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

T108N. R24W. / 35 36 / 2 1 / R23W. T107N.

CENTER SECTION 35 T108N. R24W.

12 / 1/4 / 13

NOTE: SECTION NUMBERS READ FROM THE SOUTH

N

STATE OF MINNESOTA

DEPARTMENT OF HIGHWAYS

Grading, Box Culverts

CONSTRUCTION PLAN FOR and Crushed Rock Base Inplace

County State Aid Highway No. 98 & 11

(CSAH 9) C & NW Railway AND CR "R"

BETWEEN (CSAH 11) TH No. 14 AND CSAH 2

From: (CSAH 9) 1528.25' W. of the S 1/4 Cor. Sec 33 T107N-R13W To: S 1/4 Cor Sec 35 T107N-R13W

From: (CSAH 11) 1102.66' N. of the SW Cor Sec 3 T106N-R13W To: 3034.1' NW of the Center of Sec 22 T107N-R13W

GROSS LENGTH	29,357.28 FEET	5.560 MILES
BRIDGES LENGTH	0.00 FEET	0.00 MILES
EXCEPTIONS LENGTH	0.00 FEET	0.00 MILES
NET LENGTH	29,357.28 FEET	5.560 MILES

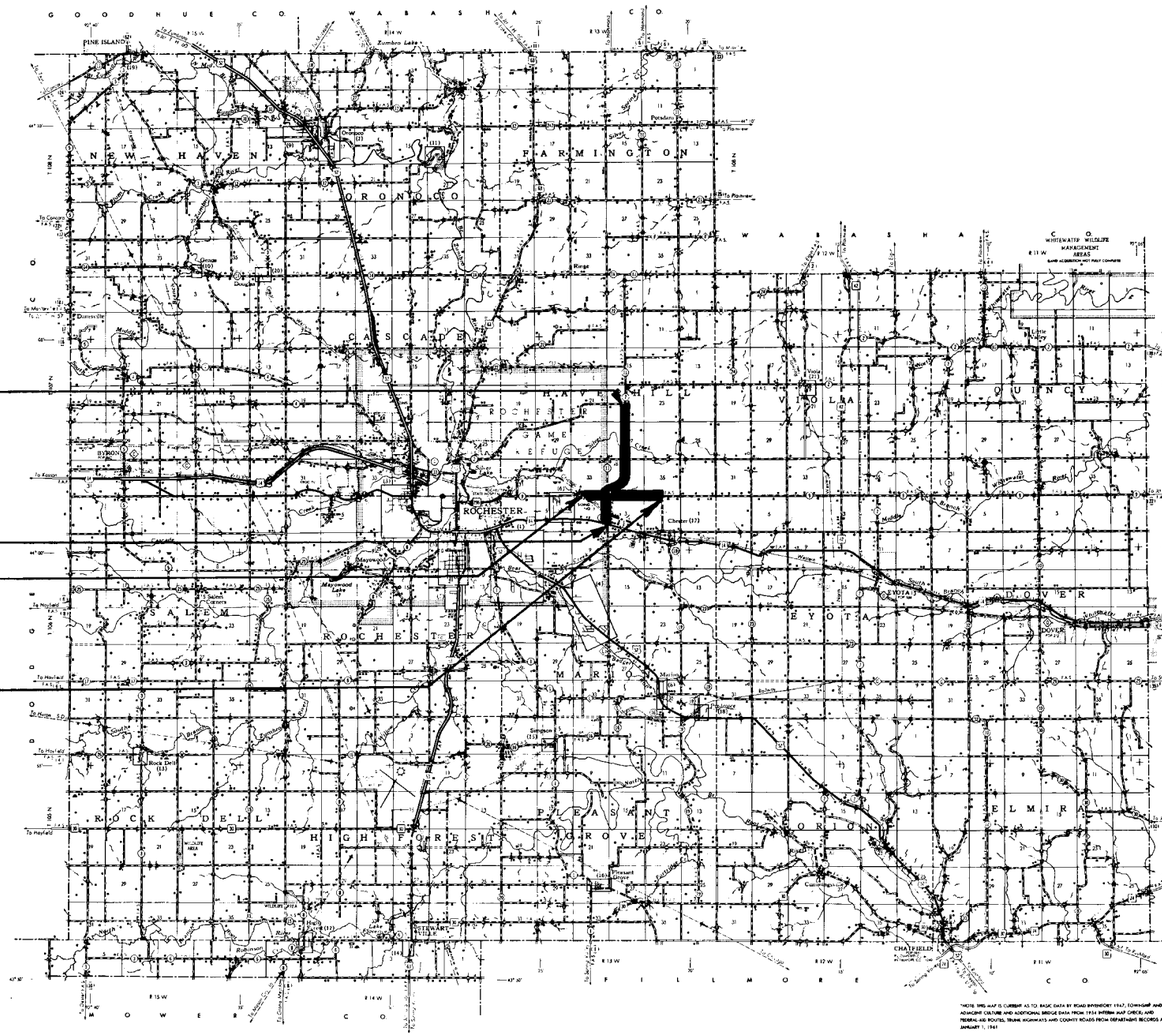
MINN. PROJ. _____

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
" No. 3. Typical Sections
" No. 4 To 7 Plan and Profile (CSAH 9)
" No. 8 To 14 Plan & Profile (CSAH 11)
" No. 15 & 16 Bridge Sheets
" No. 17 To 36 Cross Sections (CSAH 9)
" No. 37 To 77 Cross Sections (CSAH 11)



End S.A.P. 55-611-02
Sta. 386+43.82

Begin S.A.P. 55-611-02
Sta. 200+00

TEMPORARY CONNECTION: Sta. 98+00 To Sta. 104+90 − 690' = 0.131 Mile

Begin S.A.P. 55-609-01
Sta. 104+90

End S.A.P. 55-609-01
Sta. 212+03.46

Design Speed 50 M.P.H. Except Sta. 381+99.07 to Sta. 386+43.82 CSAH 11 35 M.P.H.

Projected ADT 1424 CSAH 9
Projected ADT 350 CSAH 11

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.

G. J. Sullivan — DATE 3-17-64
COUNTY ENGINEER
Olmsted — COUNTY — REG. NO. 1207

RECOMMENDED FOR APPROVAL _____ DISTRICT ENGINEER 19 64

RECOMMENDED FOR APPROVAL _____ 19 64

APPROVED _____ 19 __ _____ STATE AID ENGINEER

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED _____

—SPECIFICATIONS—

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

MICRO-FILMED

Minn. Proj. No. _____ State Proj. No. _____ State Aid Project No. 55-609-01 55-611-02

Olmsted County, Minnesota — County Proj. No. _____ Plan No. _____ Sheet No. 1 of 77 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	CSAH 11 55-611-02	CSAH 9 55-609-01
2101.502	Clearing	Tree	194	144	50
2101.507	Grubbing	Tree	264	155	109
2104.501	Remove Portable Culverts	Lin. Ft.	1062.5	562	500.5
2442.501	Remove Old Bridge (Lf Sta. 140+21)	Bridge	One		One
2442.501	Remove Old Bridge (Sta. 229+07)	Bridge	One	One	
2442.501	Remove Old Bridge (Sta. 323+85)	Bridge	One	One	
2105.501	Class A Excavation	Cu. Yd.	153,662	118,023	35,639
2105.502	Class B Excavation	Cu. Yd.	138,243	94,031	44,212
2105.504	Class SG Excavation	Cu. Yd.	14,052	7,708	6,344
109.621	Obliterating Old Road	Acre	2.93	1.67	1.26
2130.501	Water	M. Gal.	425	243	182
* 2210.526	Crushed Rock Base Inplace	Tons	23,797	13,864	9,933
2122.533	Crushed Rock in Stockpile	Tons	52,431		
2411.501	Concrete	Cu. Yd.	988.44	715.56	272.88
2411.511	Structure Excavation (Class U)	Cu. Yd.	2,200	1,963	237
2411.541	Reinforcement Bars	Lb.	130,285	91,088	39,197
2441.502	Single Lane By-Pass	By-Pass	2	2	
2451.503	Granular Backfill	Cu. Yd.	1,094	1,094	
2413.511	FBI 48"X36"D Timber Box Culv.	Lin. Ft.	64		64
2413.511	FBI 48"X60" Timber Box Culv.	Lin. Ft.	118	118	
2413.512	FBI 48"X36"D Timber Culv. End Sections	End Sections	4		4
2413.512	FBI 48"X60" Timber Culv. End Sections	End Sections	4	4	
2501.511	FBI 18"CMP Culverts	Lin. Ft.	1,656	1,156	500
2501.511	FBI 24"CMP Culverts	Lin. Ft.	220	220	
2501.511	FBI 30"CMP Culverts	Lin. Ft.	32		32
2501.511	FBI 36" CMP Culverts	Lin. Ft.	28	28	
2501.521	FBI 24" RCP Culverts Class II	Lin. Ft.	214	142	72
2501.521	FBI 24" RCP Culverts Class III	Lin. Ft.	118	54	64
2501.521	FBI 24" RCP Culverts Class IV	Lin. Ft.	112	112	
2501.521	FBI 30" RCP Culverts Class II	Lin. Ft.	68		68
2501.521	FBI 30" RCP Culverts Class III	Lin. Ft.	52	52	
2515.531	FBI Metal Aprons For 18" CMP	Apron	96	68	28
2515.531	FBI Metal Aprons For 24" CMP	Apron	4	4	
2515.531	FBI Metal Aprons For 30" CMP	Apron	2		2
2515.531	FBI Metal Aprons For 36" CMP	Apron	2	2	
2515.541	FBI Conc Aprons For 24" SCP	Apron	12	8	4
2515.541	FBI Conc Aprons For 30" SCP	Apron	4	2	2

* Item No. 2210.526 Includes 1036 Tons For Approaches and 392 Tons For County & Twp Roads.

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
3000 B	Reinforced Concrete Pipe
3060 B	Timber Box Culvert
3061	
3100 C	Concrete Aprons For Reinforced Conc Pipe
3102 B	
3123 A	Metal Apron For CMP Pipe
9000	Approachs and Entrances

TYPICAL GRADING SECTIONS

SPECIAL DETAILS

TYPICAL BASE & SURFACE SECTIONS

Note: Material from the upper 1.0' of the natural topsoil shall not be used in the upper 1.0' of the roadbed. 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: Corrugated metal and Sectional Concrete pipe culvert excavation will be considered incidental, 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.

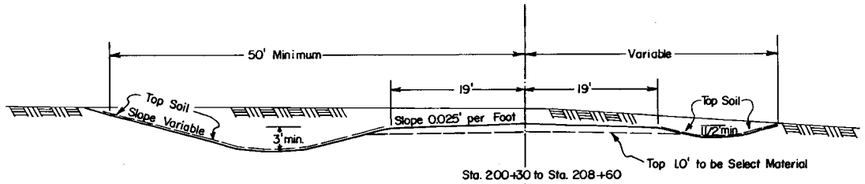
Note: Place Sectional Concrete Pipe on Class B and Class C Bedding.

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

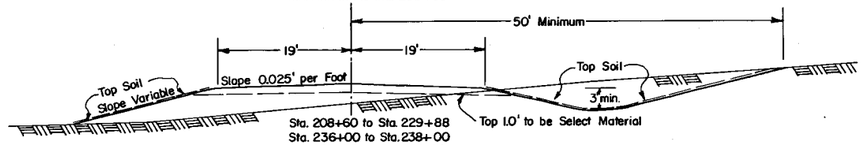
Note: Dimensions shown on Typical Grading sections shall govern, regardless of what is shown on the cross sections.

H.A. ROGERS CO.
MPLS MINN.

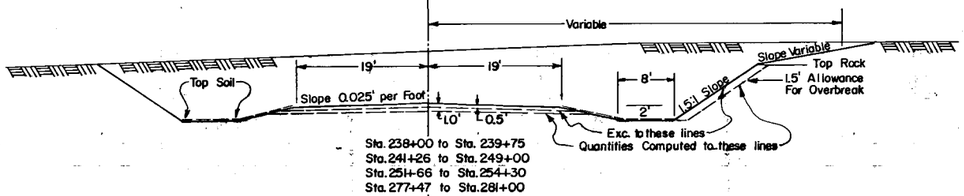
TYPICAL GRADING SECTIONS (CSAH 11)



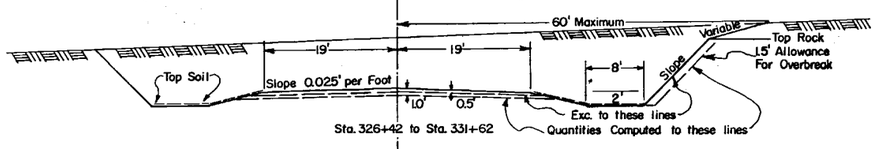
Sta. 200+30 to Sta. 208+60



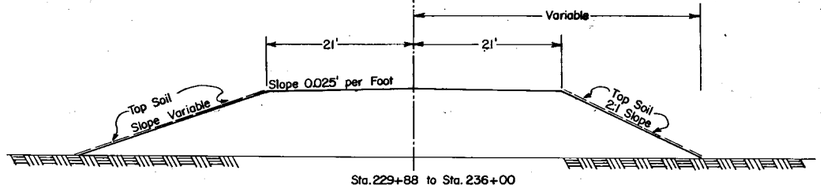
Sta. 208+60 to Sta. 229+88
Sta. 236+00 to Sta. 238+00
Sta. 257+30 to Sta. 263+50
Sta. 268+30 to Sta. 277+47
Sta. 281+00 to Sta. 282+31
Sta. 284+57 to Sta. 322+77
Sta. 331+62 to Sta. 386+43



Sta. 238+00 to Sta. 239+75
Sta. 241+26 to Sta. 249+00
Sta. 251+66 to Sta. 254+30
Sta. 277+47 to Sta. 281+00

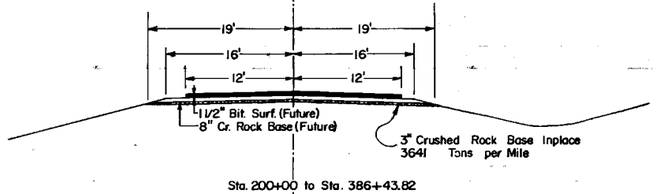


Sta. 326+42 to Sta. 331+62



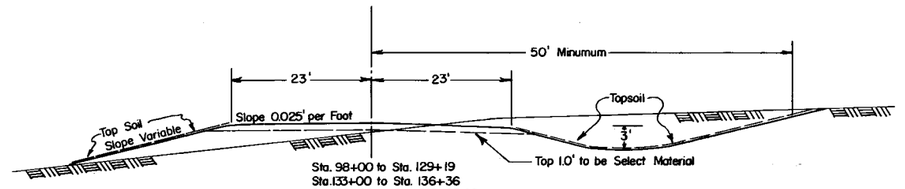
Sta. 229+88 to Sta. 236+00
Sta. 249+00 to Sta. 251+66
Sta. 254+30 to Sta. 257+30
Sta. 263+50 to Sta. 268+30
Sta. 282+31 to Sta. 284+57
Sta. 322+77 to Sta. 326+42

TYPICAL BASE & SURFACE SECTION (CSAH 11)

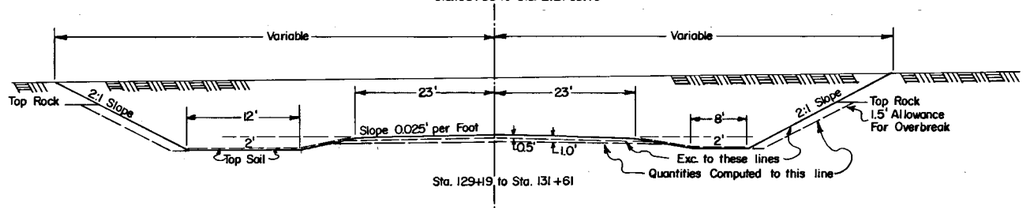


Sta. 200+00 to Sta. 386+43.82

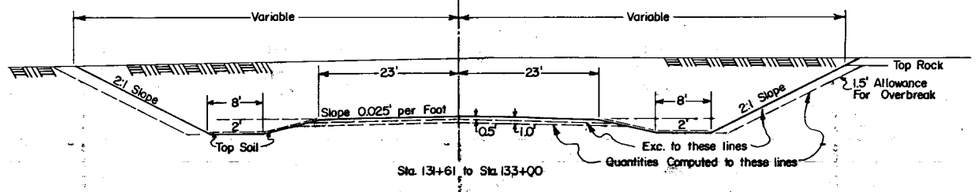
TYPICAL GRADING SECTIONS (CSAH 9)



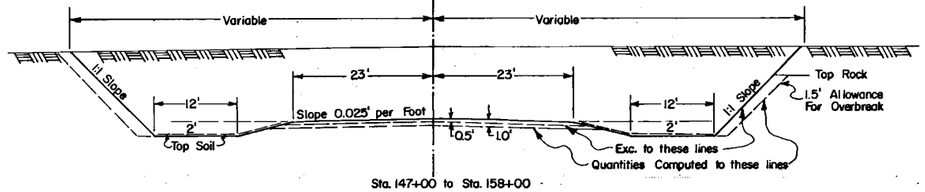
Sta. 98+00 to Sta. 129+19
Sta.133+00 to Sta. 136+36
Sta.158+00 to Sta. 212+03.46



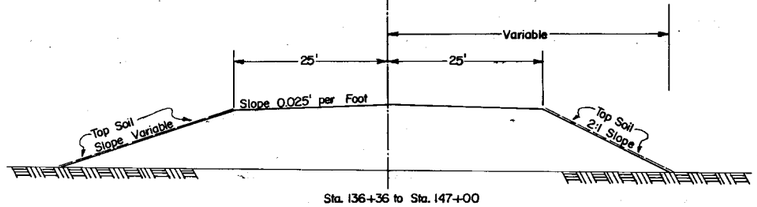
Sta. 129+19 to Sta. 131+61



Sta. 131+61 to Sta. 133+00

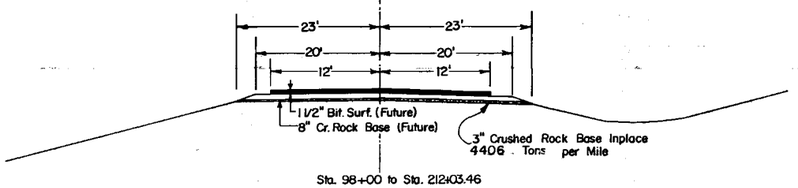


Sta. 147+00 to Sta. 158+00



Sta. 136+36 to Sta. 147+00

TYPICAL BASE & SURFACE SECTION (CSAH 9)



Sta. 98+00 to Sta. 212+03.46

FED. ROAD DIST. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS

200+40 ℄ Culv
Inpl 18"X30' CMP
Remove
F&I 18"X64' CMP
F&I 2-18" Metal Aprons
For CMP

211+60 Const. ℄ Culv
F&I 24"X80' RCP Class II
F&I 2-24" Conc Aprons
For SCP
Place Culv. on Class C Bedding

217+04 FE Lt
No Culv Inpl
F&I 18"X32' CMP
F&I 2-18" Metal Aprons
For CMP

219+50 ℄ Culv
Inpl 18"X38' CMP
Remove
F&I 24"X62' RCP Class II
F&I 2-24" Conc Aprons
For SCP
Place Culv. on Class C Bedding
Place Ditch Block

Begin S.A.P 55-611-02
Sta. 200+00

POT 202+00
Spk Inplace

POT 213+50.51
Center of South Track

POT 223+18.72
Spk Inplace

Construct 35' Shoulder Radius

Construct 50' Shoulder Radius

Two Rd

Highway

75°05

51°05

Pl 215+37.82
Δ Lt 0°01'
2" Pipe
0.05' Offset

Barn

Well

200+63 FE Rt
Inpl 24"X26' CMP
Remove
F&I 18"X32' CMP
F&I 2-18" Metal Aprons
For CMP

202+09 FE Rt
No Culv Inpl
Remove
F&I 18"X28' CMP
F&I 2-18" Metal Aprons
For CMP

204+35 Driveway Rt
Inpl 18"X20' CMP
Remove
F&I 18"X32' CMP
F&I 2-18" Metal Aprons
For CMP

205+24 Driveway Rt
Inpl 18"X30' CMP
Remove
F&I 18"X32' CMP
F&I 2-18" Metal Aprons
For CMP

207+55 Driveway Rt
Inpl 15"X26' CMP
Remove
F&I 18"X32' CMP
F&I 2-18" Metal Aprons
For CMP

213+92 ℄ Culv
Inpl 18"X28' CMP
Remove
F&I 18"X39' CMP
F&I 2-18" Metal Aprons
For CMP
Skew 51°

214+47 FE Rt
No Culv Inpl
F&I 18"X28' CMP
F&I 2-18" Metal Aprons
For CMP

215+21 FE Rt
Inpl 18"X36' CMP
Remove
F&I 18"X36' CMP
F&I 2-18" Metal Aprons
For CMP

PLAN
SURVEYED
PLOTTED
ALIGNMENT CHECKED
NOTE BOOK
NO.
RT. OF WAY CHECKED.
BY
DATE

B.M. Elev. 1062.31'
Spk in TP 29' Rt
Sta. 200+42

S.M. Elev. 1079.81'
Spk in PP 30' Rt
Sta. 215+36

PROFILE
SURVEYED
PLOTTED
GRADES CHECKED
IS MV NOTED
STRUCTURE NOTATING CHKD
NOTE BOOK
NO.
BY
DATE

Finished ℄ Grades

Present ℄ Grades

Profile 75' Lt

Profile 75' Rt

Inlet Elev. 597
Outlet Elev. 58.7

Inlet Elev. 818
Outlet Elev. 774

Subgrade Treatment
Excavate 12" Below Profile Grade
Sta. 200+10 to Sta. 208+40

Subgrade Treatment
Excavate 12" Below Profile Grade
Sta. 213+60 to Sta. 219+15

EXC Class A 212
Class SG 120
EMB 147

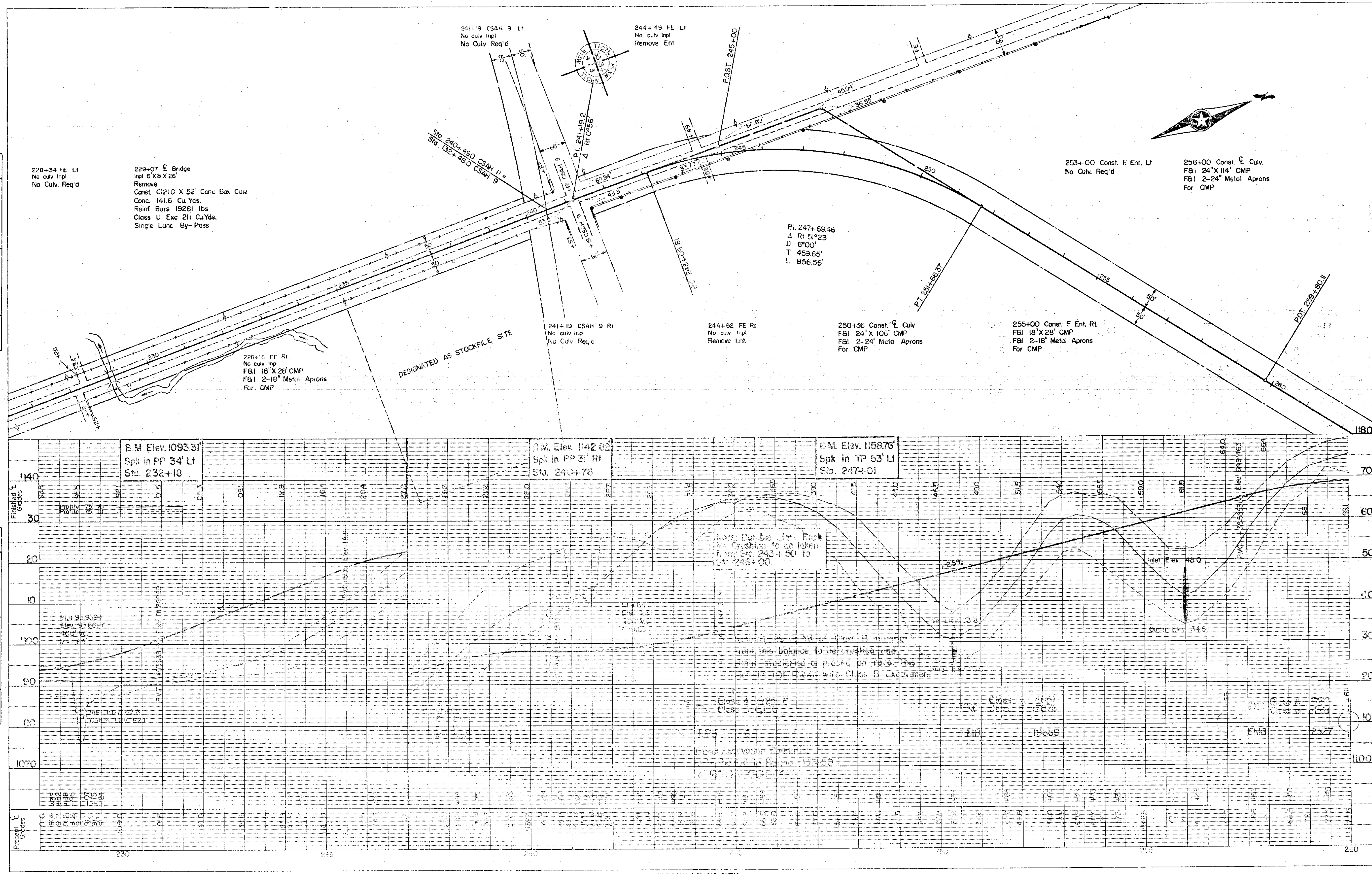
EXC Class A 1279
Class SG 993
EMB 272

EXC Class A 6983
Class SG 761
EMB 35469

SINGLE PLAN & PROFILE - DOTTED
CHARLES BRUNING COMPANY, INC.

State Proj. No. 55-611-02 (CSAH 10) Sheet No. 8 of 77 Sheets

PLAN
NOTE BOOK | NO.
SURVEYED / PLOTTED / ALIGNMENT CHECKED / RT. OF WAY CHECKED | BY | DATE

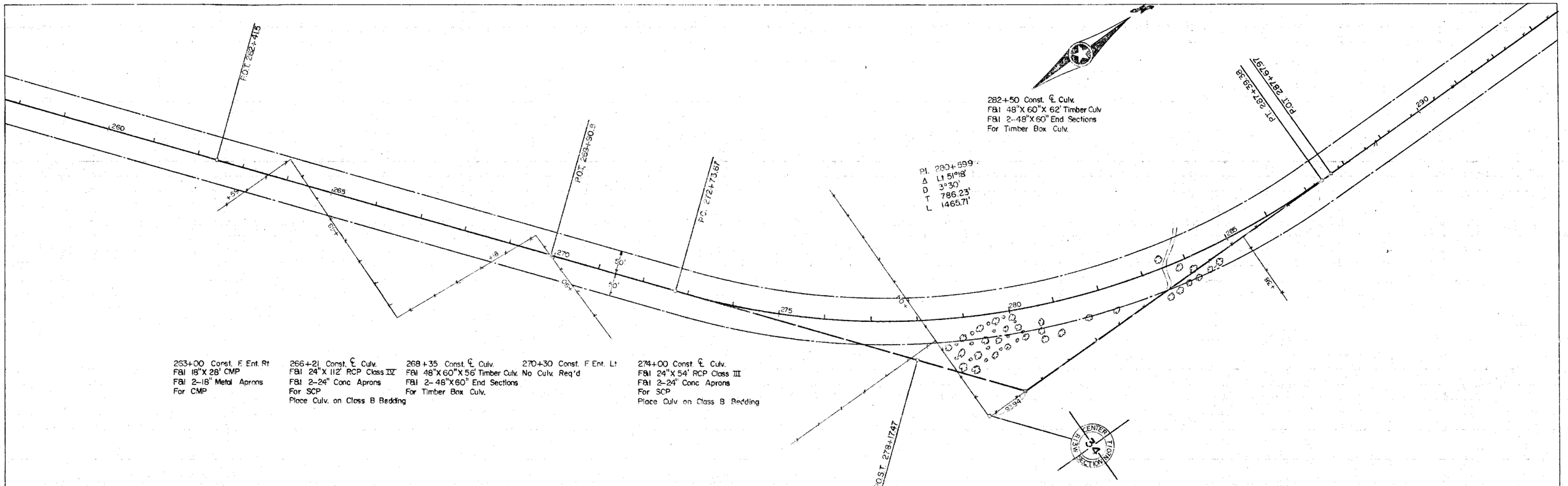


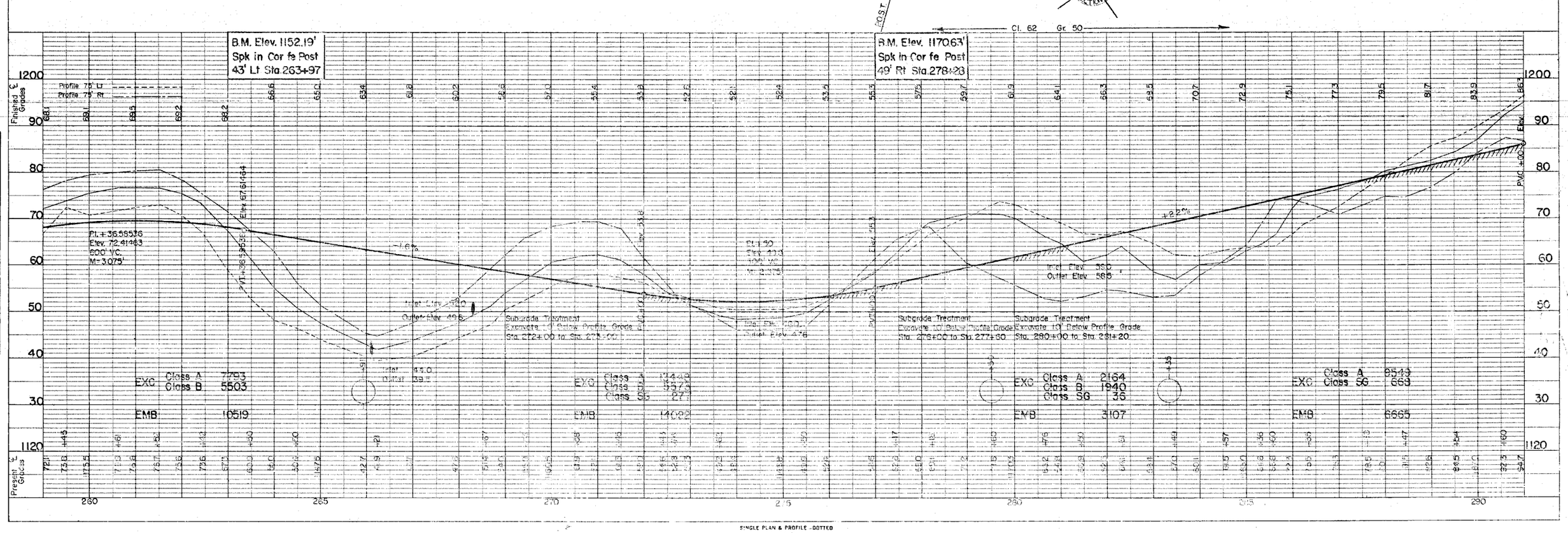
PROFILE
NOTE BOOK | NO.
SURVEYED / PLOTTED / GRADES CHECKED / B.M.s NOTED / STRUCTURE NOTAT'NS CH'KD | BY | DATE

SINGLE PLAN & PROFILE - DOTTED
CHARLES BRUNING COMPANY, INC.

PLAN: SURVEYED | PLOTTED | GRADES CHECKED | ALIGNMENT CHECKED | RT OF WAY CHECKED | NOTE BOOK | NO. | BY | DATE

PROFILE: SURVEYED | PLOTTED | GRADES CHECKED | ALIGNMENT CHECKED | NOTE BOOK | NO. | STRUCTURE NO | BY | DATE | CHKD



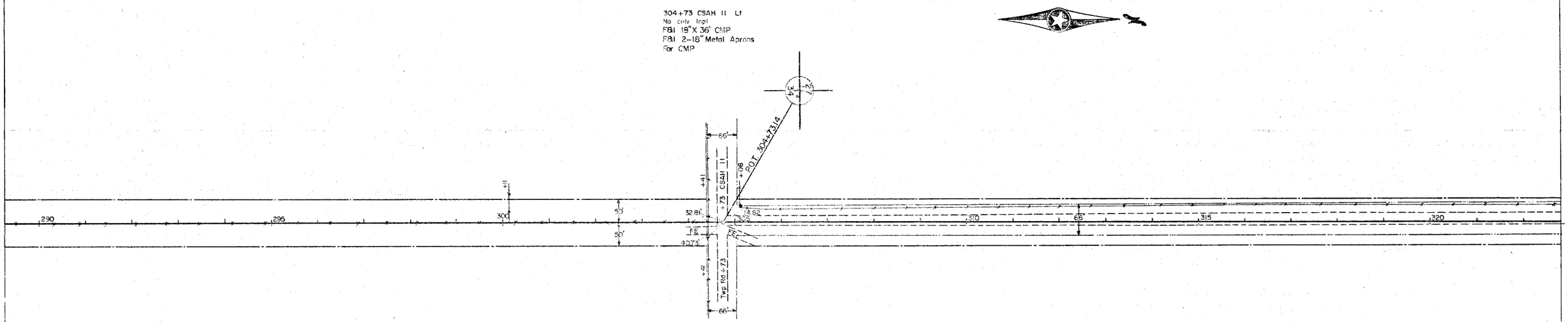


SINGLE PLAN & PROFILE - DOTTED
CHARLES BRUNING COMPANY, INC.

PLAN

DATE	BY	SURVEYED	PLOTTED	DRAWN BY	CHECKED	R/W MAP	CHECKED	NOTE BOOK	NO.

304+73 CSAH 11 Lt
No culv Inpl
FBI 18"X 36' CMP
FBI 2-18" Metal Aprons
For CMP



304+62 FE Rt (off Twp Rd)
No culv Inpl
FBI 18"X 28' CMP
FBI 2-18" Metal Aprons
For CMP

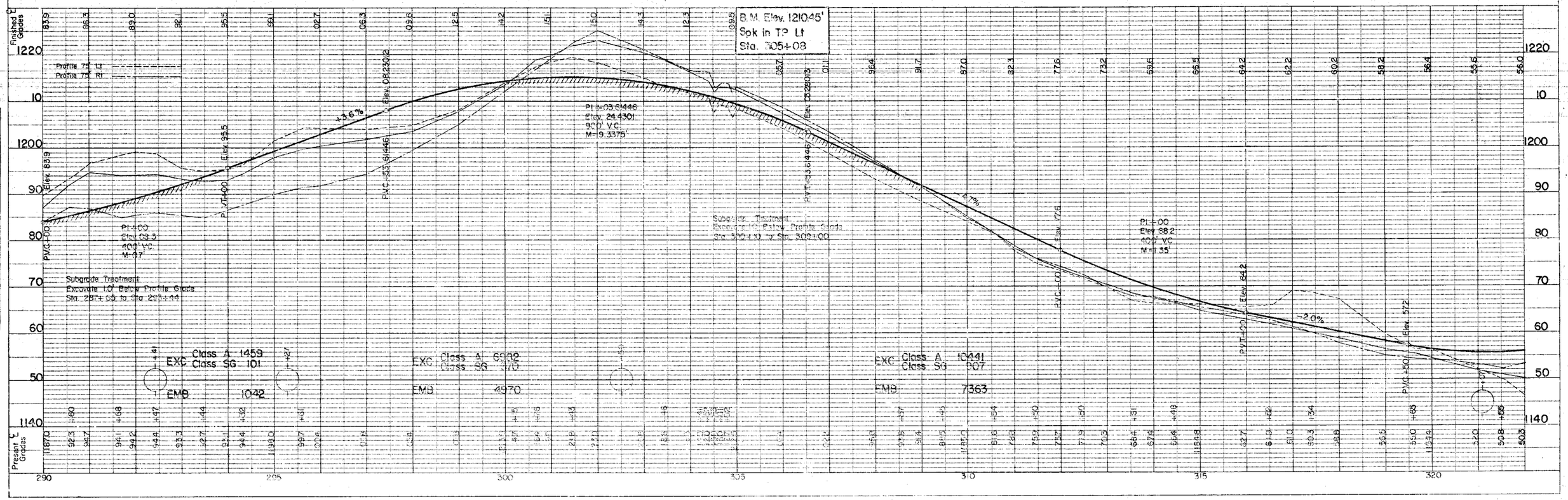
304+73 Twp Rd Rt
No culv Inpl
FBI 18"X 36' CMP
FBI 2-18" Metal Aprons
For CMP

304+81 FE Rt (off Twp Rd)
No culv Inpl
FBI 18"X 28' CMP
FBI 2-18" Metal Aprons
For CMP

PROFILE

DATE	BY	SURVEYED	PLOTTED	DRAWN BY	CHECKED	(E.M.S. NOTED.	STRUCTURE NOTATNS CHKD

NOTE BOOK NO.



325+18 FE Lt
No culv Inpl
No Culv. Req'd

331+19 FE Lt
No culv Inpl
No F Ent. Req'd

333+50 Const. F Ent Lt
F&I 18"X 28' CMP
F&I 2-18" Metal Aprons
For CMP

344+20 FE Lt
No culv Inpl
F&I 18"X28" CMP
F&I 2-18"Metal Aprons
For CMP

350+91 FE Lt
No culv Inpl
F&I 18"X 28' CMP
F&I 2-18" Metal Aprons
For CMP

POT. 331+07.20
Inpl 12" Steel Pipe

POT. 344+29.83

POT. 350+18.98

Property Corner

322+60 FE Rt
Inpl 15"X 24' CMP
Remove
F&I 36"X 28' CMP
F&I 2-36" Metal Aprons
For CMP

323+85 ℄ Bridge
Inpl 16.3'X 20' Conc Deck B. Hdwls
Remove
Const. C(11-14-11)12 X 82' Conc. Box
Conc 573.96 Cu. Yds.
Reinf. Bars 71,807 lbs
Class U Exc. 1,752 Cu. Yds.
Single Lane By-Pass
Granular Backfill 1,094 Cu.Yds.

325+82 FE Rt
No culv Inpl
No Culv. Req'd

330+56 FE Rt
Inpl 12"X 20' CMP
Remove
No F Ent. Req'd

331+20 FE Rt
No culv Inpl
No F Ent. Req'd

332+50 Const. F Ent. Rt
F&I 18"X 32' CMP
F&I 2-18" Metal Aprons
For CMP

343+67 FE Rt
No culv Inpl
F&I 18"X 28' CMP
F&I 2-18" Metal Aprons
For CMP

344+27 Twp Rd Rt
No culv Inpl
F&I 18"X 36' CMP
F&I 2-18" Metal Aprons
For CMP

PLAN
SURVEYED
PLOTTED
NOTE BOOK
NO.
RIGHT CHECKED
RT. OF WAY CHECKED
DATE
BY

Cl. 36 Gr. 19 — Cl. 4 Gr. 3

B.M. Elev. 1144.55'
□ in NE Wing Bridge
Sta. 323+94

B.M. Elev. 1148.14'
Hub 37' Rt
Sta. 325+70

B.M. Elev. 1212.89'
Spk in PP 32' Rt
Sta. 331+03

B.M. Elev. 1246.75
Spk in PP 31' Rt
Sta. 343+75

Finished ℄ Grades
Special Ditch Grades
Present ℄ Grades

Profile 75' Lt
Profile 75' Rt

P.I.+00
Elev. 50.2
700' V.C.
M=7.525'

-0.925%

Sp. Ditch

Inlet Elev. 33.0
Outlet Elev. 37.2

PVT+50 Elev. 73.3

+6.6%

℄ Elev. 77.46066

PVC+3.04347

P.I.+13.04387
Elev. 87.26086
600' V.C.
M=2.5873

PVT+13.04347
Elev. 0.67.0866

+7.15%

Subgrade Treatment
Excavate 1.0' Below Profile Grade
Sta. 341+20 to Sta. 345+60

PVC+50 Elev. 5.975

P.I.+00
Elev. 63.0
700' V.C.
M=4.33125

EXC Class A 17720
Class B 10302

EMB 22409

EXC Class A 12615
Class SG 1222

EMB 8700

SINGLE PLAN & PROFILE - DOTTED
CHARLES BRUNING COMPANY, INC

357+56 FE Lt
Inpl 15"X26' CMP
Remove
F&I 18"X32' CMP
F&I 2-18" Metal Aprons
For CMP

360+78 FE Lt
Inpl 18"X 28' CMP
2-18" Metal Aprons
Remove
F&I 18"X 32' CMP
F&I 2-18" Metal Aprons
For CMP

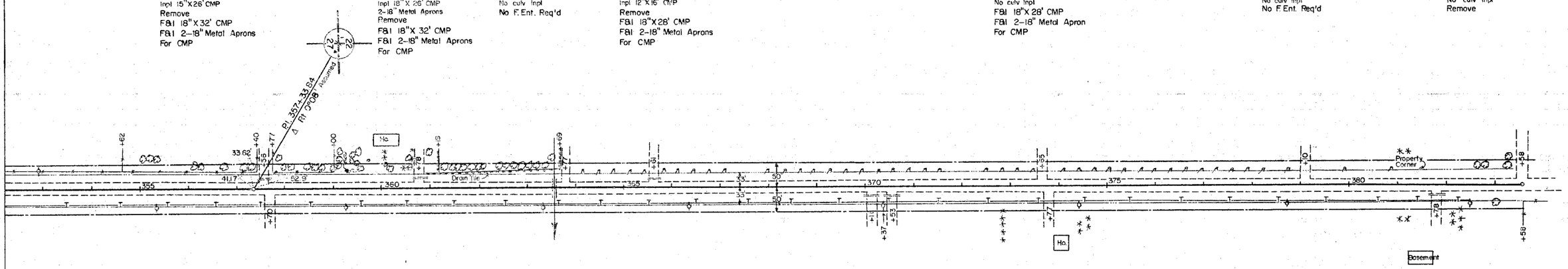
363+77 FE Lt
No culv Inpl
No F.Ent. Req'd

365+61 FE Lt
Inpl 12"X16' CMP
Remove
F&I 18"X28' CMP
F&I 2-18" Metal Aprons
For CMP

373+65 FE Lt
No culv Inpl
F&I 18"X 28' CMP
F&I 2-18" Metal Apron
For CMP

379+10 FE Lt
No culv Inpl
No F.Ent. Req'd

383+58 Road to CSAH 2 Lt
No culv Inpl
Remove



357+70 FE Rt
No culv Inpl
F&I 18"X 28' CMP
F&I 2-18" Metal Aprons
For CMP

363+58 ℄ Culv
Inpl 30"X30' CMP
Remove
F&I 30"X52' RCP Class III
F&I 2-30" Conc Aprons
For SCP
Place Culv. on Class "B" Bedding

370+11 FE Rt
Inpl 15"X30' CMP
Remove
F&I 18"X28' CMP
F&I 2-18" Metal Aprons
For CMP

370+53 FE Rt
Inpl 18"X30' CMP
Remove
F&I 18"X28' CMP
F&I 2-18" Metal Aprons
For CMP

373+77 FE Rt
No culv Inpl
F&I 18"X32' CMP
F&I 2-18" Metal Aprons
For CMP

381+78 Driveway Rt
Inpl 15"X30' CMP
Remove
F&I 18"X32' CMP
F&I 2-18" Metal Aprons
For CMP

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

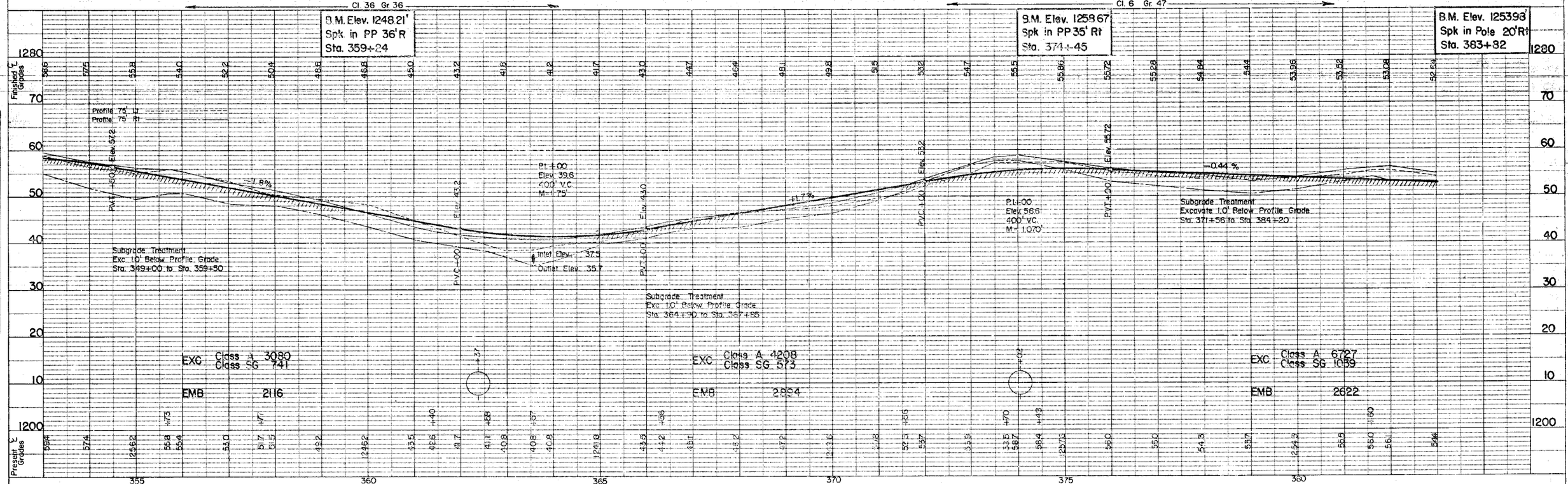
Cl. 36 Gr. 36

B.M. Elev. 1248.21'
Spk in PP 36'R
Sta. 359+24

Cl. 6 Gr. 47

B.M. Elev. 1258.67
Spk in PP 35' Rt
Sta. 374+45

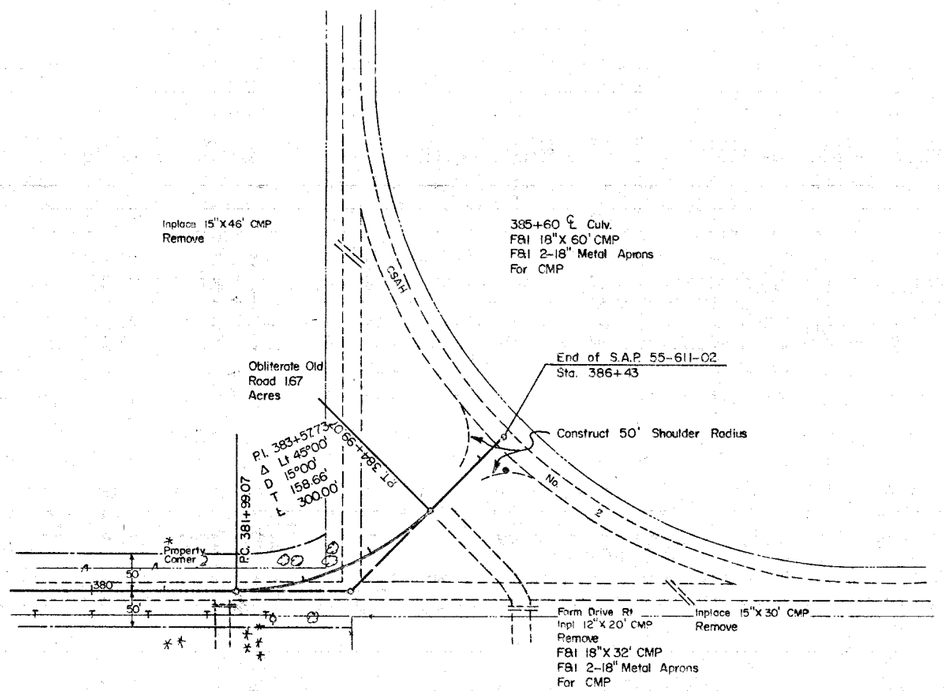
B.M. Elev. 1253.98'
Spk in Pole 20'Rt
Sta. 383+82



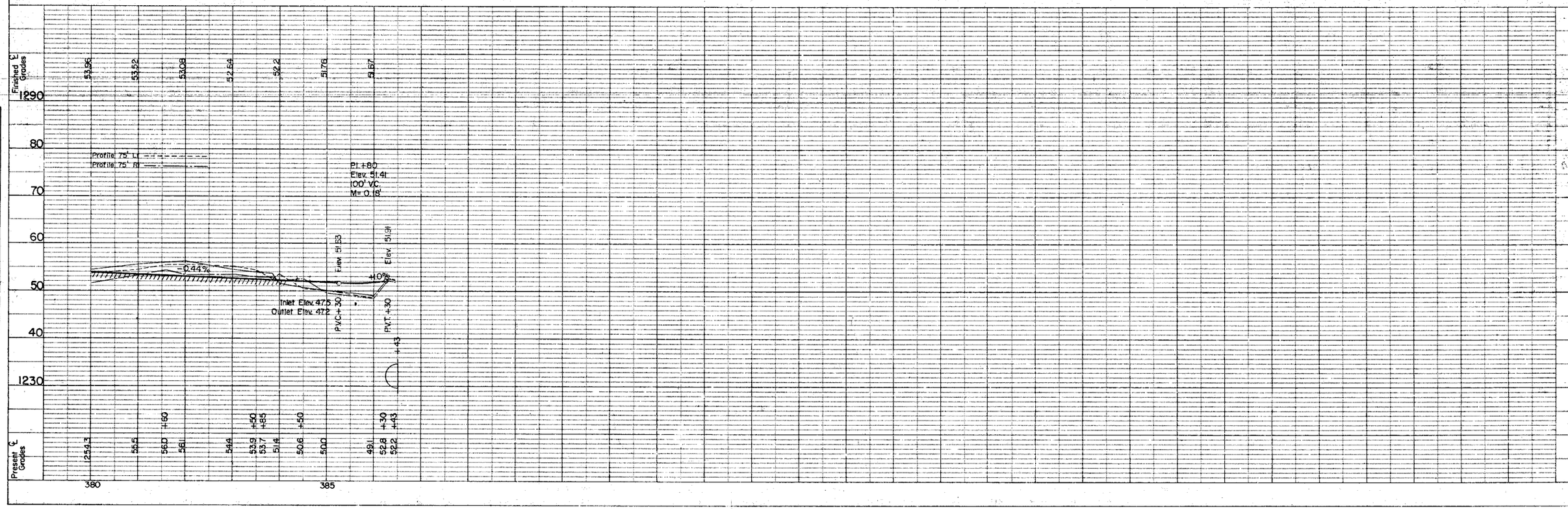
PROFILE — SURVEYED ... DRAWN ... GRADES CHECKED ... B.M.+NOTED ... STRUCTURE NOTATING CHKD ... NOTE BOOK ... NO. ... BY ... DATE

SINGLE PLAN & PROFILE—DOTTED
CHARLES BRUNING COMPANY, INC.

PLAN
SURVEYED
PLOTTED
ALIGNMENT CHECKED
PROF. WAS CHECKED
NOTE BOOK
NO.
BY
DATE



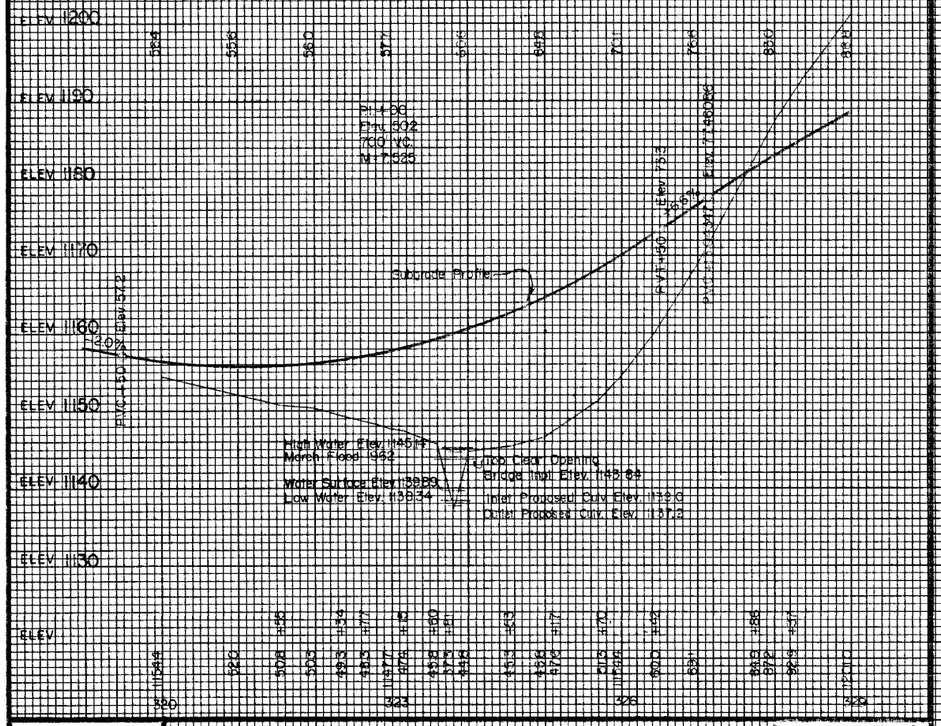
PROFILE
SURVEYED
PLOTTED
GRADES CHECKED
IS MATERIAL NOTED
NOTE BOOK
NO.
STRUCTURE NOTATNS CHKD
BY
DATE



SINGLE PLAN & PROFILE - DOTTED
CHARLES BRUNING COMPANY, INC.

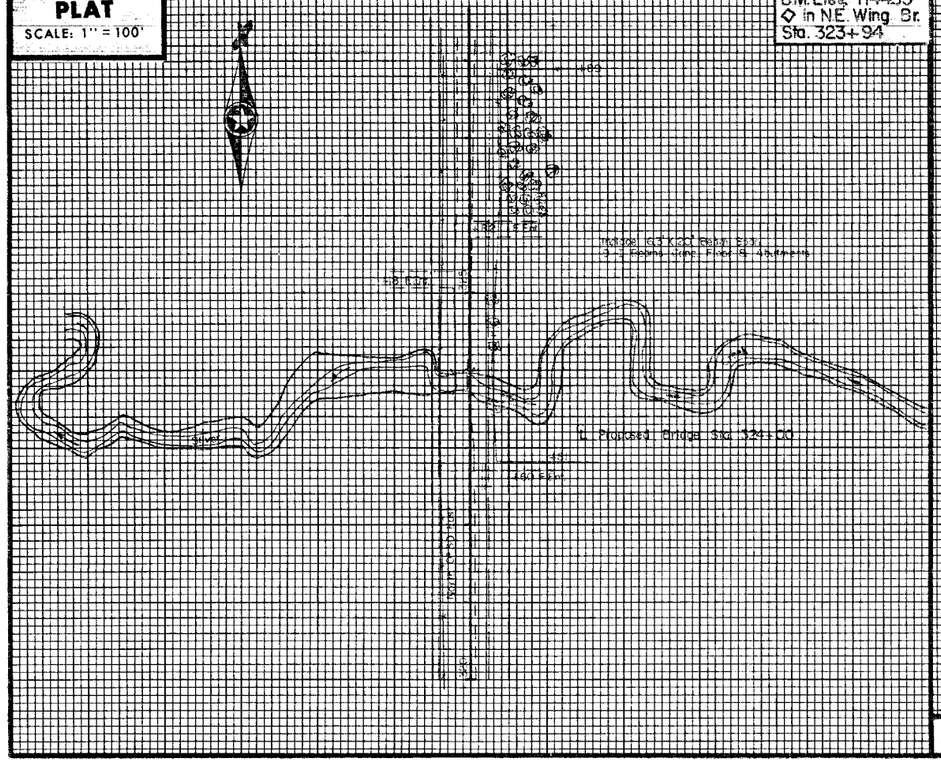
CONTRACTED PROFILE

SCALE: HOR. 1" = 100' VER. 1" = 10'



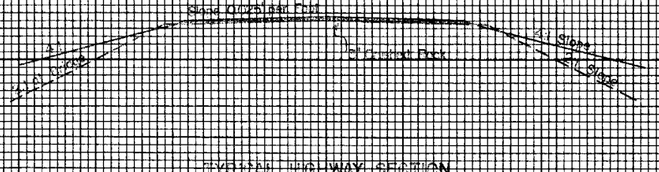
PLAT

SCALE: 1" = 100'



TYPICAL SECTIONS & PERTINENT DATA

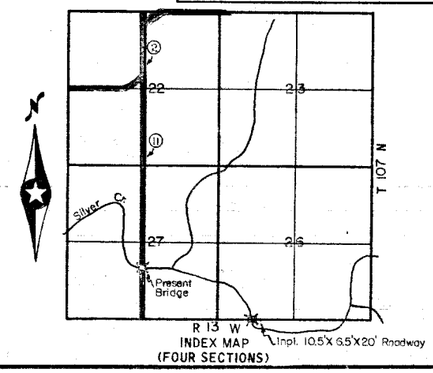
SCALES AS SHOWN



B.M. Elev. 1144.55'
◇ in N.E. Wing. Br.
Sta. 323+94 (M.S.L. Datum)

SEE SHEET 12 OF 77 SHEETS FOR PLAN AND PROFILE

Fed. Proj. No.



INDEX MAP
(FOUR SECTIONS)

FOLLOW SEPARATE "INSTRUCTIONS FOR PREPARATION OF BRIDGE SURVEYS" WHEN MAKING BRIDGE SURVEYS.

DATA

1. Preliminary recommendations of Engineer in charge of Bridge Survey:
   a. Net span length and type of bridge: C(II-14-11)10 X 86'
   b. Width of roadway on bridge: 42'
   c. Number and width of sidewalks, if any: None Req'd
   d. Locate center of bridge at station: Sta. 324+00
   e. If a skew bridge is recommended, the angle of skew should be: None
   f. Is piling required? no — undesireable material to be removed as structure excavation and backfilled with Granular Backfill
2. Special features: Waterfalls, dams, exceptional floods, ice, driftwood, sliding banks, logging, etc.: None
3. Changes: In height or length from that of old bridge, and reasons why: Present structure inadequate as to roadway width and waterway
4. Other bridges in vicinity:
   a. Over same stream (particularly structures which carry high water without overflow of roadway); give location, length, height above water, net cross-sectional area at high water stage and estimated age
   b. Over or under same highway or railroad; give location, length, horizontal and vertical clearances and estimated age
   c. Reasons why these bridges are, or are not, fair indications of what length the proposed bridge should be
5. If structure is over a drainage ditch, is ditch gradient liable to be altered? NA
6. Navigation clearances required, if any: NA
7. Information and evidence in regard to high water stages was obtained as follows: Flood Conditions March 29th 1962
8. Must contractor provide for traffic during construction of proposed bridge? Yes
   If so, by what means? By-Pass

HYDRAULIC ENGINEERS RECOMMENDATION

HIGH AND LOW WATER ELEVATIONS

Data obtained from: Observation 3/29/62
reflects highest water elevation in the area of this construction to be 1145.14 and the lowest water elevation to be 1138.34. The above figures are for informational purposes only. The state neither warrants nor represents that these figures for high water and low water are in any way indicative of the high water or low water to be expected or encountered during this construction.

SHIPPING POINT

Proposed Bridge is 7.0 miles Northeast of * Rochester which is the nearest Railroad shipping point.

*(Give name of town, station or siding)

Date — Project or County Engineer

Date — District Engineer

STATE OF MINNESOTA
DEPARTMENT OF HIGHWAYS

BRIDGE SURVEY

FOR

PROPOSED BRIDGE LOCATED 7.0 MILES Northeast OF Rochester (TOWN OR CITY) ON 11 (C. S. A. H. OR T. H. NUMBER)

SEC. 27 TWP. T107N R. 13W

TOWNSHIP ..... COUNTY .....

SURVEY MADE DURING MONTH OF July 19 63

SURVEY MADE BY .....

BRIDGE NO. .....

Area No. | Job No. | State Proj. No. | Sheet No. 15 of 77 Sheets

Bridge Survey Sheet (Sheet 1 of 2)

Fed. Proj. No.

SCALE: 1" = 10'

S-3 S-6

N 23° W

CENTER LINE OF LAYOUT

323 324

S-11 S-2 S-5

ELEV

ELEV

ELEV

ELEV 1150

ELEV 1140

ELEV 1130

ELEV 1120

ELEV

ELEV

ELEV

ELEV

20' Left

20' Right

High Water 1145.14

Elev. 1144.57

Elev. 1143.55

Elev. 1141.92

Elev. 1139.83

Elev. 1139.55

Low Water 1138.34

S-1 S-3 S-2 S-4 S-5

Elev. 1127.85 Elev. 1128.53 Elev. 1128.52 Elev. 1128.67 Elev. 1127.55

Soundings taken with Standard 1½" Rod 50 lb. Hammer 2' Drop

B.M. ELEV. 1144.55 (N.S.L. 29 ADJ.)
O in NE Wing Bridge

323 1130 324

BORINGS SHOWN [ ] TAKEN WITH
STD. 140 LB. HAMMER
30 INCH DROP
2 INCH O.D. SAMPLER

TRUNK HIGHWAY NO.
STATE OF MINNESOTA
DEPARTMENT OF HIGHWAYS

BRIDGE NO.

BRIDGE SURVEY
PLAN AND PROFILE

SEE SHEET NO FOR ADDITIONAL INFORMATION

State Proj. No.

Sheet No. 16 **of** 77 **Sheets**

Bridge Survey Sheet (Sheet 2 of 2)