FINAL
MAY 28 1985

SUMMARY

ROUTE CONCEPT REPORT
ROUTE 128

(04-SON-0.00/NAP 34.27)

This report defines the concept for development of Route 128 in District 4 for a 20 year planning period.

Segment A	Son 0.00 to 4.86	Son/Men Co Line - Rte 101	2C	C-40
	Break in Route - See Route Concept for Route 101			
Segment B	Son 4.86 to 24.76	Rte 101 - Son/Nap Co Line	2C	C-45
Segment C	Nap 0.00 to 4.56	Son/Nap Co Line - Jct Rte 29	2C	D-35
	Break in Route - See Route Concept for Route 29			
Segment D	Nap 4.56 to 19.09	Jct Rte 29 - Knoxville Rd	2C	C-40
Segment E	Nap 19.09 to 34.27	Knoxville Rd - Nap/Yol Co Ln	2C	D-35

CONCEPT RATIONALE

Route 128 is a recreational and commercial route that runs from Route 1 north of Navarro in Mendocino County southeast to Winters in Yolo County via the Alexander Valley and Lake Berryessa. Route 128 is a major transportation corridor for recreational and commercial traffic between Route 101 and the coast. It is also a main corridor for traffic from Route 101 south to the Napa Valley. Between Rutherford and Winters, Route 128 is the only route from the northern Napa Valley and the Sacramento Valley to Lake Berryessa. Traffic is mainly recreational and local truck traffic, with some intercity local traffic.

AREAS OF CONCERN

The current operating speed is 35-45 mph for most of the route. In segments A, D, and E, the V/C ratios range from 0.12 to 0.37. However, because of the alignment, grade and geometrics the overall operating speed is lower than the desired C-45. This route is expected to continue to operate at or below C-45 in the future as traffic increases; there are no plans for major improvements. However, spot improvements should be considered at problem locations.

IMPROVEMENTS

No highway capacity improvements are planned at this time.

ROUTE CONCEPT REPORT

ROUTE 128

Prepared under the direction of:

Cecil L. Smith 5/7/85

CECIL L. SMITH, Chief Date
Transportation Planning, District 4

Recommended Approval:

John Vostrez 5-13-85.

JOHN VOSTREZ Date
Deputy District Director
Planning and Programming

I approve this Route Concept Report as the guide toward which today's decisions and/or recommendations should be directed.

Approved:

Burch Bachtold 5/24/85

BURCH C. BACHTOLD Date
District Director of Transportation

Approved:

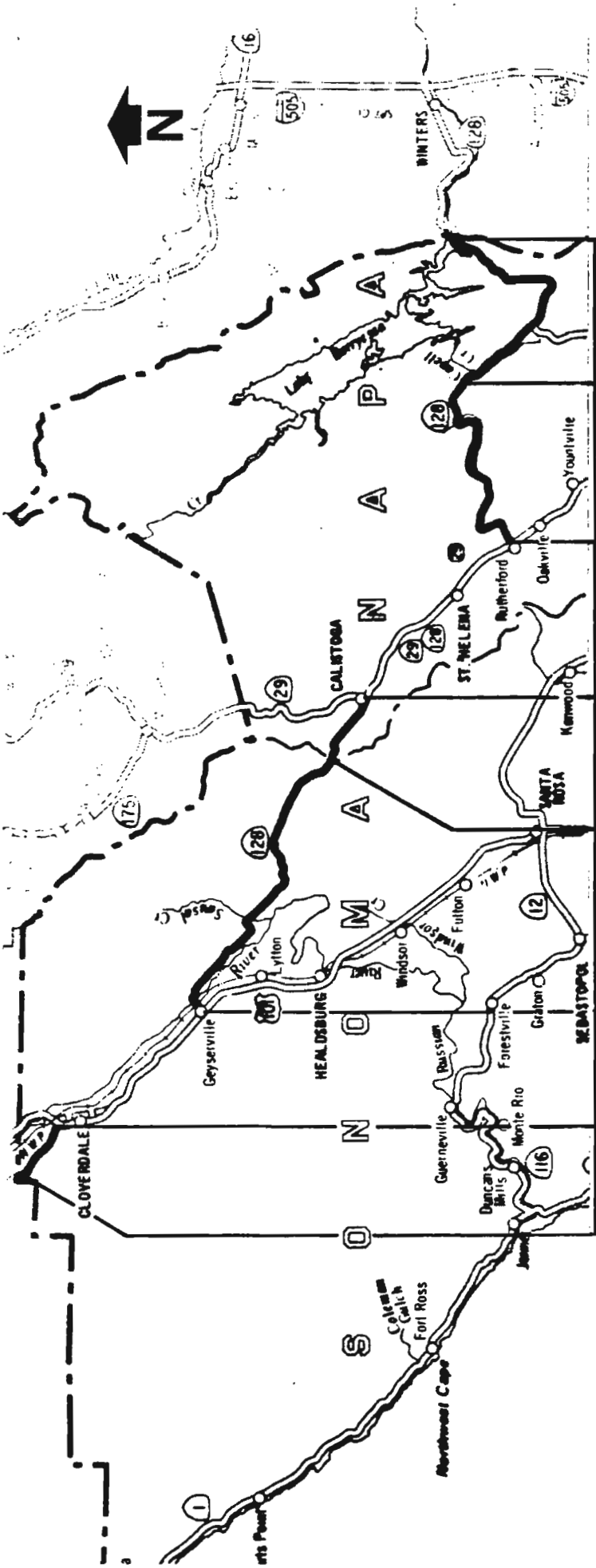
D. L. WIEMAN, Chief Date
Division of Transportation
Planning

Approved:

DONALD L. WATSON, Chief Date
Division of Highways and
Programming

Approved:

JACK KASSEL, Chief Date
Division of Project
Development



E	NAP 34.27
D	NAP 19.09 NAP 4.56
	BREAK IN ROUTE SEE REPORT FOR ROUTE 29
C	NAP 4.56 NAP 0.00
B	SON 24.76 SON 4.86
	BREAK IN ROUTE SEE REPORT FOR ROUTE 101
A	SON 4.86 SON 0.00

LOCATION MAP
Route 128

ROUTE DESCRIPTION

Route 128 consists of 122 miles of constructed and 10 miles of unconstructed 2 lane conventional highway. It traverses four counties: Mendocino (District 1); Sonoma, Napa (District 4); and Yolo (District 3). The portion of Route 128 within District 4 begins at the Mendocino/Sonoma County line and runs in a southeasterly direction to Route 101 near Cloverdale. There is a break in the route for 10 miles along Route 101 to Geyserville where Route 128 continues southeast through the Alexander Valley to Calistoga.

At Calistoga, there is another break in the route along Route 29 for 12.29 miles to Rutherford. At that point, Route 128 proceeds in an easterly direction past Lake Hennessey, connecting with Route 121 from Napa to the south, continuing around the southern end of Lake Berryessa and east to the Napa/Yolo County line.

The legislative description of Route 128 is as follows:

Route 128 is from:
(a) The mouth of the Navarro River to Route 101 near Cloverdale.
(b) Route 101 to Route 29 near Calistoga.
(c) Route 29 near Rutherford to Route 113 near Davis via Sage Canyon.

Parts of Route 128 are within the State Freeway and Expressway System:

Route 128 from:
(a) The mouth of the Navarro River to Route 101 near Cloverdale.
(b) Route 101 to Route 129 near Calistoga.
(c) Route 121 to Route 113 near Davis.

Most of this route has a functional classification as a minor arterial in the Federal Aid Primary System; from Nap PM 4.56 to Pm 23.90 it is classified as a major collector in the Federal Aid Secondary System.

Route Segments

A. Segment A (04-Son-128 PM 0.00 to 4.86)

This segment is a two-lane conventional highway from the Mendocino/Sonoma County line to Route 101 at Cloverdale. It is a major recreational route on the weekend for travelers on Route 101 from the south to the coast. During the week it is a major route for commercial traffic to inland and coastal towns.

The terrain is mountainous and the grades are greater than 6% for more than 1/2 the segment length with sustained grades 1/4 to 3/4 mile in length. Pavement width is from 20-26 feet, shoulders are 2-3 feet wide.

The AADT for this segment is 1000 and AM peak hour is 200 in both directions weekdays. The current V/C ratio is 0.17 and the LOS is C-45. Projected AADT for 1995 (2005) is 2000 (2000) and the AM peak hour is 200 (300) westbound. Expected D/C ratio and LOS for 1995 (2005) are 0.20 (0.27) and C-40 (C-40) respectively. Traffic projections do not predict a deterioration in the level of service by the year 2005. However, the segment has an existing accident rate of 3.67/MVM which is higher than the statewide average of 3.22/MVM. The fatality rate is also higher than the statewide average; 0.147/MVM actual vs 0.086/MVM average statewide.

There is no local transit or rail service along this segment. Greyhound runs an evening bus from Cloverdale to Navarro daily. This is also used as a bicycle route. There are no park and ride lots in this segment.

The AADT for the portion of Route 128 in Mendocino County (District 1) between the Sonoma/Mendocino County Line and Route 253 is essentially the same as Segment A. The current LOS is C-40 and the concept LOS is D-35 for 2005. No improvements are recommended by District 1.

ROUTE CONCEPT

Retain the existing two lane conventional highway. The concept LOS is C-40.

IMPROVEMENTS

No improvements planned.

B. Segment B (04-Son-128 PM 4.86 to 24.76)

This segment is a two lane conventional highway from Route 101 at Geyserville through the Alexander Valley to the Sonoma/Napa County line. The terrain is rolling and grades are 3-6%. Pavement widths range from 18-24 feet and the majority of the shoulders are less than 4 feet.

This section of Route 128 is the major recreational and commercial route from Route 101 from the north to Calistoga and the Napa Valley. Weekday traffic consists of local inter-community traffic and local truck traffic. (Truck traffic is 8-15% of total traffic.) The route is a recreational route for visitors from the north to the Napa Valley.

The AADT for this segment is 1000-2000 and is projected to be 1000-3000 in 1995, and 2000-4000 in 2005. AM peak hour traffic is currently 100-200 eastbound and is projected to be 200 westbound in 1995 and 200-300 in 2005. The V/C ratio is 0.11 with an LOS of C-45. Projected D/C ratio and LOS for 1995 (2005) are 0.13 (0.18) and C-45 (C-45) respectively. The accident rate for this segment is 3.57/MVM, considerably higher than the statewide average of 2.86/MVM. However, the fatality rate is 0.031/MVM, lower than the statewide average of 0.079/MVM. Analysis of the accident data shows that 34.7% of the accidents (1-1-81 to 12-31-83) were due to speeding, and 12.7% due to failure to yield. In addition, 52.5% of the accidents involved a collision with a fixed object.

There is no local transit or rail service along this segment. This section of Route 128 is used as a bicycle route. There are no park and ride lots

ROUTE CONCEPT

Retain the current two lane conventional highway. The concept LOS is C-45.

IMPROVEMENTS

No improvements planned.

C. Segment C (04-Nap-128 PM 0.00 to 4.56)

This segment of Route 128 runs from the Sonoma/Napa County line to Calistoga where it intersects with Route 29 and there is a break in the route. The use of this segment is the same as Segment B. The terrain is flat to rolling with grades from 0-6%. Pavement width is 18 feet, shoulders on most of this segment are 8 feet.

The AADT for this segment ranges from 2000 in the west to 6000 in the east at Calistoga. The AM peak hour traffic eastbound ranges from 100 to 500 in those same locations. Projected AADT for 1995 (2005) is 1000 to 7000 (2000 to 8000); projected westbound AM peak hour traffic ranges from 200 to 500 (200 to 700) in 1995 (2005). The current V/C ratio is 0.08 at the county line, and 0.42 at Calistoga, with an LOS of C-45 and D-35 respectively. The projected D/C ratio for 1995 (2005) is 0.13 (0.16) in the west and 0.44 (0.56) in the east with an LOS of C-45 (C-45) and D-35 (D-35) at those same locations. The accident rate is 3.19/MVM, higher than the statewide average of 2.67/MVM. The fatality rate is the same as the statewide average, 0.065/MVM.

There is no transit, rail service or park and ride lots along this segment. This route is used as a bicycle route.

ROUTE CONCEPT

Retain the existing two lane conventional highway. The concept LOS is D-35.

IMPROVEMENTS

No improvements planned

D. Segment D (04-Nap-128 PM 4.56 to 19.09)

This segment begins at Rutherford after a break of 12.29 miles, and extends east to the junction of Route 128 and Knoxville Road, passing by Lake Hennessey Recreation Area. This is mainly a recreation route between Lake Berryessa and the northern section of the Napa Valley. The terrain is rolling to mountainous and the grades are from 3% to greater than 6%. Pavement width is 14-24 feet; after PM 11.3 the width is 18 feet or less. Shoulders are less than 2 feet over most of this segment.

The current AADT is 1000 and the AM peak hour westbound is 200. The V/C ratio is 0.15 and the LOS is C-40. Projected AADT for 1995 (2005) is 1300 (1700) and AM peak hour westbound is 160 (195). The projected D/C ratio and LOS for those same years are 0.12 (0.16) and C-40 (C-40). The accident rate for this segment is 4.11/MVM, significantly higher than the statewide average of 3.29/MVM. However, the fatality rate is 0.076/MVM, lower than the statewide average of 0.091/MVM.

There are no rail, transit or park-and-ride facilities in this area. There is some recreational bicycle traffic.

ROUTE CONCEPT

Retain the existing two lane conventional highway. The concept LOS is C-40.

IMPROVEMENTS

No improvements planned.

E. Segment E (04-Nap-128 PM 19.09 to 34.27)

This segment begins at the junction of Route 128 and Knoxville road and runs south and east around the southern end of Lake Berryessa. The terrain is rolling and the grade is greater than 6% for one half of the segment length. Pavement width is 24 feet and shoulders are 0-2 feet.

The AADT is 1,700 with westbound AM peak hour traffic of 200. The V/C ratio is 0.17 and the LOS is C-40. Projected AADT for 1995 (2005) is 1,900 (2,000), and westbound AM peak is 240 (265), with a D/C ratio of 0.19 (0.24) and an LOS of C-40 (D-35). On this segment the accident rate is 2.20/MVM, which is lower than the statewide average of 3.10/MVM. The fatality rate is 0.086/MVM, slightly higher than the statewide average of 0.084/MVM.

There are no rail, transit, or park-and-ride facilities along this segment. There is some recreational bicycle traffic.

The AADT for Route 128 in District 3 in Yolo County is essentially the same as in Napa County. The concept LOS for 2005 is also D-35, and no improvements are planned.

ROUTE CONCEPT

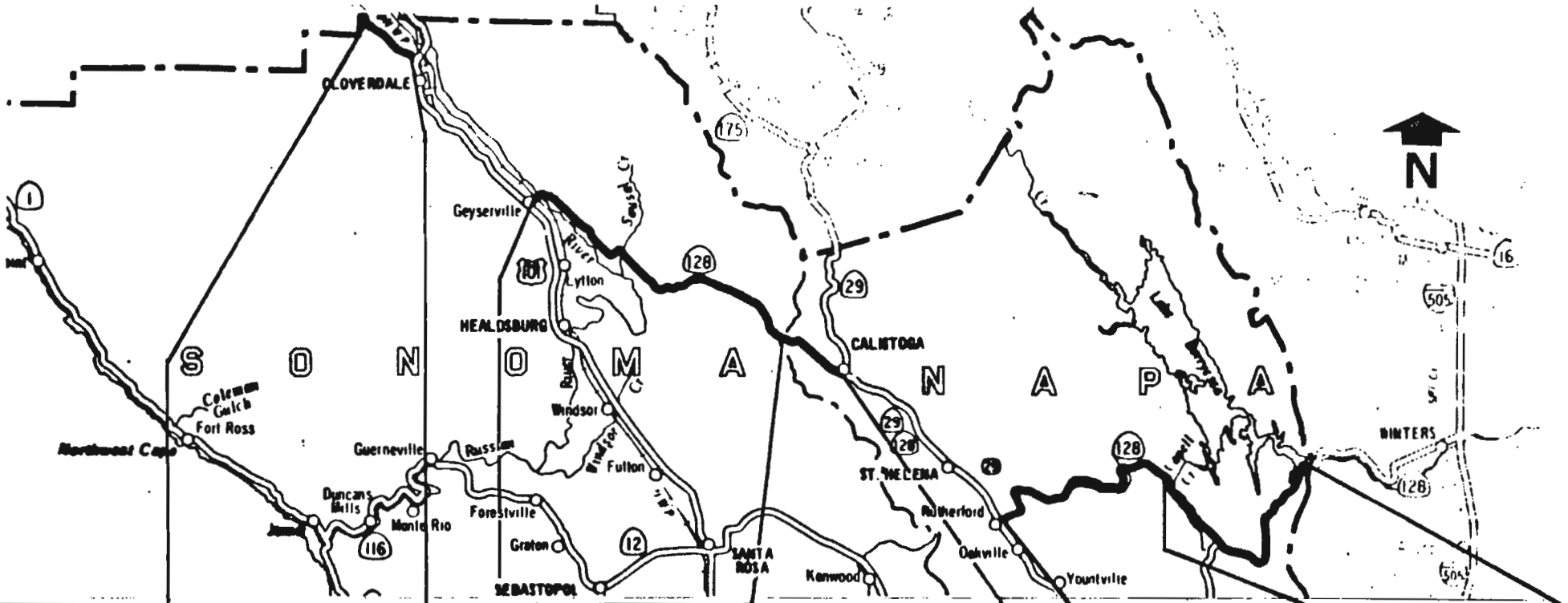
Retain the existing two lane conventional highway. The concept LOS is D-35.

IMPROVEMENTS

No improvements planned.

BRIDGE NUMBER	NAME OR DESCRIPTION	RTE	POST MILE	CITY	STRUCTURE TYPE OR PUC NUMBER OR PUMP DATA	WID	LENGTH (PROT)	WIDTH	TRAV WAY WIDTH UNDER BRIDGE	RT VERTICAL CLEARANCE LT RDWY	RT VERTICAL CLEARANCE RT RDWY	WSURF	SIDEWALKS OR CURBS LT	SIDEWALKS OR CURBS RT	YEAR BLT	YEAR WID EXT	CAPACITY DESN	CAPACITY PERMIT	CAPACITY SPCL
	MENDOCINO CO L	128	000																
20 244L	RT 101 128 SEP	128	L 484		QB		150	39	150	1809	1809	1			75		5	PPPPP	
20 244R	RT 101 128 SEP	128	L 485		QB		145	39	145	1801	1801	1			75		5	PPPPP	
	JCT RTE 101	128	L 486		RT ON 101														
20 123	DRY CREEK	128	L 518		CAF		12	28							22		2	PPPPP	
	L0553 IS E0487	128	L 553		EQUATION														
20 65	GYSRVILLE GR X	128	496		05 007580		2K		24										
20 37	HEADER DRAW	128	521		CSC		25	24				1			99		B	PPPPP	
20 38	RUSSIAN RIVER	128	544		STPCG		975	24				1		5.0	32		0	XXXXX	*
	04-SON-128																		
20 86	PLUG CREEK	128	578		CC		12								13		B	PPPPP	
20 39	ROCKAWAY CREEK	128	644		CSC		117	40				1			76		5	PPPPP	
20 130	GUILFORD CREEK	128	976		CS		18	24				2			13		B	XXXXX	
20 40	SAUSAL CREEK	128	1226		CSC		47	20				2			99		B	XXXXX	
20 131	HOOTOWL CREEK	128	1395		CS		12	24				1			15		B	PPPPP	
20 41	MAACAMA CREEK	128	1725		CGC		147	24				1			31		0	PPPPP	
20 132	LA FRANCHI CR	128	1980		CC	SA	12								20	82	A	PPPPP	
20 42	FOOTE CREEK	128	2076		CSC		67	32				1	0.7	0.7	82		A	PPPPP	
20 43	REDWOOD CREEK	128	2176		CSC		48	20				2			19		B	PPPPP	
20 44	BIDWELL CREEK	128	2405		CSC		71	40				1			77		5	PPPPP	
	NAPA CO LINE	128	2476																
	04-NAP-128																		
	SONOMA CO LINE	128	000																
21 68	BLOSSOM CREEK	128	280		MAF		40								01		B	PPPPP	
21 27	WBR NAPA RIVER	128	374	CSTG	CAF	CAF	39	25							99	26	B	PPPPP	
	JCT RTE 29	128	455	CSTG	AH ON 29														
	JCT RT 29	128	456		LT ON 128														
21 19	HOPPER SLOUGH	128	512		CG		41	19				1			21		B	PPPPP	
21 20	NAPA RIVER	128	521		QBC		130	32				1			81		A	PPPPP	
21 21	CONN CREEK	128	741		CSC		121	52				1			73		5	PPPPP	
21 74	SAGE CREEK	128	1126		CAF		23								45		3	PPPPP	
21 30	SAGE CREEK	128	1589		CG		17	20				2			99		5	PPPPP	
21 62	SODA CREEK	128	1855		MAFMP		21	23							10		B	PPPPP	
21 78	CAPELL CREEK	128	2023		SGJ		205	26				1	2.0	2.0	56		5	PPPPP	
	JCT RTE 121	128	2390																
21 82	WRAGG CREEK	128	2714		MP		11					2			55		5	PPPPP	
21 81	WRAGG CREEK	128	2790		MP		26								55		5	PPPPP	
21 80	EAST BULL CR	128	2817		MP		12								55		5	PPPPP	
21 97	RET WALL	128	3230		TW		160								78		0		
	SOLANO CO LINE	128	3427																

EXHIBIT A

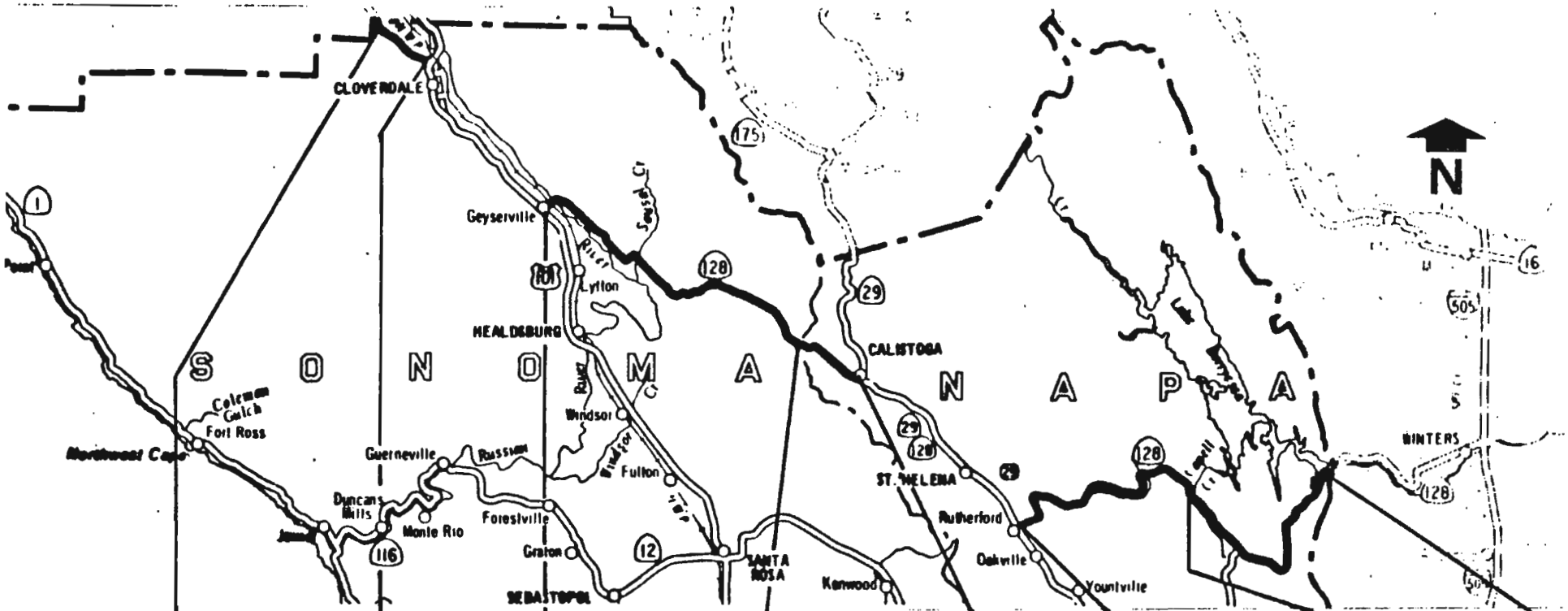


SEGMENT		A (SON 0.00 – SON 4.86)	B (SON 4.86 – SON 24.76)	C (NAP 0.00 – NAP 4.56)	D (NAP 4.56 – NAP 19.09)	E (NAP 19.09 – NAP 34.27)
NO. OF LANES	PRESENT	2	2	2	2	2
	PROPOSED 1995	2	2	2	2	2
	PROPOSED 2005	2	2	2	2	2
LEVEL OF SERVICE	PRESENT	C-45	C-45	D-35	C-40	C-40
	PROPOSED 1995	C-40	C-45	D-35	C-40	C-40
	PROPOSED 2005	C-40	C-45	D-35	C-40	D-35
TERRAIN		ROLLING	R-M	ROLLING	F-M	ROLLING
GRADES		3-6%	3->6%	3-6%	0->6%	0->6%
ACTUAL	Accidents Per MVM	3.67	3.57	3.19	4.11	2.20
	Fatalities Per MVM	.147	.031	.065	.076	.086

BREAK IN ROUTE

BREAK IN ROUTE

EXHIBIT B



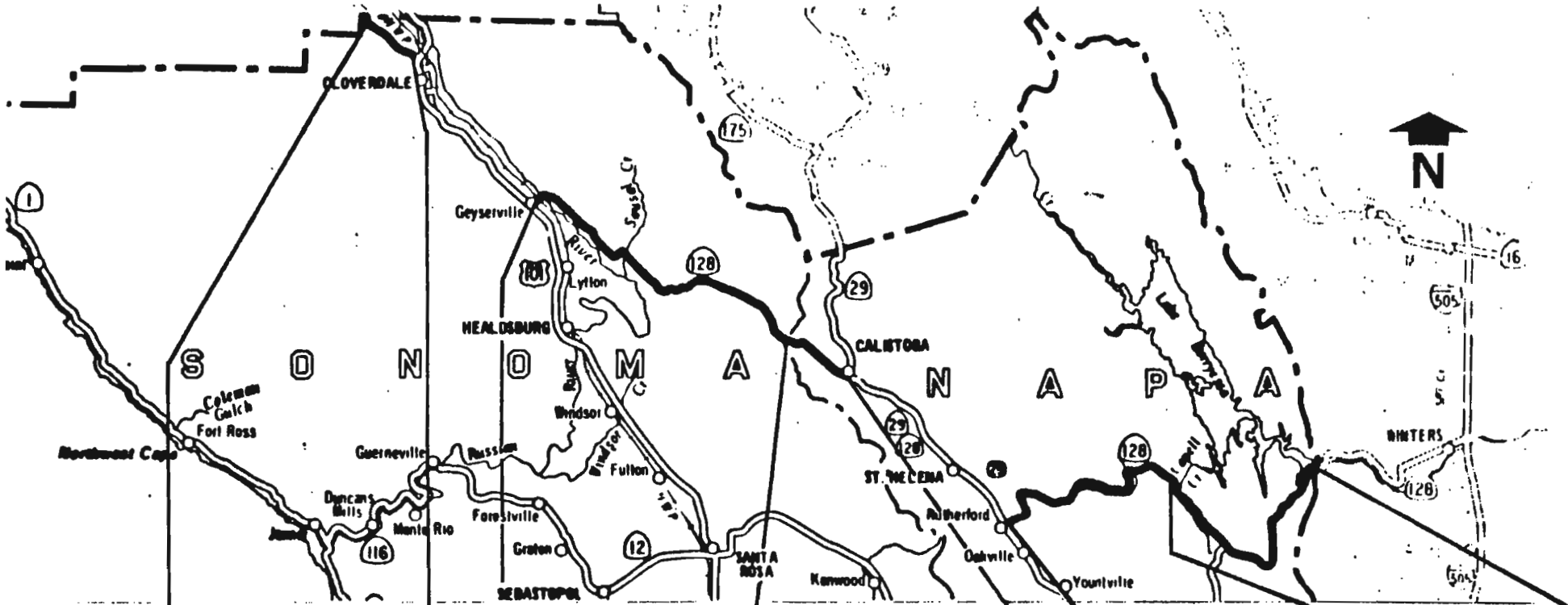
SEGMENT		SON 0.00 A SON 4.86	SON 4.86 B SON 24.76	NAP 0.00 C NAP 4.56	NAP 4.56 D NAP 19.09	NAP 19.09 E NAP 34.27
A.A.D.T. (.000)	1982	1	1.5	4	1	1.7
	1995	2	1.75	4.67	1.3	1.9
	2005	2	2.38	5.7	1.7	2
P.H.V. (00)	1982	2	1.4	3	2.0	2
	1995	2	2	3.7	1.6	2.4
	2005	3	2.13	4.7	1.95	2.65
AVE HWY SPEED		50	50	50	40	40
OPERATING SPEED		39	49	36	38	37
V/C	1982	0.17	0.11	.25	0.15	0.17
	1995	0.20	0.13	0.29	0.12	0.19
	2005	0.27	0.18	0.37	0.16	0.24
YEAR CAPACITY WILL BE REACHED		N/A	N/A	N/A	N/A	N/A

BREAK IN ROUTE

BREAK IN ROUTE

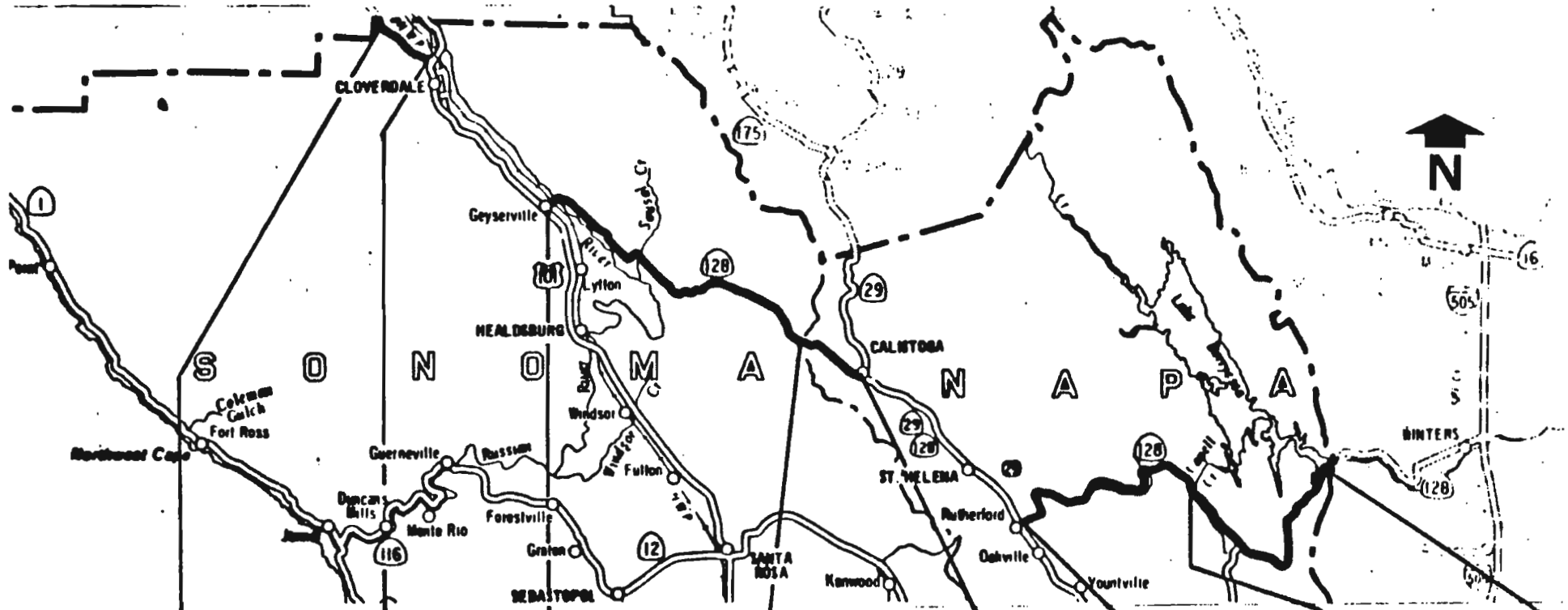
BRIDGE NUMBER	NAME OR DESCRIPTION	RTE	POST MILE	CITY	STRUCTURE TYPE OR PUC NUMBER OR PUMP DATA / WID	LENGTH (PROT)	WIDTH	TRAV WAY WIDTH UNDER BRIDGE	RT VERTICAL CLEARANCE LT RDWY	RT VERTICAL CLEARANCE RT RDWY	WSURF	SIDEWALKS OR CURBS LT	SIDEWALKS OR CURBS RT	YEAR BLT	YEAR WID EXT	CAPACITY DESN	CAPACITY PERMIT	CAPACITY SPCL
	MENDOCINO CO L	128	000															
20 244L	RT 101 128 SEP	128	L 484		QB	150	39	150	1809	1809	1			75		5	PPPPP	
20 244R	RT 101 128 SEP	128	L 485		QB	145	39	145	1801	1801	1			75		5	PPPPP	
	JCT RTE 101	128	L 486		RT ON 101													
20 123	DRY CREEK	128	L 518		CAF	12	28							22		2	PPPPP	
	L0553 IS E0487	128	L 553		EQUATION													
20 65	GYSRVILLE GR X	128	496		05 007580	2K		24										
20 37	HEADER DRAW	128	521		CSC	25	24				1			99		B	PPPPP	
20 38	RUSSIAN RIVER	128	544		STPCG	975	24				1		5.0	32		0	XXXXX	X
	04-SON-128																	
20 86	PLUG CREEK	128	578		CC	12								13		B	PPPPP	
20 39	ROCKAWAY CREEK	128	644		CSC	117	40				1			76		5	PPPPP	
20 130	GUILFORD CREEK	128	976		CS	18	24				2			13		B	XXXXX	
20 40	SAUSAL CREEK	128	1226		CSC	47	20				2			99		B	XXXXX	
20 131	HOOTOWL CREEK	128	1395		CS	12	24				1			15		B	PPPPP	
20 41	MAACAMA CREEK	128	1725		CGC	147	24				1			31		0	PPPPP	
20 132	LA FRANCHI CR	128	1980		CC SA	12								20	82	A	PPPPP	
20 42	FOOTE CREEK	128	2076		CSC	67	32				1	0.7	0.7	82		A	PPPPP	
20 43	REDWOOD CREEK	128	2176		CSC	48	20				2			19		B	PPPPP	
20 44	BIDWELL CREEK	128	2405		CSC	71	40				1			77		5	PPPPP	
	NAPA CO LINE	128	2476															
	04-NAP-128																	
	SONOMA CO LINE	128	000															
21 68	BLOSSOM CREEK	128	280		MAF	40								01		B	PPPPP	
21 27	WBR NAPA RIVER	128	374	CSTG	CAF CAF	39	25							99	26	B	PPPPP	
	JCT RTE 29	128	455	CSTG	AH ON 29													
	JCT RT 29	128	456		LT ON 128													
21 19	HOPPER SLOUGH	128	512		CG	41	19				1			21		B	PPPPP	
21 20	NAPA RIVER	128	521		QBC	130	32				1			81		A	PPPPP	
21 21	CONN CREEK	128	741		CSC	121	52				1			73		5	PPPPP	
21 74	SAGE CREEK	128	1126		CAF	23								45		3	PPPPP	
21 30	SAGE CREEK	128	1589		CG	17	20				2			99		5	PPPPP	
21 62	SODA CREEK	128	1855		MAFMP	21	23							10		B	PPPPP	
21 78	CAPELL CREEK	128	2023		SGJ	205	26				1	2.0	2.0	56		5	PPPPP	
	JCT RTE 121	128	2390															
21 82	WRAGG CREEK	128	2714		MP	11					2			55		5	PPPPP	
21 81	WRAGG CREEK	128	2790		MP	26								55		5	PPPPP	
21 80	EAST BULL CR	128	2817		MP	12								55		5	PPPPP	
21 97	RET WALL	128	3230		TW	160								78		0		
	SOLANO CO LINE	128	3427															

EXHIBIT A



SEGMENT		A (SON 0.00 – SON 4.86)	BREAK IN ROUTE	B (SON 4.86 – SON 24.76)	C (NAP 0.00 – NAP 4.56)	BREAK IN ROUTE	D (NAP 4.56 – NAP 19.09)	E (NAP 19.09 – NAP 34.27)
NO. OF LANES	PRESENT	2		2	2		2	2
	PROPOSED 1995	2		2	2		2	2
	PROPOSED 2005	2		2	2		2	2
LEVEL OF SERVICE	PRESENT	C-45		C-45	D-35		C-40	C-40
	PROPOSED 1995	C-40		C-45	D-35		C-40	C-40
	PROPOSED 2005	C-40		C-45	D-35		C-40	D-35
TERRAIN		ROLLING		R-M	ROLLING		F-M	ROLLING
GRADES		3-6%		3->6%	3-6%		0->6%	0->6%
ACTUAL	Accidents Per MVM	3.67		3.57	3.19		4.11	2.20
	Fatalities Per MVM	.147		.031	.065		.076	.086

EXHIBIT B



SEGMENT		SON 0.00 A SON 4.86	SON 4.86 B SON 24.76	NAP 0.00 C NAP 4.56	NAP 4.56 D NAP 19.08	NAP 19.08 E NAP 34.27
A.A.D.T. (.000)	1982	1	1.5	4	1	1.7
	1995	2	1.75	4.67	1.3	1.9
	2005	2	2.38	5.7	1.7	2
P.H.V. (00)	1982	2	1.4	3	2.0	2
	1995	2	2	3.7	1.6	2.4
	2005	3	2.13	4.7	1.95	2.65
AVE HWY SPEED		50	50	50	40	40
OPERATING SPEED		39	49	36	38	37
V/C	1982	0.17	0.11	.25	0.15	0.17
	1995	0.20	0.13	0.29	0.12	0.19
	2005	0.27	0.18	0.37	0.16	0.24
YEAR CAPACITY WILL BE REACHED		N/A	N/A	N/A	N/A	N/A

BREAK IN ROUTE

BREAK IN ROUTE