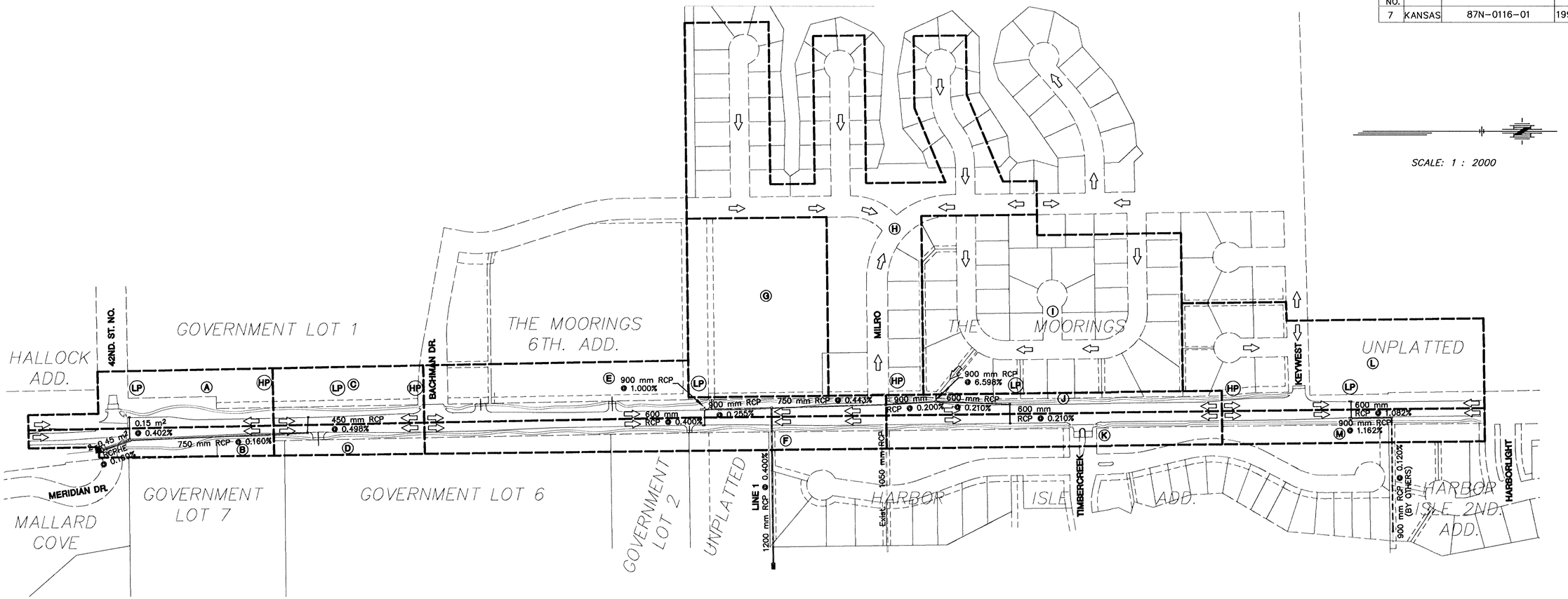
FHWA REG NO.	STATE	PROJECT NO.	YEAR	SHEET NO	TOTAL SHEETS
7	KANSAS	87N-0116-01	1999	84	110

DATE	BY	
		REFERENCES NOTED
		REFERENCES CHECKED



NORTH MERIDIAN DRAINAGE TABLE

Area ID**	Area ac	Accum. Area ac	C5	C100	Flow Length, ft	Slope	Tc5 Calc.	Tc100 Calc.	Tc5 Min.	Tc100 Min.	I5 IN/HR	I100 IN/HR	Q5 (CFS)	Q100 (CFS)	Pipe Size	Pipe Slope	Inlet Size	
SOUTH SYSTEM																		
Area 'C' W. ROW	2.25		0.32	0.32	520.00	0.404	43.31	43.30	15	15	4.56	7.37	3.28	5.31	450 mm	0.498%	L(i)=1.524	
Area 'D' E. ROW	1.15		0.41	0.41	520.00	0.404	38.32	38.51	15	15	4.56	7.37	2.15	3.45	---	---	L(i)=1.524	
Area 'C' + 'D'		3.4	0.35	0.35	520.00	0.404	41.62	41.68	15	15	4.56	7.37	5.43	8.76	750 mm	0.160%	---	Flow to 750 mm pipe E. side Meridian
Area 'A' W. ROW	2.59		0.32	0.32	597.00	0.402	46.37	46.37	15	15	4.56	7.37	3.80	6.14	0.15 m^2	0.402%	L(i)=1.524	
Area 'B' E. ROW	1.45		0.39	0.39	597.00	0.402	42.06	42.06	15	15	4.56	7.37	2.61	4.21	---	---	L(i)=1.524	
Area 'A' + 'B' + 'C' +'D'		7.4	0.35	0.35	1117.00	0.215	75.47	75.47	15	15	4.56	7.37	11.82	19.11	2-0.45 m^2	0.160%	---	Discharge in existing ditch E. side Meridian
NORTH SYSTEMS																		
Area 'E' W. ROW	4.60		0.45	0.71	1000.00	0.400	50.21	30.13	50	30	2.41	5.40	4.99	17.64	---	---	---	
Area 'G' W. LOT	6.31		0.45	0.71	750.00	1.000	32.04	19.23	32	19	3.10	6.68	8.80	29.93	900 mm	1.000%	Stub	
Area 'E' + 'G'		10.9	0.45	0.71	1000.00	0.750	40.72	24.43	41	24	2.76	6.01	13.55	46.55	900 mm	0.213%	L(i)=4.573	5-yr flow to inlet W. side Meridian @ 2+015 requires total of 4.573 m opening
Area 'F' E. ROW	3.64		0.45	0.71	980.00	0.306	54.34	32.61	54	33	2.30	5.22	3.77	13.49	600 mm	0.400%	L(i)=3.048	E. side inlet Meridian Sta. 2+015. See below for inlet explanation
Area 'E' + 'G' + 'F'		14.6	0.45	0.71	1800.00	0.400	67.37	40.42	67	40	2.01	4.66	13.16	48.14	900 mm	---	---	Combined flow to Meridian Sta. 2+015 100-year flow will cross street. Interception at 100-yr max depth is adequate with one double and one triple width inlet.
Area 'K' E. ROW	2.27		0.45	0.71	500.00	0.400	35.51	21.30	36	21	2.98	6.39	3.04	10.30	600 mm	0.210%	L(i)=1.524	To E. side Meridian Sta. 2+330
Area 'J' W. ROW	1.36		0.45	0.71	500.00	0.400	35.51	21.30	36	21	2.98	6.39	1.82	6.17	---	---	L(i)=1.524	To W. side Meridian Sta. 2+330
Area 'K' + 'J'		3.6	0.45	0.71	500.00	0.400	35.51	21.30	36	21	2.98	6.39	4.87	16.47	600 mm	0.210%	---	Pipe flow to junction w/Area I Flume
Area 'I' W. RESIDENTIAL	10.71		0.54	0.78	1100.00	0.400	45.37	25.93	45	26	2.57	5.90	14.86	49.29	900 mm	6.598%	L(i)=1.524	To inlet/junction with Area I system. Inlet on grade to capture incidental flow.
Area 'K' + 'J' + 'I'		14.3	0.52	0.76	1800.00	0.400	60.40	35.00	60	35	2.15	5.00	15.95	54.66	900 mm	0.200%	---	To Line 3 junction Sta. 2+200
Area 'H' W. RESIDENTIAL	13.40		0.54	0.78	1800.00	0.372	59.45	33.97	59	34	2.18	5.14	15.77	53.72	---	---	INTERIOR	5-yr flow primarily to interior system at Moorings. Some likely to flow out onto Meridian from Milro during 100-year event.
Area 'K' + 'J' + 'I' + 'H'		27.7	0.53	0.77	1800.00	0.400	59.26	34.12	59	34	2.18	5.07	31.94	108.41	750mm	0.419%	---	Approx. flow to Sta. 2+200 split between proposed 750 mm and exist. 1050 mm pipe.
Area 'L' W. ROW	7.59		0.45	0.71	740.00	0.405	43.00	25.80	43	26	2.64	5.90	9.02	31.79	600 mm	1.082%	L(i)=3.048	To inlet W. side Meridian Sta. 2+670
Area 'M' E. ROW	2.81		0.45	0.71	660.00	0.400	40.79	24.48	41	24	2.76	6.01	3.49	11.99	---	---	L(i)=3.048	To inlet E. side Meridian Sta. 2+670
Area 'L' + 'M'		10.4	0.45	0.71	740.00	0.405	43.00	25.80	43	26	2.64	5.90	12.36	43.57	900 mm	1.162%	---	To N. Harbor Isle system

Tc Calculated using City of Wichita Procedure for North Systems. Tc set at 15 min for South System.
Extent of offsite watersheds north of site visually checked. See assumptions in report text.

NO.	DATE	REVISIONS	BY	APP'D
2				
1	12/15/98	Plan & Drainage Table	TM	TM

KANSAS DEPARTMENT OF TRANSPORTATION

MERIDIAN AVE. DRAINAGE PLAN

PROJ. NO. 87N-0116-01 SEDGWICK COUNTY

MID-KANSAS ENGINEERING CONSULTANTS, INC.
WICHITA, KANSAS

DESIGNED BY:	TKM	CHECKED BY:	TKM
DRAWN BY:	WNJ	DATE: DEC. 1998	SHEET 84 OF 110