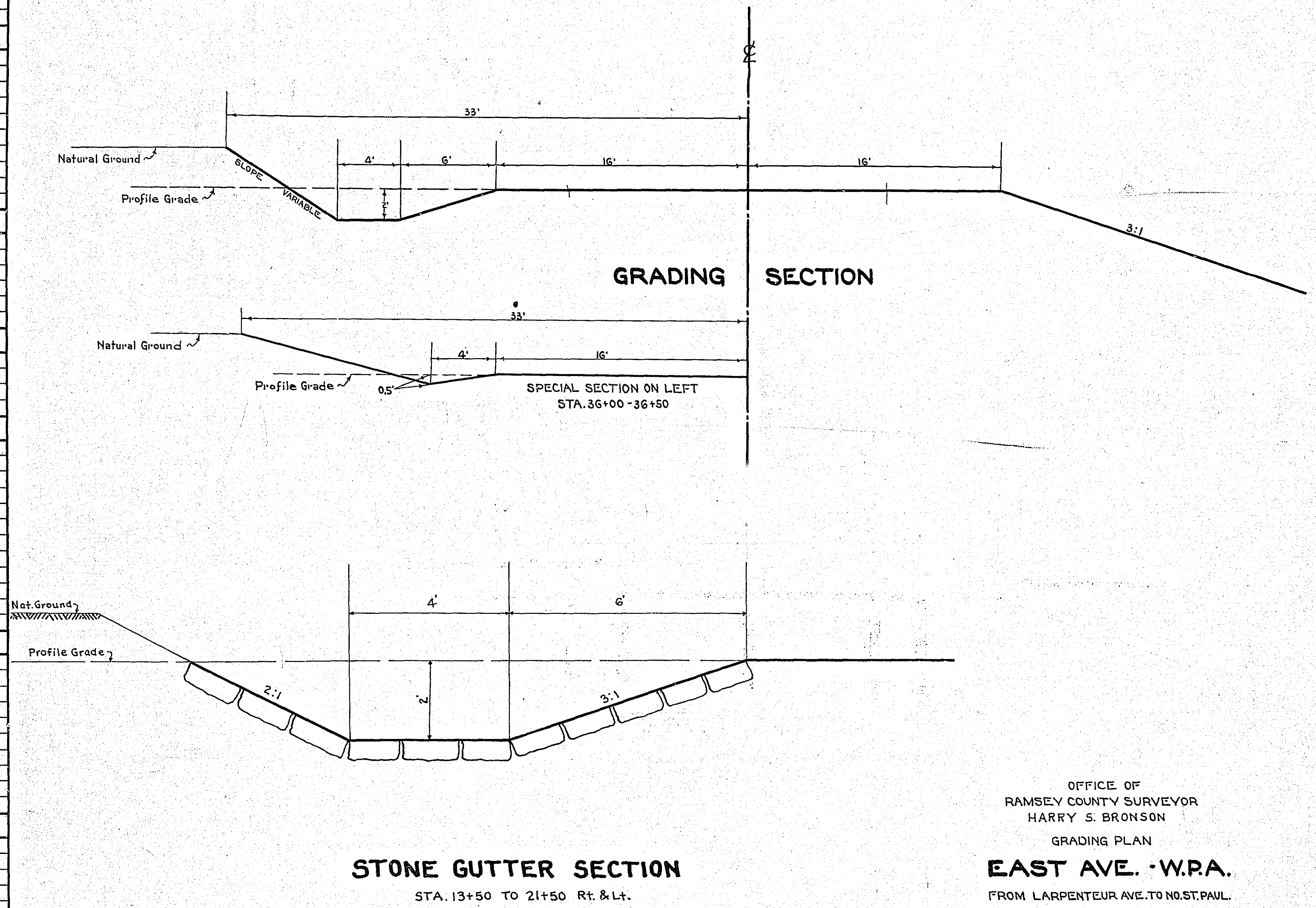


STATEMENT OF ESTIMATED QUANTITIES

CLASS	ITEM	UNIT	MILE From To	MILE From To	MILE From To	MILE From To	MILE From To	MILE From To	MILE From To	MILE From To	MILE From To	MILE From To	TOTAL ESTIMATED QUANTITIES
GRADING	1	Clearing	Trees										
	2	Grubbing	Trees										
	3	Clearing	Acres										
	4	Grubbing	Acres										
	5	Excavation	Earth	Cu. Yds.									
	6	Excavation	Loose Rock	Cu. Yds.									
	7	Excavation	Solid Rock	Cu. Yds.									
	8	Excavation	Overhaul	Cu. Yds.									
	9	Excavation	Special	Cu. Yds.									
	10	Excavation	Hand Ditch	Cu. Yds.									
	11	Install	12" C.M.	Lin. Ft.									
	12	Install	15" C.M.	Lin. Ft.									
	13	Install	18" C.M.	Lin. Ft.									
	14	Install	24" C.M.	Lin. Ft.									
	15	Install	30" C.M.	Lin. Ft.									
	16	Install	36" C.M.	Lin. Ft.									
	17	Install	18" Pa	Lin. Ft.									
	18	Install	24" Pa	Lin. Ft.									
	19	Install	30" Pa	Lin. Ft.									
	20	Install	36" Pa	Lin. Ft.									
	21	Install	42" Pa	Lin. Ft.									
	22	Install	48" Pa	Lin. Ft.									
	23	Remove Old Culvert	Lin. Ft.										
	24	Replace Old Culvert	Lin. Ft.										
	25	Finishing and Seeding	100 Sq.Yds.										
	26	Rubble Gutter	Cu. Yds.										
	27	Headwall Concrete	Cu. Yds.										
	28	Headwall Steel	Lbs.										
	29												
	30												
	31												
	32												
C.M. CULVERTS	1	Furnish 12" C.M.	Lin. Ft.										
	2	Furnish 15" C.M.	Lin. Ft.										
	3	Furnish 18" C.M.	Lin. Ft.										
	4	Furnish 24" C.M.	Lin. Ft.										
	5	Furnish	Lin. Ft.										
	6	Furnish	Lin. Ft.										
	7	Furnish 12" C.M. Band	Each										
	8	Furnish 15" C.M. Band	Each										
	9												
	10												
P <sub>3</sub> CULVERTS	1	Furnish 18" P <sub>3</sub>	Lin. Ft.										
	2	Furnish 24" P <sub>3</sub>	Lin. Ft.										
	3	Furnish 30" P <sub>3</sub>	Lin. Ft.										
	4	Furnish 36" P <sub>3</sub>	Lin. Ft.										
	5												
	6												
GUARD RAIL	1	Guard Rail - Cable	Lin. Ft.										
	2	Guard Rail Anchors	Each										
	3	Dummy Posts	Each										
	4												
SIDEWALKS AND CURBING	1	Concrete Curb - Straight	Lin. Ft.										
	2	Concrete Curb - Radius	Lin. Ft.										
	3	Remove Old Curb	Lin. Ft.										
	4	Remove Old Curb and Gutter	Lin. Ft.										
	5	Remove Old Sidewalk	Sq. Ft.										
	6	Replace Old Sidewalk	Sq. Ft.										
	7	Construct New Sidewalk	Sq. Ft.										
	8	Curb Inlet	Each										
	9	Catch Basin Complete	Each										
	10												
	11												
	12												
SEWER	1	12" Vitrified Sewer Pipe	Lin. Ft.										
	2	15" Vitrified Sewer Pipe	Lin. Ft.										
	3	18" Vitrified Sewer Pipe	Lin. Ft.										
	4	20" Vitrified Sewer Pipe	Lin. Ft.										
	5	24" Vitrified Sewer Pipe	Lin. Ft.										
	6	Manhole Complete	Each										
	7	Catch Basin Complete	Each										
	8												
	9												
	10												
PAVEMENT	1	Pavement - 1 Course Conc.	Sq. Yds.										
	2	Pavement - Asphaltic Conc.	Sq. Yds.										
	3	Integral Curb - B'	Lin. Ft.										
	4	Integral Curb - 12"	Lin. Ft.										
	5	Surface Drain	Each										
	6	Surface Drain Basin	Each										
	7	Shoulders - Earth	Lin. Ft.										
	8												
STRUCTURES	1	Concrete	Cu. Yds.										
	2	Reinforcing Steel	Lbs.										
	3	Excavation	Cu. Yds.										
	4	Piling	Lin. Ft.										
	5												
	6												
	7												
	8												
	9												
	10												

DETAILS



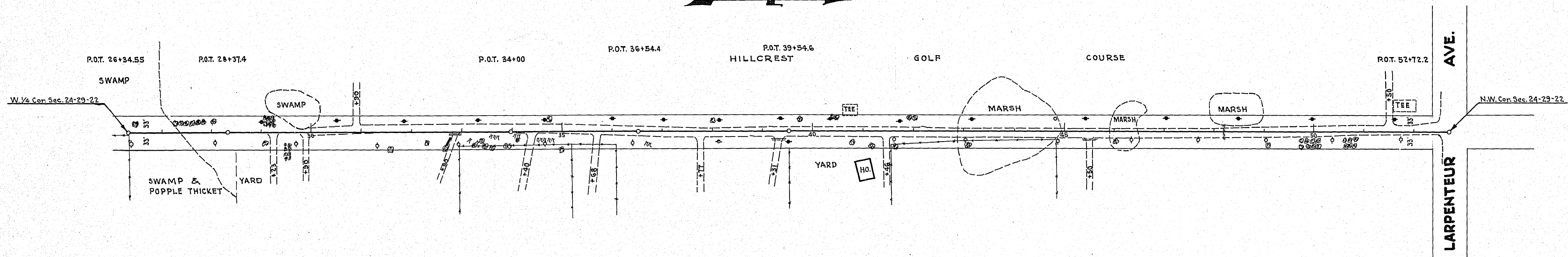
OFFICE OF  
 RAMSEY COUNTY SURVEYOR  
 HARRY S. BRONSON  
 GRADING PLAN  
**EAST AVE. - W.P.A.**  
 FROM LARPEUR AVE. TO NO. ST. PAUL.  
 JULY 1936  
*McKnight Rd.*



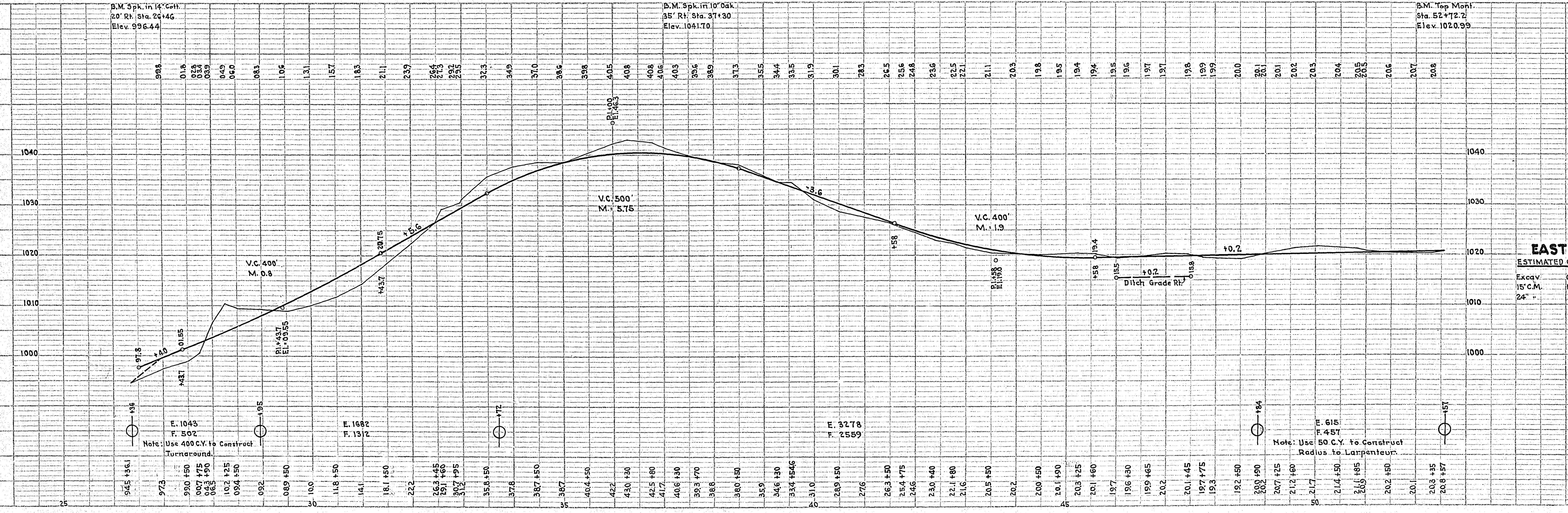
29+23 Rt. PI. 15' x 20' C.M.    29+90 Rt. PI. 15' x 20' C.M.    30+90 Lt. PI. 15' x 20' C.M.    32+80 Rt. Imp. 12' x 39' C.M. Rem. PI. 15' x 20' C.M.    34+40 Rt. PI. 15' x 20' C.M.    35+68 Rt. PI. 15' x 20' C.M.    37+77 Rt. PI. 15' x 20' C.M.    39+31 Rt. Imp. 12' x 20' C.M. Rem. PI. 15' x 20' C.M.    41+46 Rt. PI. 15' x 20' C.M.    45+50 Rt. Imp. 12' x 20' C.M. Rem. PI. 15' x 20' C.M.    46+00 Lt. PI. 24' x 66' C.M.    48+20 Lt. Imp. 18' Colv. Rem.    51+50 Lt. PI. 15' x 20' C.M.

1160'

PLAN SURVEYED: \_\_\_\_\_ DATE: \_\_\_\_\_  
 NOTE: BODY ALIGNMENT CHECKED  
 FT. OF W/1Y CHECKED: \_\_\_\_\_



PROFILE SURVEYED: \_\_\_\_\_ DATE: \_\_\_\_\_  
 NOTE: BODY GRADES CHECKED  
 B.M. NOTED: \_\_\_\_\_  
 STRUCTURE: TOTAL IN CHARGE: \_\_\_\_\_



**EAST AVE.**  
 ESTIMATED QUANTITIES  
 Excav. 15' C.M. 24" - 56  
 Cu. Yds. 6618  
 Lin. Ft. 220

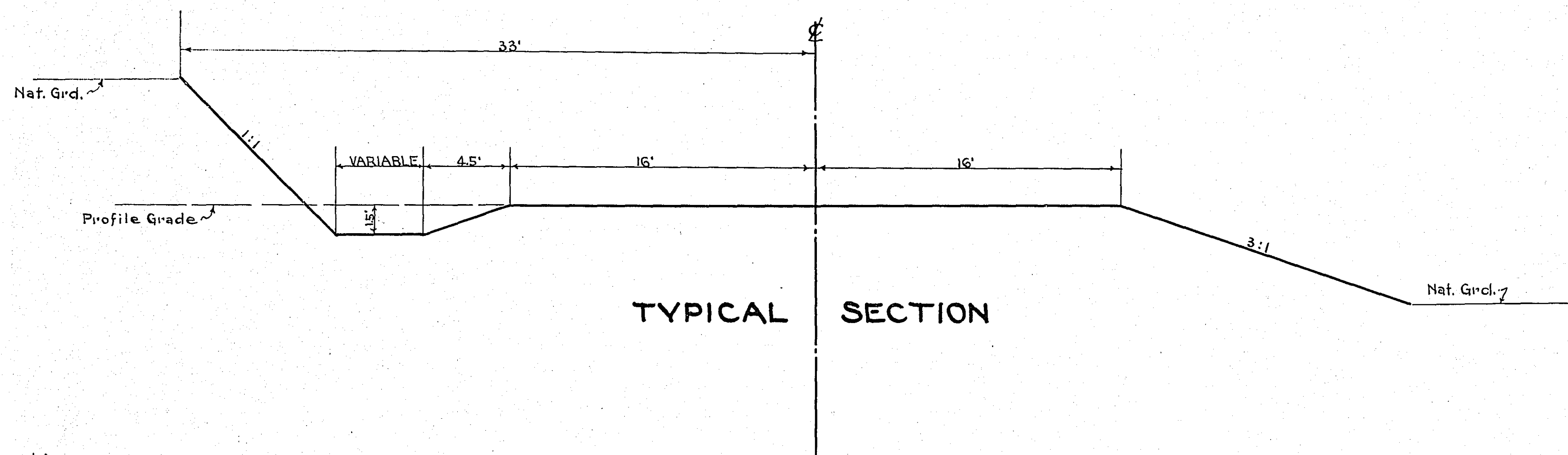
835



STATEMENT OF ESTIMATED QUANTITIES

CLASS	ITEM	UNIT	MILE From To	MILE From To	MILE From To	MILE From To	MILE From To	MILE From To	MILE From To	MILE From To	MILE From To	MILE From To	TOTAL ESTIMATED QUANTITIES
GRADING	1	Clearing	Trees										
	2	Grubbing	Trees										
	3	Clearing	Acres										
	4	Grubbing	Acres										
	5	Excavation Earth	Cu. Yds.										
	6	Excavation Loose Rock	Cu. Yds.										
	7	Excavation Solid Rock	Cu. Yds.										
	8	Excavation Overhaul	Cu. Yds.										
	9	Excavation Special	Cu. Yds.										
	10	Excavation Hand Ditch	Cu. Yds.										
	11	Install 12" C.M.	Lin. Ft.										
	12	Install 15" C.M.	Lin. Ft.										
	13	Install 18" C.M.	Lin. Ft.										
	14	Install 24" C.M.	Lin. Ft.										
	15	Install	Lin. Ft.										
	16	Install	Lin. Ft.										
	17	Install 18" Ps	Lin. Ft.										
	18	Install 24" Ps	Lin. Ft.										
	19	Install 30" Ps	Lin. Ft.										
	20	Install 36" Ps	Lin. Ft.										
	21	Install	Lin. Ft.										
	22	Install	Lin. Ft.										
	23	Remove Old Culvert	Lin. Ft.										
	24	Replace Old Culvert	Lin. Ft.										
	25	Finishing and Seeding	100 Sq.Yds.										
	26	Rubble Gutter	Cu. Yds.										
	27	Headwall Concrete	Cu. Yds.										
	28	Headwall Steel	Lbs.										
	29												
	30												
	31												
	32												
C.M. CULVERTS	1	Furnish 12" C.M.	Lin. Ft.										
	2	Furnish 15" C.M.	Lin. Ft.										
	3	Furnish 18" C.M.	Lin. Ft.										
	4	Furnish 24" C.M.	Lin. Ft.										
	5	Furnish	Lin. Ft.										
	6	Furnish	Lin. Ft.										
	7	Furnish 12" C.M. Band	Each										
	8	Furnish 15" C.M. Band	Each										
	9												
	10												
P <sub>3</sub> CULVERTS	1	Furnish 18" Ps	Lin. Ft.										
	2	Furnish 24" Ps	Lin. Ft.										
	3	Furnish 30" Ps	Lin. Ft.										
	4	Furnish 36" Ps	Lin. Ft.										
	5												
GUARD RAIL	1	Guard Rail - Cable	Lin. Ft.										
	2	Guard Rail Anchors	Each										
	3	Dummy Posts	Each										
	4												
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	2	Concrete Curb - Radius	Lin. Ft.										
	3	Remove Old Curb	Lin. Ft.										
	4	Remove Old Curb and Gutter	Lin. Ft.										
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	6	Replace Old Sidewalk	Sq. Ft.										
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	2	15" Vitrified Sewer Pipe	Lin. Ft.										
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	4	20" Vitrified Sewer Pipe	Lin. Ft.										
	5	24" Vitrified Sewer Pipe	Lin. Ft.										
	6	Manhole Complete	Each										
	7	Catch Basin Complete	Each										
	8												
	9												
	10												
PAVEMENT	1	Pavement - 1 Course Conc.	Sq. Yds.										
	2	Pavement - Asphaltic Conc.	Sq. Yds.										
	3	Integral Curb 8"	Lin. Ft.										
	4	Integral Curb 12"	Lin. Ft.										
	5	Surface Drain	Each										
	6	Surface Drain Basin	Each										
	7	Shoulders - Earth	Lin. Ft.										
	8												
STRUCTURES	1	Concrete	Cu. Yds.										
	2	Reinforcing Steel	Lbs.										
	3	Excavation	Cu. Yds.										
	4	Piling	Lin. Ft.										
	5												

DETAILS



TYPICAL SECTION

NOTE: ALL SECTIONS TO CONFORM TO 66' R.O.W.

OFFICE OF  
RAMSEY COUNTY SURVEYOR  
EMIL H. SCHULZ,  
GRADING PLAN OF  
**EAST AVENUE**  
SOUTH OF LARPEN TEUR AVE.  
OCT. 1936



