

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
RIGHT-OF-WAY LINE.....	RADIUS.....	R
TRAVELLED WAY.....	ELEVATION.....	EL
RAILROADS.....	VERTICAL CURVE.....	VC
RETAINING WALL.....	BENCH MARK.....	B.M.
BASE OR SURVEY LINE.....	SECTIONAL CONCRETE CULVERT.....	P.C.
LEVEE.....	CORRUGATED METAL CULVERT.....	C.M.
GRAVEL PIT.....	CULVERT HAUL.....	P.L.H.
SAND PIT.....	TON MILES.....	T.M.
CLAY PIT.....	PLACE.....	P
ROCK QUARRY.....	IN PLACE.....	Inp.
CULVERTS.....	REPLACE.....	Rep.
PLAIN.....	RIGHT.....	R
WITH FACE WALLS.....	LEFT.....	L
WITH WING WALLS.....	HAND DITCHING.....	H.D.
DROP INLET.....	POINT OF CURVE.....	P.C.
POWER POLE LINE.....	POINT OF TANGENT.....	P.T.
TELEPHONE OR TELEGRAPH LINE.....	POINT OF INTERSECTION.....	P.I.
MARSH.....	SPECIAL EXCAVATION.....	S.E.
HEDGE, BRUSH, OR TIMBER.....	SPECIAL FLOWING.....	S.P.
GROUND ELEVATION.....	TELEPHONE POLE.....	Tel.P.
GRADE ELEVATION.....		

OFFICE OF COUNTY SURVEYOR
 RAMSEY COUNTY
 Plan and Profile of North St. Paul Road

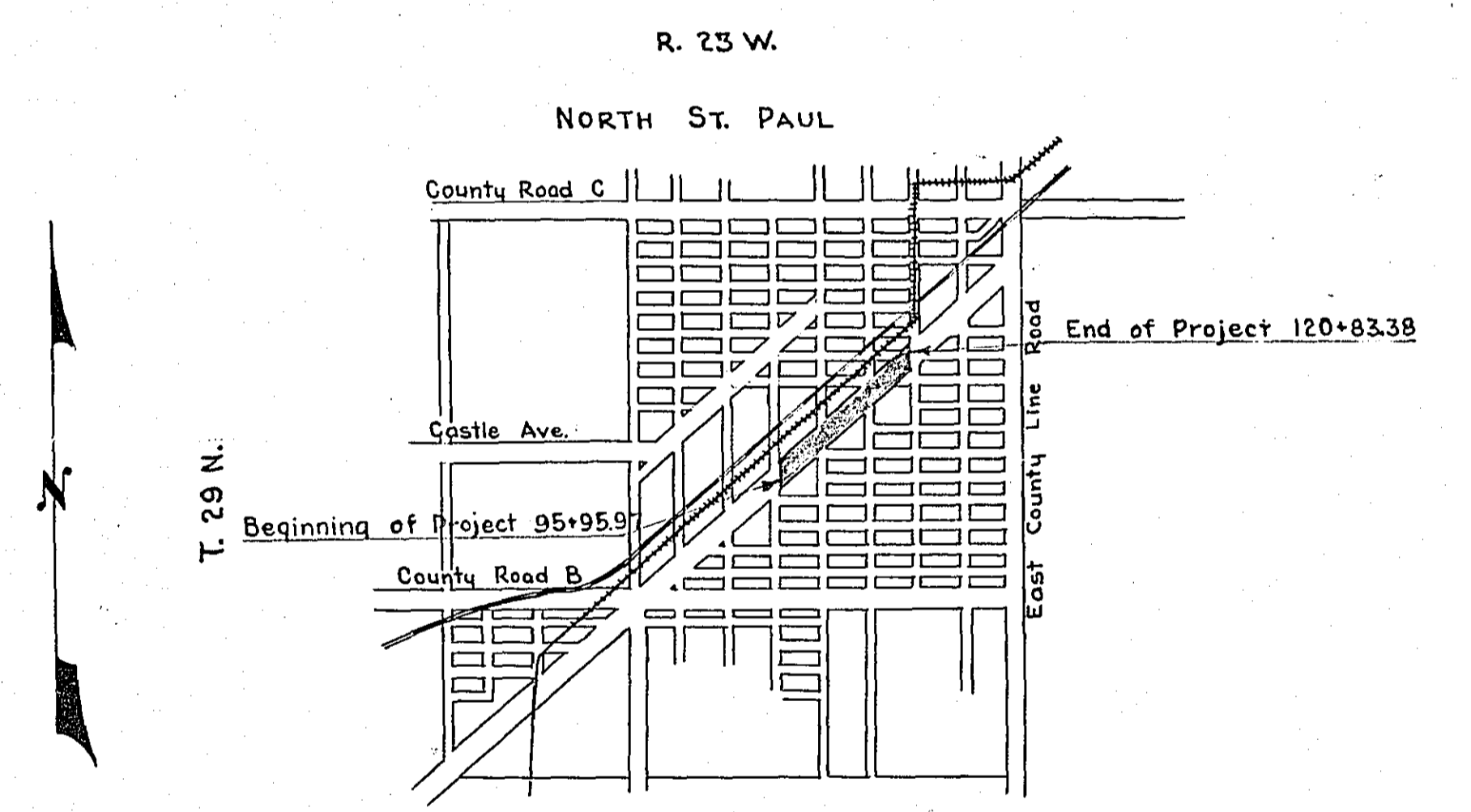
From Pennsylvania St. To Charles St.

GROSS LENGTH 2487.41 FEET 0.471 MILES
 LENGTH OF EXCEPTIONS 181.22 FEET 0.034 MILES
 NET LENGTH 2306.19 FEET 0.437 MILES
 PLAN, 1 Inch = 100 Feet
 PROFILE, Horz. 1 Inch = 100 Feet. Vert. 1 Inch = 2 Feet
 WORKING PLANS { Horz. 1 Inch = 1 Foot
 Vert. 1 Inch = 1 Foot
 Cross-Sections, 1 Inch = 1 Foot

LAYOUT
 SCALE, 1 Inch = 2640 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. 95+95.97 to Sta. 120+83.38

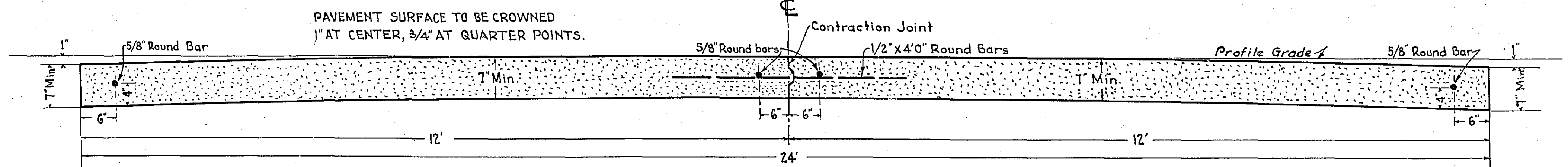


Recommended for Approval *Kenneth J. Maria*
 COUNTY SURVEYOR
 Plans Approved and Recommended for Consideration *Harry A. Bronson*
 COUNTY SURVEYOR
 Approved by County Board 19 *[Signature]*
 CHAIRMAN OF COUNTY BOARD

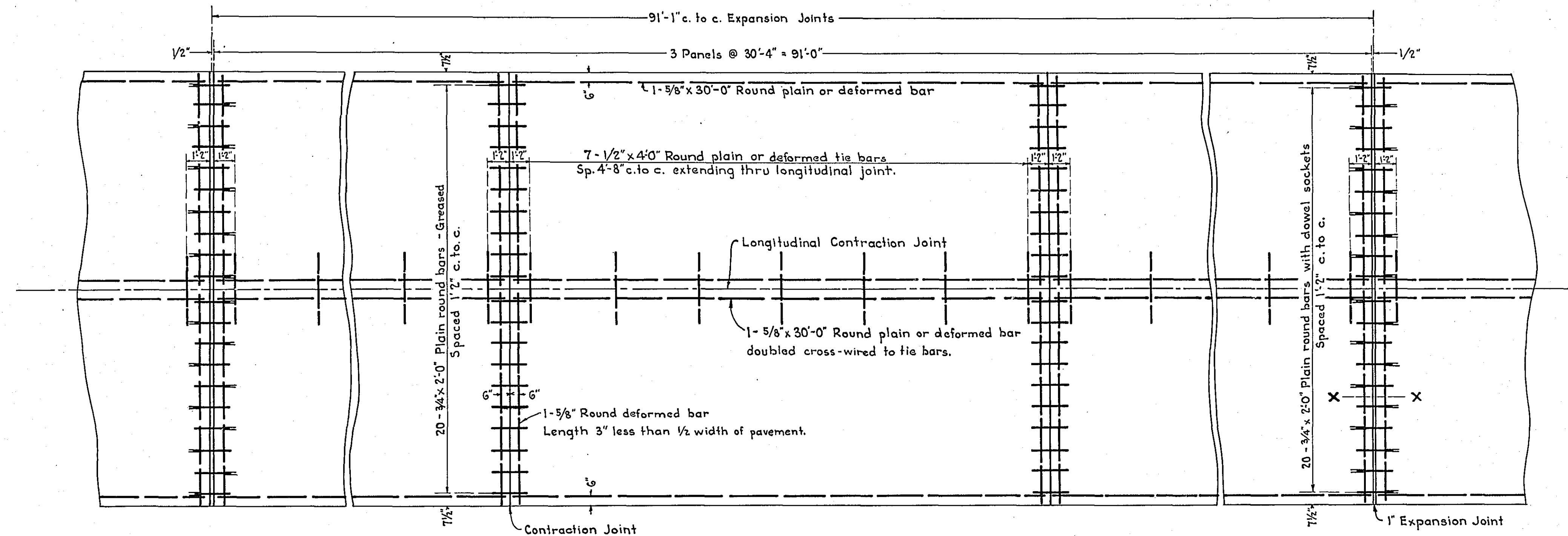
STATEMENT OF ESTIMATED QUANTITIES

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.	1200									
	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												
GUARD RAIL P ₃ CULVERTS	1	Furnish 18" P ₃	Lin. Ft.										
	2	Furnish 24" P ₃	Lin. Ft.										
	3	Furnish 30" P ₃	Lin. Ft.										
	4	Furnish 36" P ₃	Lin. Ft.										
	5												
	6												
GUARD RAIL - CABLE	1	Guard Rail - Cable	Lin. Ft.										
	2	Guard Rail Anchors	Each										
	3	Dummy Posts	Each										
	4												
	5												
	6												
	7												
	8												
	9												
	10												
	11												
	12												
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	Fine Grading	Cu. Yds.	200									
	2	Conc. Pavement	Sq. Yds.	6095									
	3	Steel Reinf.	Lbs.	29380									
	4												
	5												
	6												
	7												
	8												
STRUCTURES	1	Concrete	Cu. Yds.										
	2	Reinforcing Steel	Lbs.										
	3	Excavation	Cu. Yds.										
	4	Piling	Lin. Ft.										
	5												
	6												
	7												
	8												
	9												
	10												

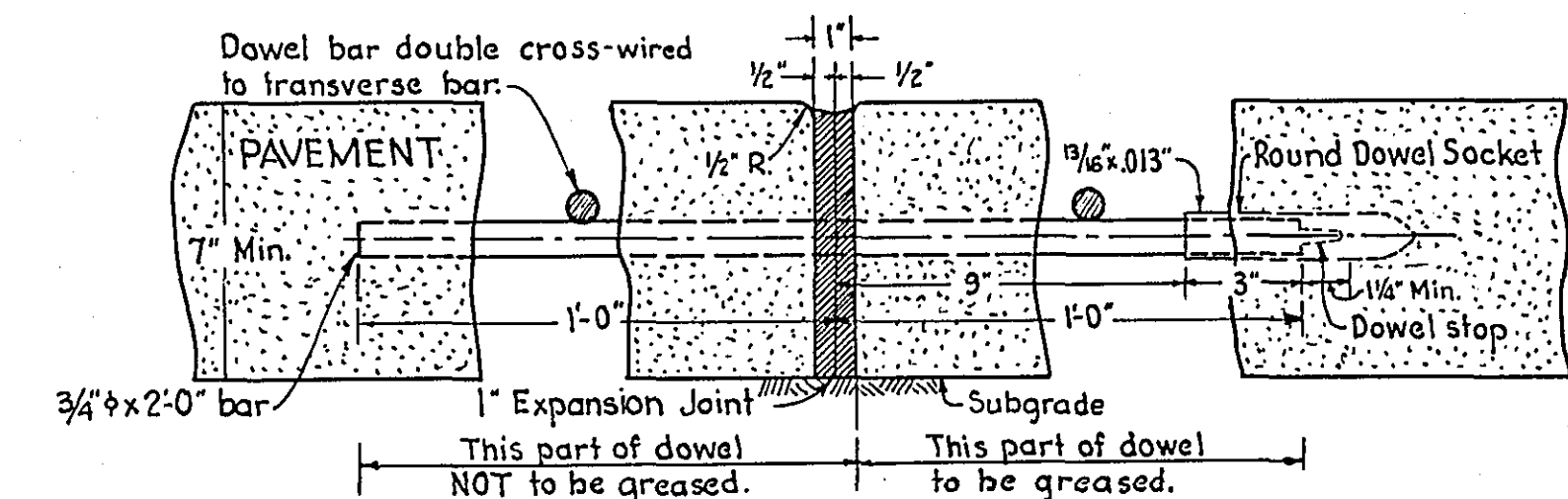
DETAILS
24 FOOT PAVEMENT
ONE COURSE CONCRETE



CROSS SECTION



PLAN



SECTION X-X
(STANDARD POURED TYPE)

CONSTRUCTION NOTES

No Longitudinal Bars shall be continuous thru contraction or expansion joints.
All the intersections of bars and dowels shall be double cross-wired, i.e., wired in both directions across the intersection. Use 16 gauge loop tie wire.
Contraction and expansion joint steel assemblies are to be made up in a notched rack and wired so that the steel will be fastened as specified in its proper position with the dowel bars parallel to each other.
Filling Joints; See Par. 7:23 City of St. Paul Specifications.

