

DESIGNATION	TRANSFER ROAD/PIERCE BUTLER ROUTE	COMO AVE.
PRESENT ADT (1998)	12,700	8,250
PROJECTED ADT (2015)	17,800	11,550
FUNCTIONAL CLASS	1	2
TRAFFIC LINES	10	10
PARKING LINES	10	10
DESIGN LOAD	10	10
STABILIZER "RT" VALUE	10	10
DESIGN SPEED	35 mph	30 mph

BASED ON STOPPING DISTANCE
HEIGHT OF EYE: 5.5 FEET
HEIGHT OF OBJECT: 0.5 FEET

GOVERNING SPECIFICATIONS

THE 1988 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS FOR CONSTRUCTION AS AMENDED BY THE
"SUPPLEMENTAL SPECIFICATIONS" DATED MAY 2, 1994, SHALL GOVERN.

ALL TRAFFIC CONTROL DEVICES AND SIGNING SHALL CONFORM TO
THE UNIFORM, INCLUDING FIELD MANUAL FOR TEMPORARY TRAFFIC
CONTROL, EDITION LATEST, JANUARY 1998.



PLAN REVISIONS		
DATE	SHEET NO. & DESCRIPTION	BY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT
SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE
LAWS OF THE STATE OF MINNESOTA.

Kathy Jaschke REG. NO. 21864 DATE 1/26/00

APPROVED *David J. Schmitt* DATE 4/26/00
COUNTY ENGINEER

APPROVED *Thomas J. Egan* DATE 4/26/00
CITY ENGINEER

MINNESOTA DEPARTMENT OF TRANSPORTATION

Patti J. Loken DATE 5-5-00
METHOD-ASSISTANT DESIGN ENGINEER STATE AID: REVIEWED FOR
COMPLIANCE WITH STATE-AID RULES/PROJECT

Patti J. Loken DATE 5-5-00
APPROVED FOR STATE AID FUNDING: STATE AID ENGINEER

DESIGN DRAWN BY: MR.PK.ML DATE 1/2000
CHECKED BY: MR.PK.ML DATE 1/2000

28-218

RAMSEY COUNTY

DEPARTMENT OF PUBLIC WORKS

CONSTRUCTION PLAN FOR: MILLING, BITUMINOUS RESURFACING,
CURB & GUTTER AND RELATED IMPROVEMENTS.

THIS PLAN CONTAINS 9 SHEETS

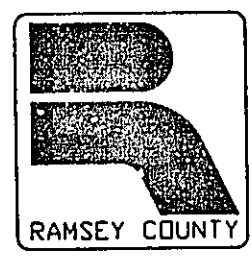
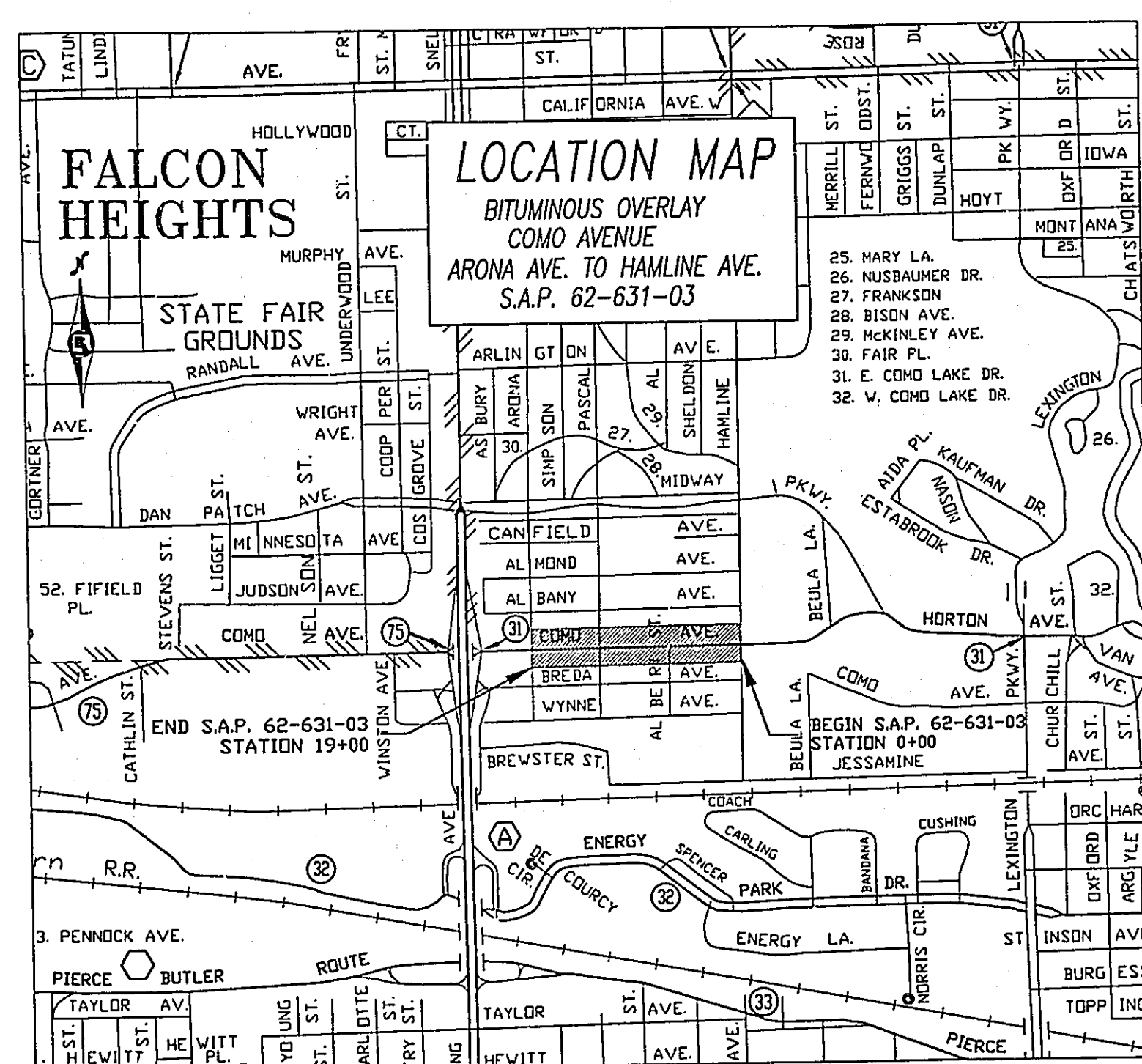
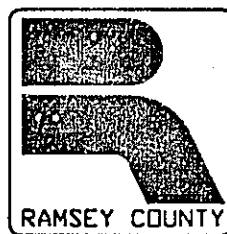
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	ESTIMATED QUANTITIES
3-4	LOCATION MAPS
5-8	TYPICAL SECTIONS
9A	DETAIL AND CHARTS

COMO AVE.
HAMLINE AVE. TO ARONA ST.
S.A.P. 62-631-03

GROSS LENGTH	1900'
BRIDGE LENGTH	0'
EXCEPTIONS	0'
NET LENGTH	1900'

TRANSFER ROAD/
PIERCE BUTLER ROUTE
UNIVERSITY AVE. TO MINNEHAHA AVE.
S.A.P. No. 62-633-02

GROSS LENGTH	18271'
BRIDGE LENGTH	450'
EXCEPTIONS	450'
NET LENGTH	17821'



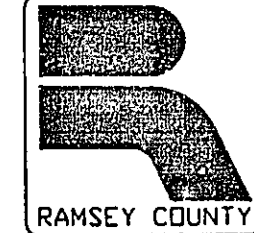
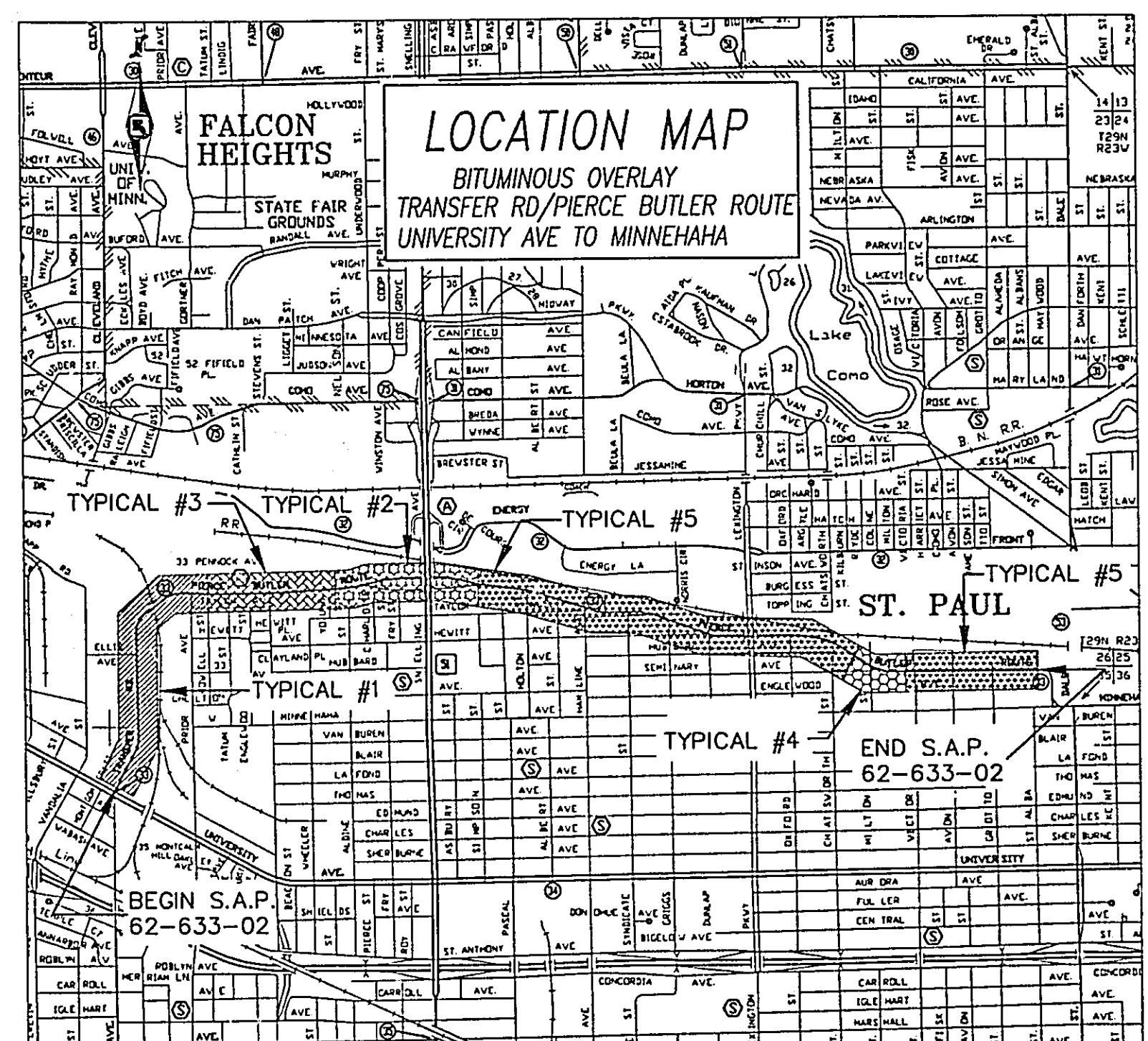
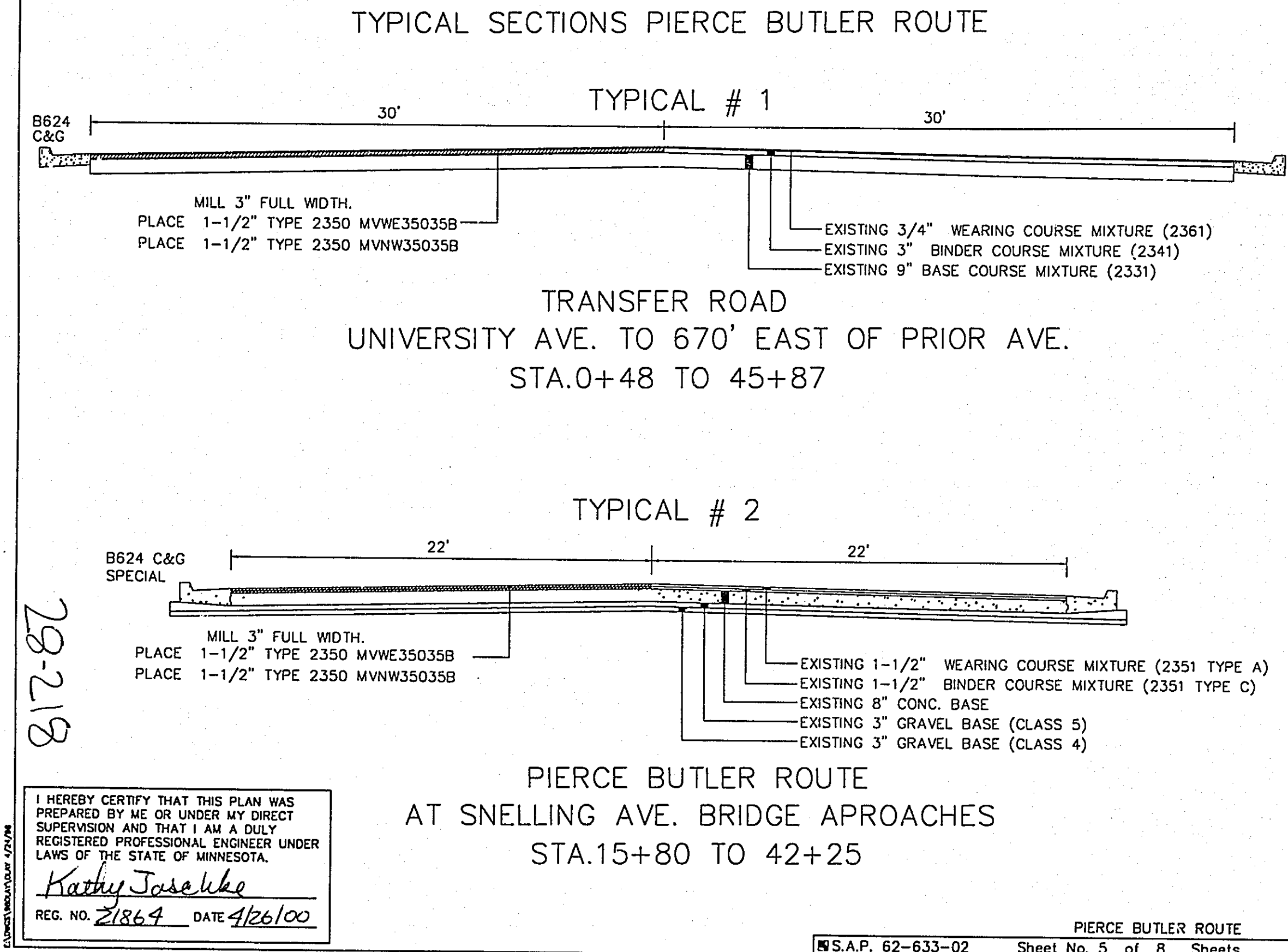
RAMSEY COUNTY
Department of Public Works

28-218

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Kathy Jaschke
REG. NO. 21864 DATE 4/26/00

S.A.P. 62-631-03 Sheet No. 3 of 8 Sheets



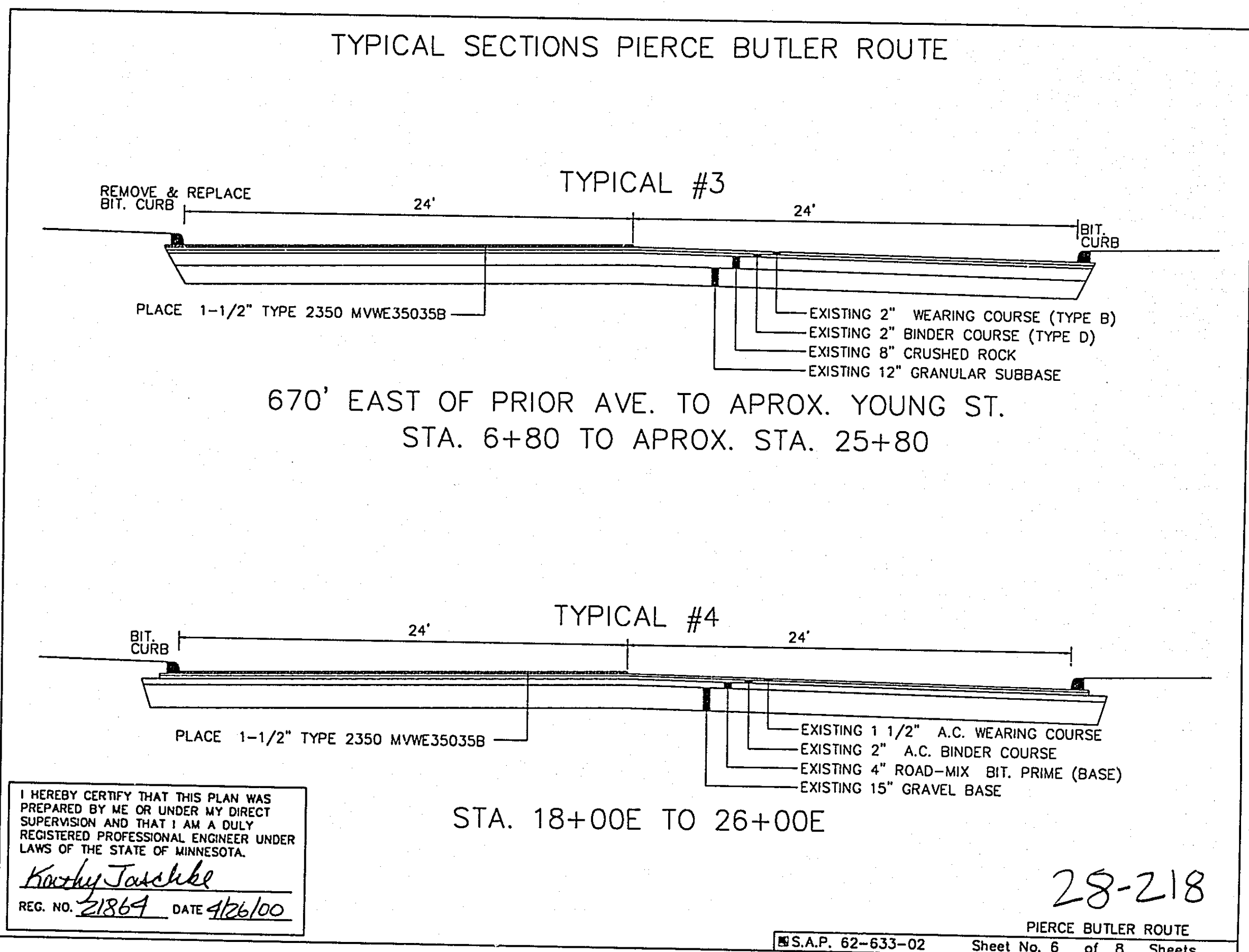
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S.A.P. 62-633-02 Sheet No. 4 of 8 Sheets



STATEMENT OF ESTIMATED QUANTITIES

ITEM NO.	ITEM	UNIT	TOTAL PROJECT QUANTITIES	COMO AVE. S.A.P. 62-631-03 QUANTITIES	TRANSFER ROAD/PIERCE BUTLER RD. S.A.P. 62-633-02 QUANTITIES
2021.501	MOBILIZATION	L.S.	1	0.167	0.833
2104.501	REMOVE BITUMINOUS CURB	L.F.	1495		1495
2232.501	MILL BITUMINOUS SURFACE (3")	SQ. YD.	38750		38750
2232.501	MILL BITUMINOUS SURFACE (3 1/2")	SQ. YD.	54619	10555	44064
2350.609	MVWE35035B	TON	10750	1050	9700
2350.609	MVNW35035B	TON	10315	1365	8950
2350.609	MVNW45035B (LEVELING)	TON	800	100	700
2357.502	BITUMINOUS MATERIAL FOR TACK COAT	GAL	10300	1200	9100
2504.602	ADJUST GATE	EACH	2		2
2506.522	ADJUST FRAME & RING CASTING	EACH	11		11
2535.501	BITUMINOUS CURB (7")	L.F.	1495		1495
2563.601	TRAFFIC CONTROL	L.S.	1	0.123	0.877
2564.531	F & I SIGN PANELS TYPE C	S.F.	32	32	
2564.602	PAVE. MESS. (LEFT ARROW) - EPOXY	EACH	10		10
2564.602	PAVE. MESS. (RR CROSSING) - EPOXY	EACH	6		6
2564.602	PAVE. MESS. (HOV DIAMOND) - EPOXY	EACH	5		5
2564.602	PAVE. MESS. (BIKE) - EPOXY	EACH	5		5
2564.602	PAVE. MESS. (ONLY) - EPOXY	EACH	5		5
2564.602	PAVE. MESS. (THRU ARROW) - EPOXY	EACH	5		5
2564.603	4" BROKEN LINE YELLOW - EPOXY	L.F.	850		850
2564.603	4" BROKEN LINE WHITE - EPOXY	L.F.	9000		9000
2564.603	4" DOUBLE YELLOW - EPOXY	L.F.	20250	1900	18350
2564.603	4" SOLID LINE WHITE - EPOXY	L.F.	8400	7600	800
2564.603	4" SOLID LINE YELLOW - EPOXY	L.F.	3400		3400
2564.603	12" SOLID LINE WHITE - EPOXY	L.F.	100	50	50
2564.603	8" SOLID LINE YELLOW - EPOXY	L.F.	1400	700	700
2564.604	ZEBRA CROSSWALK WHITE - EPOXY	SQ. FT.	100	100	
2575.555	TURF ESTABLISHMENT	L.S.	1		1

I hereby certify that this plan was prepared by me or
under my direct supervision and that I am a duly
registered professional engineer under that laws of
the State of Minnesota

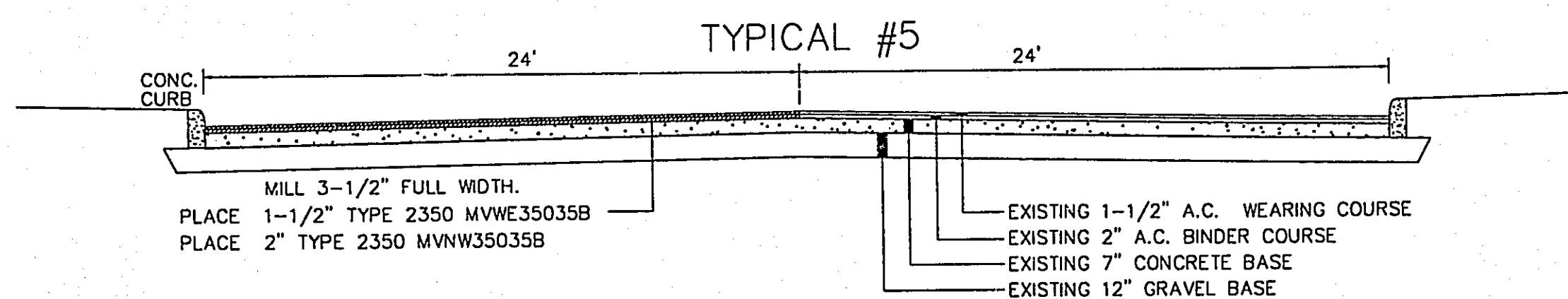
Kathy Jaschke 4/26/00
MN Reg. No. 21864

28-218

S.A.P. 62-631-03 S.A.P. 62-633-02

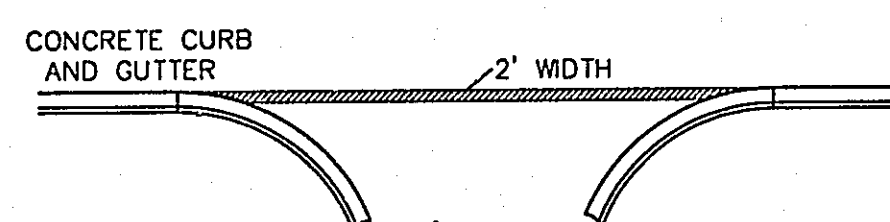
SHEET 2 OF 8 SHEETS

TYPICAL SECTIONS PIERCE BUTLER ROUTE



STA. 15+80W TO 18+00E
STA. 26+00E TO 48+30E (END PROJECT)

MILLING AT SIDE STREETS



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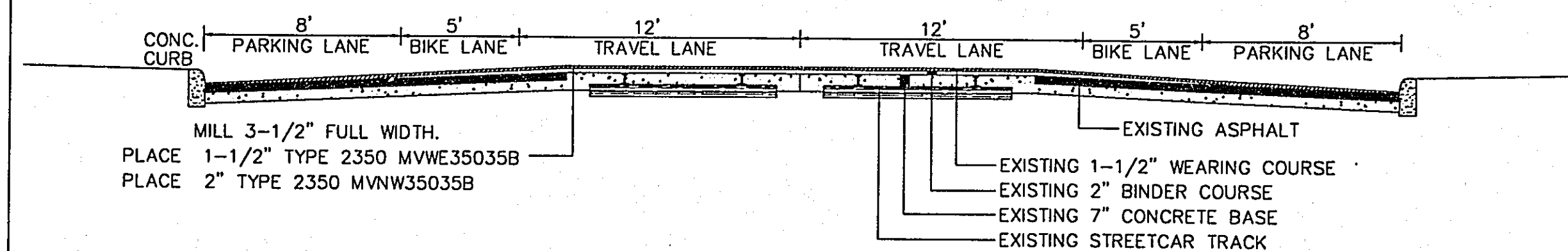
REG. NO. 21864 DATE 4/26/00

28-218

PIERCE BUTLER ROUTE

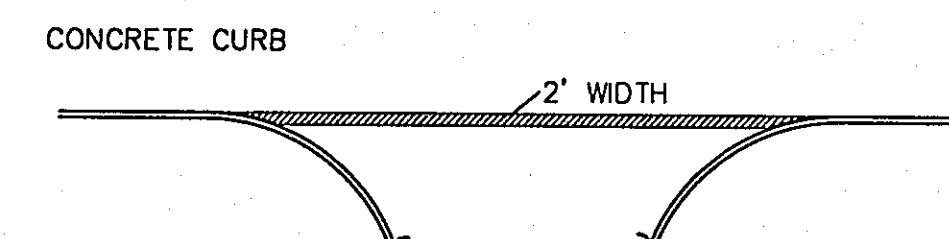
S.A.P. 62-633-02 Sheet No. 7 of 8 Sheets

TYPICAL SECTIONS COMO AVENUE



HAMLIN TO ARONA
STA. 0+00 TO 19+00

MILLING AT SIDE STREETS



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28-218

COMO AVE.

S.A.P. 62-631-03 Sheet No. 8 of 8 Sheets

ONLY
BIKE

6'

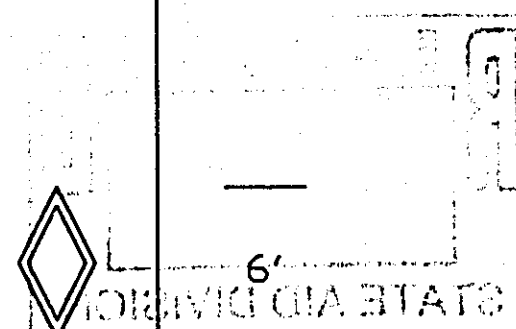
6'

4'

6'

4'

20'



PAVEMENT MESSAGE- BIKE LANE

SIGN PANEL TYPE "C"

SIGN NO.	QUANT.	SIZE (IN.)	AREA (SQ. FT.)	TOTAL AREA (SQ. FT.)	PANEL LEGEND
D11-1	2	24 X 12	3.00	6.00	BIKE ROUTE
M4-11	1	24 X 6	0.50	0.50	BEGIN
M4-12	1	24 X 6	0.50	0.50	END
R3-17	5	24 X 30	5.00	25.00	RIGHT LANE ONLY
			TOTAL = 32.00 SQ. FT.		

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S.A.P. 62-631-03 SHEET NO. 8a OF 8 SHEETS