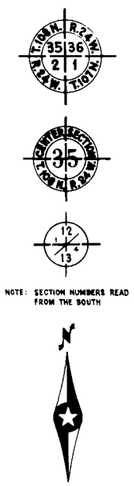
Form 413 Rev. 1959

CONVENTIONAL SIGNS

STATE LINE
COUNTY LINE
TOWNSHIP OR RANGE LINE
SECTION LINE
QUARTER LINE
SIXTEENTH LINE
RIGHT-OF-WAY LINE
PRESENT ROAD R/W LINE
LIMITED ACCESS
PROPERTY LINE (Except Land Lines)
VACATED PLATTED PROPERTY
CORPORATE OR CITY LIMITS
TRUNK HIGHWAY CENTER LINE
RETAINING WALL
STEAM RAILROAD
ELECTRIC RAILROAD
RAILROAD RIGHT-OF-WAY LINE
CREEK
RAPIDS OR WATERFALL
DRY RUN
DRAINAGE DITCH
HIGH TENSION LINE
POWER POLE LINE
TELEPHONE OR TELEGRAPH LINE
TELEPHONE CONDUIT
GUARD RAIL
WIRE FENCE
RAILROAD SNOW FENCE
BOARD OR HIGHWAY SNOW FENCE
STONE WALL OR FENCE
GAS MAIN
WATER PIPE
SEWER PIPE
DRAIN TILE
GRAVEL PIT
SAND PIT
CLAY PIT
ROCK QUARRY
SPRINGS
MARSH

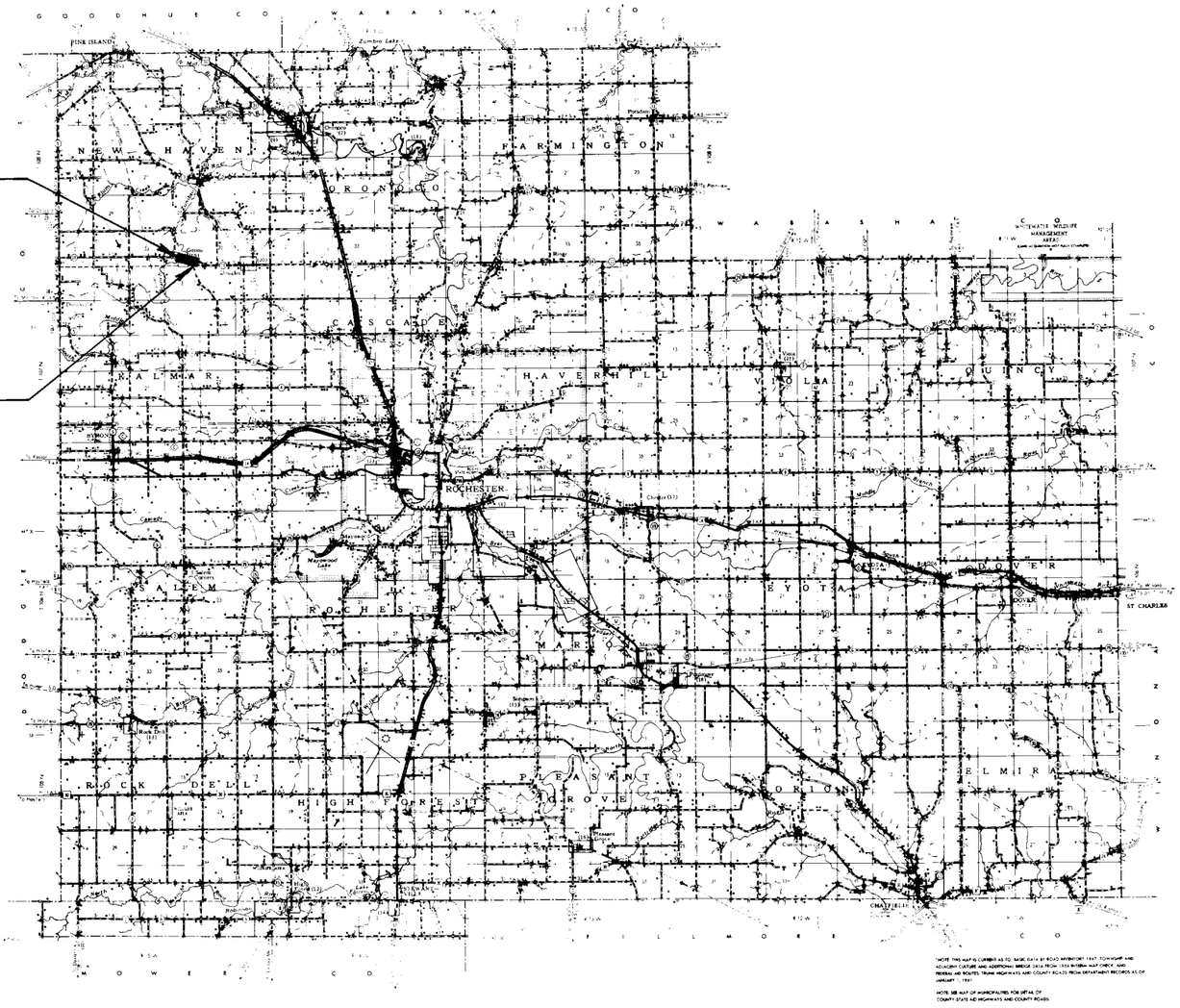
TIMBER
BRUSH
ORCHARD
ROCK LEDGE
SAND
EDGE OF CUT
TOE OF EMBANKMENT
CATCH BASIN
MANHOLE
DROP INLET
FIRE HYDRANT
ARC LAMP
OTHER LAMPS (State Kind)
RAILROAD CROSSING SIGN
RAILROAD CROSSING BELL
ELECTRIC WARNING SIGN
CROSSING GATE
CATTLE GUARD
OVERHEAD (Highway Over)
UNDERPASS (Highway Under)
ABUTMENT, WALL & PIER
BRIDGE
CULVERT
BUILDING (One Story Frame)
C-CONCRETE S-STONE T-TILE B-BRICK ST.-STUCCO
HEDGE
IRON PIPE
STONE MONUMENT
WOOD STAKE OR HUB
MEANDER CORNER



NOTE: SECTION NUMBERS READ FROM THE SOUTH

Begin S.A.P. 55-614-05
Sta. 178+00

End S.A.P. 55-614-05
Sta. 204+35.28



STATE OF MINNESOTA
DEPARTMENT OF HIGHWAYS

CONSTRUCTION PLAN FOR Grading and Crushed Rock Base Inplace

County State Aid Highway No. 14

IN VILLAGE OF GENOA

From 2023' E. & 1256' N. of SW Cor Sec 34 T108N-R15W To 4470' E. & 475' N. of SW Cor Sec 34 T108N-R15W

GROSS LENGTH 2635.28 FEET 0.4991 MILES
BRIDGES LENGTH 0 FEET 0 MILES
EXCEPTIONS LENGTH 0 FEET 0 MILES
NET LENGTH 2635.28 FEET 0.4991 MILES

SCALES
PLAN, 1 Inch = 100 Feet
PROFILE, Horz. 1 Inch = 100 Feet. Vert. 1 Inch = 10 Feet
WORKING PLANS: Horz. 1 Inch = 100 Feet; Vert. 1 Inch = 10 Feet; Cross-Section 1 Inch = 10 Feet
LAYOUT: Scale, 1 Inch = 10560 Feet

INDEX OF SHEETS

Sheet No. 1. Title Sheet & Layout Map
" No. 2. Est. Quantities & Typical Sec.
" No. 3. To 4 Plan & Profile
" No. 5 To 10 Cross Sections

Design Speed 55 M.P.H.

Projected ADT 658

S.F. = 50

ALL FEDERAL, STATE AND LOCAL LAWS WILL BE COMPLIED WITH IN THE CONSTRUCTION OF THIS PROJECT.

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 _____
COUNTY ENGINEER

_____ COUNTY REG. NO _____

RECOMMENDED FOR APPROVAL _____ 19 ____
DISTRICT ENGINEER

RECOMMENDED FOR APPROVAL J. F. Berglund 4/13 19 65

APPROVED 4-13 1965 M. M. Evans
STATE AID ENGINEER

—SPECIFICATIONS—

THE "SPECIFICATIONS FOR HIGHWAY CONSTRUCTION" DATED JAN. 1, 1964 SHALL GOVERN.

State Aid Project No. 55-614-05

Olmsted County, Minnesota County Proj. No. _____ Plan No. _____ Sheet No. 1 of 10 Sheets

H. A. ROGERS CO. Minneapolis

FORM 129c - No. 2 Rev. '

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

ESTIMATED QUANTITIES

SPECIFICATION NO.	ITEM	UNIT	TOTAL ESTIMATED QUANTITIES	MUNICIPAL	RURAL
2101.502	Clearing	Tree	38		
2101.507	Grubbing	Tree	35		
2104.501	Remove Portable Culverts	Lin. Ft.	48		
2105.501	Class A Excavation	Cu. Yd.	5,105		
2105.504	Class SG Excavation	Cu. Yd.	166		
2105.507	Borrow Excavation Class B	Cu. Yd.	26,500		
2105.510	Top Soil Covering	Cu. Yd.	1,848		
2130.501	Water	M. Gals.	37		
2210.527	Crushed Rock Base Inplace	Cu. Yd.	1,506		
2413.511	F&I 48"X60" Timber Box Culv.	Lin. Ft.	112		
2413.512	F&I 48"X60" Timber Culv. End Sections	End Section	4		
2501.511	F&I 18" CMP	Lin. Ft.	174		
2501.521	F&I 24" RCP Culv. Class II	Lin. Ft.	144		
2515.531	F&I Metal Aprons For 18" CMP	Apron	8		
2515.541	F&I Conc Aprons For 24" SCP	Apron	4		

Note: Item 2210.527 Includes 140 Cu.Yds. For Approaches.

STANDARD DETAIL PLATES

Standard Detail Plates issued October 1, 19 and submitted for approval by the Division Engineer of the Public Roads Administration October 15, 19 shall govern

PLATE NO.	STANDARD DETAIL PLATES
3000C	Reinforced Concrete Pipe
3060 B	
3061	Timber Box Culvert
3102C B	Concrete Apron for Reinforced Concrete Pipe
3100D	
3123C	Metal Aprons for CM Pipes
9000	Approachs and Entrances

Note: Material from the upper 1.0' of the natural topsoil shall not be used in the upper 1.0' of the roadway. Part of this material shall be uniformly spread on slopes and ditch bottoms to a depth of 3". No payment in addition to the contract price for Class "A" excavation will be made for spreading the topsoil as above provided, nor will any undercutting made in excavation prior to placing the topsoil, be measured for payment.

Note: Corragated metal and Sectional Concrete pipe culvert excavation will be considered incidential, and will be under unit price for "Furnish and Install Culvert Pipe".

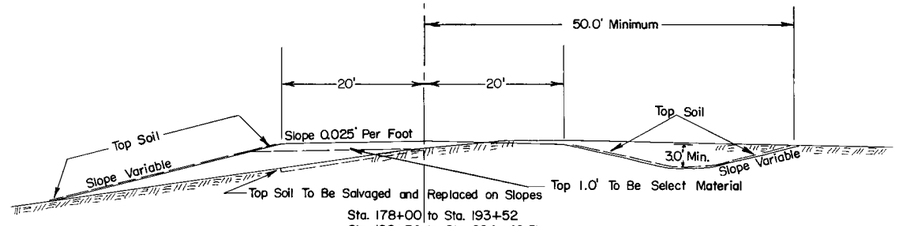
Note: Subgrade Treatment:
Excavate 1.0' below profile grade for compaction, as shown on the plan and profile sheets. Excavation has been computed and is listed as SG excavation. Backfill with select material from R.O.W. Tapers shall be 50:1 in all cases.

Note: Place Sectional Concrete Pipe on Class "C" Bedding.

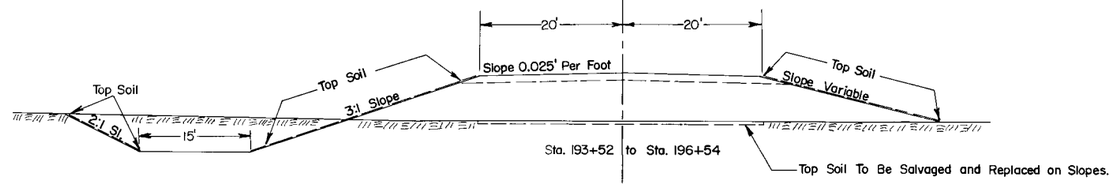
Note: All dimensions and slopes shown on typical sections are approximate.

Note: Dimensions shown on the typical Grading Section shall govern, regardless of what is shown on the cross sections.

TYPICAL GRADING SECTIONS

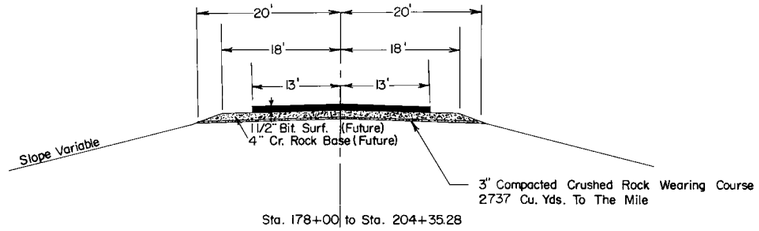


Sta. 178+00 to Sta. 193+52
Sta. 196+54 to Sta. 204+42.51



Sta. 193+52 to Sta. 196+54

TYPICAL BASE & SURFACE SECTIONS



Sta. 178+00 to Sta. 204+35.28

SPECIAL DETAILS

H.A.ROGERS CO.
MPLS MINN.

180+64 Const. Street App. Rt
No Culv. Req'd

184+00 Const. ℄ Culv
F&I 24"X72' RCP Class III
F&I 2-24" Conc Aprons
For SCP
Place Culv. on "C" Bedding

PI 186+00
Δ Rt 32°45'
D 5°00'
T 336.87'
L 655.0'

Begin S.A.P. 55-614-05
Sta. 178+00

189+75 Const. F Ent. Lt
No Culv. Req'd

199+10 FE Lt
No culv Inpl
F&I 18"X28' CMP
F&I 2-18" Metal Aprons
For CMP

203+06 FE Lt
Inpl 48"X36" CMP
No Change

PI. 200+08.65
Δ Lt 38°30'
D 4°20'
T 461.90'
L 888.53'

P.C. 196+46.75

P.T. 204+35.28

End S.A.P. 55-614-05
Sta. 204+35.28

Const. 50' Sh. Radius

CENTER STREET

River

Zumbro

Run

Tile Outfall

189+75 Const. F Ent. Rt
F&I 18"X52' CMP
F&I 2-18" Metal Aprons
For CMP

190+15 Const. ℄ Culv.
F&I 48"X60"X56' Timber Culv.
F&I 2-48"X60" End Sections
For Timber Box Culv.

193+52 Const. ℄ Culv.
F&I 48"X60"X56' Timber Culv.
F&I 2-48"X60" End Sections
For Timber Box Culv.

194+00 Const. F Ent. Rt
F&I 18"X28" CMP
F&I 2-18" Metal Aprons
For CMP

198+20 Const. St. Rt
F&I 18"X66' CMP
F&I 2-18" Metal Aprons
For CMP

202+00 ℄ Culv
Inpl. 24" X 48' CMP
Remove
F&I 24"X72' RCP Class III
F&I 2-24" Conc. Aprons
For SCP
Place Culv. on "C" Bedding

202+45 Twp Rt
No culv Inpl
No Culv. Req'd

202+75 ℄ Box Culv
Inpl C86X54" Conc Culv
No Change

Cl. 6 Gr. 5 — Cl. 29 Gr. 28 — Cl. 3 Gr. 2

B.M. Elev. 1006.19'
Spk in PP 177' Rt
Sta. 180+34

B.M. Elev. 1021.84'
Spk in PP 88' Rt
Sta. 199+30

B.M. Elev. 1014.27'
Spk in TP 16' Lt
Sta. 200+97

Finished ℄ Grades

Present ℄ Grades

P.I. +00
Elev. 04.5
400' V.C.
M=0.45

Profile 75' Lt
Profile 75' Rt

-0.3%

Elev. 03.9

P.V.T. +00

Elev. 03.11539

P.I. +61.53846
Elev. 01.91538
800' V.C.
M=1.3

P.V.C. +66.53846

Elev. 05.91538

P.V.T. +61.53846

+1.0%

1.1%

Inlet Elev. 95.0
Outlet Elev. 94.6

Inlet Elev. 97.0
Outlet Elev. 96.6

Inlet Elev. 99.5
Outlet Elev. 99.0

Inlet Elev. 13.2
Outlet Elev. 05.8

Subgrade Treatment
Excavate 1.0' Below Profile Grade
Sta. 200+00 to Sta. 205+77

Note: 26500 Cu.Yds. from side borrow.

EXC Class A 1869
EMB 1365

EXC 1034
EMB 773

EXC Class A 2202
Class SG 166
EMB 28073

Special Ditch

PLAN — SURVEYED, DRAWN, ALIGNMENT CHECKED, RT. OF WAY CHECKED, NOTE BOOK, NO.

PROFILE — SURVEYED, DRAWN, GRADES CHECKED, B.M.'s NOTED, STRUCTURE NOTATIONS CHKD, NOTE BOOK, NO.

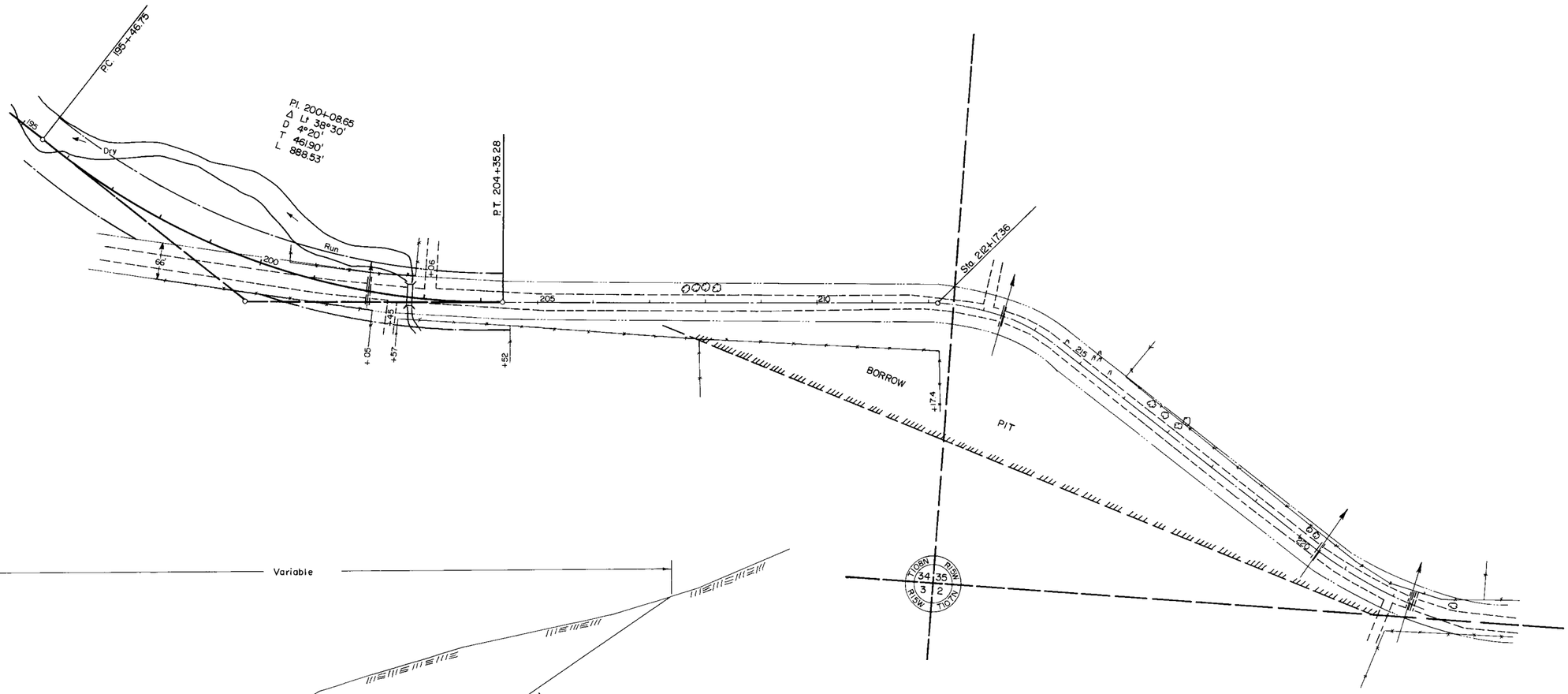
DATE / BY

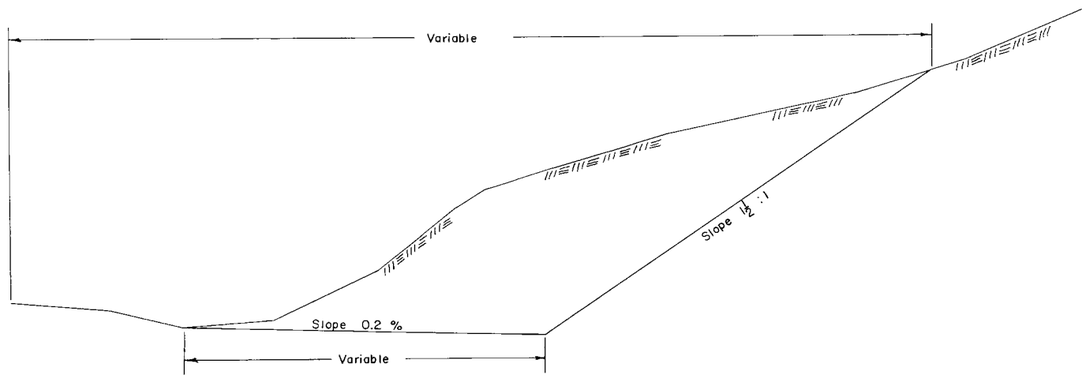
SINGLE PLAN & PROFILE SHEET
CHARLES MACHINE COMPANY, INC.

S.A.P. 55-614-05

OLMSTED COUNTY, MINN.

Sheet No. 3 of 10 Sheets





TYPICAL SECTION BORROW AREA

S. A. P. 55-614-05
4 . 10