FORM 100-A '65

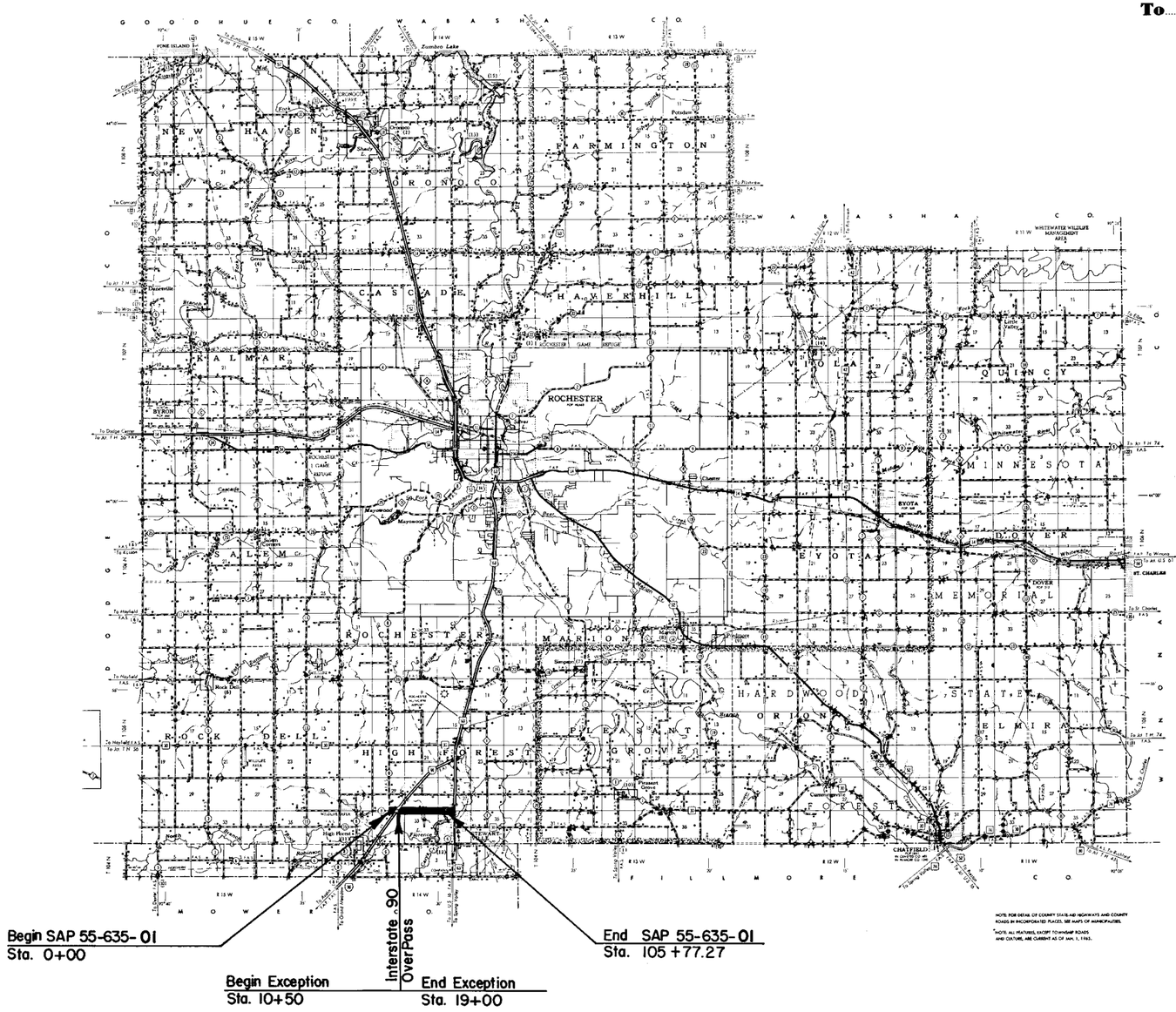
Fed. Proj. No.

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 (W)
CHAIN LINK FENCE (C-L)
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 (TIMBER)
CATCH BASIN (C.B.)
FIRE HYDRANT
CATTLE GUARD
OVERPASS (Highway Over)
UNDERPASS (Highway Under)
BRIDGE
BUILDING (One Story Frame) (I.S.F. 75')
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 (G)
WATER MAIN (I)
CONDUIT
TELEPHONE CABLE IN CONDUIT (T)
ELECTRIC CABLE IN CONDUIT (P)
TELEPHONE MANHOLE (T)
ELECTRIC MANHOLE (P)
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, Crushed Rock Base Inplace and Box Culvert Extention

COUNTY STATE AID HIGHWAY NO. 35

BETWEEN CSAH 8 **AND** Stewartville

From S 1/4 Corner Section 29 T105N-R14W
(Give proper reference to Sections, Township and Range)

To SE Corner SW 1/4 SW 1/4 of Section 27 T105N-R14W

GROSS LENGTH	10577.27	FEET	2.003 MILES
BRIDGES-LENGTH	251.56	FEET	0.048 MILES
EXCEPTIONS-LENGTH	598.44	FEET	0.113 MILES
NET LENGTH	9727.27	FEET	1.842 MILES

INDEX OF SHEETS

Sheet No. 1. Title Sheet & Layout Map
" No. 2. Est Quantities & Typical Sec
" No. 3 To 6 Plan & Profile
" No. 7 To 20 Cross Sections

DESIGN SPEED 55 M. P. H.

PROJECTED A. D. T. 437

7T Ult 9T TON DESIGN
HCADT Less Than 150

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.

A. J. Sullivan DATE 3-7-67
COUNTY ENGINEER
Olmsted COUNTY REG. NO. 2007

RECOMMENDED FOR APPROVAL Claude Zipkowski 4-10, 1967
DISTRICT STATE AID ENGINEER

RECOMMENDED FOR APPROVAL C. E. Weichselbaum 4-10, 1967

APPROVED 4-10, 1967 R. J. Mason
STATE AID ENGINEER

— SPECIFICATIONS —

STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION DATED JANUARY 1, 1964 AS AMENDED BY "SUPPLEMENTAL SPECIFICATIONS" DATED FEBRUARY 1, 1966 SHALL GOVERN.

Minn. Project No. _____ S.A.P. 55-635-01
State Project No. _____

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

ALBINSON, INC.
MINNEAPOLIS, MINN. 55415

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 STEWARTVILLE	MUNICIPAL COUNTY	RURAL
2101.502	Clearing	Tree	69		One	68
2101.507	Grubbing	Tree	66		One	65
2104.501	Remove Portable Culverts	Lin. Foot	732	146	78	508
2105.501	Common Excavation	Cu.Yd.	32548	6168	3254	23126
2105.507	Subgrade Excavation	Cu. Yd.	802		802	0
2105.523	Common Borrow	Cu.Yd.	5165		0	5165
2110.511	Sand-Gravel Material	Cu.Yd.	10317	1584	1428	7305
2211.502	Aggregate Base Inplace	Cu.Yd.	5463	792	690	3981
2411.501	Concrete	Cu.Yd.	94.8		0	94.8
2411.511	Structure Excavation	Cu.Yd.	68.2		0	68.2
2411.541	Reinforcement Bars	Pounds	15651		0	15651
2501.511	F&I 18"CMP Culverts	Lin. Foot	540		28	512
2501.512	F&I 18" Span CMP-A Culverts	Lin. Foot	32		0	32
2501.523	F&I 30"RCP Culverts Class II	Lin. Foot	58		0	58
2501.523	F&I 30"RCP Culverts Class III	Lin. Foot	48		0	48
2501.523	F&I 36"RCP Culverts Class II	Lin. Foot	68		0	68
2501.524	F&I 581/2"Span RCP-A Culvert Class III	Lin. Foot	48		48	0
2515.532	F&I Metal Aprons for 18"CMP	Apron	36		2	34
2515.533	F&I Metal Aprons for 18" Span CMP-A	Apron	2		0	2
2515.536	F&I Conc Aprons for 30" SCP	Apron	4		0	4
2515.536	F&I Conc Aprons for 36" SCP	Apron	2		0	2
2515.537	F&I Conc Aprons for 581/2" Span SCP-A	Apron	2		2	0

Note: Item 2210.527 includes 240 Cu.Yds. for Approaches and 75 Cu. Yds. 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
3000E	Reinforced Concrete Pipe
8000C	Standard Barricade
3014C	Reinforced Concrete Pipe Arch
8008C	Standard Barricade
3065B	Connection Between Existing Culv. & New C Barrel
3100E	Concrete Apron for Reinforced Concrete Pipe.
3110C	Concrete Apron for Reinforced Concrete Pipe-Arch
3122E	Metal Apron for CM Pipe-Arch Culverts.
3123E	Metal Apron for CM Pipes.
9000A	Approaches 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.

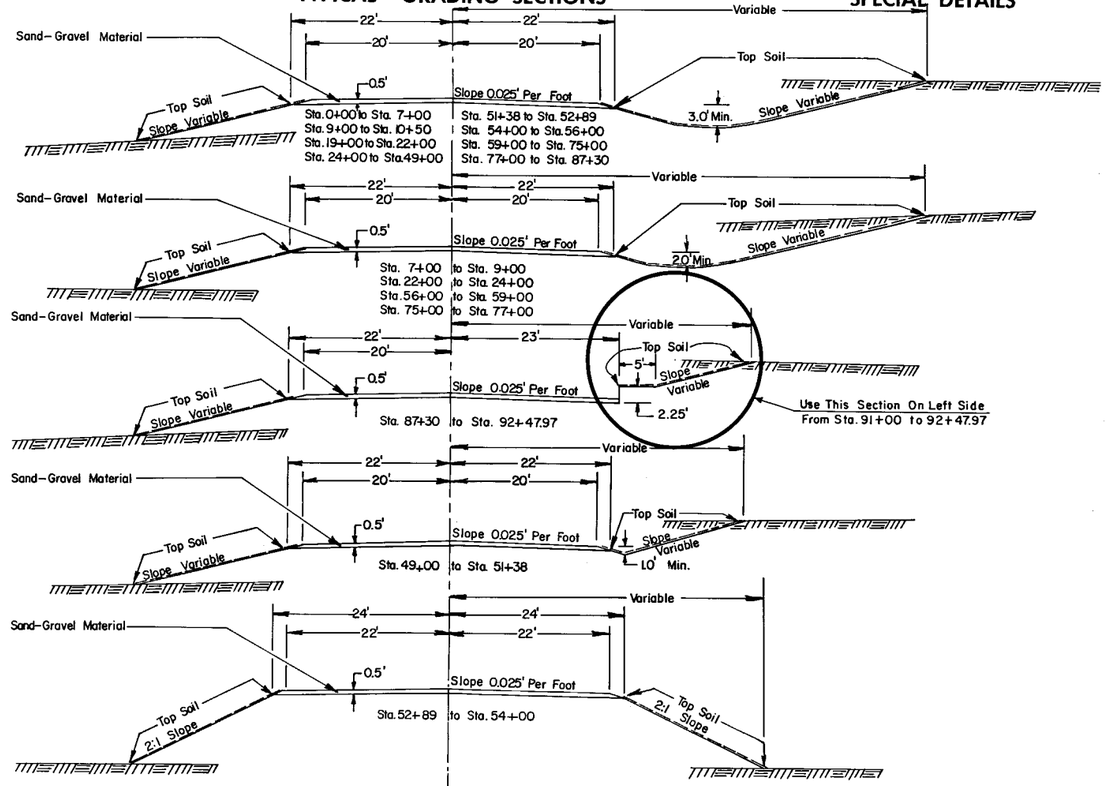
Note: Corrugated Metal and Sectional Concrete pipe culvert excavation will be considered incidental, and will be under unit price for "Furnish and Install Culvert Pipe".

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.

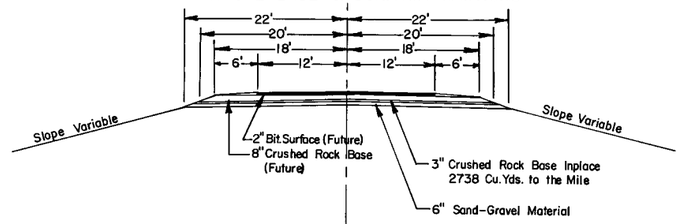
Note: Place Sectional Concrete Pipe on Class B and Class C Bedding.

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

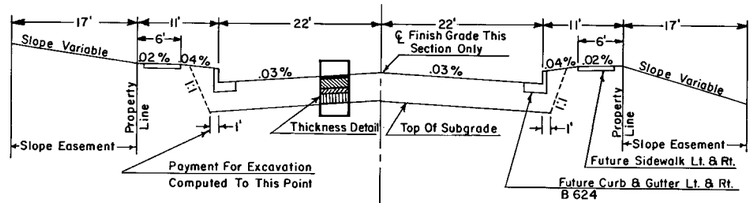
TYPICAL GRADING SECTIONS



TYPICAL BASE & SURFACE SECTIONS

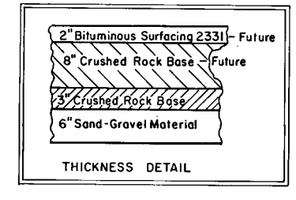


Sta. 0+00 to Sta. 13+76.22
Sta. 16+27.78 to Sta. 92+47.97



TYPICAL SECTION FOR-
Sta. 92+47.97 to Sta. 105+77.27

SPECIAL DETAILS



H.A.ROGERS CO.
MPLS MINN.

Olmsted County, Minn. Proj. No. SAP 55-635-01 Plan No. _____ Sheet No. 2 of 20 Sheets

CSAH 8 Left Sta. 0+00
No Culv Inpl
No Culv Req'd

℄ Culv. Inpl. Sta.. 2 + 98
36" X 48' C.M.P. Inpl.
Remove & Salvage
F&I 30"X58' RCP Class II
F&I 2–30" Conc Aprons
For SCP
Place Culv. on C Bedding

Farm Ent. Lt. Sta. 8+49
No Culv. Inpl.
F&I 18"X32' CMP
F&I 2–18" Metal Aprons
For CMP

Field Ent. Lt. Sta. 20 + 86
No Culv. Inpl.
F&I 18"X28' CMP
F&I 2–18" Metal Aprons
For CMP

Begin Exception
Sta. 10+50

End Exception
Sta. 19+00

C.S.A.H. 8

Inpl. 1/2" Paint. Rod

Telephone Cable Marker

Sewer Tile Outlets

Telephone Phone–Cable

Begin Steel Guard Rail

R.O.W. Marker

Inpl. 60 D. Spk. At 01–03'
Sta. 16 + 27.65

INTERSTATE NO. 90

End Steel Guard Rail

End Cable Begin Overhead

R.O.W. Marker

Inpl. 3/4" Paint. Rod
Sta. 26 + 55.92
No Angle

T.105N. R.7W. 5th P.M.
29 28 32 33

Sewer Tile Outlet

R.O.W. Marker

50' Radius

SERVICE ROAD

SOUTH BOUND LANE

NORTH BOUND LANE

Borrow Area

Begin SAP 55–635–01
Sta. 0+00

Farm Ent. Rt. Sta. 0 + 00
No Culv. Inpl.
No Culv Req'd

Farm Ent. Rt. 8 + 86
No Culv. Inpl.
F&I 18"X32' CMP
F&I 2–18" Metal Aprons
For CMP

Service Road Rt. Sta. 20 + 31
No Culv. Inpl.
No Culv Req'd

Farm Ent. Rt. Sta. 23 + 40
18" X 30' C.M.P. Inpl.
Remove & Salvage
F&I 18"X32' CMP
F&I 2–18" Metal Aprons For CMP

Field Ent. Rt. Sta. 27 + 17
15" X 26' C.M.P. Inpl.
Remove & Salvage
F&I 18"X28' CMP
F&I 2–18" Metal Aprons
For CMP

Cl. 25 Gr. 23

Cl. 40 Gr. 37

B.M. Elev. 1263.42'
Spk. in P.P. 48'
Rt. Sta. 00+31

B.M. Elev. 1288.41'
Disc. S.E. Wing
Over Head Sta. 16+17

B.M. Elev. 1269.80'
Spk. in P.P. 28' Rt.
Sta. 26+41

Finished ℄ Subgrades

Present ℄ Grades

P.I. +79.06976
Elev. 62.70930
400' V.C.
M = 2.15

-1.0%

+3.3%

-2.4%

Elev. 647.0931

Elev. 69.30930

Elev. 72.28684

P.V.C. +79.06976

P.V.T. +79.06976

P.V.C. +69.29824

+50 End Grading

P.I. +19.29824
Elev. 9703684
1500' V.C.
M = 10.6875

+00 Begin Grading

Elev. 7903684

P.V.T. +69.29824

P.I. 30+00
Elev. 615

Inlet Elev. 59.7
Outlet Elev. 58.8

EXC 129
Left Sand & Gravel Mat'l 65
Right

EXC 1665
Borrow Sand-Gravel Mat'l 1889
1020

EMB 2451

EMB 86

EXC 1465
Sand-Gravel Mat'l 517

EMB 1008

West Edge Bridge

East Edge Bridge

PLAN
SURVEYED
PLOTTED
NOTE BOOK
NO. OF MAT CHECKED
NO.
DATE
BY

PROFILE
SURVEYED
PLOTTED
NOTE BOOK
NO. OF MAT CHECKED
NO.
DATE
BY

Field Ent. Lt. Sta. 31 + 33
14" X 28' SCP Inpl.
Remove & Salvage
F&I 18"X28' CMP
F&I 2-18" Metal Aprons
For CMP

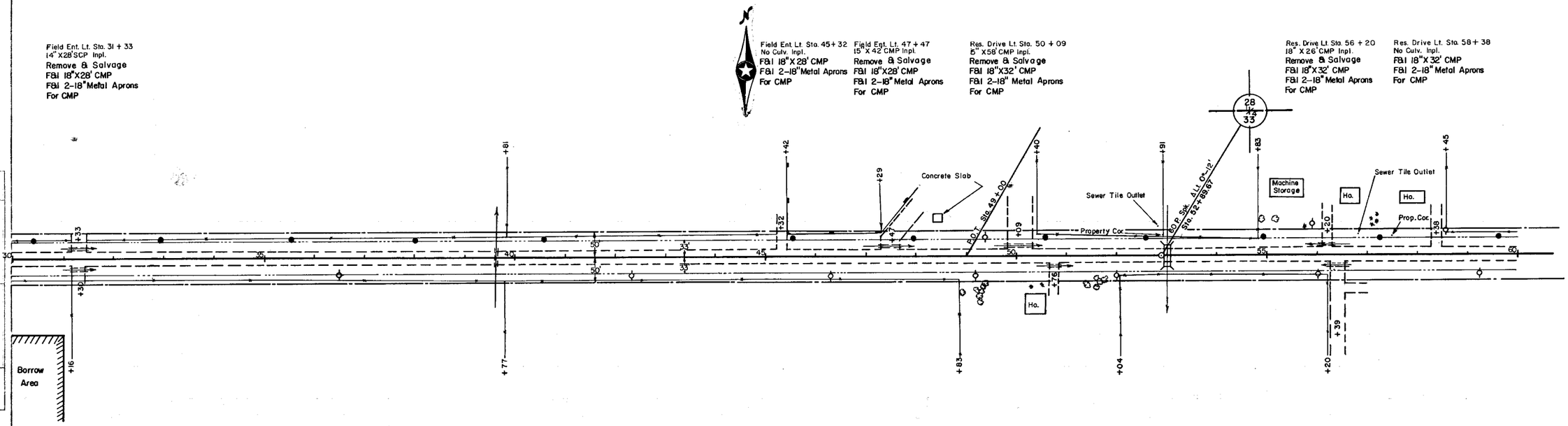
Field Ent. Lt. Sta. 45+32
No Culv. Inpl.
F&I 18"X 28' CMP
F&I 2-18" Metal Aprons
For CMP

Field Ent. Lt. Sta. 47 + 47
15" X 42' CMP Inpl.
Remove & Salvage
F&I 18"X28' CMP
F&I 2-18" Metal Aprons
For CMP

Res. Drive Lt. Sta. 50 + 09
15" X 58' CMP Inpl.
Remove & Salvage
F&I 18"X32' CMP
F&I 2-18" Metal Aprons
For CMP

Res. Drive Lt. Sta. 56 + 20
18" X 26' CMP Inpl.
Remove & Salvage
F&I 18"X32' CMP
F&I 2-18" Metal Aprons
For CMP

Res. Drive Lt. Sta. 58 + 38
No Culv. Inpl.
F&I 18"X 32' CMP
F&I 2-18" Metal Aprons
For CMP



Field Ent. Rt. Sta. 31 + 30
24" X 30' CMP Inpl.
Remove & Salvage
F&I 18"X28' CMP
F&I 2-18" Metal Aprons
For CMP

℄ Culv. Sta. 39 + 62
36" X 48' CMP Inpl.
Remove & Salvage
F&I 30"X48' RCP Class III
F&I 2-30" Conc Aprons
For SCP
Place Culv on B Bedding, Place Ditch Block

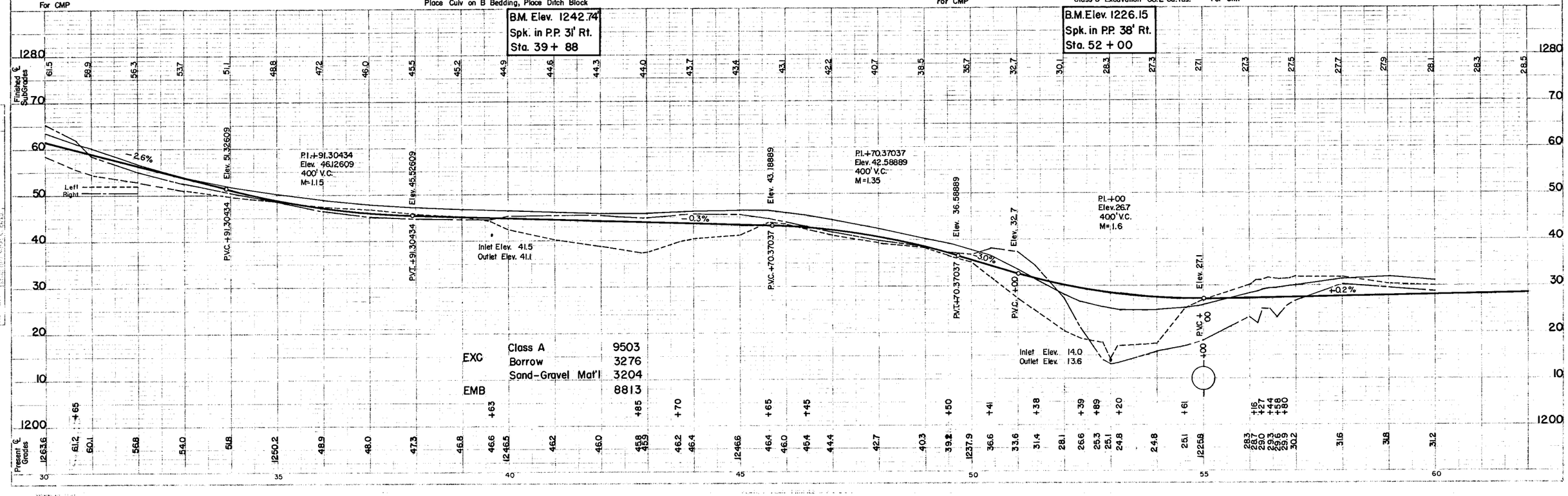
Res. Drive Rt. Sta. 50 + 76
15"X 26' CMP Inpl.
Remove & Salvage
F&I 18"Span X 32' CMP-A
F&I 2-18" Span Metal Aprons
For CMP

℄ Culv. Sta. 53 + 00
W 86D X 32' Inpl.
Extend 23' Right, 23' Left
Conc. 94.8 Cu.Yds.
Reinf. Bars 15651 Lbs
Class U Excavation 68.2 Cu.Yds.

Twp. Rd. Rt. Sta. 56 + 39
15" X 32' CMP Inpl.
Remove & Salvage
F&I 18"X36' CMP
F&I 2-18" Metal Aprons
For CMP

B.M. Elev. 1242.74
Spk. in P.P. 31' Rt.
Sta. 39 + 88

B.M. Elev. 1226.15
Spk. in P.P. 38' Rt.
Sta. 52 + 00



Field Ent. Lt. Sta. 70 + 12
No Culv. Inpl.
F&I 18"X28' CMP
F&I 2-18" Metal Aprons
For CMP

Res. Drive Lt. Sta. 76+28
24"X28' CMP Conc. Hdwl. Inpl.
Remove & Salvage
F&I 18"X32' CMP
F&I 2-18" Metal Aprons
For CMP

℄ Culv. Sta. 82 + 76
60"X48' CMP Inpl.
Remove & Salvage
F&I 58 1/2"Span X48' RCP-A Class III
F&I 2-58 1/2" Span Conc Aprons
For SCP-A
Place Culv on B Bedding

Field Ent. Lt. Sta. 86 + 35
24"X30' SCP Inpl.
Remove & Salvage
F&I 18"X28' CMP
F&I 2-18" Metal Aprons
For CMP

T.105N. R.14W. 28 27 33 34 T.104N. R.14W.

P.I. Sta. 73+18.94
Δ Rt 0°05' Assumed

P.O.T. 69+95.40

Sewer Outlet

Ho.

Village of Stewartville

—Cemetery—

C-L

℄ Culv. Sta. 63 + 28
Inpl. 36"X 48' CMP
Remove & Salvage
F&I 36"X 68' RCP Class II
F&I 2-36" Conc Aprons
For SCP
Place Culv on C Bedding

Field Ent. Rt. Sta. 69 + 87
No Culv. Inpl.
F&I 18"X28' CMP
F&I 2-18" Metal Aprons
For CMP

Field Ent. Rt. Sta. 79 + 15
Inpl. 24"X38'SCP
Remove & Salvage
F&I 18"X28' CMP
F&I 2-18" Metal Aprons
For CMP

Cemetary Ent. Rt. Sta. 90 + 97
No Culv. Inpl.
No Culv Req'd

B.M. Elev. 1223.20
Spk. in P.P. 33' Rt.
Sta. 62 + 67

B.M. Elev. 1219.68
Spk: in P.P. 31' Lt.
Sta. 76 + 61

Cl. 3 Gr. 5

Cl. 1 Gr. 1

Grade Revision during Grading

Elev. 29.7363.6

Elev. 24.33636

Elev. 25.0

Inlet Elev. 23.9
Outlet Elev. 21.4

+0.2%

-2.0%

+3.0%

P.V.C. +18.18181

P.V.T. +18.18181

P.V.C. +63.63636

Pl +18.18181 + 63.63636
Elev. ~~30.33637~~ 30.4272
600' V.C.
M=1.65

P.V.C. +59.0

P.V.C. +44.0

P.V.T. +44.0

Pl +84.0
Elev. 07.42
500' V.C.
M=3.125

Inlet Elev. 06.2
Outlet Elev. 05.9

P.V.C. +80.0

P.V.T. +80.0

Pl. +00
Elev. 32.5
500' V.C.
M=3.375

Subgrade Treatment
Excavate 1.0' Below Profile Grade
Sta. 87+00 to Sta. 93+00

EXC 8582
Sand-Gravel Mat'l 1956
EMB 6096

EXC 2786
Sand-Gravel Mat'l 1130
EMB 1912

EXC 2250
SG 802
Sand-Gravel Mat'l 841
EMB 1564

Finished ℄ Subgrades

Present ℄ Grades

State Aid Project SAP 55-635-01 (CSAH 35) Sheet No. 5 of20 Sheets

PROJECT DIVISION
COUNTY — VILLAGE

27 / 16 / 34

M.H.D. WEST R.

M.H.D. 5/8" Reinf. Rod
Sta. 92+47.97 No Angle

M.H.D. STORAGE BUILDING NO. 91220

STA. 94+10.97 36' LT.
END OF 6" METAL PIPE INPL.
BUILDING FLOOR DRAIN
INV. ELEV. 1218.80

STATE HIGHWAY DEPT. DRIVE STA. 97+04
INP. 24" X 36' CMP
REMOVE & Salvage

M.H.D. EAST R. +72.97

SCALE- HORZ. 1"=50'
VERT. 1"=5'

NOT IN CONTRACT

STA. 105+22.27 39 L.F. 24" CMP INPL.
REMOVE END SECTION 19.5' LT.
REMOVE END SECTION 19.5' RT.
F.&I. TYPE 2 C.B. 21.5' LT.
INV. ELEV. 1203.51
GRATE ELEV. 1206.25
F.&I. TYPE 2 C.B. 21.5 RT.
INV. ELEV. 1203.13
GRATE ELEV. 1206.25
F.&I. 2 L.F. 24" CMP 19.5° TO 21.5° LT.
F.&I. 2 L.F. 24" CMP 19.5° TO 21.5° RT.

STA. 105+40.27 45° RT.
F.&I. TYPE 2 MANHOLE
INV. ELEV. 1202.98
RING ELEV. 1207.50

STA. 105+40.27 45° RT. TO
STA. 105+58.27 21.5° RT.
F.&I. 24 L.F. 30" CMP

FIELD ENT. LT. STA. 102+63
INPL. 18" X 26' CMP
REMOVE & Salvage

FIELD ENT. LT. STA. 104+22
INPL. 15" X 26' CMP
REMOVE & Salvage

STA. 104+60± BEGIN BITUMINOUS PAVING INPLACE

1 1/2 S-F

17' SLOPE EASEMENT

INPL. CRUSHED ROCK ROAD

WATERMAN INPLACE

17' SLOPE EASEMENT

50' 33' 33'

CEMETERY

CEMETERY ENT. RT.
STA. 93+72
NO CULVERT INPL.

EAST LINE CEMETERY +86.00

FIELD ENT. RT. STA. 94+13
NO CULVERT INPL.

STA. 94+47 ± 30' RT.
HYDRANT INPL.
EXTEND TO GRADE
N.I.C.

VILLAGE OF STEWARTVILLE

NOT IN CONTRACT
STA. 96+44.37 35.5' LT. END OF 18" CONC. CULVERT
INV. ELEV. 1215.63
F.&I. 14 L.F. 18" RCP 21.5° TO 35.5' LT.
F.&I. 54.5 L.F. 18" RCP 21.5° LT. TO 33° RT.
F.&I. TYPE 2 C.B. 21.5' LT.
INV. ELEV. 1213.80
GRATE ELEV. 1216.78
F.&I. TYPE 2 C.B. 21.5' RT.
INV. ELEV. 1212.94
GRATE ELEV. 1216.78

STA. 99+26± 30' RT.
HYDRANT INPL.
EXTEND TO GRADE
N.I.C.

FIELD ENT. RT. STA. 101+96
15" X 26' CMP INPL.
REMOVE & Salvage

TRAILER SALES ENT. STA. 104+22
15" X 31.5' CMP INPL.
REMOVE & Salvage

STA. 104+52± 30' RT.
HYDRANT INPL.
EXTEND TO GRADE
N.I.C.

INPL. CONCRETE PAVEMENT

℄ In Centerline T.H. 63
Sta. 105+77.27

END S.A.P. 55-635-01
STA. 105+77.27

T.H. NO. 63

27 / 4 / 34

B.M. ELEV. 1227.63
SPK. IN P.P. 30' LT.
STA. 99+78

B.M. ELEV. 1209.49
BOLT E. FH. 30' RT.
STA. 104+52

PLAN

PROFILE

FINISHED ℄ GRADES

P.I. = 91+00
ELEV. = 1233.5
V.C. = 500'
M = 3.85

-3.16%

FINISHED ℄ PROFILE

EXISTING GRADE

P.I. = 95+00
ELEV. = 1217.7
V.C. = 200'
M = 0.62

-0.70%

P.I. = 99+77.27
ELEV. = 1215.06
NO V.C.

-1.20%

P.I. = 103+27.27
ELEV. = 1210.86
V.C. = 100'
M = 0.125

-2.20%

P.I. = 105+27.27
ELEV. = 1206.46
V.C. = 100'
M = 0.64

+2.94%

24" CMP INPLACE

EXISTING ℄ ELEVATION

M.H.D. WEST R. +47.97

℄ T.H. NO. 63 +77.27

1230 1225 1220 1215 1210 1205 1200 1195

91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106

PLATE 1, FRANKFORTE
REUPERT & LOSER CO.

State Aid Project S.A.P. 55-635-01 (CSAH 35) Sheet No. 6 of 20 Sheets