

PLAN

DATE: _____

BY: _____

REVISIONS:

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

13. _____

14. _____

15. _____

16. _____

17. _____

18. _____

19. _____

20. _____

21. _____

22. _____

23. _____

24. _____

25. _____

26. _____

27. _____

28. _____

29. _____

30. _____

31. _____

32. _____

33. _____

34. _____

35. _____

36. _____

37. _____

38. _____

39. _____

40. _____

41. _____

42. _____

43. _____

44. _____

45. _____

46. _____

47. _____

48. _____

49. _____

50. _____

51. _____

52. _____

53. _____

54. _____

55. _____

56. _____

57. _____

58. _____

59. _____

60. _____

61. _____

62. _____

63. _____

64. _____

65. _____

66. _____

67. _____

68. _____

69. _____

70. _____

71. _____

72. _____

73. _____

74. _____

75. _____

76. _____

77. _____

78. _____

79. _____

80. _____

81. _____

82. _____

83. _____

84. _____

85. _____

86. _____

87. _____

88. _____

89. _____

90. _____

91. _____

92. _____

93. _____

94. _____

95. _____

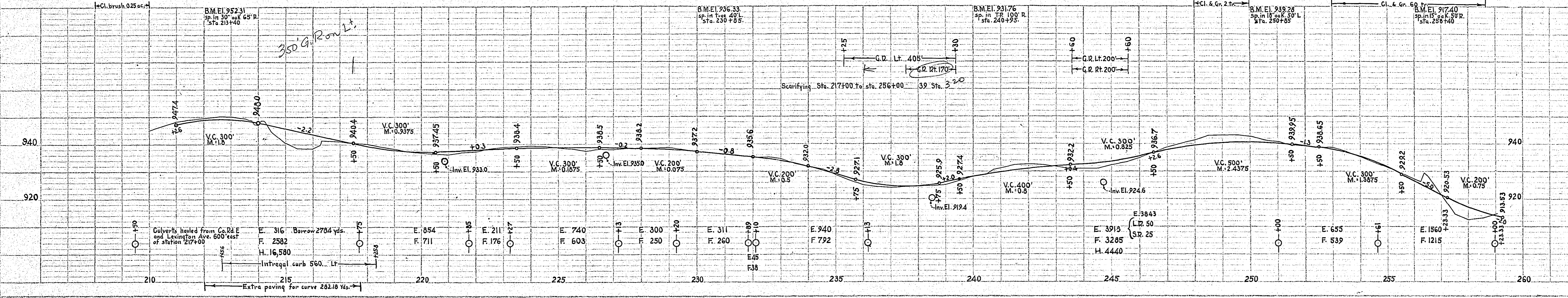
96. _____

97. _____

98. _____

99. _____

100. _____



ESTIMATED QUANTITIES
STA. 212+76.6 TO STA. 259+03.1

Item	Units	Quantity
Clearing brush	Acres	0.25
Grading	Sq. Yds.	62
Exc.	Cu. Yds.	12,538
Fill	Cu. Yds.	39
Sub.	Cu. Yds.	21,073
Install C.M. 15"	Lin. Ft.	160
Form old curb	Sq. Yds.	150
Rep. old curb	Sq. Yds.	262
Shoulders Earth	Sq. Yds.	6,152
Shoulders Earth	Sq. Yds.	12,676
Integr. curb 4"	Lin. Ft.	580
Integr. curb 3"	Lin. Ft.	172
Guard rail Cable	100' Sps.	278
Painting & seeding	100' Sps.	16,396
Flumes, filed joint	Each	13
Guard rail anchor blocks	Each	39
Scarifying	Sq. Yds.	39

PROFILE

DATE: _____

BY: _____

REVISIONS:

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

13. _____

14. _____

15. _____

16. _____

17. _____

18. _____

19. _____

20. _____

21. _____

22. _____

23. _____

24. _____

25. _____

26. _____

27. _____

28. _____

29. _____

30. _____

31. _____

32. _____

33. _____

34. _____

35. _____

36. _____

37. _____

38. _____

39. _____

40. _____

41. _____

42. _____

43. _____

44. _____

45. _____

46. _____

47. _____

48. _____

49. _____

50. _____

51. _____

52. _____

53. _____

54. _____

55. _____

56. _____

57. _____

58. _____

59. _____

60. _____

61. _____

62. _____

63. _____

64. _____

65. _____

66. _____

67. _____

68. _____

69. _____

70. _____

71. _____

72. _____

73. _____

74. _____

75. _____

76. _____

77. _____

78. _____

79. _____

80. _____

81. _____

82. _____

83. _____

84. _____

85. _____

86. _____

87. _____

88. _____

89. _____

90. _____

91. _____

92. _____

93. _____

94. _____

95. _____

96. _____

97. _____

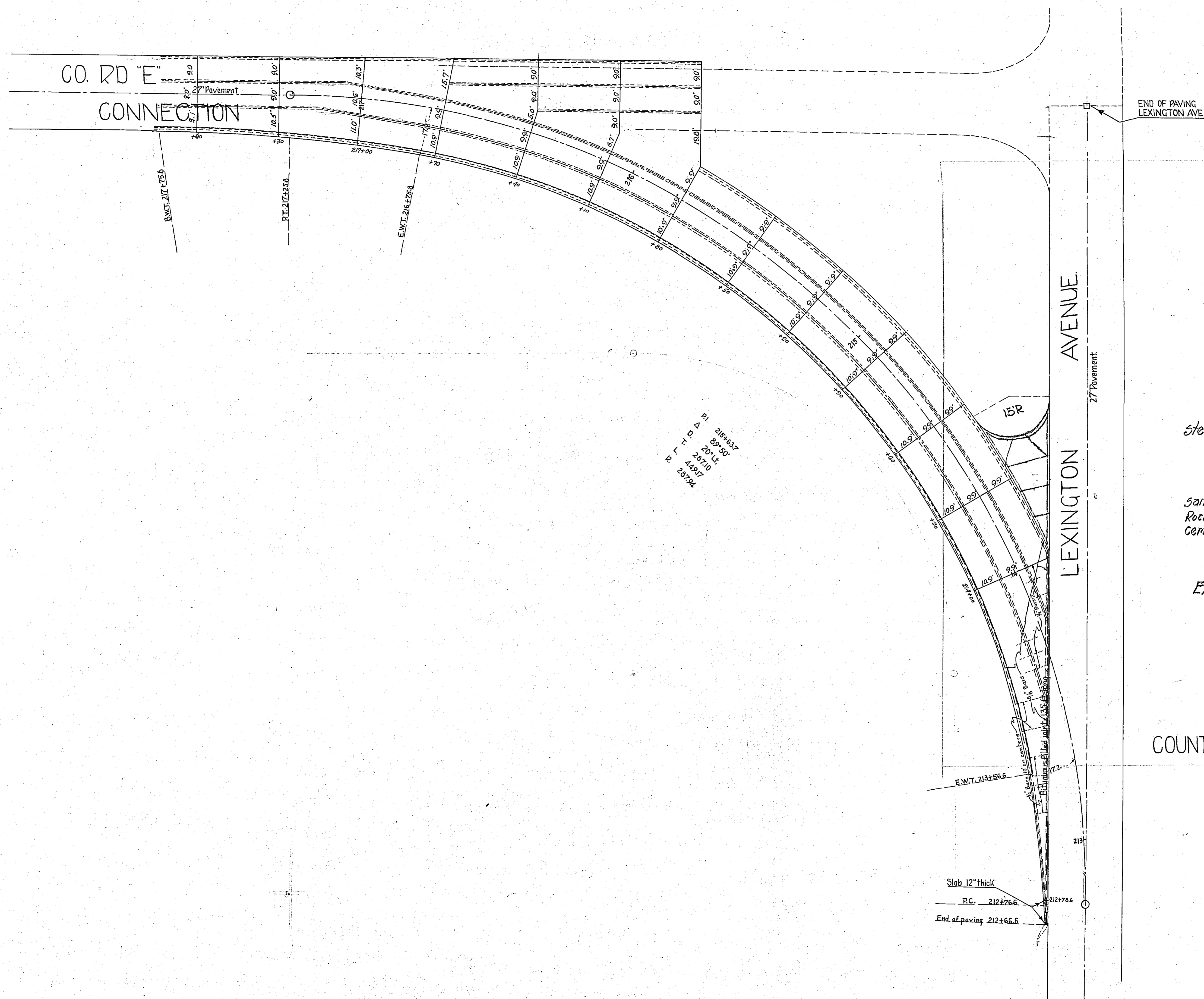
98. _____

99. _____

100. _____

PLATE 2 - PLAN - PROFILE - P. P. & R. E. STANDARD
KEMPPEL & GIBER CO., NEW YORK

Co Rd E 4802



JOB-52-27
BILL OF MATL.
 steel- 2 pcs 5/8" φ 50' lg.
 1 " " " 30' lg.
 3 " " " 10' " "
 1 " " " 5' " "
 sand- 6 yds
 Rock- 10 yds
 cement- 70 sax
 54.5 sq.yds.
 Exc-4) cu.yds

DETAIL OF INTERSECTION
 COUNTY RD. 'E' AT LEXINGTON AVE.
 RAMSEY CO. PROJ. NO. 26-07
 SCALE 1" = 20'

PL. 215427
 80'±
 20'±
 149'±
 R. 23724

Slab 12" thick
 P.C. 212+76.6
 End of paving 212+66.6

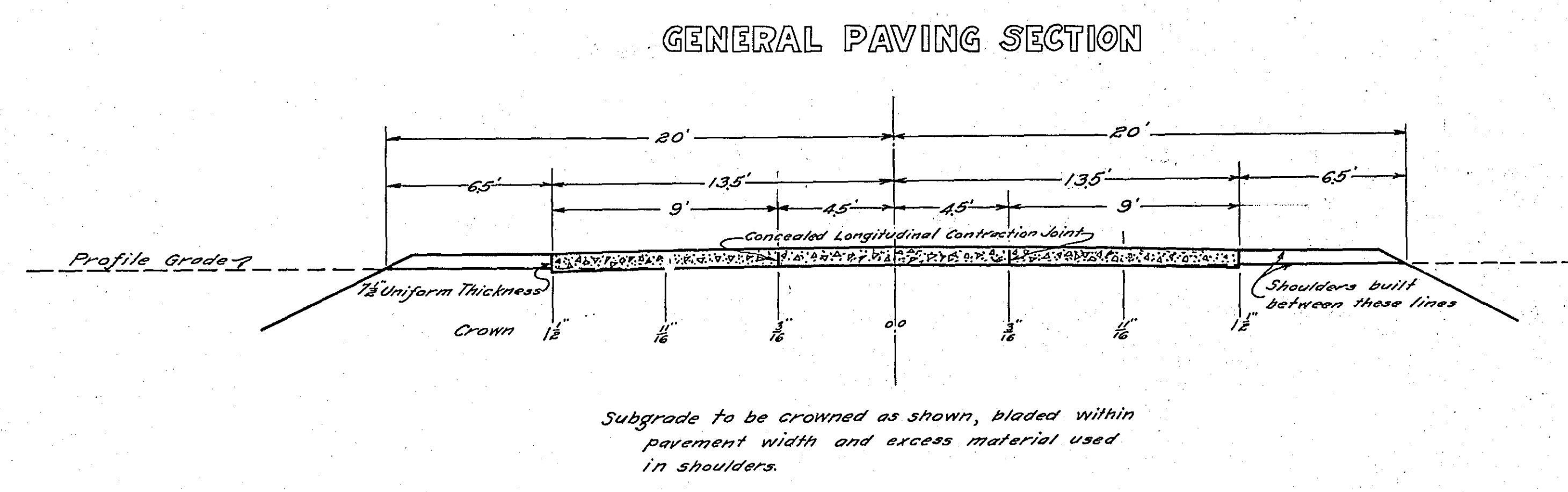
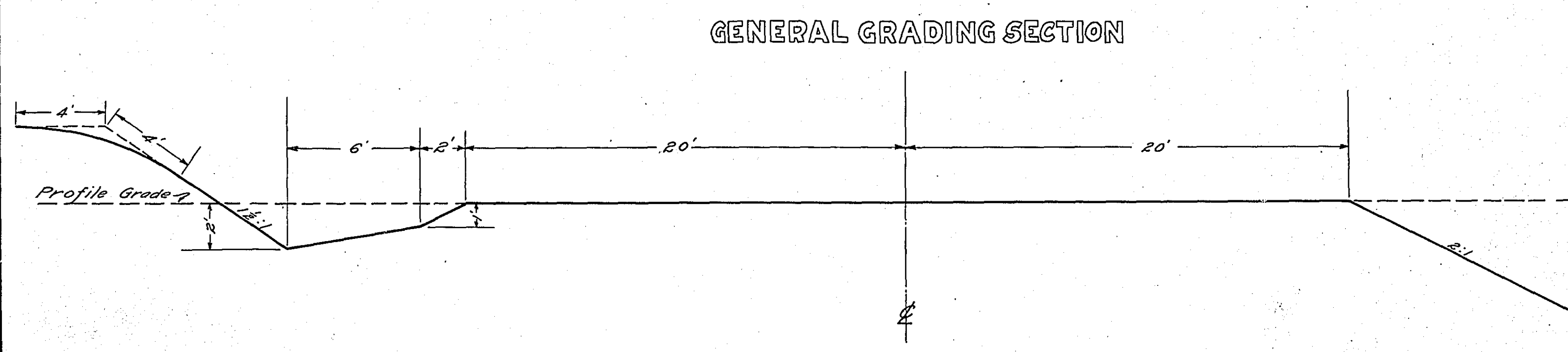
M.W.C.

STATEMENT OF ESTIMATED QUANTITIES AND COSTS.

ITEM	UNIT	MILE	MILE	MILE	MILE	MILE	MILE	MILE	MILE	MILE	TOTAL ESTIMATED QUANTITIES	ESTIMATED UNIT PRICES	AMOUNTS	TOTALS
		Sta. 212480 to Sta. 212510	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.				
1	Clearing	Acres									62			
2	Clearing	Trees	62											
3	Clearing Brush	Acres	0.25								0.25			
4	Grubbing	Acres												
5	Grubbing	Trees	62								62			
6	Excavation - Earth	Cu. Yd.	12559								12559			
7	Excavation - Loose Rock	Cu. Yd.	50								50			
8	Excavation - Solid Rock	Cu. Yd.	25								25			
9	Excavation - Overhaul	Cu. Yd.	21020								21020			
10	Special Plowing	Lin. Ft.												
11	Special Excavation	Cu. Yd.												
12	Hand Ditching	Cu. Yd.												
13	Tile Drain	in. Lin. Ft.												
14	Tile Drain	in. Lin. Ft.												
15	Tile Drain	in. Lin. Ft.												
16	Tile Outlet Headwalls	Headwall												
17	Porous Backfill Material	Cu. Yd.												
18	Stone Drains	Lin. Ft.												
19	Stone Rip Rap	Cu. Yd.												
20	Headwall Rip Rap	Cu. Yd. Mile												
21	Concrete End Walls	Cu. Yd.												
22	Install and Haul 15" C. M.	Lin. Ft.	140								140			
23	Install and Haul " C. M.	Lin. Ft.												
24	Install	Lin. Ft.												
25	Install	Lin. Ft.												
26	Install	Lin. Ft.												
27	Install	Lin. Ft.												
28	Install 18" P ₃	Lin. Ft.	232								232			
29	Install " P ₁	Lin. Ft.												
30	P ₃ Culvert Haul	Ton Miles	10.52								10.52			
31	Remove Old Culvert	Lin. Ft.	160								160			
32	Replace Old Culvert	Lin. Ft.	24								24			
33	Scarifying	Sq. Yds.	39								39			
TOTAL ESTIMATED COST OF GRADING (IN 'TOTALS' COLUMN)														\$ 4949.02
34	C. M. Culv. Material 15"	Lin. Ft.	140								140			
35	C. M. Culv. Material "	Lin. Ft.												
36	Culv. Material "	Lin. Ft.												
37	Culv. Material "	Lin. Ft.												
38	Culv. Material " C. M.	Lin. Ft.												
39	Culv. Material "	Lin. Ft.												
40	Culv. Material "	Lin. Ft.												
41	P ₃ Culv. Material 18"	Lin. Ft.	232								232			
42	P ₁ Culv. Material "	Lin. Ft.												
TOTAL ESTIMATED COST OF PORTABLE CULVERT MATERIAL (IN 'TOTALS' COLUMN)														\$ 614.76
43	Gravel Pit Stripping	Cu. Yd.												
44	Screening	Cu. Yd.												
45	Load & Haul - 0 to 1/2 Mile	Cu. Yd.												
46	Load & Haul - 1/2 to 1 Mile	Cu. Yd.												
47	Load & Haul - 1 Mile Point	Cu. Yd.												
48	Additional Haul Beyond 1 Mi.	Cu. Yd. Mile												
49	Shaping & Compacting	Man Hour												
50	Shaping & Compacting	Man & Team Hour												
51														
TOTAL ESTIMATED COST OF GRAVEL HAUL (IN 'TOTALS' COLUMN)														
52	Gravel Material F. O. B. Pit	Cu. Yd.												
53	Freight (if any)	Cu. Yd.												
54	Unloading from Cars	Cu. Yd.												
TOTAL ESTIMATED COST OF GRAVEL MATERIAL (IN 'TOTALS' COLUMN)														
55	Fine Grading - Exc. & Emb.	Cu. Yd.												
56	Shoulder's - Earth	Sq. Yd.	6129								6129			
57	Bituminous Filled Joint	Lin. Ft.	135								135			
58	Pavement 1CC - 27 FT	Sq. Yd.	12608.25								12608.25			
59	Integral Curb 4" Concrete	Lin. Ft.	560								560			
60	Catch Basin	Complete	1								1			
61	Fir Header 3x10"	Lin. Ft.	112								112			
TOTAL ESTIMATED COST OF PAVEMENT CONSTRUCTION (IN 'TOTALS' COLUMN)														\$ 25993.40
62	Concrete	Cu. Yd.												
63	Reinforcing Steel	Lb.												
64	Structural Steel	Lb.												
65	Excavation - Earth	Cu. Yd.												
66	Excavation - Loose Rock	Cu. Yd.												
67	Excavation - Solid Rock	Cu. Yd.												
BRIDGES														
68	Concrete	Bridge No. * Station No.	Br. No.	Br. No.	Br. No.	Br. No.	Br. No.	Br. No.	Br. No.	Br. No.	Br. No.	Br. No.	Br. No.	Br. No.
69	Reinforcing Steel	Cu. Yd.												
70	Structural Steel	Lb.												
71	Piling	Lin. Ft.												
72	Temporary Crossing	Lump Sum												
73	Remove Old Bridge	Lump Sum												
74	Bituminous Surface	Sq. Yd.												
75														
TOTAL ESTIMATED COST OF STRUCTURES (IN 'TOTALS' COLUMN)														
76	Guard Rail - Cable	Lin. Ft.	975								975			
77	Guard Rail - Concrete	Lin. Ft.												
78	Gutter - Plain Rubble	Sq. Yd.												
79	Gutter - Grouted Rubble	Sq. Yd.												
80	Excavation for Rubble Gutter	Cu. Yd.												
81	Gutter - Concrete	Lin. Ft.												
82	Curbing - Concrete	Lin. Ft.												
83	Guard Rail Anchor Block	Complete	8								8			
84	Rating & Seeding	100 Sq. Yds.	158.96								158.96			
TOTAL ESTIMATED COST OF MISCELLANEOUS ITEMS (IN 'TOTALS' COLUMN)														\$ 455.44
GRAND TOTAL														\$ 32 012.62

TYPICAL CROSS-SECTIONS AND DETAILS.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MINN.				



4802

*NOTE: BRIDGE ITEMS, LISTED UNDER BRIDGE NUMBERS IN MILE COLUMNS REGARDLESS OF LOCATION

CONVENTIONAL SIGNS & ABBREVIATIONS

STATE LINE	-----	EXCAVATION	E
COUNTY LINE	-----	EMBANKMENT	-----	F
TOWNSHIP LINE	-----	OVERHAUL	-----	H
SECTION LINE	-----	SURFACING	-----	S
CITY, VILLAGE, OR BOROUGH	-----	GUARD RAIL	-----	GR
FENCE LINE	-----	INTERSECTION ANGLE	Δ	A
RIGHT-OF-WAY LINE	-----	RADIUS	R	R
TRAVELLED WAY	-----	ELEVATION	EL	EL
RAILROADS	-----	VERTICAL CURVE	VC	VC
RETAINING WALL	-----	BEACH MARK	B.M.	B.M.
BASE OR SURVEY LINE	-----	SECTIONAL CONCRETE CULVERT	P.C.	P.C.
LEVEL	-----	CORRUGATED METAL CULVERT	C.M.	C.M.
GRAVEL PIT	⊙	CULVERT HAUL	P.L.H.	P.L.H.
SAND PIT	⊙	TON MILES	T.M.	T.M.
CLAY PIT	⊙	PLACE	P	P
ROCK QUARRY	⊙	IN PLACE	Imp.	Imp.
CULVERTS		REPLACE	Rep.	Rep.
PLAIN	-----	RIGHT	R	R
WITH FACEWALLS	-----	LEFT	L	L
WITH WINGWALLS	-----	HAND DITCHING	H.D.	H.D.
DROP INLET	⊠	POINT OF CURVE	P.C.	P.C.
POWER POLE LINE	-----	POINT OF TANGENT	P.T.	P.T.
TELEPHONE OR TELEGRAPH LINE	-----	POINT OF INTERSECTION	P.I.	P.I.
MARSH	-----	SPECIAL EXCAVATION	SE	SE
HEDGE, BUSH, OR TIMBER	-----	SPECIAL FLOWING	S.P.	S.P.
GROUND ELEVATION	-----	TELEPHONE POLE	Tel.P.	Tel.P.
GRADE ELEVATION	-----			

STATE HIGHWAY DEPARTMENT
OF MINNESOTA

Plan and Profile of State Road No. 6

COUNTY OF RAMSEY

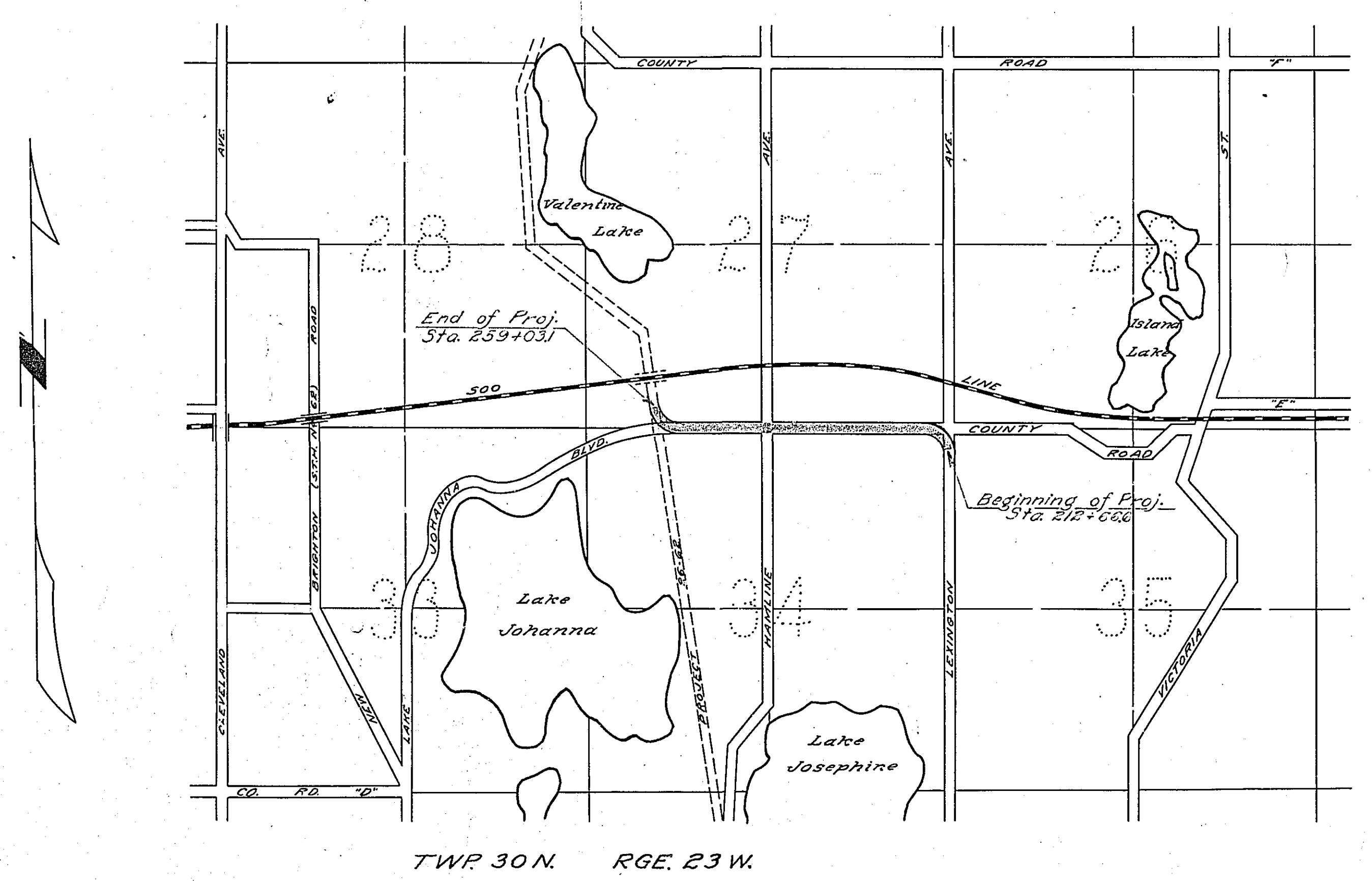
From A point 278' South of S.E. Cor. Sec. 27-30-23 To A point 300' East and 210' North of SW. Cor. Sec. 27-30-23
Give proper reference to Sections, Township and Range

GROSS LENGTH 4636.5 FEET 0.88 MILES
LENGTH OF EXCEPTIONS FEET MILES
NET LENGTH 4636.5 FEET 0.88 MILES
PLAN, 1 Inch = 200 Feet
PROFILE, Horz. 1 Inch = 200 Feet. Vert. 1 Inch = 20 Feet
SCALES WORKING PLANS { Horz. 1 Inch = 100 Feet
Vert. 1 Inch = 10 Feet
Cross-Sections, 1 Inch = 10 Feet

LAYOUT
SCALE, 1 Inch = 1750 Feet

INDEX OF SHEETS

Sheet No. 1. Title Sheet and Layout Map
" No. 2. Typical Cross-Sections and Statement
" No. 3. Plan and Profile, Sta. 212+666 to Sta. 259+031
" No. 4, 5, 6. Cross Sections
" No. 7. Details
" No. 8. Pavement Construction Details
" No. 9. Miscellaneous Standards



TWP. 30 N. RGE. 23 W.

Planned by P. J. Hoyle
Acting HIGHWAY ENGINEER FOR Ramsey COUNTY.
Recommended for Approval _____ DIVISION ENGINEER
Recommended for Approval O. L. Kipp CONSTRUCTION DIVISION
Approved May 28 1926 J. W. Bevin CHIEF ENGINEER & DEPUTY COMMISSIONER