

HWY 96

MACKUBIN To RICE ST.

09/23/26

27 SEP 1999

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PLAN SYMBOLS

STATE LINE
COUNTY LINE
TOWNSHIP OR RANGE LINE
SECTION LINE
QUARTER LINE
SIXTEENTH LINE
RIGHT-OF-WAY LINE
PRESENT RIGHT-OF-WAY LINE
CONTROL OF ACCESS LINE
PROPERTY LINE (Except Land Lines)
VACATED PLATTED PROPERTY
CORPORATE OR CITY LIMITS

TRUNK HIGHWAY CENTER LINE
RETAINING WALL
RAILROAD
RAILROAD RIGHT-OF-WAY LINE
RIVER OR CREEK
DRY RUN
DRAINAGE DITCH
DRAIN TIE
CULVERT
DROP INLET
GUARD RAIL
BARBED WIRE FENCE
WOVEN WIRE FENCE
CHAIN LINK FENCE
WOODEN 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
CATCH BASIN
FIRE HYDRANT
CATTLE GUARD
OVERPASS (Highway Over)
UNDERPASS (Highway Under)
BRIDGE
BUILDING (One Story Frame)
F-FRAME
C-CONCRETE
S-STONE
T-TILE
B-BRICK
ST-STUCCO
IRON PIPE OR ROD
MONUMENT (STONE, CONCRETE, OR METAL)
WOODEN NAIL
GRAVEL PIT
SAND PIT
BORROW PIT
ROCK QUARRY

UTILITY SYMBOLS

POWER POLE LINE
TELEPHONE OR TELEGRAPH
POLE LINE
JOINT TELEPHONE AND POWER
ON POWER POLES
ON TELEPHONE POLES
ANCHOR
STEEL TOWER
STREET LIGHT
PEDESTAL (TELEPHONE CABLE
TERMINAL)
GAS MAIN
WATER MAIN
CONDUIT
TELEPHONE CABLE IN CONDUIT
ELECTRIC CABLE IN CONDUIT
TELEPHONE MANHOLE
ELECTRIC MANHOLE
BURIED COMMUNICATION CABLE
BURIED TELEPHONE CABLE
BURIED ELECTRIC CABLE
SEWER (SANITARY)
SEWER (STORM)
SEWER MANHOLE
HANDHOLE
CATCH BASIN

SCALES (FULL SIZE)
PLAN 1:500
PROFILE HORZ. 1:500
VERT. 1:50
X-SECTION 1:100



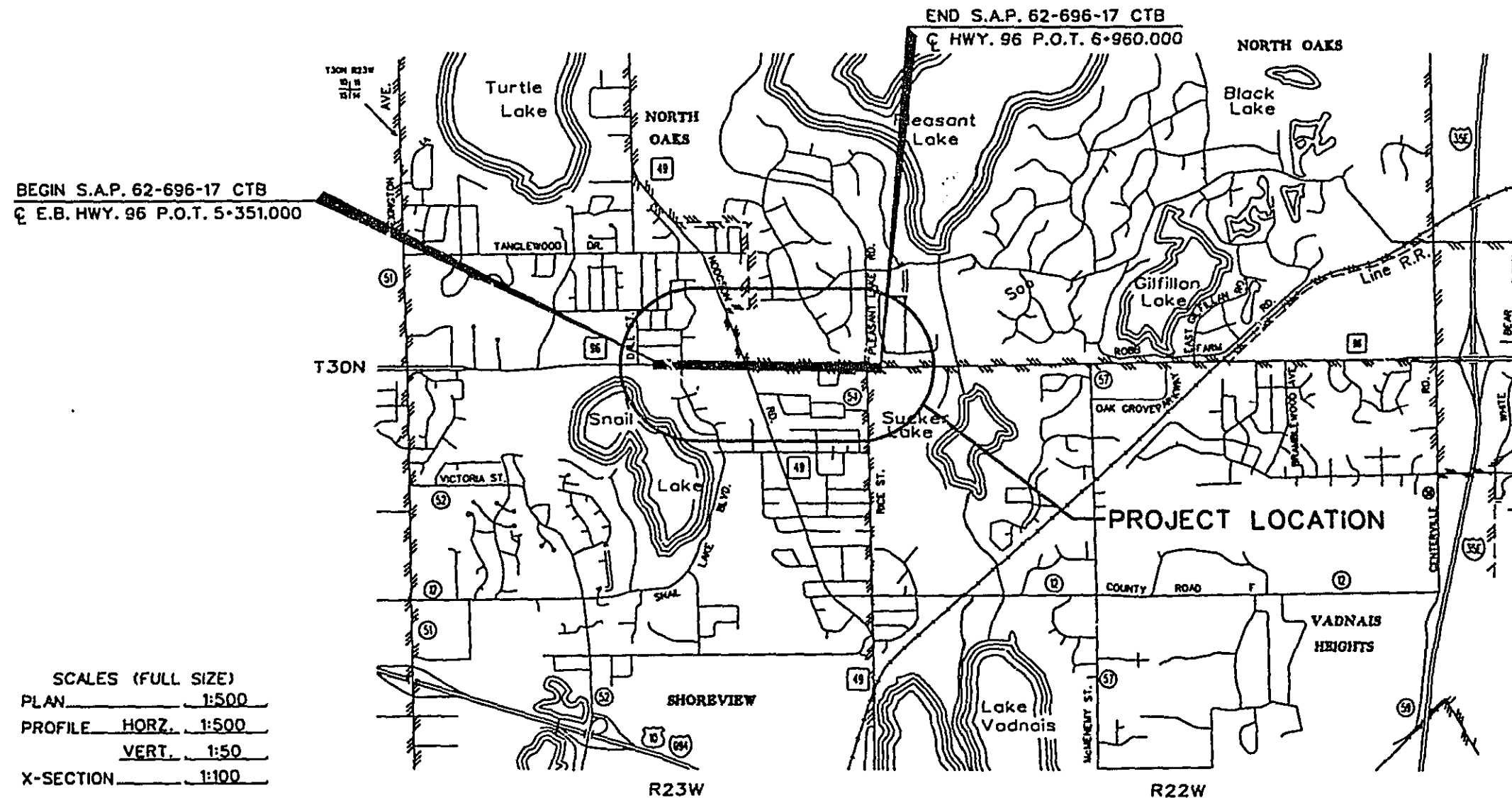
RAMSEY COUNTY DEPARTMENT OF PUBLIC WORKS

CONSTRUCTION PLAN FOR RIGHT OF WAY ACQUISITION FOR HWY 96 LOCATED IN RAMSEY COUNTY ON HWY 96 FROM MACKUBIN ST. TO RICE ST. S.A.P. 62-696-17 CTB

LEGAL DESCRIPTION

HWY 96
BEGINNING AT A POINT 5.6 m NORTH AND 211 m EAST FROM
THE SOUTHWEST CORNER OF SECTION 13, TOWNSHIP 30, RANGE 23
RAMSEY COUNTY, MINNESOTA
ENDING AT A POINT 0.5 m SOUTH AND 230 m EAST FROM
THE NORTHEAST CORNER OF SECTION 24, TOWNSHIP 30, RANGE 23
RAMSEY COUNTY, MINNESOTA

NOTE:
THE EXACT LOCATION OF UNDERGROUND
GAS, TELEPHONE, FIBEROPTIC, ELECTRIC,
CABLE TV AND PIPE LINES ARE UNKNOWN.
THE CONTRACTOR SHALL CONTACT GOPHER
STATE ONE CALL BEFORE COMMENCING
EXCAVATION.



HWY 96 S.A.P. 62-696-17 CTB

FUNCTIONAL CLASSIFICATION: HIGH DENSITY ARTERIAL
NO. OF TRAFFIC LANES: 4
NO. OF PARKING LANES: 0
STRUCTURAL DESIGN: 9.1.1
R VALUE: 22
ADT (Current Year) (1999): 13,500
ADT (Future Year) (2019): 21,300
HCADT (Future Year) (2019): 7.5%
CESALS - 20 YEAR CUMULATIVE: 5,585,000

GROSS LENGTH: 1609.000 m 1.609 km
BRIDGE LENGTH: 0 m 0 km
EXCEPTION LENGTH: 0 m 0 km
NET LENGTH: 1609.000 m 1.609 km
DESIGN SPEED: 80 km/h EB HWY 96 STA. 5+351.000 TO STA. 5+515.443
90 km/h EB HWY 96 STA. 5+515.443 TO STA. 6+959.260
BASED ON: STOPPING SIGHT DISTANCE
HEIGHT OF EYE: 1070 mm HEIGHT OF OBJECT: 150 mm

PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY



PROJECT LOCATION
COUNTY RAMSEY
METRO DIVISION



MINN. PROJ. NO.

GOVERNING SPECIFICATIONS

THE 1995 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION
"STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION" SHALL GOVERN.

INDEX	
NO.	SHEET DESCRIPTION
SHEET NO.	
SHEET DESCRIPTION	
1	TITLE SHEET
2-3	TYPICAL SECTIONS
4-6	ALIGNMENT PLAN AND TABULATION
7-14	PLAN AND PROFILE SHEETS
15	TABULATION

FOR R/W PLAN ONLY
NOT FOR CONSTRUCTION

THIS PLAN CONTAINS 15 SHEETS.

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.

ENGR. Reg. No. Date

ESHI

SHORT ELLIOTT HENDRICKSON INC.

Approved: Daniel G. Schacht 10/20/99
RAMSEY COUNTY DIRECTOR OF PUBLIC WORKS

Approved: Paul H. H. 11/22/99
SEAL OF THE RAMSEY COUNTY BOARD
CO. 57, 1st CD

Approved: James E. Dean 10/2/99
RAMSEY COUNTY PROJECT MANAGER

Approved: Mark A. 10/04/99
CITY OF SHOREVIEW

Approved: Harold J. Urban 9/29/99
CITY OF VADNAIS HEIGHTS

Approved: Paul H. H. 10/27/99
CITY OF NORTH OAKS

Approved for State Aid Division: Paul H. H. 11/14/99
APPROVED FOR STATE AID FUNDING STATE AID ENGINEER

Recommended for Approval: Robb Ungert 10/20/99
METRO - ASSISTANT DIVISION ENGINEER - STATE AID
REVIEWED FOR COMPLIANCE WITH STATE AID RULES/POLICY

I HEREBY CERTIFY THAT THE FINAL REVISIONS, IF ANY, OF THIS PLAN
WERE MADE BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A
DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE
OF MINNESOTA.

DATE 10/17/99 REG. NO. 15012

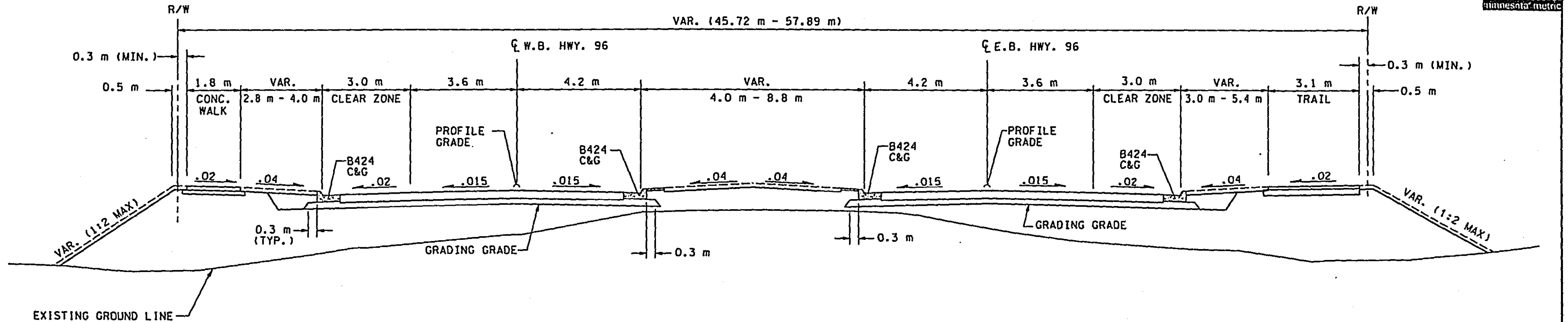
STATE AID PROJ. NO. 62-696-17 CTB SHEET NO. 1 OF 15 SHEETS

28-167

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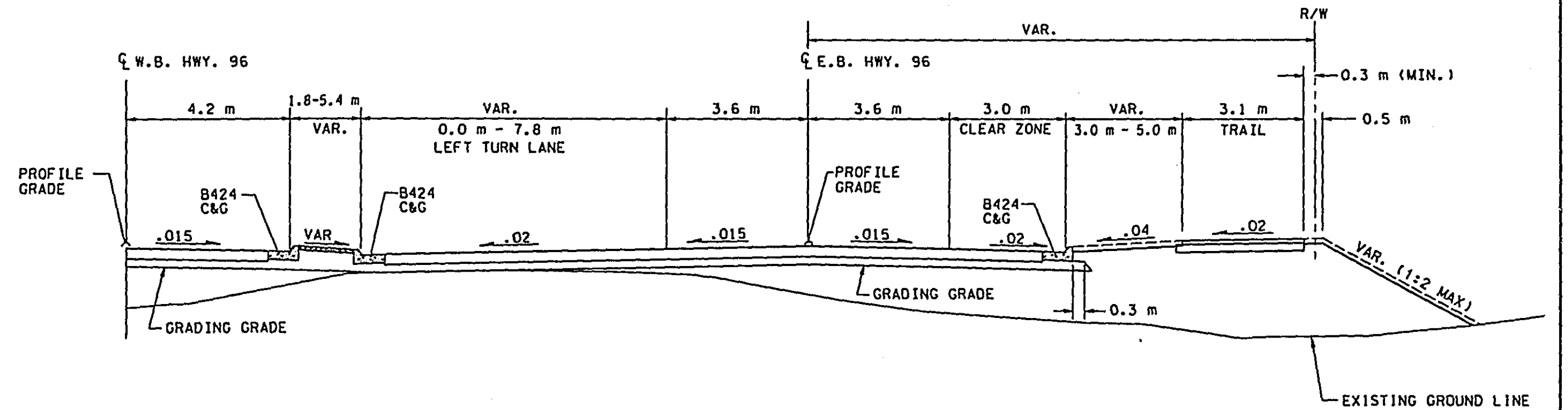
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HWY 96
STA. 5+469.00 - STA. 6+959.26

FOR R/W PLAN ONLY
NOT FOR CONSTRUCTION



HWY 96
TURN LANE SECTION

NOTES:
ALL CROSS SLOPES ARE IN m/m.

28-167

HWY 96
AND TURN LANES

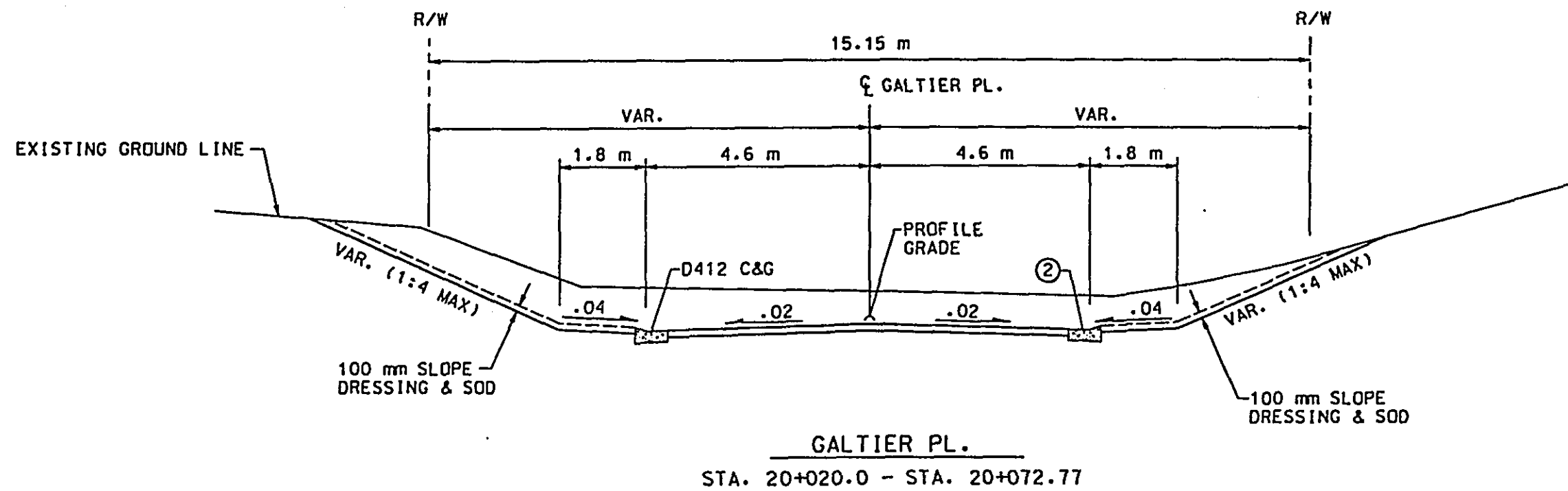
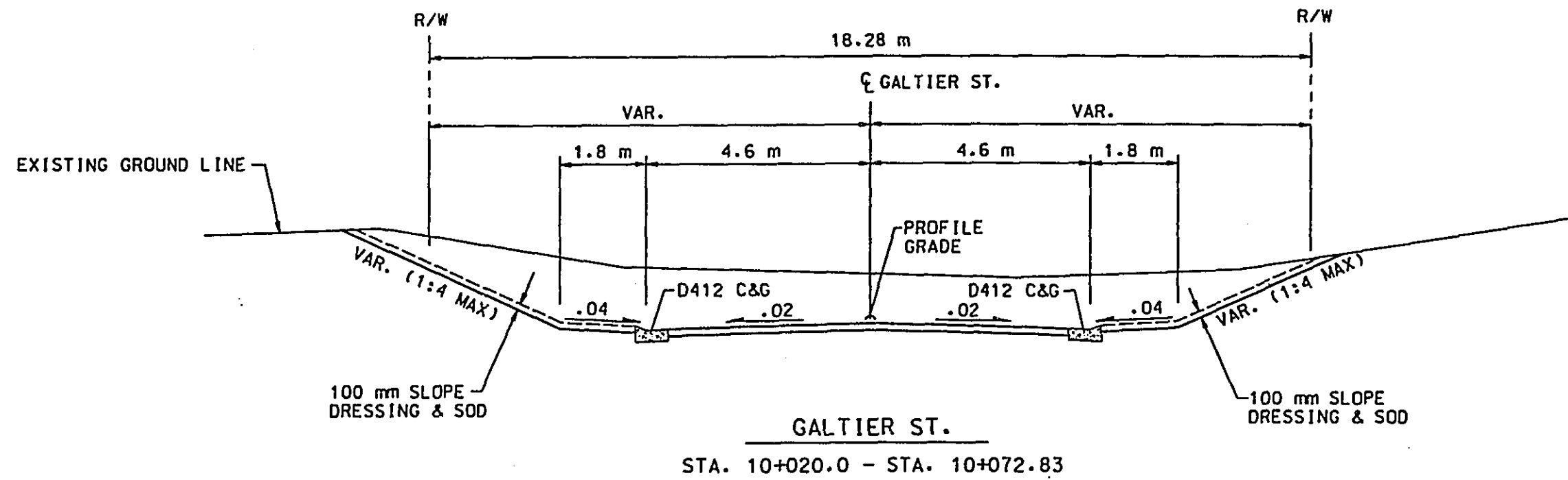
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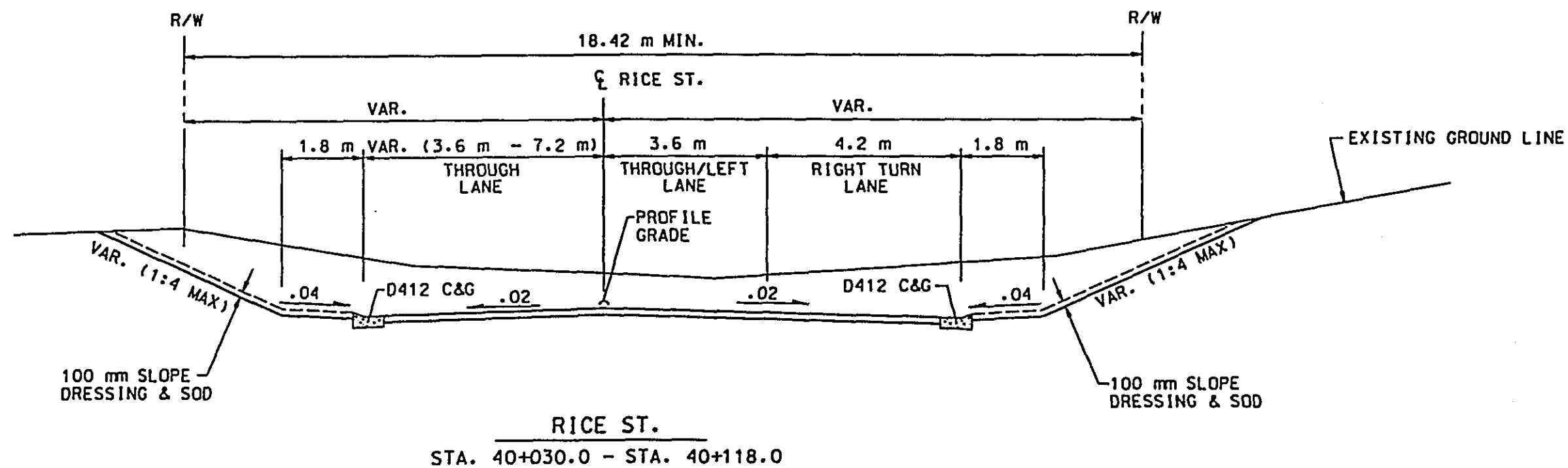
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NOT FOR CONSTRUCTION

- NOTES:
- 1 ALL CROSS SLOPES ARE IN m/m.
 - ② D412 C&G STA. 20+024.84 - STA. 20+047.49
B618 C&G STA. 20+047.49 - STA. 20+073.77



28-167

GALTIER ST.
GALTIER PL.
RICE ST.

DRAWING STATUS

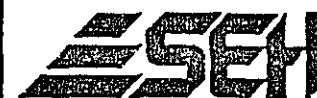
DRAWN

DESIGN

CHECKED

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.

Date: _____ Reg. No. _____



RAMSEY COUNTY
HIGHWAY 96
S.A.P. 62-696-17

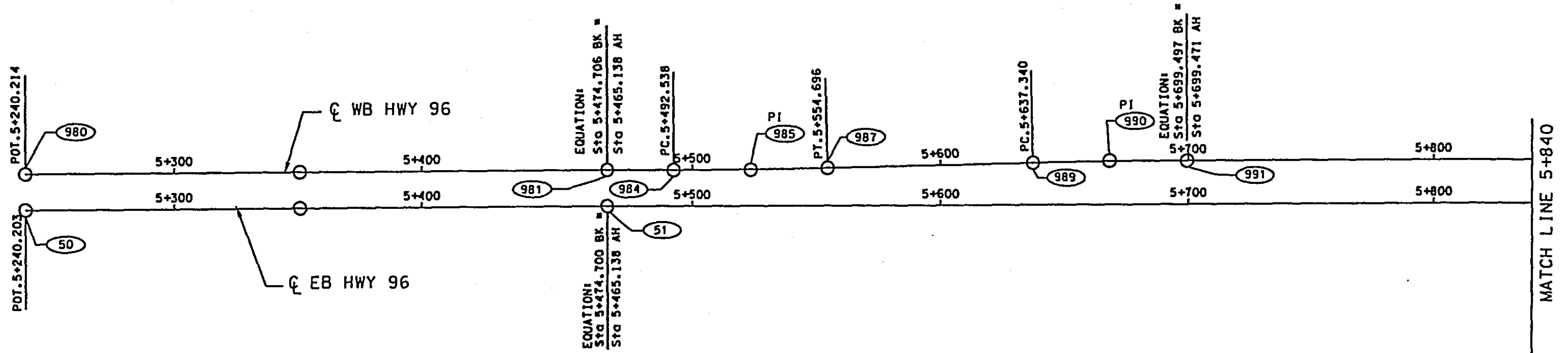
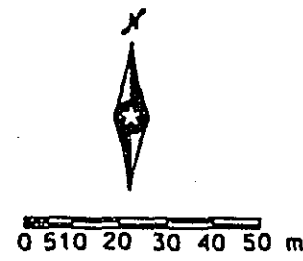
TYPICAL SECTIONS

FILE NO.
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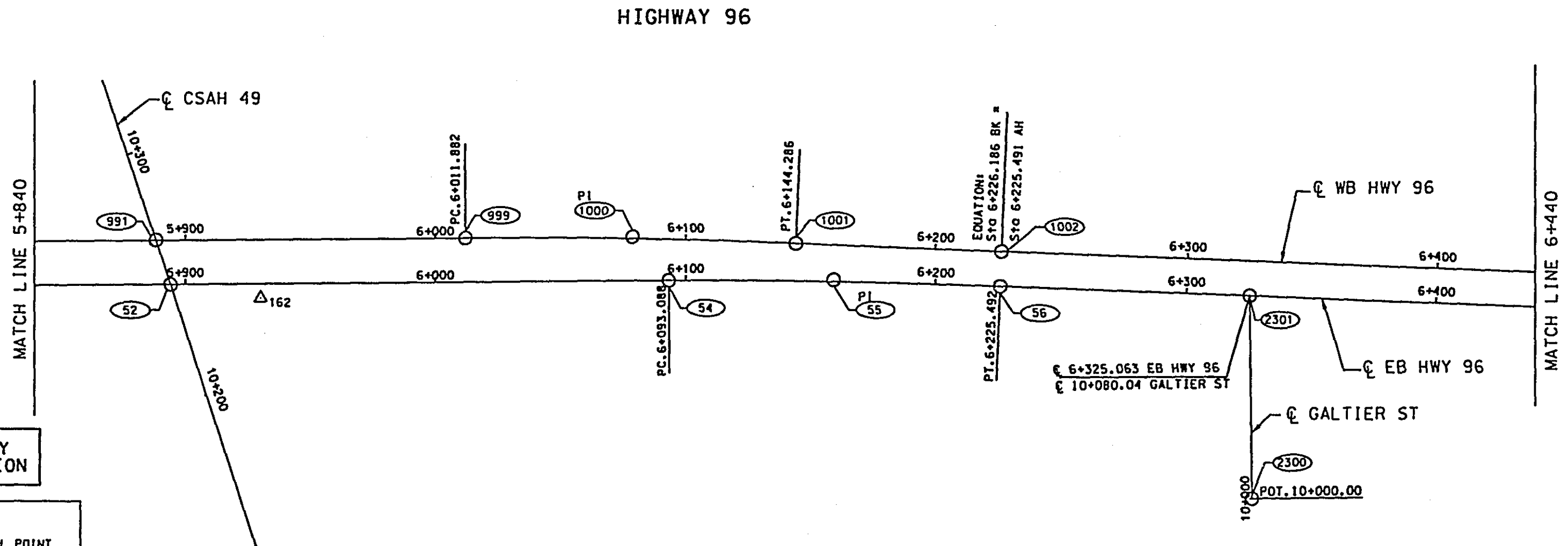
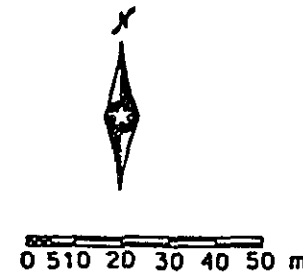
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11/35/08



17 NOV 1999



FOR R/W PLAN ONLY
NOT FOR CONSTRUCTION

- LEGEND**
- △ HORIZONTAL CONTROL POINT
 - (XXXX) ALIGNMENT POINT NUMBER

28-167

DRAWING STATUS

DRAWN

DESIGN

CHECKED

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.
Signature: _____ Date: _____
Printed Name: _____ Reg. No. _____



RAMSEY COUNTY
HIGHWAY 96
S.A.P. 62-696-17

**HIGHWAY 96
ALIGNMENT PLAN**

FILE NO.
RAMSEY601.02

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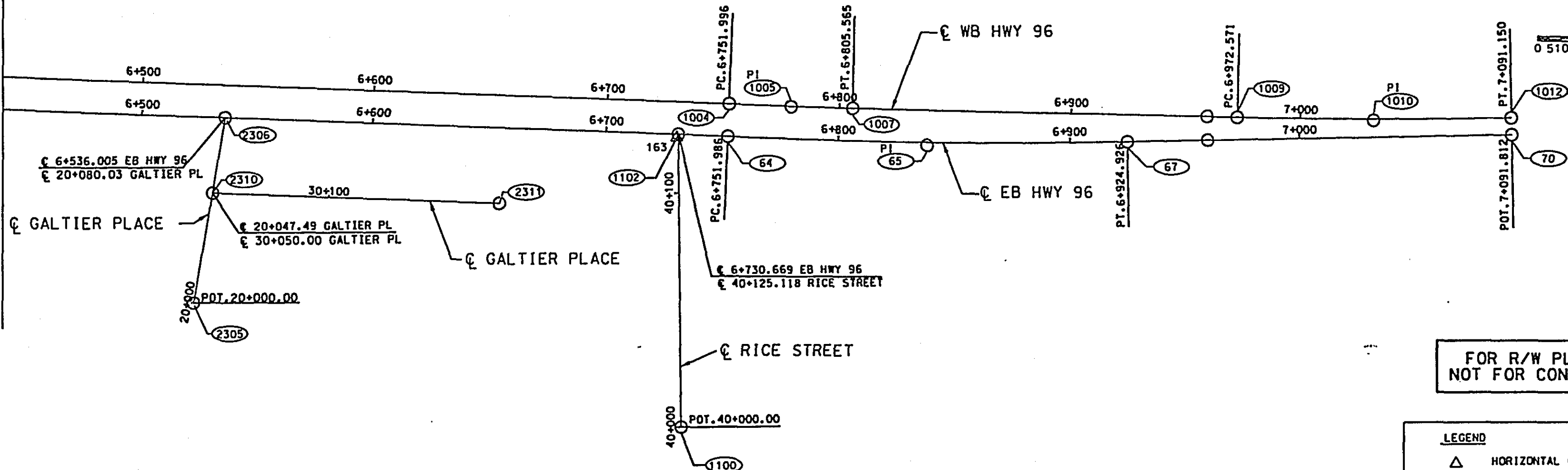
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17 NOV 1999

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MATCH LINE 6+440



FOR R/W PLAN ONLY
NOT FOR CONSTRUCTION

LEGEND

- △ HORIZONTAL CONTROL POINT
- XXXX ALIGNMENT POINT NUMBER

28-167

DRAWING STATUS

DRAWN

DESIGN

CHECKED

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.

Signature: _____ Date: _____
Printed Name: _____ Reg. No. _____



RAMSEY COUNTY
HIGHWAY 96
S.A.P. 62-696-17

HIGHWAY 96
ALIGNMENT PLAN

FILE NO.
RAMSEY9601.02

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11/36/02

17 NOV 1999

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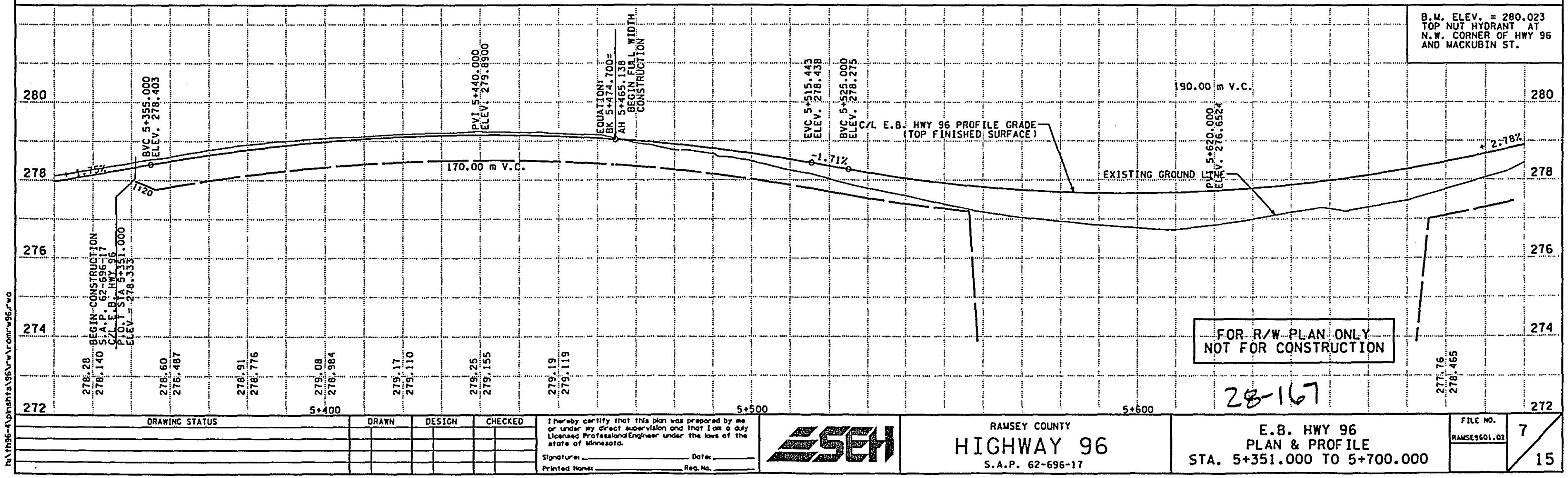
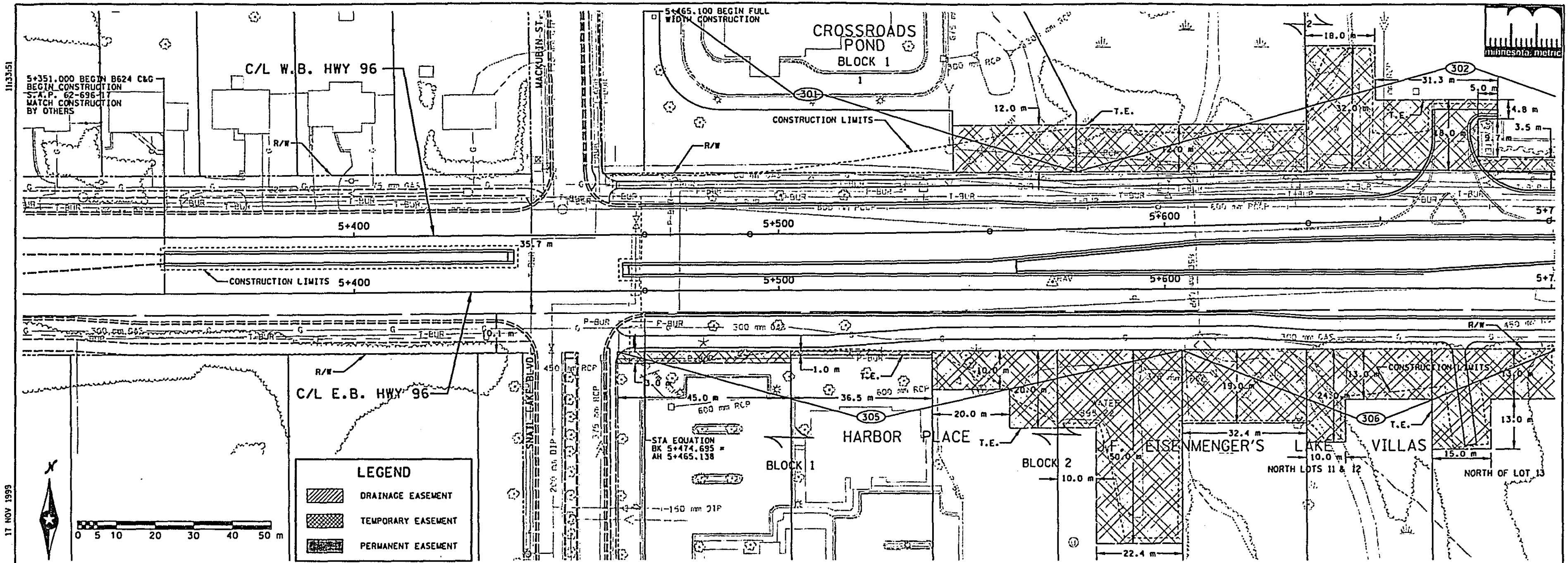
METRIC ALIGNMENT TABULATION									
POINT NO.	POINT	STATION	CURVE DATA				COORDINATES		AZIMUTH
			DELTA	RADIUS	TANGENT	LENGTH	X	Y	
		EB HWY 96							
50	POT	5+240.203					172,697.0770	62,542.4910	
51	POT	STATION EQUATION 5+474.700 (BK)					172,931.5660	62,543.6961	
		5+465.138 (AH)					172,931.5660	62,543.6961	
52	POT	INTERSECTION CSAH 49 & HWY 96 5+893.988					173,360.4101	62,545.8999	
54	PC	6+093.093					173,559.5129	62,546.9231	N 89° 42' 20.0" E
55	PI	6+159.306	2° 31' 43.4" RT	3,000.000	66.213	132.404	173,625.7246	62,547.2634	PI
56	CC						173,574.9299	59,546.9627	
57	PT	6+225.497					173,691.8867	62,544.6820	S 87° 45' 56.6" E
64	PC	6+751.991					174,217.9804	62,524.1564	S 87° 45' 56.6" E
65	PI	6+838.485	3° 17' 16.1" LT	3,013.800	86.494	172.941	174,304.4087	62,520.7843	PI
66	CC						174,335.4753	65,535.6652	
67	PT	6+924.931					174,390.8880	62,522.3746	N 88° 56' 47.3" E
70	POT	7+091.817					174,557.7451	62,525.4431	
		WB HWY 96							
980	POT	5+240.214					172,697.0030	62,556.6908	
981	POT	STATION EQUATION 5+474.706 (BK)					172,931.4920	62,558.0959	
		5+465.138 (AH)					172,931.4920	62,558.0959	
984	PC	5+492.538					172,958.8920	62,558.2367	N 89° 42' 20.0" E
985	PI	5+523.618	1° 11' 13.6" LT	3,000.000	31.080	62.158	172,989.9715	62,558.3964	PI
986	CC						172,943.4750	65,558.1971	
987	PT	5+554.696					173,021.0411	62,559.2000	N 88° 31' 06.4" E
989	PC	5+637.340					173,103.6570	62,561.3368	N 88° 31' 06.4" E
990	PI	5+668.420	1° 11' 13.6" RT	3,000.000	31.080	62.158	173,134.7265	62,562.1403	PI
992	CC						173,181.2231	59,562.3397	
991	PT	STATION EQUATION 5+699.497 (BK)					173,165.8061	62,562.3001	N 89° 42' 20.0" E
		5+699.471 (AH)					173,165.8061	62,562.3001	
993	POT	INTERSECTION CSAH 49 & HWY 96 5+888.329					173,354.6614	62,563.2706	
999	PC	6+011.882					173,478.2133	62,563.9055	N 89° 42' 20.0" E
1000	PI	6+078.095	2° 31' 43.4" RT	3,000.000	66.213	132.404	173,544.4250	62,564.2458	PI
1003	CC						173,493.6303	59,563.9452	
1001	PT	6+144.286					173,610.5871	62,561.6645	S 87° 45' 56.6" E
1002	POT	STATION EQUATION 6+226.186 (BK)					173,692.4248	62,558.4716	
		6+225.497 (AH)					173,692.4248	62,558.4716	
1004	PC	6+752.001					174,218.5288	62,537.9455	S 87° 45' 56.6" E
1005	PI	6+778.787	1° 01' 23.2" LT	3,000.000	26.785	53.569	174,245.2938	62,536.9012	PI
1006	CC						174,335.4857	65,535.6648	
1007	PT	6+805.571					174,272.0732	62,536.3350	S 88° 47' 19.8" E
1009	PC	6+972.576					174,439.0413	62,532.8050	S 88° 47' 19.8" E
1010	PI	7+031.873	2° 15' 52.9" LT	3,000.000	59.297	118.579	174,498.3254	62,531.5516	PI
1011	CC						174,502.4537	65,532.1347	
1012	PT	7+091.155					174,557.6127	62,532.6418	N 88° 56' 47.3" E

METRIC ALIGNMENT TABULATION									
POINT NO.	POINT	STATION	CURVE DATA				COORDINATES		AZIMUTH
			DELTA	RADIUS	TANGENT	LENGTH	X	Y	
		GALTIER STREET							
2300	POT	10+000.000					173,792.2670	62,460.7680	
2301	POT	ξ - ξ 10+080.037					173,791.3822	62,540.8002	
		GALTIER PLACE							
2305	POT	20+000.000					173,988.5220	62,453.7190	
2306	POT	ξ - ξ 20+080.029					174,002.1638	62,532.5765	
		GALTIER PLACE							
2310	POT	ξ - ξ 30+050.000					173,996.6172	62,500.5140	
2311	POT	30+173.454					174,119.9820	62,495.8310	
		RICE STREET							
1100	POT	40+000.000					174,197.9390	62,399.8750	
1102	POT	ξ - ξ 40+125.119					174,196.6803	62,524.9874	

HORIZONTAL CONTROL POINTS			
POINT NO.	HORIZONTAL CONTROL POINT	COORDINATES	
		X	Y
161		172,596.9790	62,536.3750
162	C&T IRON MON'T SOUTHEAST CORNER SECTION 13	173,396.3608	62,540.4846
163		174,195.9856	62,523.5775

28-167

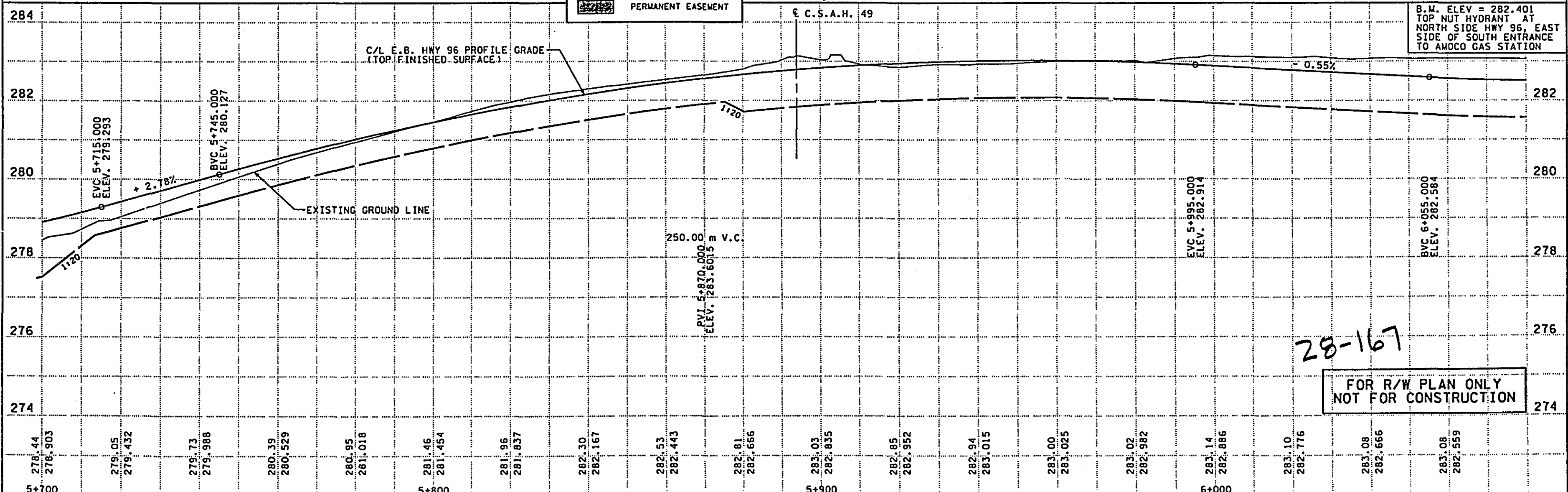
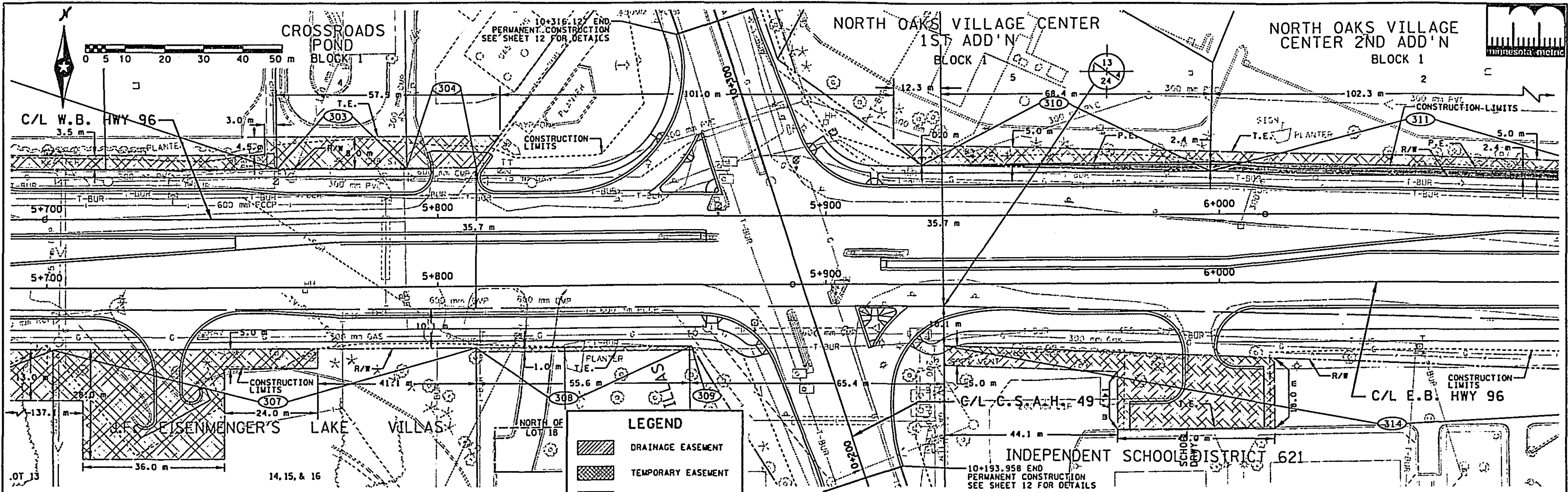
FOR R/W PLAN ONLY
NOT FOR CONSTRUCTION



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17 NOV 1999

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DRAWING STATUS				DRAWN				DESIGN				CHECKED			

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.

Signature: _____ Date: _____

Printed Name: _____ Reg. No. _____

RAMSEY COUNTY

HIGHWAY 96

S.A.P. 62-696-17

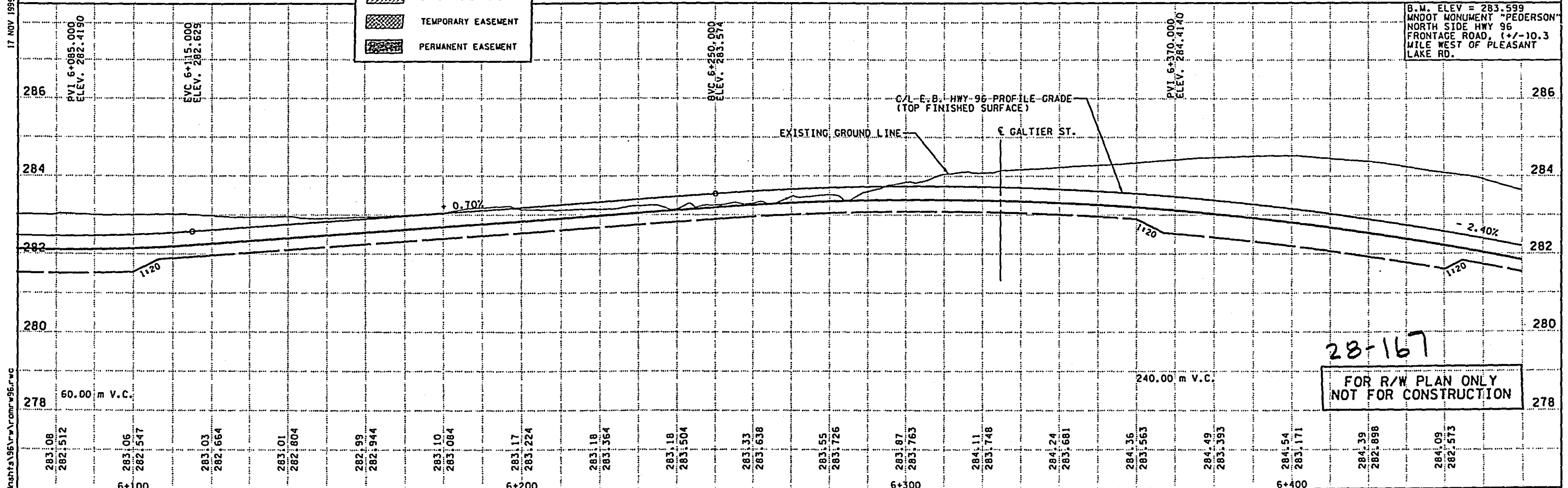
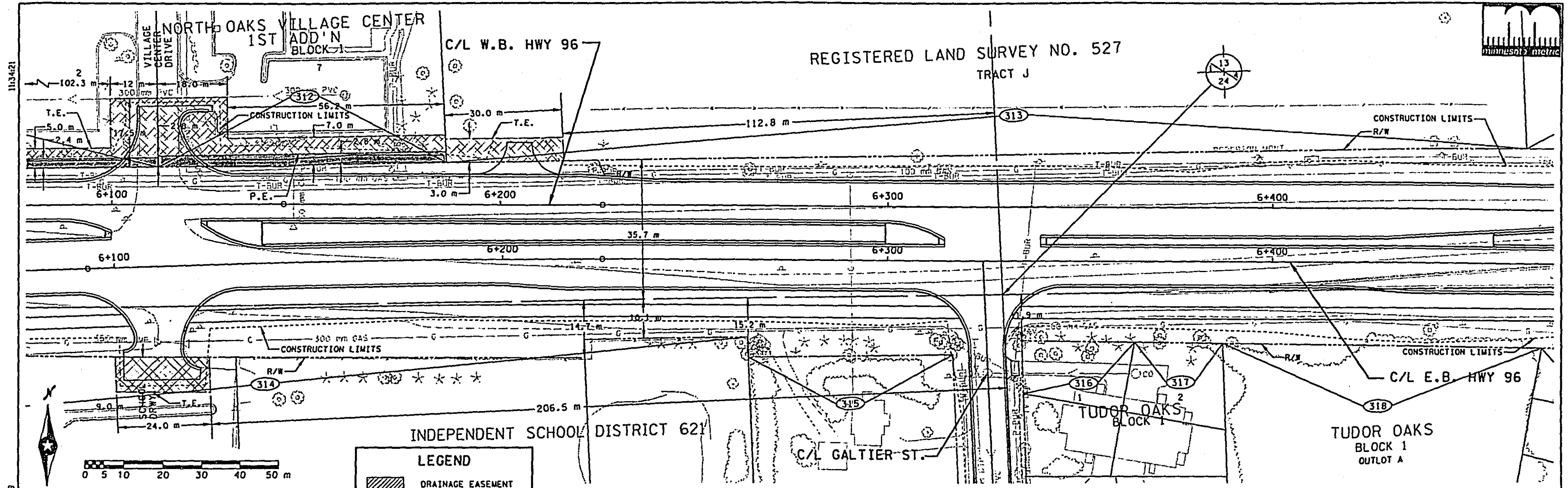
E.B. HWY 96

PLAN & PROFILE

STA. 5+700.000 TO 6+080.000

FILE NO. **8**

15



DRAWING STATUS			DRAWN	DESIGN	CHECKED	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. Signature: _____ Date: _____ Printed Name: _____ Reg. No. _____		RAMSEY COUNTY HIGHWAY 96 S.A.P. 62-696-17	E.B. HWY 96 PLAN & PROFILE STA. 6+080.000 TO 6+460.000	FILE NO.	9 15
										RAISE9601.02	



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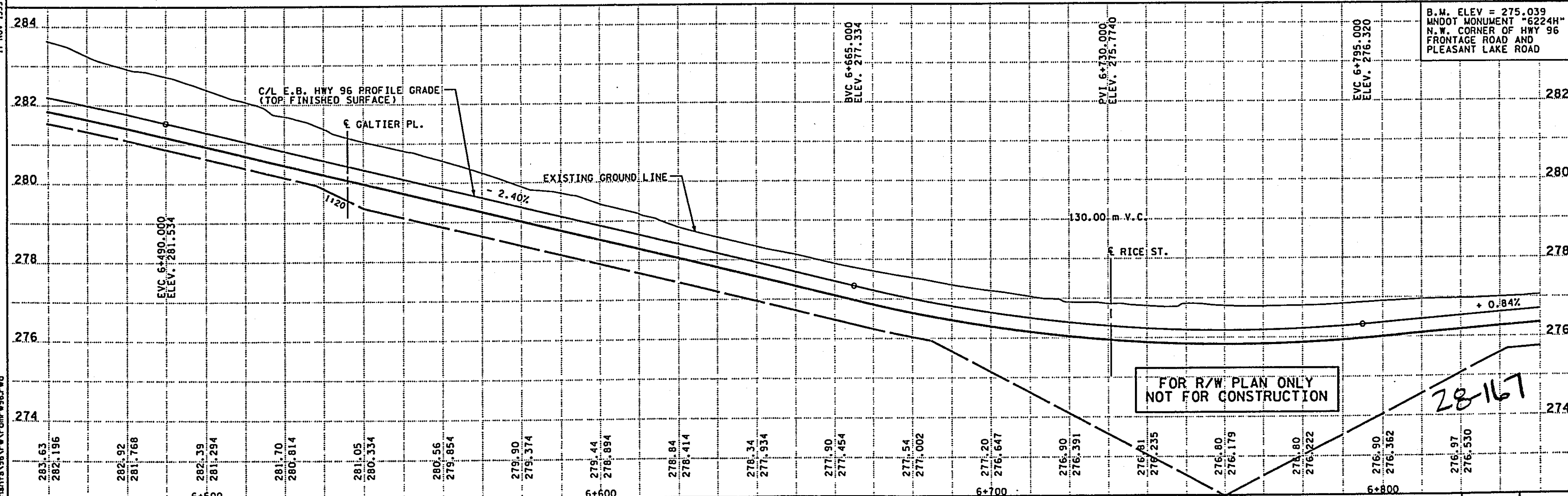
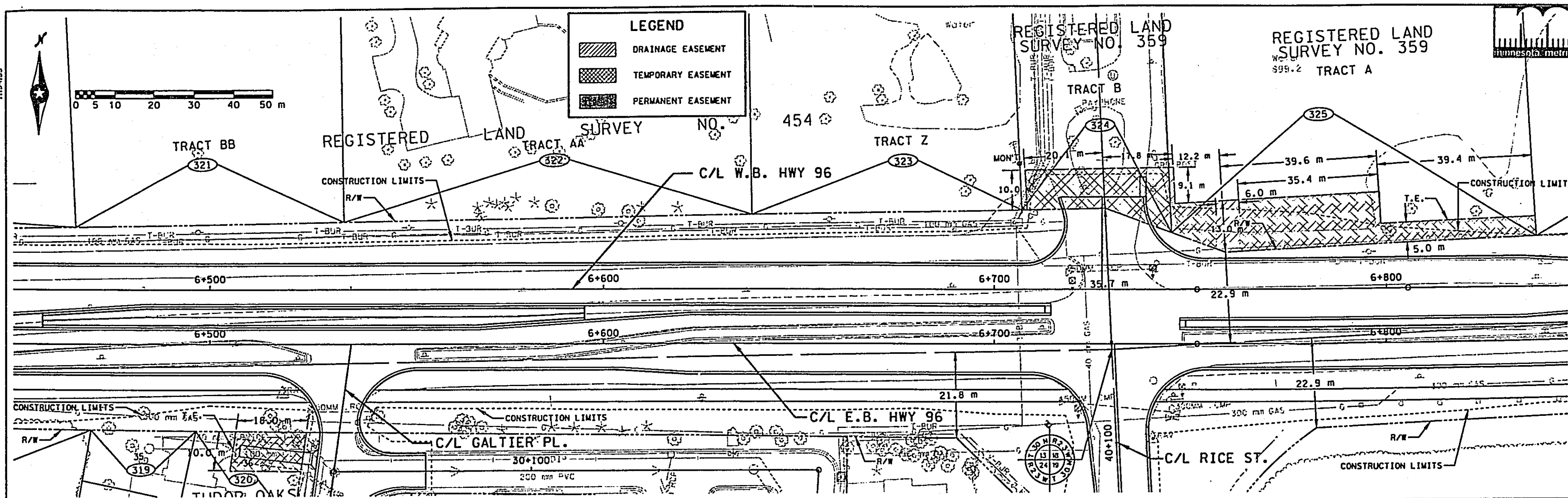
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DRAWING STATUS		DRAWN	DESIGN	CHECKED

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.

Signature: _____ Date: _____

Printed Name: _____ Reg. No. _____

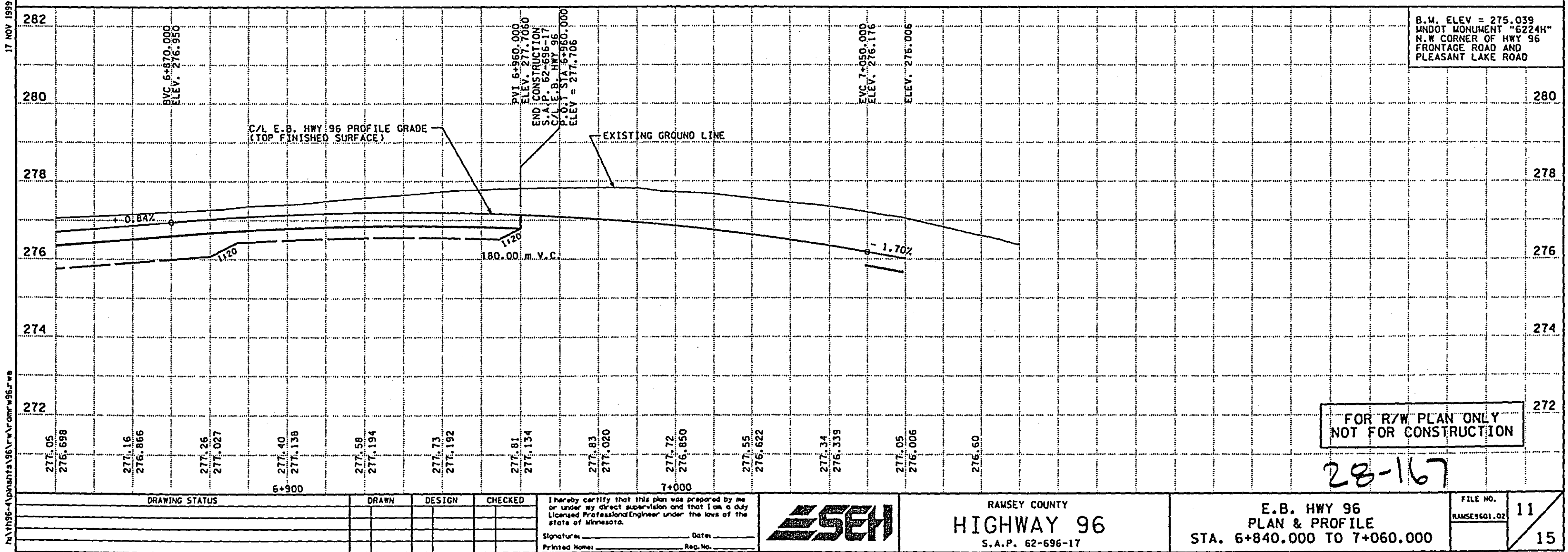
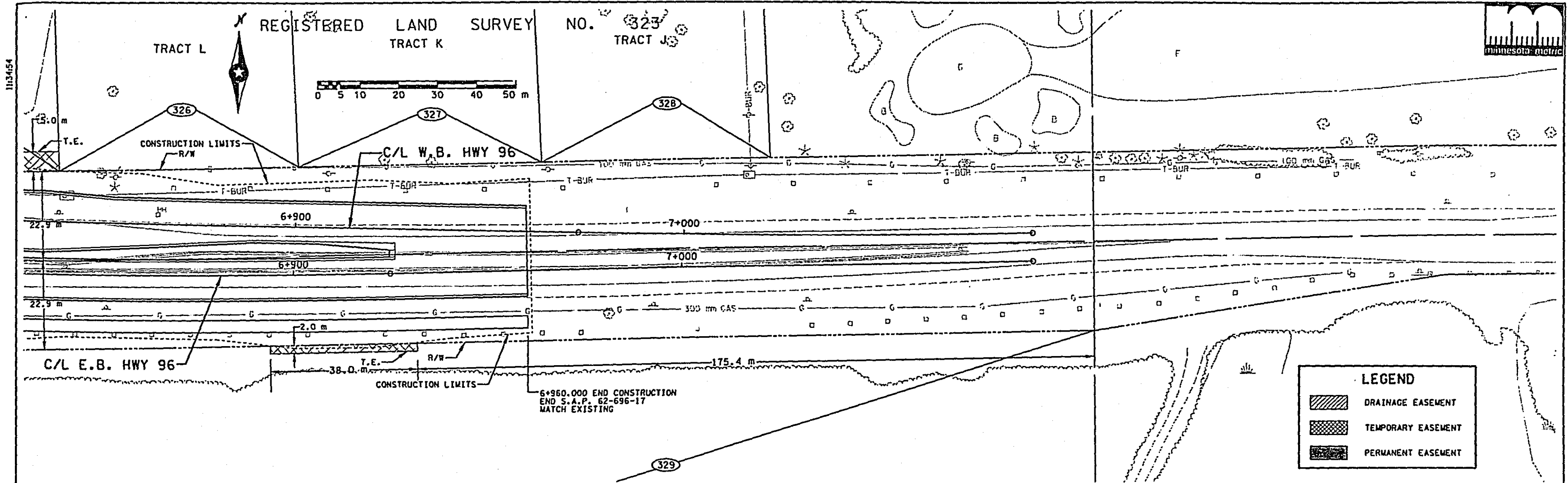


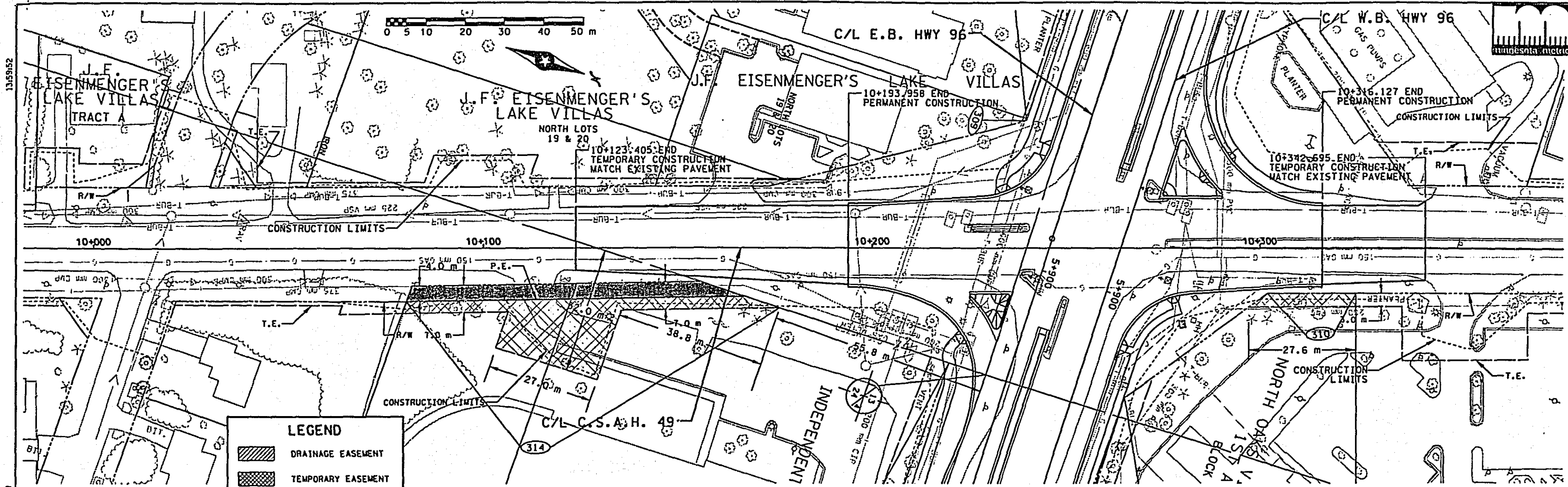
RAMSEY COUNTY
HIGHWAY 96
S.A.P. 62-696-17

E.B. HWY 96
PLAN & PROFILE
STA. 6+460.000 TO 6+840.000

FILE NO.
RAMSE9601.0

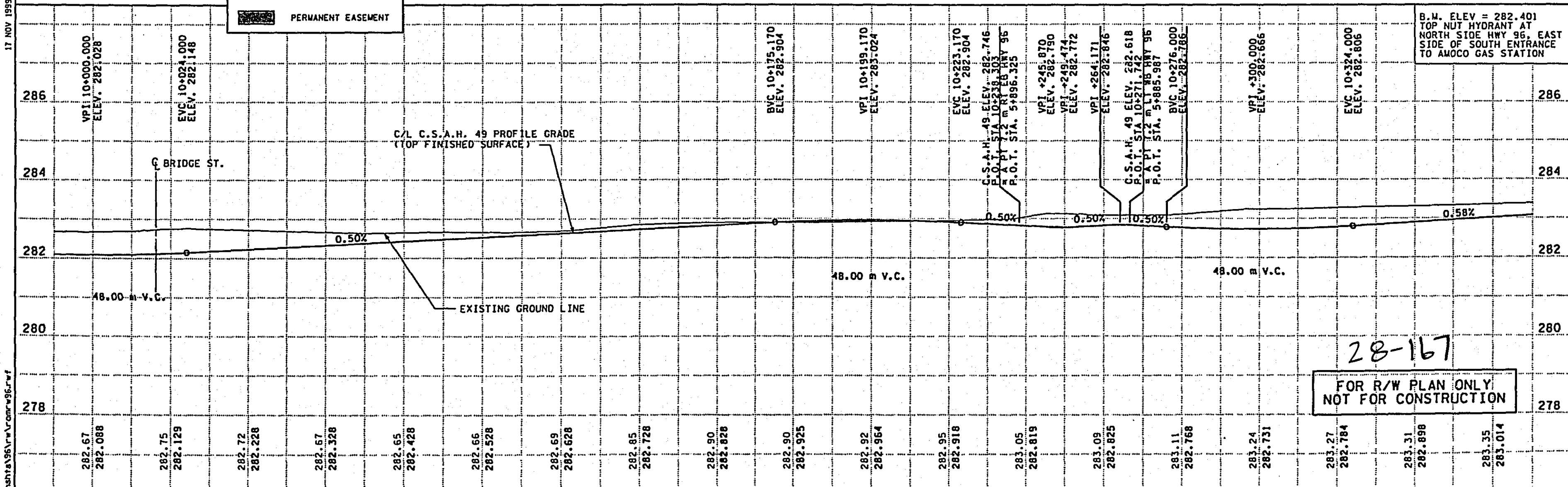
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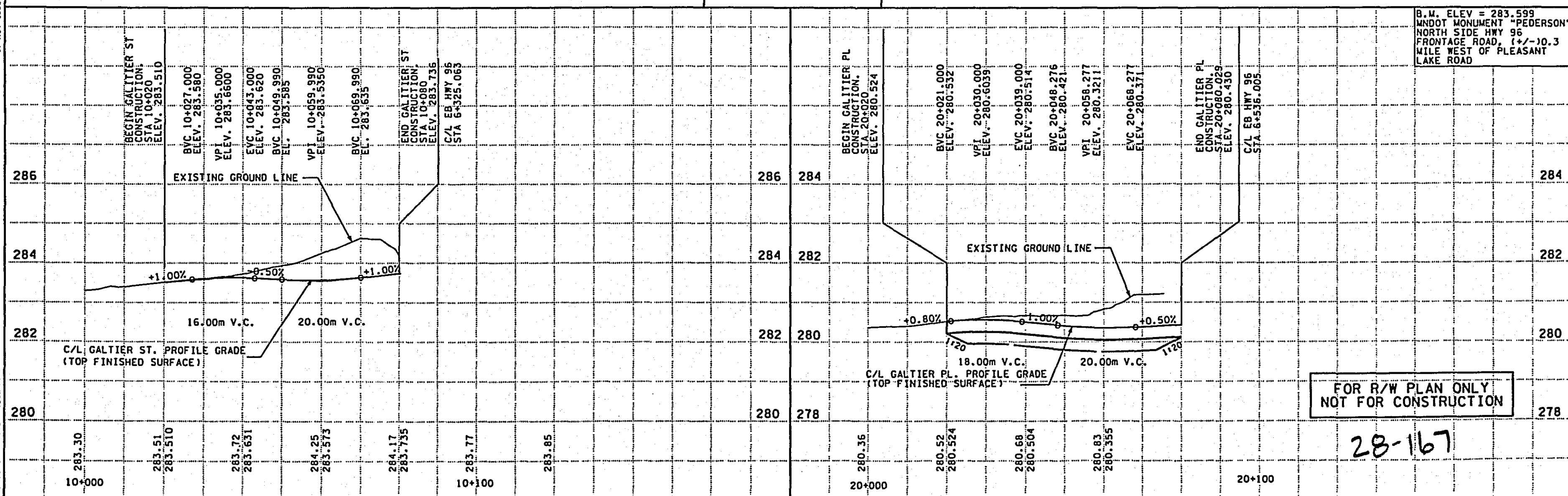
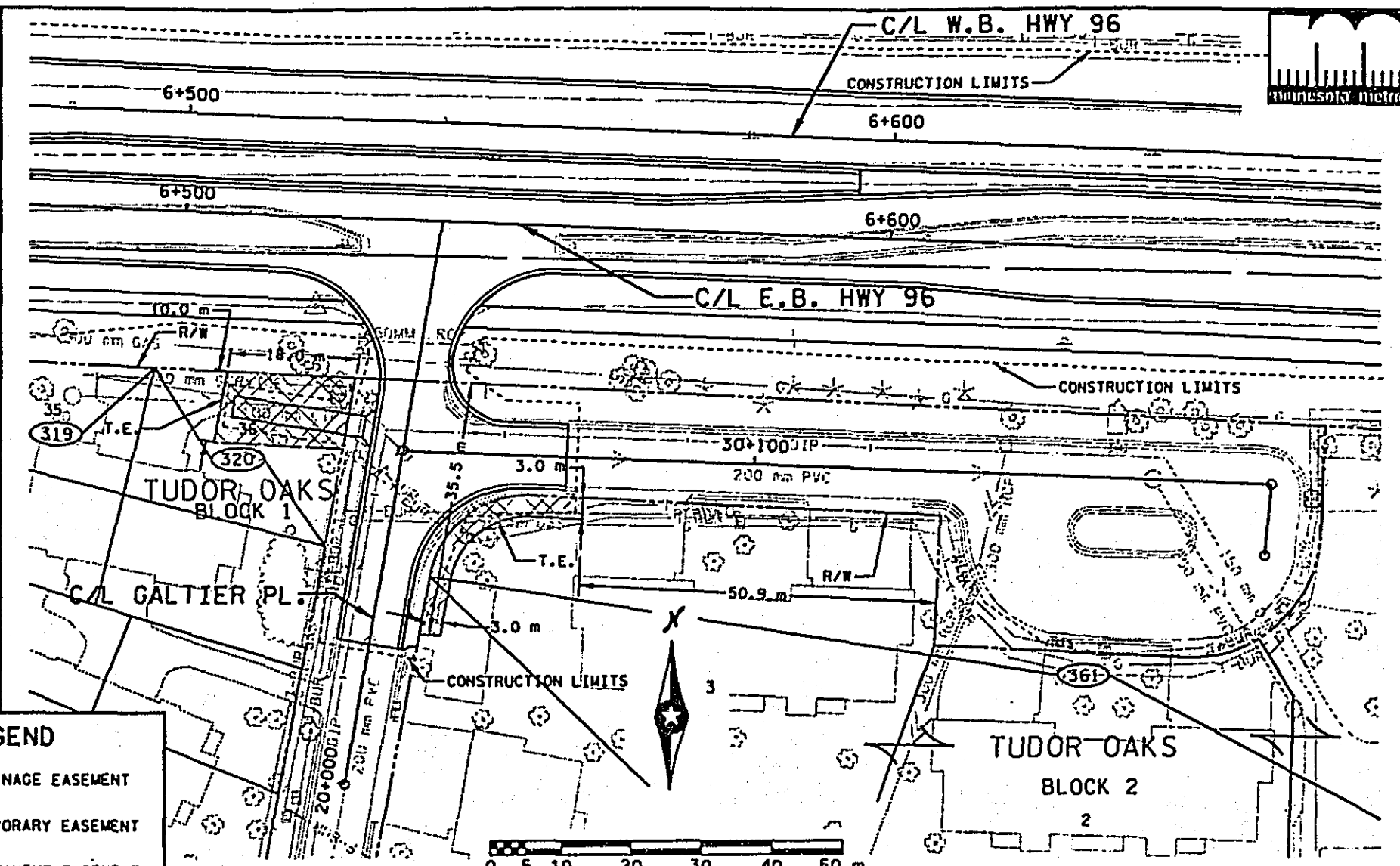
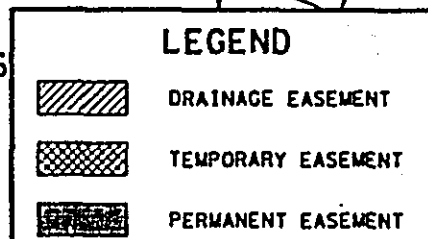


LEGEND

- DRAINAGE EASEMENT
- TEMPORARY EASEMENT
- PERMANENT EASEMENT



DRAWING STATUS			DRAWN	DESIGN	CHECKED	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. Signature: _____ Date: _____ Printed Name: _____ Reg. No. _____		RAMSEY COUNTY HIGHWAY 96 S.A.P. 62-696-17	C.S.A.H. 49 PLAN & PROFILE STA. 9+990.000 TO 10+370.000	FILE NO.	12
										RAMSEY 601.02	15



DRAWING STATUS	DRAWN	DESIGN	CHECKED

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Signature _____ Date _____

Printed Name _____ Reg. No. _____



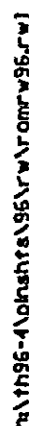
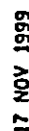
RAMSEY COUNTY
HIGHWAY 96
S.A.P. 62-696-17

GALTIER ST. / GALTIER PL.
PLAN & PROFILE

FILE NO.
RAMSE9601.02

13

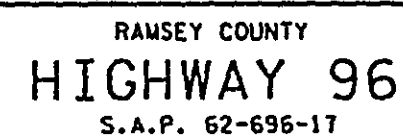
19



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.

Signatures: _____ Date: _____

Printed Name: _____ Reg. No. _____



RICE ST.
PLAN & PROFILE
STA 40+030.000 TO 40+125.119

FILE NO.	14
RAMSE9601.02	15

17 NOV 1999

[illegible]

28-16-

DRAWING STATUS	DRAWN	DESIGN	CHECKED	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. Signature: _____ Date: _____ Printed Name: _____ Reg. No. _____		RAMSEY COUNTY HIGHWAY 96 S.A.P. 62-696-17	RIGHT OF WAY TABULATION	FILE NO. RAMSEY601.02	15 15