FORM 100-A '65

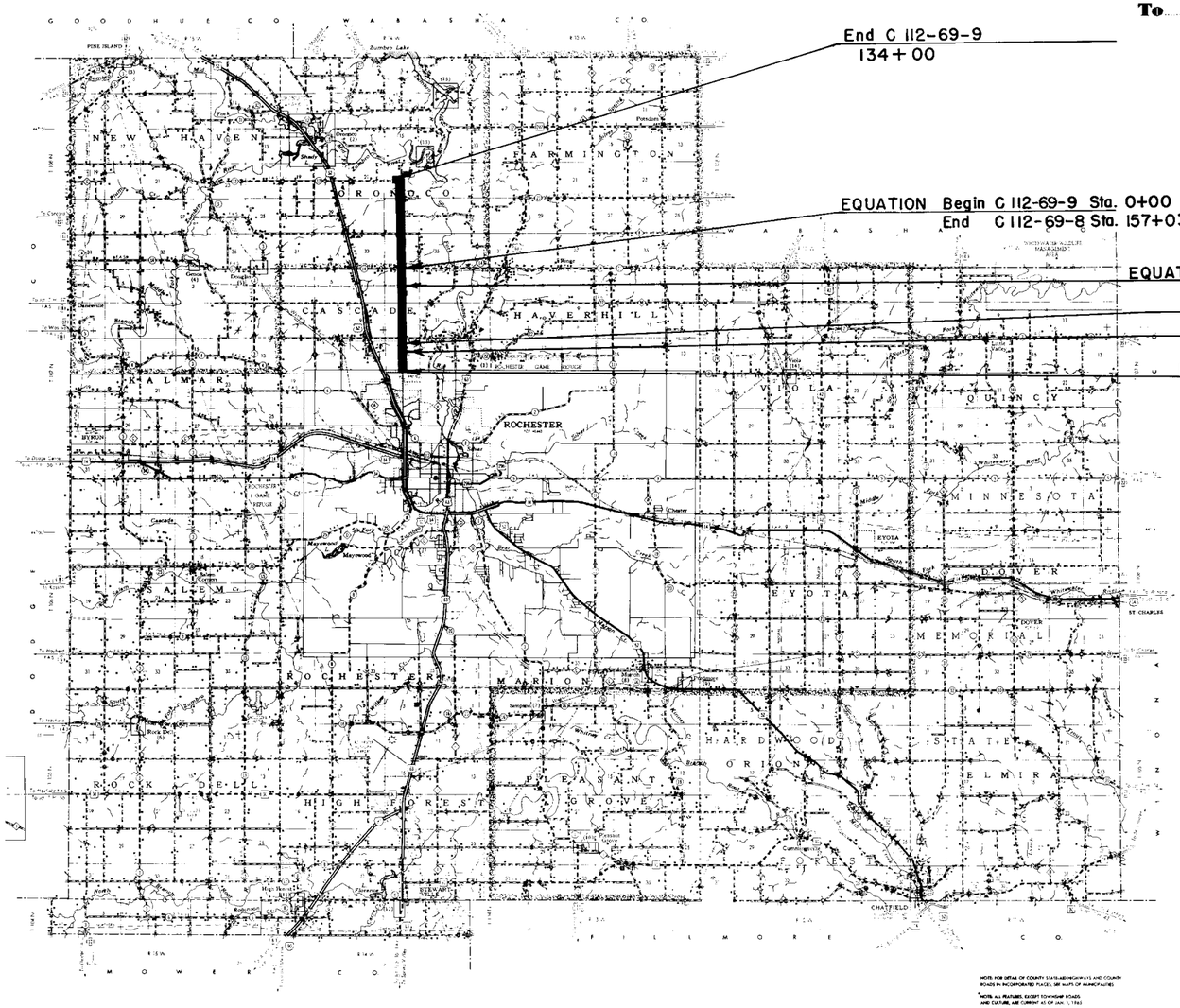
Fed. Proj. No.

PLANS SYMBOLS

STATE LINE
COUNTY LINE
TOWNSHIP OR RANGE LINE
SECTION LINE
QUARTER LINE
SIXTEENTH LINE
RIGHT-OF-WAY LINE
PRESENT RIGHT-OF-WAY LINE
CONTROL OF ACCESS LINE
PROPERTY LINE (Except Land Lines)
VACATED PLATTED PROPERTY
CORPORATE OR CITY LIMITS
TRUNK HIGHWAY CENTER LINE
RETAINING WALL
RAILROAD
RAILROAD RIGHT-OF-WAY LINE
RIVER OR CREEK (NAME)
DRY RUN
DRAINAGE DITCH (SIZE)
DRAIN TILE
CULVERT
DROP INLET
GUARD RAIL
BARBED WIRE FENCE
WOVEN WIRE FENCE
CHAIN LINK FENCE
RAILROAD SNOW FENCE
STONE WALL OR FENCE
HEDGE
RAILROAD CROSSING SIGN
RAILROAD CROSSING BELL
ELECTRIC WARNING SIGN
CROSSING GATE
MEANDER CORNER
SPRINGS
MARSH
TIMBER
ORCHARD
BRUSH
NURSERY
CATCH BASIN C.B.
FIRE HYDRANT
CATTLE GUARD
OVERPASS (Highway Over)
UNDERPASS (Highway Under)
BRIDGE
BUILDING (One Story Frame)
F FRAME C CONCRETE
S STONE T TILE
B BRICK ST STUCCO
IRON PIPE OR ROD
MONUMENT (STONE, CONCRETE, OR METAL)
WOODEN HUB
GRAVEL PIT (G)
SAND PIT (S)
BORROW PIT (B)
ROCK QUARRY (Q)

UTILITIES SYMBOLS

POWER POLE LINE
TELEPHONE OR TELEGRAPH POLE LINE
JOINT TELEPHONE AND POWER ON POWER POLES
ON TELEPHONE POLES
ANCHOR
STEEL TOWER
STREET LIGHT
PEDESTAL (TELEPHONE CABLE TERMINAL)
GAS MAIN
WATER MAIN
CONDUIT
TELEPHONE CABLE IN CONDUIT
ELECTRIC CABLE IN CONDUIT
TELEPHONE MANHOLE
ELECTRIC MANHOLE
BURIED TELEPHONE CABLE T-BUR
BURIED ELECTRIC CABLE P-BUR
AERIAL TELEPHONE CABLE T-AE
SEWER, (SANITARY OR STORM)
SEWER MANHOLE



NOTE: FOR DETAIL OF COUNTY STATE-AID HIGHWAYS AND COUNTY ROADS IN INCORPORATED PLACES, SEE MAPS OF MUNICIPALITIES

*NOTE: ALL FEATURES, EXCEPT TOWNSHIP ROADS AND CULTURE, ARE CURRENT AS OF JAN. 1, 1965

STATE OF MINNESOTA

DEPARTMENT OF HIGHWAYS

CONSTRUCTION PLAN FOR Grading, Aggregate Base

COUNTY **HIGHWAY NO.** 112

BETWEEN North City limits of Rochester **AND** 5.5 Miles North

From S1/4 Corner Sec. 15 T107N-R14W
To 280.39' West of Center Sec. 22 T108N-R14W
(Give proper reference to Sections, Township and Range)

GROSS LENGTH	29,108.93	FEET 5.513	MILES
BRIDGES-LENGTH	42.25	FEET 0.008	MILES
EXCEPTIONS-LENGTH	0	FEET 0	MILES
NET LENGTH	29,066.68	FEET 5.505	MILES

INDEX OF SHEETS

Sheet No 1 Title Sheet & Layout Map
" No 2 Est Quantities & Typical Sec
" No 3 Est. Quantities & Typical Sec.
" No 4 To 14 Plan & Profile Sheets
" No 15 to 66 X Sections

DESIGN SPEED 50 M. P. H.

PROJECTED A. D. T. 497

7T ULT 9T TON DESIGN

SOIL FACTOR 130

ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND ORDINANCES 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.

Arthur La Shell Hammes DATE August 20, 1969
COUNTY ENGINEER

Olmsted COUNTY REG. NO. 8284

RECOMMENDED FOR APPROVAL _____, 19
DISTRICT STATE AID ENGINEER

RECOMMENDED FOR APPROVAL _____, 19

APPROVED _____, 19
STATE AID ENGINEER

— SPECIFICATIONS —

STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION DATED JANUARY 1, 1968 as amended by Supplemental Specifications dated July 1, 1969, shall apply.

Minn. Project No. _____ S.A.P. _____
State Project No. _____

Olmsted County, Minnesota. County Proj. No. C112-69-9 C112-69-8 Plan No. _____ Sheet 1 of 66 Sheets

ALBINSON, INC.
MINNEAPOLIS, MINN. 55415

FORM 100-A 63

FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MINN.				

ESTIMATED QUANTITIES

	SPECIFICATION NO.	ITEM	UNIT	MUNICIPAL	C112-69-8	TOTAL ESTIMATED QUANTITIES
	2101.501	Clearing	Acre		1.89	1.89
	2101.502	Clearing	Tree		165	332
	2101.506	Grubbing	Acre		1.89	1.89
	2101.507	Grubbing	Tree		162	333
	2104501	Remove Portable Culverts	Lin.Foot		579	819
	2105.501	Common Excavation	Cu.Yd.		116,303	229,542
	2105.503	Rock Excavation	Cu.Yd.		50,229	72,003
	2105.507	Subgrade Excavation	Cu.Yd.		6,930	10,867
*	2211.501	Aggregate Base Class 2	Ton		13,450	24,106
	2130.501	Water	M-Gals			10
	2501.511	18" Metal Pipe Culv.	Lin.Foot		616	1,198
	2501.511	24" Metal Pipe Culv.	Lin. Foot		32	88
	2501.511	48" Metal Pipe Culv.	Lin.Foot		28	28
	2501.512	18" Span Metal Pipe Arch - Culv.	Lin.Foot		132	132
					202	
	2501.523	24" Conc. Culv. Cl. II	Lin.Foot		202	308
	2501.523	24" Conc. Culv. Cl. III	Lin. Foot		80	80
	2501.523	30" Conc. Culv. Cl. II	Lin. Foot		90	90
	2501.523	36" Conc. Culv. Cl. II	Lin. Foot		82	82
	2501523	42" Conc. Culv. Cl. II	Lin. Foot		74	74
	2501.523	48" Conc. Culv. Cl III	Lin. Foot			78
	2501.523	60" Conc. Culv. Cl II	Lin.Foot		58	58
	2501.532	18" Metal Aprons	Apron		42	80
	2501.532	24" Metal Aprons	Apron		2	6
	2501.532	48" Metal Aprons	Apron		2	2
	2501.533	18" Span Metal Aprons	Apron		8	8
	2501.536	24" Conc. Aprons	Apron		8	10
	2501.536	30" Conc. Aprons	Apron		2	2
	2501.536	36" Conc. Aprons	Apron		2	2
	2501.536	42" Conc. Aprons	Apron		2	2
	2501.536	48" Conc. Aprons	Apron			2
	2501.536	60" Conc. Aprons	Apron		2	2
	2501.572	Install 24" Conc. Culverts (Aprons Included)	Lin. Foot			150
	2501.572	Install 48" Conc. Culvert	Lin.Foot			12
	2501.524	154" Span Concrete Pipe-Arch Culvert Class II	Lin.Foot			130
	2501.537	154" Span Concrete Aprons	Apron			4
	2123.501	Common Laborers	Hour		8	8
	2123.503	Motor Grader	Hour		8	8
	2123.508	15 C.Y. Scraper	Hour		12	32
	2123.509	Dozer	Hour		12	32
	2104.520	Remove 17' Span Concrete Structure (Sta. 116+88)	Structure			1

* C 112-69-889 NOTE: Item No. 2211.501 Includes 280 Tons for Private Drives, 234 Tons for F.E. and 250 Tons for Twp. Roads.

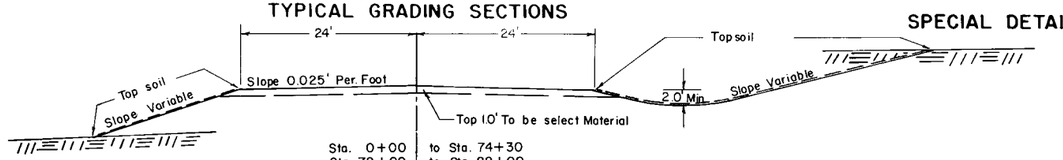
STANDARD DETAIL PLATES

THE FOLLOWING STANDARD DETAIL PLATES, APPROVED BY THE BUREAU OF PUBLIC ROADS, SHALL APPLY ON THIS PROJECT.

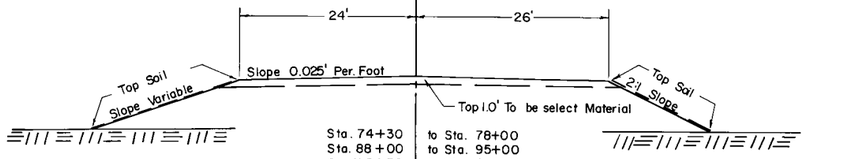
PLATE NO	DESCRIPTION
3000 F	Reinforced Concrete Pipe
3040 C	Corrugated Metal Pipe
3100 E	Concrete Apron for Reinforced Concrete Pipe
3122 E	Metal Apron for C.M. Pipe-Arch Culvert
3123 E	Metal Apron for C.M. Pipes
8000 C	Standard Barricades
8008 C	Contractors Sign
9000 A	Approaches and Entrances

From Rochester to C.S.A.H. 14

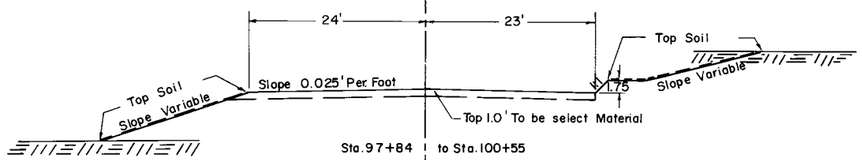
TYPICAL GRADING SECTIONS



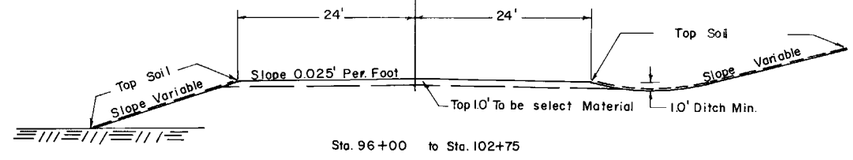
Sta. 0+00 to Sta. 74+30
Sta. 78+00 to Sta. 88+00
Sta. 95+00 to Sta. 96+00
Sta. 111+31 to Sta. 118+56
Sta. 127+00 to Sta. 134+00
Sta. 138+40 to Sta. 157+03.88



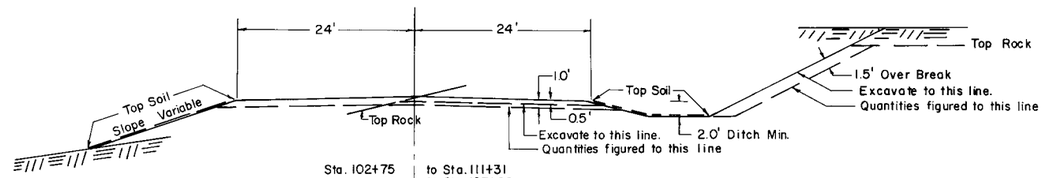
Sta. 74+30 to Sta. 78+00
Sta. 88+00 to Sta. 95+00
Sta. 118+56 to Sta. 123+79



Sta. 97+84 to Sta. 100+55

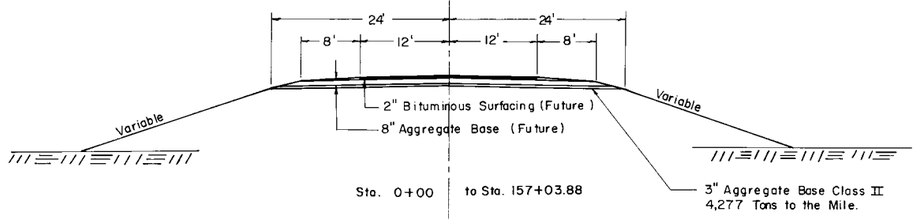


Sta. 96+00 to Sta. 102+75



Sta. 102+75 to Sta. 111+31
Sta. 123+79 to Sta. 127+00
Sta. 134+00 to Sta. 138+40

TYPICAL BASE & SURFACE SECTIONS



Sta. 0+00 to Sta. 157+03.88

SPECIAL DETAILS

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 Common 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 Subgrade Excavation. Back fill 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

Minn. Project No._____ C.P. C112-69-8 & C112-69-9 State Project No._____

ALBINSON, INC. MINNEAPOLIS 15, MINN.

Olmsted County, Minnesota. County Proj. No._____ Plan No._____ Sheet 2 of 66 Sheets

FORM 129c - No. 2 Rev. '

ESTIMATED QUANTITIES from C.S.A.H. 14 to 2.5 miles North

SPECIFICATION NO.	ITEM	UNIT	TOTAL ESTIMATED QUANTITIES	MUNICIPAL	C112-69-9
2101.502	Clearing	Tree			167
2101.507	Grubbing	Tree			171
2104.501	Remove Portable Culverts	Lin. Foot			240
2105.501	Common Excavation	Cu.Yd.			113239
2105.503	Rock Excavation	Cu.Yd.			21774
2105.507	Subgrade Excavation	Cu. Yd.			3937
2211.501	Aggregate Base Class 2	Tons			10,656
2501.511	18" Metal Pipe Culvert	Lin.Foot			582
2501.511	24" Metal Pipe Culvert	Lin.Foot			56
2501.523	24" Conc. Culv. Class 2	Lin.Foot			106
2501.523	48" Conc. Culv. Class 3	Lin.Foot			78
2501.532	18" Metal Aprons	Apron			38
2501.532	24" Metal Aprons	Apron			4
2501.536	24" Concrete Aprons	Apron			2
2501.536	48" Concrete Aprons	Apron			2
* 2501.572	Install 24" Concrete Culverts (Aprons Included)	Lin. Foot			150
* 2501.572	Install 48" Concrete Culverts	Lin.Foot			12
2104.520	Remove 17' Span Structure (Sta.116+88) Salvage I-Beams	Structure			One
2130.501	Water	M. Gal.			10
2501.524	154" Span Concrete Pipe-Arch Culvert Class II	Lin. Foot			130
2501.537	154" Span Concrete Aprons	Apron			4
2123.508	15 Cu. Yd. Scraper	Hour			20
2123.509	Dozer	Hour			20

Estimated Quantities for Total No. 2 See Sheet

Item No. 2211.501 Includes 90 Tons Drives, 160 Tons F. Ent. and 160 Tons TWP Roads.

* To Be Furnished By County See Special Provisions.

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
3000F	Reinforced Concrete Pipe
3100E	Conc.Apron For Reinforced Concrete Pipe
3123E	Metal Aprons For C.M. Pipes
9000A	Approaches and Entrances
8000C & 8008C	Standard Barricades
3014D	Reinforced Concrete Pipe-Arch
3114B	Two-Piece Concrete Apron For Reinforced Concrete Pipe-Arch

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 "Common" 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 "Subgrade Excavation." Back fill 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.

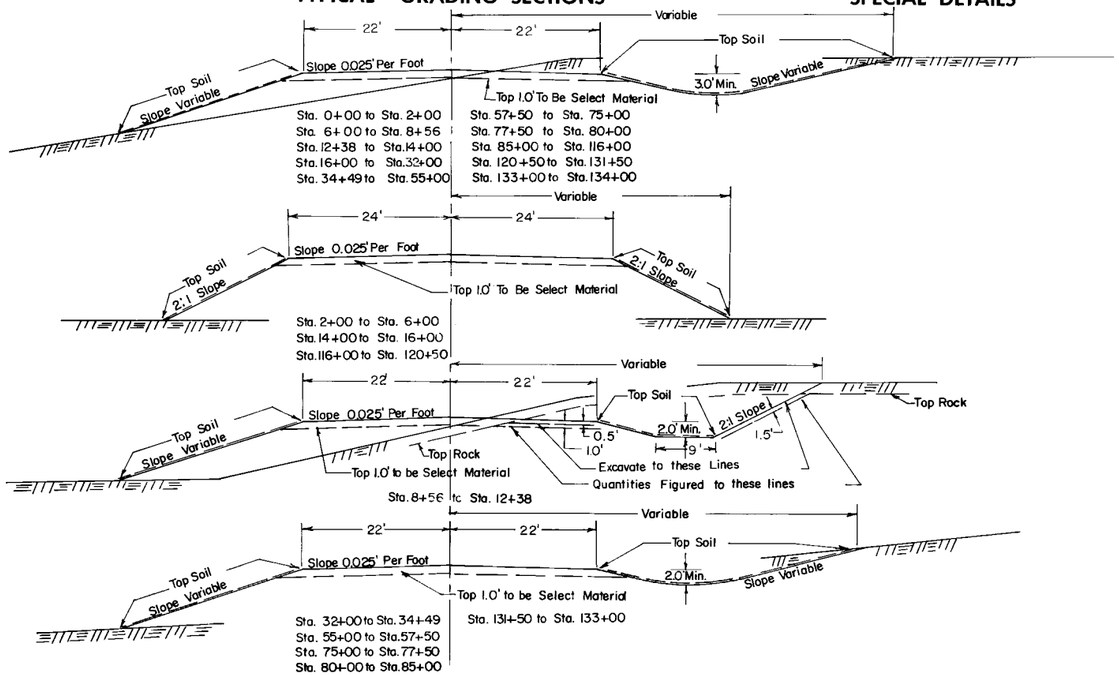
Note: All dimensions and slopes shown on typical sections are approximate.

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

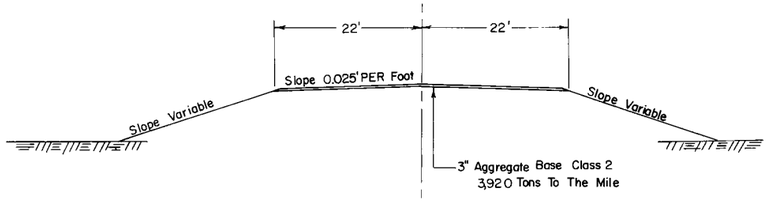
From C.S.A.H. 14 to 2.5 miles North

TYPICAL GRADING SECTIONS

SPECIAL DETAILS



TYPICAL BASE & SURFACE SECTIONS



Sta. 0+00 to Sta. 134+00

H.A. ROGERS CO.
MPLS. MINN.

Olmsted County, Minn. Proj. No. C112-69-9 Plan No. _____ Sheet No. 3 of 66 Sheets

PLAN

SURVEYED
PLOTTED
NOTE BOOK
NO.
DATE
BY
ALIGNMENT CHECKED
BY OFFICE CHECKED

PROFILE

SURVEYED
PLOTTED
NOTE BOOK
NO.
DATE
BY
GRADE CHECKED
BY OFFICE CHECKED
STRUCTURE NOTATIONS ONLY

City of Rochester

18th Ave. N.W.

43.0'

0+00 X on Manhole Cover

22-15

41°51' N.W.

+52

76.23'

Cable Marker

Begin C112-69-8

Cable Marker

+97

+26

+88

+69

+79.69

+27

Cable Marker

Cable Marker

50'

50'

48.40'

35.87'

29.31'

Pi. 26+31.40
Mon. 1/2 Iron Rod
Δ Rt. 0°01'

51 Center Section T 107 N R 14 W

FE Lt. 12+97
No Culv. Inpl.
F & I 18"X28' CMP
F & I 2-18" Metal Aprons
For CMP

FE Lt. 17+68
No Culv. Inpl.
No Culv. Req'd.

FE Rt. 13+69
Inpl. 18"X 20' CMP
Remove & Salvage
F & I 18"X 28' CMP
F & I 2-18" Metal Aprons
For CMP

℄ Culv. 17+33
Inpl. 24"X 28' CMP
Remove & Salvage
F & I 24"X 60' RCP Class III
F & I 2-24' Conc. Aprons
For SCP
Place Culv. on "C" Bedding

℄ Culv. 24+35
Inpl. 24"X 24' CMP
Remove & Salvage
F & I 24"X 64' RCP Class III
F & I 2-24" Conc. Aprons
For SCP
Place Culv. on "C" Bedding
Place Ditch Block

Cl. I Gr. I

B.M. Elev. 1032.71'
Spk. in LP SE Cor
18th. Ave. & 41st. St.

B.M. Elev. 1013.67'
Spk. in PP 27' Lt.
Sta. 14 + 74

B.M. Elev. 1010.99'
Spk. in PP 29' Lt.
Sta. 26 + 32

℄ Subgrade Elev.

P.V.C. +00.0 Elev. 30.3

-0.2%

Profile 75' Lt.

Profile 75' Rt.

Pi. +00
Elev. 29.3
1000' V.C.
M=1.625

P.V.T. +00 Elev. 21.8

-1.5%

P.V.C. +00 Elev. 15.8

Pi. +00
Elev. 12.8
400' V.C.
M=0.5

P.V.T. +00 Elev. 11.8

Inlet Elev. 09.2
Outlet Elev. 07.0

-0.5%

Inlet Elev 06.0
Outlet Elev. 00.2

P.V.C. +00 Elev. 07.8

Pi. +00
Elev. 06.8
400' V.C.
M= .25

P.V.T. +00 Elev. 00.8

-3.0%

Subgrade Treatment:
Excavate 1.0' Below Profile Grade
From Sta. 0+00 to Sta. 15+00

Subgrade Treatment:
Excavate 1.0' Below Profile Grade
From Sta. 19+50 to Sta. 21+50 and
From Sta. 24+70 to Sta. 26+50

Subgrade Treatment:
Excavate 1.0' Below Profile Grade
From Sta. 28+70 to Sta. 30+25

Common Exc.	18,327	
Rock Exc.	2,287	
Subgrade Exc.	2,813	EMB 15,077

PLATE 1 — PLAN - PROFILE

Res. Drive Lt. 31+99
Inpl. 18"X 24' CMP
Remove & Salvage
F&I 18" X 32' CMP
F&I 2-18" Metal Aprons
For CMP

Twp.Rd.Lt. 52+43
No Culv. Inpl.
No Culv. Req'd.

Drive Lt. 56+21
No Culv. Inpl.
F&I 18" X 32' CMP
F&I 2-18" Metal Aprons
For CMP

Drive Lt. 56+94
Inpl. 15"X 24'CMP
Remove & Salvage
F&I 18"X 32' CMP
F&I 2-18" Metal Aprons
For CMP

FE Lt. 58+15
No Culv. Inpl.
F&I 18"X 28' CMP
F&I 2-18" Metal Aprons
For CMP

Ho.

P.O.T. 43+55.41

Rt. 52+68.62
Impl. Cast Iron Monut. ΔLt. 0°34'

End Cable
Begin Overhead

Cable Marker

Cable Marker

Cable Marker

Cable Marker

FE Rt. 32+11
No Culv. Inpl.
No Culv. Req'd.

℄ Bridge 36+80.5
Inpl 32' X 23' Timber
To Be Constructed
By Others

Res. Drive Rt. 39+13
No Culv. Inpl.
No Culv. Req'd.

FE Rt. 47+13
No Culv. Inpl.
F&I 18"X 28' CMP
F&I 2-18" Metal Aprons
For CMP

Twp. Rd. Rt. 52+43
No Culv. Inpl.
No Culv. Req'd.

℄ Culv. 52+75
Inpl. 54" X 32' CMP
Masonary Hwdl.
Remove & Salvage
F&I 60" X 58' RCP Class II
F&I 2-60" Conc. Aprons
For SCP
Place Culv. on "C" Bedding

Cl. 8 Gr. 9 — Cl. 1 Gr. 1 — Cl. 6 Gr. 6

B.M. Elev. 988.52'
Bolt on N.W. Cor.
Abut of Bridge

B.M. Elev. 1000.32
Spk. in PP Rt. of
Sta. 52 + 00

℄ Subgrade Elev.

Profile 75' Lt.

Profile 75' Rt.

P.I. +00
Elev. 91.8
400' V.C.
M=1.7

P.I. +46.15384
Elev. 94.38461
400' V.C.
M=1.3

P.I. +50
Elev. 09.5
500' V.C.
M=2.25

P.I. +50
Elev. 03.5
600' V.C.
M=4.5

P.V.T. +00.8 Elev. 00.8

-3.0%

P.V.C. +00 Elev. 97.8

P.V.T. +00 Elev. 92.6

+0.4 %

P.V.C. 46.15384 Elev. 93.58461

P.V.T. +46.15384 Elev. 00.38461

+3.0%

P.V.C. +50 Elev. 02.0

P.V.T. +400 Elev. 08.0

-0.6%

P.V.C. +50 Elev. 05.3

Inlet Elev. 97.7
Outlet Elev. 96.8

P.V.T. +50 Elev. 19.7

+5.4%

Subgrade Treatment:
Excavate 1.0' Below Profile Grade
From Sta. 40+80 to Sta 45+20

Common Exc. 3,110
Rock Exc. 653
Subgrade Exc. 292
EMB 2,833

Common Exc. 4,214
Rock Exc. 329
Subgrade Exc. 319
EMB 3,300

Common Exc. 18,561
Rock Exc. 4
EMB 12,681

PLAN — SURVEYED — PLOTTED — NOTE BOOK — NO. — BY — DATE — ALIGNMENT CHECKED — PROFILE CHECKED — QUANTITIES CHECKED

PROFILE — SURVEYED — PLOTTED — NOTE BOOK — NO. — BY — DATE — ALIGNMENT CHECKED — PROFILE CHECKED — QUANTITIES CHECKED

PLANS AND PROFILE — CHARLES BRUNGS ENGINEERS

CR "112" C.P. C112-69-8 Sheet 5 of 66 Sheets

FE Lt. 75+62
No Culv. Inpl
F&I 18" X 28' CMP
F&I 2-18" Metal Aprons
For CMP

℄ Culv. 77+64
Inpl. 24" X 28' CMP
Remove & Salvage
F&I 36" X 82' RCP Class II
F&I 2-36" Conc. Aprons
For SCP
Place Culv. on "C" Bedding

FE Lt. 87+72
No Culv. Inpl.
F&I 18" X 28' CMP
F&I 2-18" Metal Aprons
For CMP

℄ Culv. 89+04
Inpl. 36" X 28' CMP
Remove & Salvage

P.O.T. 60+77.55

P.O.T. 68+97.40

P.O.T. 78+57.35
Spl. Cast Iron Monut.

Cable Marker

FE Rt. 67.+55
No Culv. Inpl.
F&I 18" X 28' CMP
F&I 2-18" Metal Aprons
For CMP

Construct FE Rt. 82+50
F&I 18" X 28' CMP
F&I 2-18" Metal Aprons
For CMP

B.M. Elev. 1072.62'
Spk. in TP 32' Rt.
Sta. 68+36

Cl. 2 Gr. 2

Cl. 1 Gr. 1 — Cl. 018 Acres Gr 0.18 Acres

Profile 75' Lt.

Profile 75' Rt.

℄ Subgrade Elev.

P.I. + 73.97959
Elev. 74.99489
1000' V.C.
M=12.25

P.V.C. + 78.97959
Elev. 47.99489

P.V.T. +73.97959
Elev. 82.99490

P.V.C. +0.0
Elev. 51.85

+5.4%

-4.4%

P.I. +00
Elev. 29.85
1000' V.C.
M=13.0

P.V.T. +00
Elev. 29.85

+6.0%

Inlet Elev. 30.5
Outlet Elev. 30.0

Subgrade Treatment
Excavate 1.0' Below Profile Grade
From Sta. 82+25 to Sta. 86+80

Common Exc.	38,513	EMB.	26,459
Subgrade Exc.	612		

PLATE 1—PLAN—PROFILE

CR "112" C.P. C112-69-8 Sheet 6 of 66 Sheets

FE Lt. 96+42
Inpl. 18" X 20' CMP
Remove & Salvage
F&I 18"X 28' CMP
F&I 2-18" Metal Aprons
For CMP

Drive Lt. 99+58
No Culv. Inpl.
No Culv. Req'd.

FE Lt. 104+80
Inpl. 15" X 28' CMP
Remove & Salvage
F&I 18"X 28' CMP
F&I 2-18" Metal Aprons
For CMP

FE Lt. Old Road 107+08
Inpl. 18" X 20' CMP
Remove & Salvage
No F.E. Req'd.

FE Rt. Old Road 111+82
Inpl. 24" X 56' CMP
No Change

Construct F.E. Rt. 111+82
F&I 18"X 28' CMP
F&I 2-18" Metal Aprons
For CMP

P.O.T. 98+20.21

P.O.T. 104+73.26
No. Coin Iron Monu.

P.C. 108+69.22

P.I. 112+72.39
Δ Rt. 16° 05'
D 2°00'
T 404.76'
L 804.17'

P.T. 116+72.39

P.O.T. 118+89.23

FE Rt. 91+07
No Culv. Inpl.
No Culv. Req'd.

Twp.Rd. Rt. 97+58
Inpl. 18" X 36' CMP
Remove & Salvage
F&I 18" Span X 36' CMP-A
F&I 18" Span Metal Aprons
For CMP-A

Drive Rt. 98+08
No Culv. Inpl.
F&I 18" Span X 32' CMP-A
F&I 2-18" Span Metal Aprons
For CMP-A

Drive Rt. 100+01
No Culv. Inpl.
F&I 18" Span X 32' CMP-A
F&I 2-18" Span Metal Aprons
For CMP-A

Drive Rt. 102+28
Inpl. 15" X 20' CMP
Remove & Salvage
F&I 18" Span X 32' CMP-A
F&I 2-18" Span Metal Aprons
For CMP-A

Drive Rt. 104+97
Inpl. 15" X 20' CMP
Remove & Salvage
F&I 18" X 32' CMP
F&I 2-18" Metal Aprons
For CMP

℄ Culv. 115+38
Inpl. 30" X 34' CMP
Remove & Salvage
F&I 42" X 74' RCP Class II
F&I 2-42" Conc. Aprons
For RCP
Place Culv. on "C" Bedding

Drive Rt. 116+29
No Culv. Inpl.
F&I 48" X 28' CMP
F&I 2-48" Metal Aprons
For CMP

Cl. 106 Gr. 110 | Cl. 0.93 Acres Gr. 0.93 Acres | Cl. 4 Gr. 2 | Cl. 0.78 Acres Gr. 0.78 Acres

B.M. Elev. 1149.31'
Spk. in PP 30' Rt.
Sta. 97+31

B.M. Elev. 1140.72'
Spk. in PP 21' Lt.
Sta. 106+15

Profile 75' Lt.
Profile 75' Rt.

+60%

P.V.C. 104+54.48 Elev. 32.47727

PI +10.45454
Elev. 62.47727
1000' V.C.
M = 13.75

P.V.T. 104+54.48 Elev. 37.47728

-5.0%

PI +00
Elev. 88.0
500' V.C.
M = 2.1875

P.V.C. +50.0 Elev. 00.5

P.V.T. +50.0 Elev. 84.25

-1.5%

Subgrade Treatment:
Excavate 1.0' Below Profile Grade
From Sta. 96+10 to Sta. 102+20

Common	Exc.	14,466
Rock	Exc.	14,781
Subgrade	Exc.	945
EMB		22,064

Subgrade Treatment:
Excavate 1.0' Below Profile Grade
From Sta. 111+15 to Sta. 111+45

Common	Exc.	4,764
Rock	Exc.	8,939
Subgrade	Exc.	28
EMB		11,405

Inlet Elev. 79.0
Outlet Elev. 77.5

PLAN — SURVEYED, PLOTTED, DRAWN, CHECKED, NOTE BOOK, R.P. OF W.S. CHECKED, NO.

PROFILE — SURVEYED, PLOTTED, GRADE, CHECKED, NOTE BOOK, E. W.S. NOTED, NO., ESTIMATE NOTATION GIVEN

DRAWING NO. 12-61

PLATE 1 - PLAN & PROFILE

CHARLES BRUNING COMPANY

Farm Ent. Lt. 121+77
Inpl. 18" X 31' CMP
Remove & Salvage
F&I 24" X 32' CMP
F&I 2-24" Metal Aprons
For CMP

Farm Ent. Lt. 127+42
Inpl. 18" X 20' CMP
Remove & Salvage
F&I 18" X 32' CMP
F&I 2-18" Metal Aprons
For CMP

Drive Lt. 138+35
Inpl. 18" X 30' CMP
Remove & Salvage
F&I 18" X 32' CMP
F&I 2-18" Metal Aprons
For CMP

FE Lt. 139+15
No Culv. Inpl.
Remove F.E.

Construct F.E. Lt. 140+05
F&I 18" X 28' CMP
F&I 2-18" Metal Aprons
For CMP

EQUATION
P.T. 130+93.77
131+02.73
130+92.68

P.I. 127+28.85
Δ Lt. 33° 49' 30"
D 4° 30'
T 387.15'
L 751.67'

P.C. 123+41.6

Tele. Cable Marker

Prop. Cor.

Tele. Cable Marker No. 8795

℄ Culv. 122+06
Inpl. 24" X 40' CMP
Remove & Salvage
F&I 30" X 90' RCP Class III
F&I 2-30" Conc. Aprons
For SCP
Place Culv. on "C" Bedding

FE Rt. 127+40
No Culv. Inpl.
F&I 18" X 32' CMP
F&I 2-18" Metal Aprons
For CMP

℄ Culv. 131+51
Inpl. 18" X 34' CMP
Remove & Salvage
F&I 24" X 78' RCP Class III
F&I 2-24" Concrete Aprons
For SCP
Place Culv. on "C" Bedding
Construct Ditch Block at Sta. 133+00

P.I. 139+68.07
Δ Rt. 18° 01' 30"
D 2° 30'
T 363.50'
L 721.00'

P.C. 136+04.57

P.T. 143+25.57

P.O.T. 144+41.94
Mpl. 1/2" Reinf. Rod

Cable

FE Rt. 146+56
No Culv. Inpl.
No Culv. Req'd.

B.M. Elev. 1055.70
Spk. in PP 24' Rt.
Sta. 131+42

P.I. +07.575
Elev. 57.81063
400' V.C.
M=0.5

P.V.C. +07.575 Elev. 60.80638

P.V.T. +07.575 Elev. 52.81063

P.I. +00
Elev. 40.5
400' V.C.
M=1.0

P.V.C. +00 Elev. 45.5

P.V.T. +00 Elev. 39.5

P.V.C. +50 Elev. 36.75

-1.5%

-2.5%

-0.5%

Inlet Elev. 70.5

Outlet Elev. 63.0

Profile 75' Lt.

Profile 75' Rt.

Common Exc. 363
Rock Exc. 12,540
EMB. 10,925

Common Exc. 187
Rock Exc. 5,751
EMB. 4,699

Common Exc. 2,136
Rock Exc. 1,578
Subgrade Exc. 492
EMB. 2,941

Common Exc. 1,103
Rock Exc. 217
Subgrade Exc. 325
EMB. 894

Subgrade Treatment:
Excavate 1.0' Below Profile Grade
From Sta. 133+00 Sta. 139+50

Subgrade Treatment:
Excavate 1.0' Below Profile Grade
From Sta. 148+30 to Sta. 154+50

CL. 26 GR. 22

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

PROFILE — SURVEYED, PLOTTED, NOTE BOOK, IN MASTER, NO., ALIGNMENT CHECKED, BY, DATE

FE Lt. 150+31
No Culv. Inpl.
F&I 18" X 28' CMP
F&I 2-18" Metal Aprons
For CMP

FE Lt. 156+56
No Culv. Inpl.
Move F.E. to Sta. 156+30
F&I 18" X 28' CMP
F&I 2-18" Metal Aprons
For CMP

Construct 50' Shldr. Radius

Construct 50' Shldr. Radius

P.I. 157+03.88
Inpl. 80 P Spk.

CR "Q"

End C112-69-8 Sta. 157+03.88
Begin C 112-69-9 Sta. 0+00

℄ Culv. 156+84
Inpl. 15" X 38' CMP
Remove & Salvage

Construct ℄ Culv. 156+64
F&I 24" X 80' RCP Cl. III
F&I 2-24" Conc. Aprons
For SCP
Place Culv. on "B" Bedding

CL. 10 GR. 8

B.M. Elev. 1026.51'
Spk. in PP 27' Lt.
Sta. 156+09

P.I. +50
Elev. 35.75
400' V.C.
M = 1.75

P.I. +26.25
Elev. 20.7
300' V.C.
M = 1.5

P.V.C. +50.0 Elev. 38.75

P.V.T. +50.0 Elev. 27.75

P.V.C. +76.25 Elev. 26.70

P.V.T. +76.25 Elev. 20.7

Profile 75' Lt

Profile 75' Rt

Inlet Elev. 17.4
Outlet Elev. 16.9

Common Exc. 10,559
Rock Exc. 3,150
Subgrade Exc. 1,104

EMB. 10,088

Subgrade Treatment:
Excavate 1.0' Below Profile Grade
From Sta. 156+60 to Sta. 156+92

PLATE 1—PLAN-PROFILE

C.S.A.H. No. 14 Left & Right
No Change

F.E. Lt. 1+00
Inpl. 15"X 20' CMP
Remove & Salvage
No F.Ent. Req'd

℄ Box Culv. 3+09
Inpl. C 86 D + 30° X 102'
No Change

℄ Culv. 19+89
Inpl. 42" X 24'CMP
Remove & Salvage
F&I 48"X 78' RCP Class III
F&I 2-48" Conc Aprons
For SCP
Install 48"X 12' RCP
Place Culv. on "C" Bedding

Drive Lt. 27+15
No Culv. Inpl.
Move To Sta. 27+35
F&I 18"X 32' CMP
F&I 2-18" Metal Aprons
For CMP

Construct 50' Shldr. Radius

Construct 50' Shldr. Radius

STA. 0+00
C112-69-9

C.S.A.H. No. 14

Bit. 0+00
60' D Spk. Inpl.

P.O.T. 3+47.13
60' D Spk. Inpl.

P.I. 26+26.41
Garrison Road Inpl.

House

Tele. Cable Marker

FE Rt. 19+02
No Culv. Inpl.
F&I 24"X 28' CMP
F&I 2-24" Metal Aprons
For CMP

Sta. 28+00
Construct Field Entrance Rt
F&I 18"X 28' CMP
F&I 2-18" Metal Aprons
For CMP

B.M. Elev. 1015.74'
Spk. in P.P. 36' Rt.
Sta. 0+17

B.M. Elev. 1024.95'
Spk. in P.P. 33' Lt.
Sta. 9+18

B.M. Elev. 1022.38'
Spk. in PP 31' Rt.
Sta. 17+65

B.M. Elev. 1044.60'
Spk. in PP 30' Rt.
Sta. 25+41

Profile 75' Lt.
Profile 75' Rt.

P.I. +00
Elev. 19.96
150' V.C.
M=0.65625

P.I. +00.01034
Elev. 01.9135
500' V.C.
M = 3.625

P.I. +50
Elev. 15.55
500' V.C.
M=1.375

P.I. +14.28571
Elev. 42.29999
400' V.C.
M=1.4

+13%

+3.5%

+07%

Subgrade Treatment
Excavate 1.0' Below Profile Grade
Sta. 7+40 to Sta. 8+15

Subgrade Treatment
Excavate 1.0' Below Profile Grade
Sta. 21+00 to Sta. 27+00

Common Exc.	3,714	Common Exc.	2,358	Common Exc. 4,791
Rock Exc.	10,610	Rock Exc.	2,614	Rock Exc. 4,530
Subgrade Exc.	110			
EMB	12,385	EMB	3,643	EMB 6,942

Common Exc.	4,627
Rock Exc.	259
Subgrade Exc.	656
EMB	3,536

CR "112" C.P. C112-69-9

FE Lt. 31+27
Inpl. 15"X24"
Remove & Salvage
F&I 18"X32' CMP
F&I 2-18" Metal Aprons
For CMP

Construct Berm Sta. 31+37 to Sta. 32+50

Tele. Cable Marker

Tele. Cable Marker

POT 38+60.39
60' D Spk. Inpl.

POT 47+96.85
60' D Spk. Inpl.

Tele. Cable Marker

Twp. Rd. Lt. 52+78
No Culv. Inpl.
F&I 18"X 50' CMP
F&I 2-18" Metal Aprons
For CMP

Tele. Pole & Cable

Twp. Rd. 52+78

Inst. 24" Metal Apron Inpl. 4 Rt. 0°25'

FE Lt. 56+41
No Culv. Inpl.
F&I 18"X 28' CMP
F&I 2-18" Metal Aprons
For CMP

Barn & Sa

℄ Culv. 53+17
Inpl 15"X40' CMP
Remove & Salvage
No Culv. Req'd

Farm Drive Rt. 32+58
No Culv. Inpl.
F&I 18"X 32' CMP
F&I 2-18" Metal Aprons
For CMP

℄ Culv. 32+75
Inpl 15"X 26' CMP
Remove & Salvage
No Culv. Req'd

Sta. 46+00
Construct Field Entrance Rt
F&I 18"X 28' CMP
F&I 2-18" Metal Aprons
For CMP

℄ Culv. 52+46
Inpl. 15"X 26' CMP
Remove & Salvage
Inst. 24"X 72' RCP
Inst. 2-24" X 6.0' Conc. Aprons
For SCP
Place Culv. on "C" Bedding
Culv. & Aprons to be Furnished By the County
See Special Provisions

Twp. Rd. Rt. 52+78
No Culv. Inpl.
No Culv. Req'd

FE Rt. 56+80
No Culv. Inpl.
F&I 18"X 32' CMP
F&I 2-18" Metal Aprons
For CMP

Cl. 4 Gr 5 — Cl. 7 Gr. 7

B.M. Elev. 1086.08'
Spk. in PP 32' Rt.
Sta. 39+24

B.M. Elev. 1060.66'
Spk. in PP 36' Rt.
Sta. 53+13

Finished ℄ Subgrade

Profile 75' Rt.
Profile 75' Lt.

Present ℄ Grades

Pl. +00
Elev. 48.5
400' V.C.
M= 2.4

Elev. 47.1

P.V.C. +00

Elev. 59.5

+5.5%

P.V.T. +00

P.V.C. +64.28571 Elev.

Elev. 63.03571

Pl. +64.28571
Elev 85.03571
800' V.C.
M= 7.0

P.V.T. +64.28571 Elev. 79.03572

-1.5%

P.V.C. +19.60784 Elev. 67.70589

Pl. +19.60784
Elev. 64.70589
400' V.C.
M=2.55

P.V.T. +19.60784 Elev. 71.90588

+3.6%

P.V.C. +00

Elev.

+0.4%

P.V.T. +00

Pl. +00
Elev. 85.6
400' V.C.
M= 1.6

Subgrade Treatment
Excavate 1.0' Below Profile Grade
Sta. 55+25 to Sta. 58+60

Inlet Elev. 61.7
Outlet Elev. 58.5

+0.7%

Common Exc. 3243
EMB 2325

Common Exc. 19,501
EMB 13,771

PROFILE

CR"112" C.P. C112-69-9

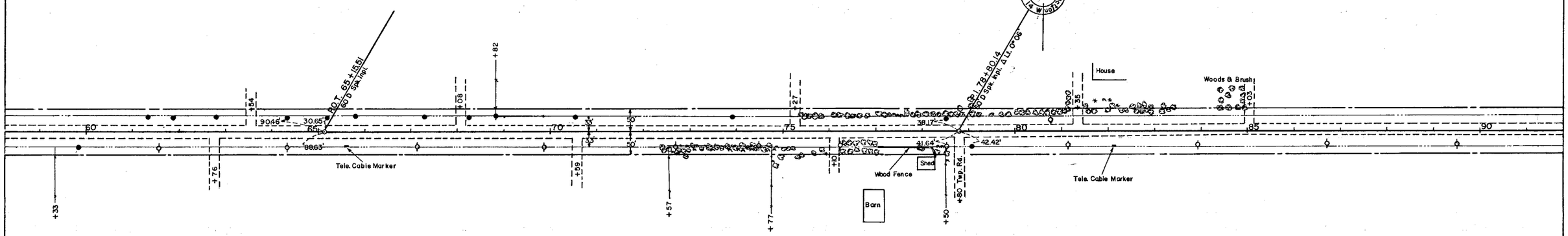
FE Lt. 63+54
No Culv. Inpl.
F&I 18"X28' CMP
F&I 2-18" Metal Aprons
For CMP

FE Lt. 68+08
No Culv. Inpl.
F&I 18"X28' CMP
F&I 2-18" Metal Aprons
For CMP

FE Lt. 75+27
No Culv. Req'd

Farm Drive Lt. 81+35
No Culv. Inpl.
F&I 18"X32' CMP
F&I 2-18" Metal Aprons
For CMP

FE Lt. 85+03
No Culv. Inpl.
F&I 18"X28' CMP
F&I 2-18" Metal Aprons
For CMP



FE Rt. 62+76
No Culv. Inpl.
F&I 18"X28' CMP
F&I 2-18" Metal Aprons
For CMP

FE Rt. 70+59
No Culv. Inpl.
F&I 18"X28' CMP
F&I 2-18" Metal Aprons
For CMP

Const. ℄ Culv. Sta. 74+00
F&I 24"X24' RCP Class 2
Inst. 24"X52' RCP
Inst. 2-24"X6.0' Conc. Aprons
For SCP
Place Culv. on "C" Bedding
See Special Provisions for Install Item

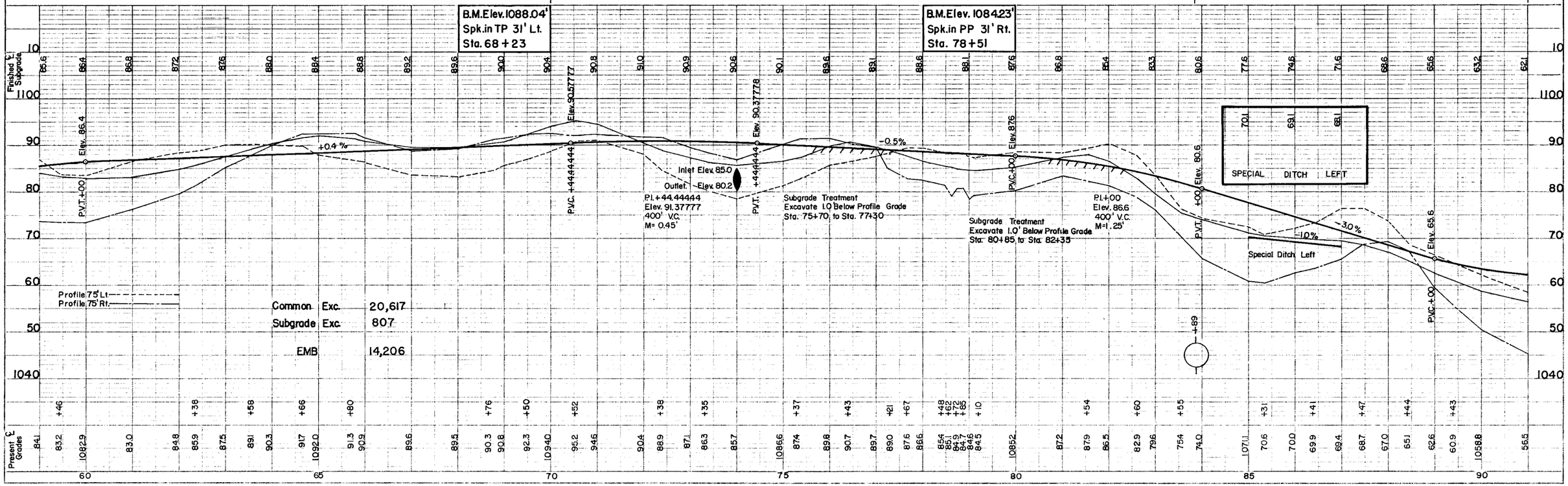
Drive Rt. 76+10
No Culv. Inpl.
F&I 18"X32' CMP
F&I 2-18" Metal Aprons
For CMP

Twp. Rd. Rt. 78+80
No Culv. Inpl.
No Culv. Req'd

Cl. 126 Gr. 134 — Cl. 9 Gr. 9

B.M. Elev. 1088.04'
Spk. in TP 31' Lt.
Sta. 68+23

B.M. Elev. 1084.23'
Spk. in PP 31' Rt.
Sta. 78+51



Common Exc.	20,617
Subgrade Exc.	807
EMB	14,206

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

PROFILE
NOTE BOOK
SURVEYED
PLOTTED
H. SCALE
V. SCALE
BY
DATE
NO.
PROFILE NO. ATH. Cp.

FE Lt. 111+00
Inpl. 24"X 30' CMP
Remove & Salvage
F&I 24"X 28' CMP
F&I 2-24" Metal Aprons
For CMP

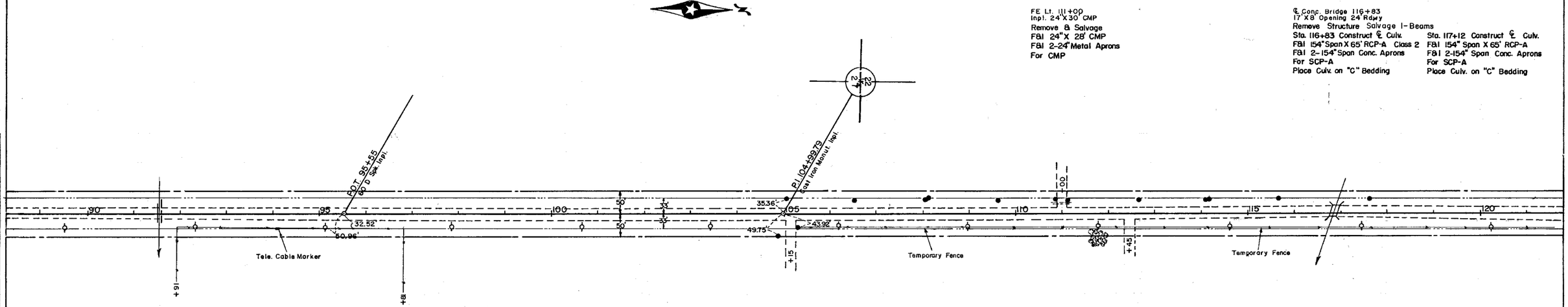
℄ Conc. Bridge 116+83
17'X8' Opening 24° Rdwy
Remove Structure Salvage I-Beams
Sta. 116+83 Construct ℄ Culv.
F&I 154"Span X 65' RCP-A Class 2
F&I 2-154" Span Conc. Aprons
For SCP-A
Place Culv. on "C" Bedding

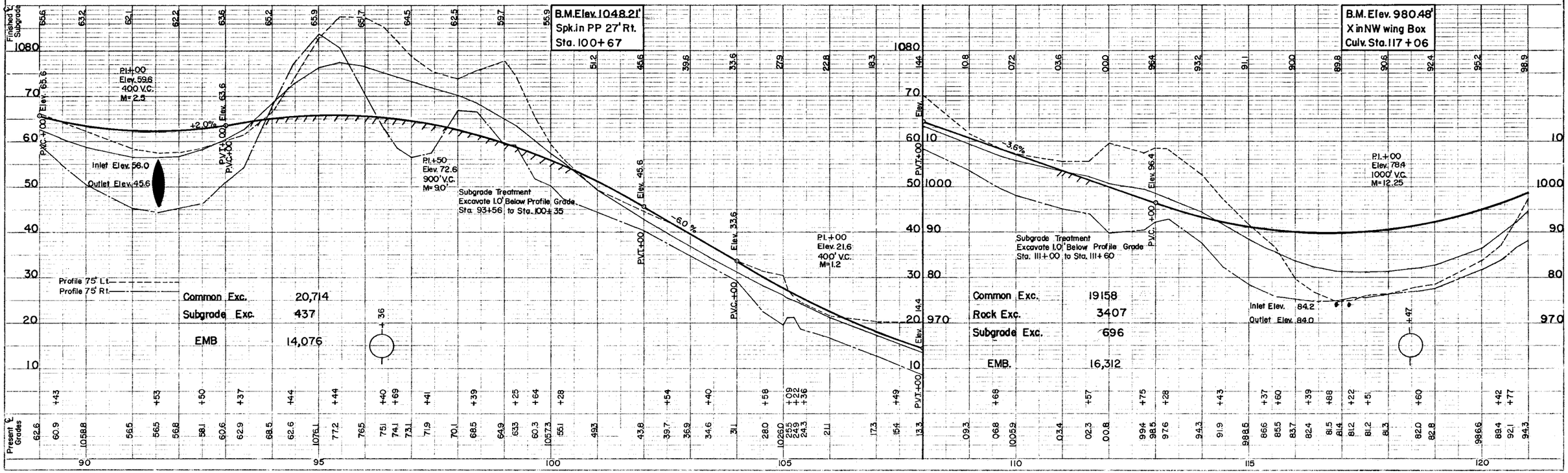
Sta. 117+12 Construct ℄ Culv.
F&I 154" Span X 65' RCP-A
F&I 2-154" Span Conc. Aprons
For SCP-A
Place Culv. on "C" Bedding

℄ Culv. 91+53
Inpl. 24"X 28' CMP
Remove & Salvage
F&I 24"X 82' RCP RCP Class 2
F&I 2-24" Conc. Aprons
For SCP
Place Culv. on "C" Bedding

Farm Drive Rt. 105 + 15
No Culv. Inpl.
No Culv. Req'd

FE Rt. 112+45
No Culv. Inpl.
F&I 18"X 28' CMP
F&I 2-18" Metal Aprons
For CMP





FE Lt. 121+35
No Culv. Inpl.
F&I 18"X 28' CMP
F&I 2-18" Metal Aprons
For CMP

School Drive Rt. 132+58
Inpl. 15"X22' CMP
Remove & Salvage
F&I 18"X32' CMP
F&I 2-18" Metal Aprons
For CMP

FE Lt. 139+21
No Culv. Inpl.
F&I 12"X22' CMP
F&I 2-12" Metal Aprons
For CMP

Match Line

End C-69-9
Sta. 134+00

Johnson Center Section 22 T.10N R.14W

Pt. 131+19.61
Cast Iron Monut. Inpl. & 89.56 Lt.

Sch.

Pump House

Twp. Rd.

Temporary Fence

Woods & Brush

End Temporary Fence
Begin Barb

Tele Cable Marker

POT 140+00
60 D Spk. Inpl.

FE Rt. 126+02
No Culv. Inpl.
F&I 18" X 28' CMP
F&I 2-18" Metal Aprons
For CMP

Twp. Rd. Rt. 131+20
No Culv. Inpl.
No Culv. Req'd.

30"
℄ Culv. 135+78
Inpl. 2'x2'x28' Conc. Box Culv.
Remove Structure
F&I 30" X 70' RCP Class II
F&I 2-30" Conc. Aprons
For CMP
Install 30" X 10' RCP
Place Culvert on "C" Bedding
See Special Provisions for Install Item.

FE Rt. 146+68
No Culv. Inpl.
No Culv. Req'd.

CL. 21 Gr. 16

B.M. Elev. 1043.71
Spk. in PP 29' Rt.
Sta. 131+41

B.M. Elev. 1027.51'
Spk. in TP 37' Rt.
Sta. 147+31

Finished Subgrade

Profile 75' Lt.
Profile 75' Rt.

P.V.C. +00 Elev. 09.4
P.V.T. +00 Elev. 21.8
-2.67 %
P.I. +50
Elev. 43.5
700' V.C.
M=6.0375
P.V.C. +00 Elev. 40.55
P.V.T. +00 Elev. 40.55
-0.7%
Inlet Elev. 30.2
Outlet Elev. 26.8
P.V.C. +00 Elev. 31.66364
P.V.T. +40.90909 Elev. 22.26364
-4.0 %
P.V.C. +00 Elev. 15.9
P.I. +40.90909
Elev. 30.26364
400' V.C.
M=1.65

Subgrade Treatment:
Excavate 1.0' Below Profile Grade
Sta. 122+00 to Sta. 128+10

Subgrade Treatment:
Excavate 1.0' Below Profile Grade
Sta. 131+00 to Sta. 132+76
Sta. 133+20 to Sta. 133+80

EXC	Common	14,516 *
	Rock	354
	Subgrade	1231
EMB		10,193

* NOTE: 4100 Cu. Yds. in this balance will be obtained from the roadway between Sta. 138+00 to Sta. 142+00

PLAN — SURVEYED, PLOTTED, ALIGNMENT CHECKED, GRADES CHECKED, NOTE BOOK, SHEET NO.

PROFILE — SURVEYED, PLOTTED, ALIGNMENT CHECKED, GRADES CHECKED, NOTE BOOK, SHEET NO., STRUCTURES NO. & STR. CHKD.

PLATE 1 — PLAN — PROFILE

C.R."112" CP. C 112-69-9