

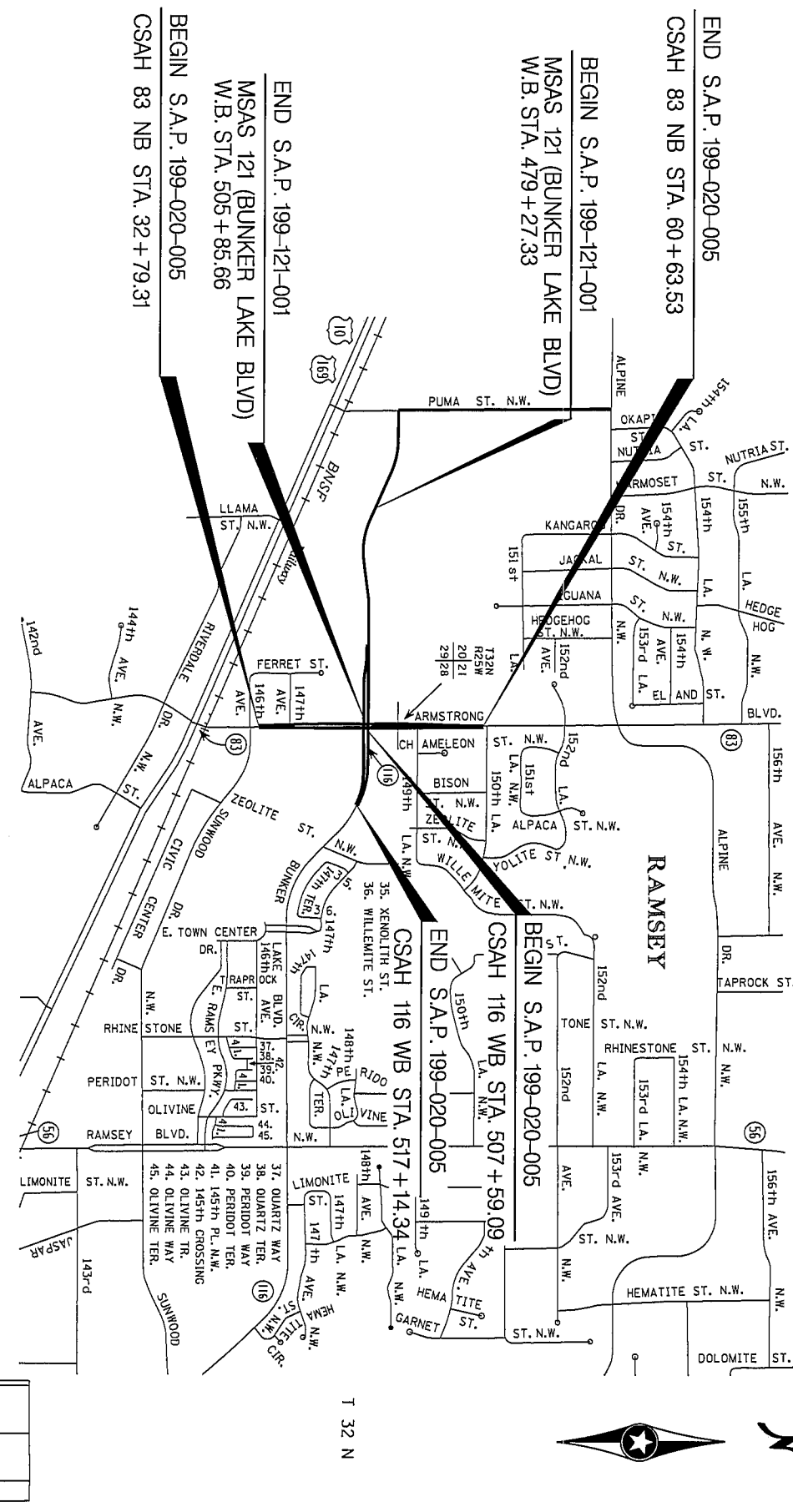
MINNESOTA DEPARTMENT OF TRANSPORTATION

CITY OF RAMSEY

CONSTRUCTION PLAN FOR: GRADING, AGGREGATE BASE, BITUMINOUS PAVING, STORM SEWER, CONCRETE CURB & GUTTER, BITUMINOUS PATH, SIGNING & STRIPING, TRAFFIC CONTROL SIGNALS, AND APPURTENANT WORK

LOCATED ON CSAH 83 FROM A POINT 700 FEET NORTH OF TH 10 TO ALPINE DRIVE NW
 LOCATED ON CSAH 116 FROM CSAH 83 TO A POINT 950 FEET EAST OF CSAH 83
 LOCATED ON MSAS 121 FROM PUMA STREET TO CSAH 83

S.A.P. 199-121-001 (MSAS 121) BUNKER LAKE BLVD.	S.A.P. 199-020-005 (CSAH 83) ARMSTRONG BLVD.	S.A.P. 199-020-005 (CSAH 116) BUNKER LAKE BLVD.
GROSS LENGTH..... 2658.33 FEET	GROSS LENGTH..... 2784.22 FEET	GROSS LENGTH..... 937.58 FEET
BRIDGES-LENGTH..... 0 FEET	BRIDGES-LENGTH..... 0 FEET	BRIDGES-LENGTH..... 0 FEET
EXCEPTIONS-LENGTH..... 0 FEET	EXCEPTIONS-LENGTH..... 0 FEET	EXCEPTIONS-LENGTH..... 0 FEET
NET LENGTH..... 2658.33 FEET	NET LENGTH..... 2784.22 FEET	NET LENGTH..... 937.58 FEET
(LENGTH BASED ON NB STATIONING)		



PLAN SYMBOLS

STATE LINE	-----
COUNTY LINE	-----
TOWNSHIP OR RANGE LINE	-----
SECTION LINE	-----
QUARTER LINE	-----
SIXTEENTH LINE	-----
RIGHT-OF-WAY LINE	-----
TEMPORARY EASEMENT	-----
PRESENT RIGHT-OF-WAY	-----
CONTROL OF ACCESS LINE	-----
PROPERTY LINES (EXCEPT LAND LINES)	-----
VACATED PLATTED PROPERTY	-----
CORPORATE OR CITY LIMITS	-----
TRUNK HIGHWAY CENTER LINE	-----
RETAINING WALL	-----
RAILROAD	-----
RAILROAD RIGHT-OF-WAY	-----
RIVER OR CREEK	-----
DRY RUN	-----
DRAINAGE DITCH	-----
DRAIN TILE	-----
CULVERT	-----
DROP INLET	-----
GUARD RAIL	-----
BARBED WIRE FENCE	-----
WOVEN WIRE FENCE	-----
CHAIN LINK FENCE	-----
RAILROAD SNOW FENCE	-----
STONE WALL OR FENCE	-----
HEDGE	-----
RAILROAD CROSSING SIGN	-----
RAILROAD CROSSING BELL	-----
ELECTRIC WARNING SIGN	-----
CROSSING GATE	-----
MEANDER CORNER	-----
SPRINGS	-----
MARSH	-----
TIMBER	-----
ORCHARD	-----
BRUSH	-----
NURSERY	-----
CATTLE GUARD	-----
OVERPASS HIGHWAY OVER	-----
UNDERPASS HIGHWAY UNDER	-----
BRIDGE	-----
BUILDING (ONE STORY FRAMED)	-----
F - FRAME	-----
S - STONE	-----
B - BRICK	-----
SI - STUCCO	-----
IRON ROD OR PIPE	-----
MONUMENT (STONE, CONCRETE, OR METAL)	-----
WOODEN PILE	-----
GRAVEL PIT	-----
SAND PIT	-----
BORROW PIT	-----
ROCK QUARRY	-----
UTILITY SYMBOLS	-----
POWER POLE LINE	-----
TELEPHONE OR TELEGRAPH POLE LINE	-----
ANCHOR	-----
STREET LIGHT CONDUIT	-----
PEDESTAL TELEPHONE CABLE TERMINAL	-----
GAS MAIN	-----
WATER MAIN	-----
HYDRANT	-----
VALVE	-----
CATCH BASIN	-----
TELEPHONE CABLE IN CONDUIT	-----
ELECTRIC CABLE IN CONDUIT	-----
TELEVISION CABLE IN CONDUIT	-----
ELECTRIC MANHOLE	-----
BURIED TELEPHONE CABLE	-----
BURIED ELECTRIC CABLE	-----
BURIED TELEVISION CABLE	-----
TRAFFIC SIGNAL INTERCONNECT CABLE	-----
SEWER (STORM) MANHOLE	-----
SEWER (SANITARY) MANHOLE	-----
SEWER (SANITARY)	-----

SCALES

INDEX MAP	0 1000 2000
PLAN	0 50 100
PROFILE HORIZ.	0 50 100
VERT.	0 5 10 20
CROSS SECTION	0 10 20

S.A.P. 199-020-005

CSAH 83 (ARMSTRONG BLVD.)

DESIGN DESIGNATION

R VALUE	50
ADT (CURRENT YEAR) 2011 =	8000
ADT (FUTURE YEAR) 2031 =	23500
D (DIRECTIONAL DIST.) =	50/50
HAOT (FUTURE YEAR) 2031 =	3.92
ESALS	1,395,000
DESIGN SPEED 55 MPH	
BASED ON STOPPING SIGHT DISTANCE	
HEIGHT OF EYE 3.5' HEIGHT OF OBJECT 2.0'	
DESIGN SPEED NOT ACHIEVED AT	N/A
FUNCTIONAL CLASSIFICATION "A" MINOR ARTERIAL	
NO. OF TRAFFIC LANES	4
NO. OF PARKING LANES	0
SHOULDER WIDTH	8'
TON DESIGN	10

S.A.P. 199-020-005

CSAH 116 (BUNKER LAKE BLVD.)

DESIGN DESIGNATION

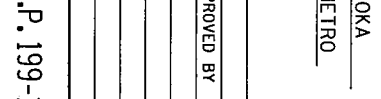
R VALUE	50
ADT (CURRENT YEAR) 2011 =	3900
ADT (FUTURE YEAR) 2031 =	21900
D (DIRECTIONAL DIST.) =	50/50
HAOT (FUTURE YEAR) 2031 =	3.92
ESALS	1,133,000
DESIGN SPEED 55 MPH	
BASED ON STOPPING SIGHT DISTANCE	
HEIGHT OF EYE 3.5' HEIGHT OF OBJECT 2.0'	
DESIGN SPEED NOT ACHIEVED AT	N/A
FUNCTIONAL CLASSIFICATION "A" MINOR ARTERIAL	
NO. OF TRAFFIC LANES	4
NO. OF PARKING LANES	0
SHOULDER WIDTH	8'
TON DESIGN	10

S.A.P. 199-121-001

MSAS 121 (BUNKER LAKE BLVD.)

DESIGN DESIGNATION

R VALUE	50
ADT (CURRENT YEAR) 2011 =	2300
ADT (FUTURE YEAR) 2031 =	8800
D (DIRECTIONAL DIST.) =	50/50
HAOT (FUTURE YEAR) 2031 =	3.92
ESALS	489,000
DESIGN SPEED 40 MPH	
BASED ON STOPPING SIGHT DISTANCE	
HEIGHT OF EYE 3.5' HEIGHT OF OBJECT 2.0'	
DESIGN SPEED NOT ACHIEVED AT	N/A
FUNCTIONAL CLASSIFICATION "A" LOCAL STREET	
NO. OF TRAFFIC LANES	2
NO. OF PARKING LANES	4
SHOULDER WIDTH	10
TON DESIGN	10



GOVERNING SPECIFICATIONS

THE 2005 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION," SHALL GOVERN.

ALL TRAFFIC CONTROL DEVICES AND SIGNING SHALL CONFORM TO THE "MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), INCLUDING "FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS."

UTILITY NOTE:
 THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THE UTILITY LOCATIONS ARE BASED ON THE RECORD DRAWINGS OF CLASS 36 OR 38 DRAINAGE AND GROUND SURVEYS FOR THE COLLECTION AND DEPOSITION OF EXISTING SUBSURFACE UTILITY DATA.

INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2-3	GENERAL LAYOUT
4-6	ESTIMATED QUANTITIES
7	INDEX OF TABULATIONS AND STANDARD PLATES
8	SOIL AND CONSTRUCTION NOTES
9-11	QUANTITY TABULATIONS
12-13	EARTHWORK TABULATION & SUMMARY
14-23	SANITARY PLAN & PROFILE
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52-53	ALIGNMENT PLAN
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55-63	INPLACE TOPOGRAPHY & REMOVAL PLAN
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99	DRAINAGE TABULATION
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111-117	EROSION CONTROL DETAILS
118	SIGNING & STRIPING TABULATIONS
119-129	SIGNING & STRIPING PLANS
130-134	SIGNING & STRIPING DETAILS
135-145	SIGNAL PLAN
146	CONTOUR PLAN
147-236	CROSS SECTIONS

THIS PLAN CONTAINS 236 SHEETS

ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND ORDINANCES WILL BE COMPLIED WITHIN THE CONSTRUCTION OF THIS PROJECT.

701 Xenia Avenue South, Suite 300
 Minneapolis, MN 55416
 www.wsbeng.com

783414001-1678341100
 INFRASTRUCTURE ENGINEERING + PLANNING + CONSTRUCTION

SIGNATURE: _____ TYPED OR PRINTED NAME: JAPPE MALE, PE
 DESIGN ENGINEER, I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 DATE: 1/21/2011 LICENSE NUMBER 42064

APPROVED _____ DATE _____
 CITY OF RAMSEY ENGINEER

APPROVED _____ DATE _____
 ANOKA COUNTY ENGINEER

DISTRICT STATE AID ENGINEER-REVIEW FOR COMPLIANCE WITH STATE AID RULES/POLICY
 DATE: _____
 APPROVED FOR STATE AID FUNDING-STATE AID ENGINEER DATE: _____