FT	EA	SY	SY	LF	LF	LF	LF	EA	EA	EA	EA	LF	EA	EA	EA	LF	LF	LF	LS
				I-40 EBL AND WBL FROM MM92.95-																										
I-5891A	Burke	1	1-40	MM 119.13	1 - 5	2	MD	NO	NO	26.18	24	65	2,000	15,600	140,000.00	153,000.00	225.00	3,100.00	44.00	193.00	190.00	54.00	212,750.00	21	10	60	500	1,000	5,000	1
FOR PROJ NO.	I-5891A									26.18		65	2,000	15,600	140,000.00	153,000.00	225.00	3,100.00	44.00	193.00	190.00	54.00	212,750.00	21	10	60	500	1,000	5,000	1
GRAND TOTA										26.18		65	2,000	15,600	140,000.00	153,000.00	225.00	3,100.00	44.00	193.00	190.00	54.00	212,750.00	21	10	60	500	1,000	5,000	1

					440000000-1	44050000	441000000	441500000	442000000	- 4422000	44300000	4445000000-Е	448000000-N	451000000-N	4516000000-N		47250000	00-E		481500	0000-E	4825000000-E		48450000	000-N		484710	0000-E	4847120000-Е	485000000-Е	490500000-N
PROJECT NO COL	NTY M	AP NO	ROUTE	DESCRIPTION	WORK ZONE	WORK	WORK	FLASHING	PORTABLE	PORTAB	DRUMS	BARRICADES	TMA	LAW	SKINNY DRUMS	THERMOPLASTI	THERMOPLAST	THERMOP 1	HERMOPLA	PAINT	PAINT	PAINT	PAINT	PAINT	PAINT	PAINT	POLYUREA	POLYUREA	POLYUREA	REMOVAL OF	SNOWPLOWA
					SIGNS	ZONE	ZONE	ARROW	CHANGEAB	L LE		(TYPE III)		ENFORCEMENT		C PAVEMENT	C PAVEMENT	LASTIC	STIC	PAVEMENT	PAVEMENT	PAVEMENT	PAVEMENT	PAVEMENT	PAVEMENT	PAVEMENT	PAVEMENT	PAVEMENT	PAVEMENT	PAVEMENT	BLE
					(STATIONARY	SIGNS	SIGN	BOARD	E MESSAGE	CHANGE						MARKING	MARKING	PAVEMEN	PAVEMENT	MARKING	MARKING	MARKING	MARKING	MARKING	MARKING	MARKING	MARKING	MARKING	MARKING	MARKING	PAVEMENT
)	(PORTAB	(BARRICA		SIGN	ABLE						SYMBOL	SYMBOL (90	т	MARKING	LINES (6")	LINES (6")	LINES (12")	SYMBOL	SYMBOL LT	SYMBOL	SYMBOL LT,	LINES (6")	LINES (6")	LINES (12")	LINES (6")	MARKERS
						LE)	DE			MESSAG	i					(90	MILS) LT	MARKING	SYMBOL (90	WHITE	YELLOW	WHITE		ARROW	STR AND RT	STR, RT	WHITE	YELLOW	WHITE		
							MOUNTE			E SIGN						MILS)MERGE	ARROW	SYMBOL	MILS) LT,						ARROW	ARROW	(HIGHLY	(HIGHLY	(HIGHLY		
							D)			(SHORT						ARROW		(90 MILS)	STR, RT								REFLECTIVE	REFLECTIVE	REFLECTIVE		
										TERM)								STR AND	ARROW								ELEMENTS)	ELEMENTS)	ELEMENTS)		
																		RT													
																		ARROW													
					SF	SF	SF	EA	EA	DAY	EA	LF	EA	HR	EA	EA	EA	EA	EA	LF	LF	LF	EA	EA	EA	EA	LF		LF	LF	EA
				I-40 EBL AND WBL FROM MM92.95-																											
I-5891 Bu	rke	1	I-40	MM 119.13	1,390	448	20	4	8	200	100	64	2	1,500	480	118	2	2	1	752,600	598,600	60,000	236	4	4	2	376,300	299,300	30,000	1,926	5,220
TOTAL FOR	PROJ NO). I-5891			1,390	448	20	4	8	200	100	64	2	1,500	480	118	2	2	1	752,600	598,600	60,000	236	4	4	2	376,300	299,300	30,000	1,926	5,220
GRA	ND TOTA	AL .			1,390	448	20	4	8	200	100	64	2	1,500	480	118	2	2	1	752,600	598,600	60,000	236	4	4	2	376,300	299,300	30,000	1,926	5,220
																	123			1,351	L,200			246	i		675,	,600			

PROJECT	NO.	SHEET NO.	TOTAL NO.
I-5891	1A	16	