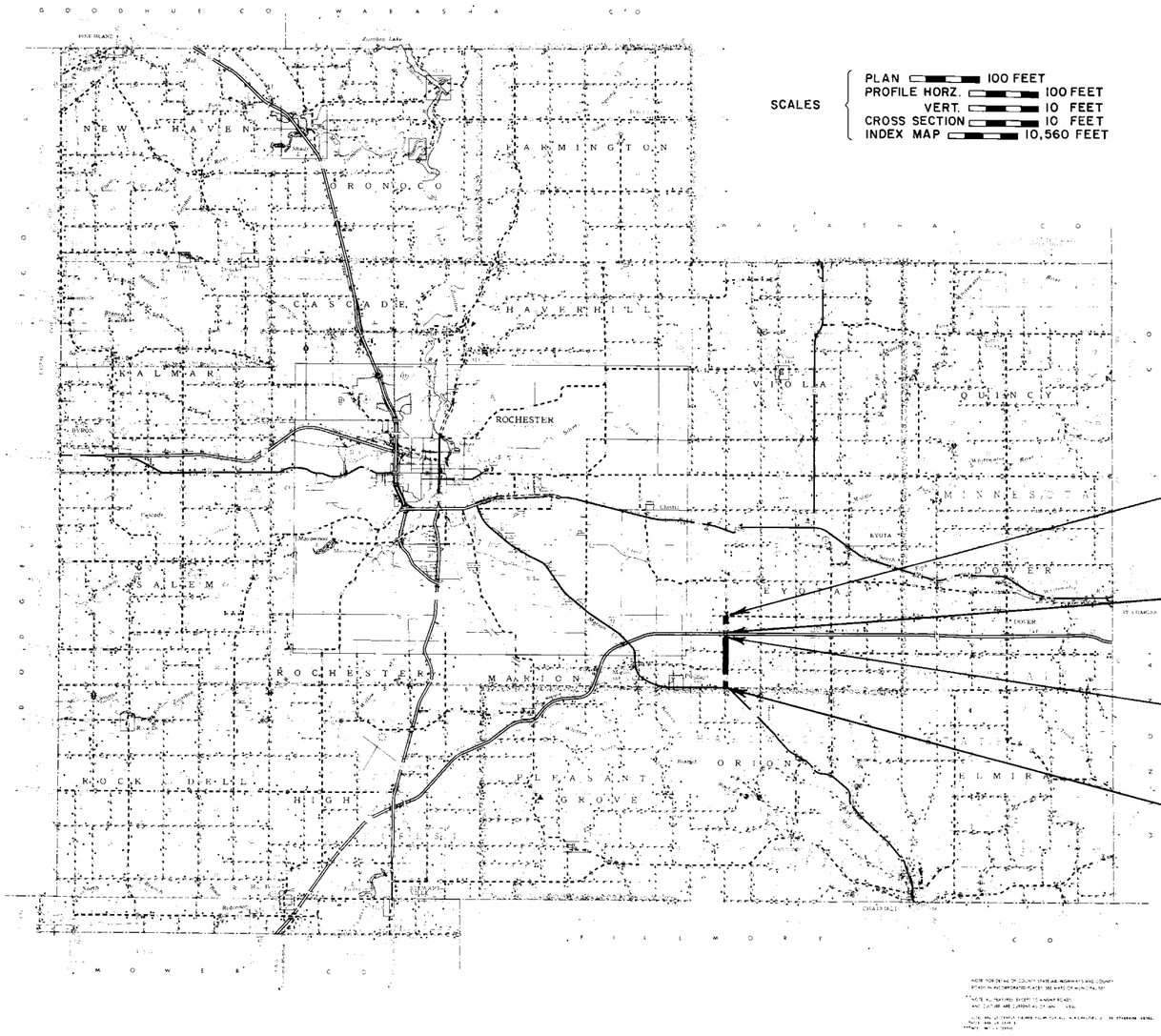
FORM 100-A '65

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
SAND PIT
BORROW PIT
ROCK QUARRY

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
BURIED ELECTRIC CABLE
AERIAL TELEPHONE CABLE
SEWER, (SANITARY OR STORM)
SEWER MANHOLE



SCALES
PLAN 100 FEET
PROFILE HORZ. 100 FEET
VERT. 10 FEET
CROSS SECTION 10 FEET
INDEX MAP 10,560 FEET

SPECIFICATIONS REFERENCE

THE 1978 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION" SHALL GOVERN.

Fed. Proj. No.

STATE OF MINNESOTA

DEPARTMENT OF TRANSPORTATION

CONSTRUCTION PLAN FOR Grading and Aggregate Base

COUNTY STATE AID HIGHWAY NO. 19

BETWEEN T.H. 52 **AND** C.S.A.H. 23

From 28.15 feet south N.W. Cor. Sec. 5 T105N-R12W
Give proper reference to Sections, Township and Range

To 329.62 feet N.E. of the S.W. Cor. Sec. 20 T106 N-R12W

GROSS LENGTH	10,879.90	**FEET**	2.060 **MILES**
BRIDGES-LENGTH	0	**FEET**	0 **MILES**
EXCEPTIONS-LENGTH	1300.00	**FEET**	0.246 **MILES**
NET LENGTH	9,579.90	**FEET**	1.814 **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

END S.A.P. 55-619-04A
Sta. 108+79.90

END INTERSTATE 90 EXCEPTION
Sta. 83+00

BEGIN INTERSTATE 90 EXCEPTION
Sta. 70+00

BEGIN S.A.P. 55-619-04A
Sta. 0+00

DESIGN SPEED 50 **M.P.H.**

PROJECTED A.D.T. 358
EST. HCADT 36

7 **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.

J. K. Dolan — DATE 2/5/79
COUNTY ENGINEER

Olmsted COUNTY REG. NO. 10219

RECOMMENDED FOR APPROVAL J. K. Dolan 2-6 19 79
DISTRICT STATE AID ENGINEER

RECOMMENDED FOR APPROVAL Delbert D. Offerdahl 2-4 19 79

APPROVED 2/22 19 79 — STATE AID ENGINEER

Minn. Project No. _____ S.A.P. 55-619-04A
State Project No. _____

C.S.A.H. 19 Olmsted County, Minnesota. County Proj. No. _____ Plan No. _____ Sheet 1 of 20 Sheets

ALBINSON, INC.
MINNEAPOLIS MINN. 55415

ESTIMATED QUANTITIES

	SPECIFICATION NO.	ITEM	UNIT	MUNICIPAL	RURAL	TOTAL ESTIMATED QUANTITIES	
	2101.502	CLEARING	TREE		144	144	
	2101.507	GRUBBING	TREE		150	150	
	2104.501	REMOVE PIPE CULVERT	LIN. FT.		172	172	
	2104.501	REMOVE METAL TILE	LIN. FT.		300	300	
(1)	2104.509	REMOVE BOX CULVERT	EACH		3	3	
	2105.501	COMMON EXCAVATION	CU. YD.		31058	31058	
	2105.503	ROCK EXCAVATION	CU. YD.		2561	2561	
	2105.507	SUBGRADE EXCAVATION	CU. YD.		6430	6430	
(2)	2130.501	WATER	M-GAL.		50	50	
(3)	2211.501	AGGREGATE BASE, CLASS 2	TON		9700	9700	
(4)	2501.511	18" C.S. PIPE CULVERT	LIN. FT.		764	764	
	2501.511	24" C.S. PIPE CULVERT	LIN. FT.		138	138	
	2501.511	42" C.S. PIPE CULVERT	LIN. FT.		28	28	
	2501.511	24" R.C. PIPE CULVERT CLASS II	LIN. FT.		104	104	
	2501.511	30" R.C. PIPE CULVERT CLASS II	LIN. FT.		58	58	
	2501.511	36" R.C. PIPE CULVERT CLASS II	LIN. FT.		50	50	
	2501.511	48" R.C. PIPE CULVERT CLASS II	LIN. FT.		58	58	
	2501.515	18" G.S. PIPE APRONS	EACH		28	28	
	2501.515	24" G.S. PIPE APRONS	EACH		4	4	
	2501.515	42" C.S. PIPE APRONS	EACH		2	2	
	2501.515	24" R.C. PIPE APRONS	EACH		4	4	
	2501.515	30" R.C. PIPE APRONS	EACH		2	2	
	2501.515	36" R.C. PIPE APRONS	EACH		2	2	
	2501.515	48" R.C. PIPE APRONS	EACH		2	2	
	2501.521	36" SPAN R.C.P-A. CULV. CLASS II A	LIN. FT.		48	48	
	2501.521	44" SPAN R.C.P-A. CULV. CLASS II A	LIN. FT.		100	100	
	2501.521	51" SPAN R.C.P-A. CULV. CLASS II A	LIN. FT.		52	52	
	2501.525	36" SPAN R.C. PIPE-ARCH APRONS	EACH		2	2	
	2501.525	44" SPAN R.C. PIPE-ARCH APRONS	EACH		4	4	
	2501.525	51" SPAN R.C. PIPE-ARCH APRONS	EACH		2	2	
	2575.501	ROADSIDE SEEDING	ACRE		12	12	(P)
	2575.502	SEED MIXTURE 5	POUND		600	600	
	2575.511	MULCH MATERIAL TYPE 1	TON		24	24	
	2575.519	DISC ANCHORING	ACRE		12	12	(P)
	2575.531	COMMERCIAL FERT. ANALYSIS 12-12-12	TON		1.2	1.2	

1 Sta. 1+68, Size 2x2.5x23' Concrete Box Culvert
Sta. 85+53, Size 1.5x2.5x22' Concrete Box Culvert
Sta. 91+74, Size 1.5x2.5x22' Concrete Box Culvert

2 To be used as a dust preventative

3 Includes 8830 tons for road, 570 tons for 19 Res. and Field drives and 300 tons for 6 public road approachs.

4 Item no. 2501.511 18" C.S. Pipe Culvert total estimated quantity includes 2-45° elbows.

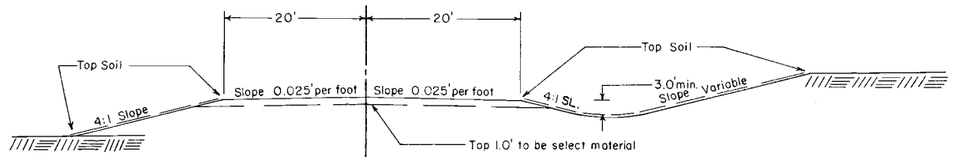
(P) Plan Quantity.

STANDARD PLATES

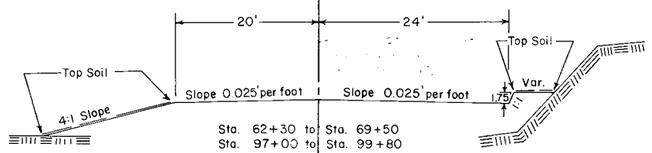
THE FOLLOWING STANDARD PLATES, APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION, SHALL APPLY ON THIS PROJECT.

PLATE NO.	DESCRIPTION
0003 A	SPECIFICATION REFERENCE TO STANDARD PLATES
3000 H	REINFORCED CONCRETE PIPE
3014 H	REINFORCED CONCRETE PIPE-ARCH DETAIL
3040 E	CORRUGATED METAL PIPE CULVERT
3100 F	CONCRETE APRON FOR REINFORCED CONCRETE PIPE
3110 D	CONCRETE APRON FOR REINFORCED CONCRETE PIPE-ARCH
3123 G	METAL APRON FOR C.M. PIPE
3124 A	METAL APRON CONNECTION
3145 A	CONCRETE PIPE JOINT TIES
8000 F	STANDARD BARRICADES
9000 B	APPROACHES AND ENTRANCES
3221 A	CORRUGATED STEEL PIPE COUPLING BAND

TYPICAL GRADING SECTIONS

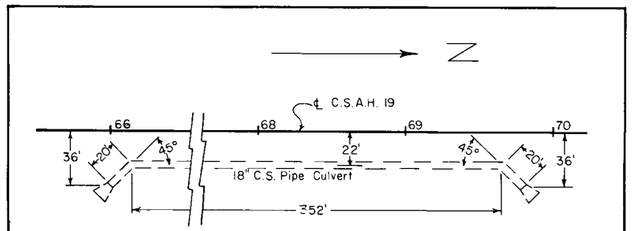


Sta. 0+00 to Sta. 62+30
Sta. 69+50 to Sta. 97+00
Sta. 99+80 to Sta. 108+79.90



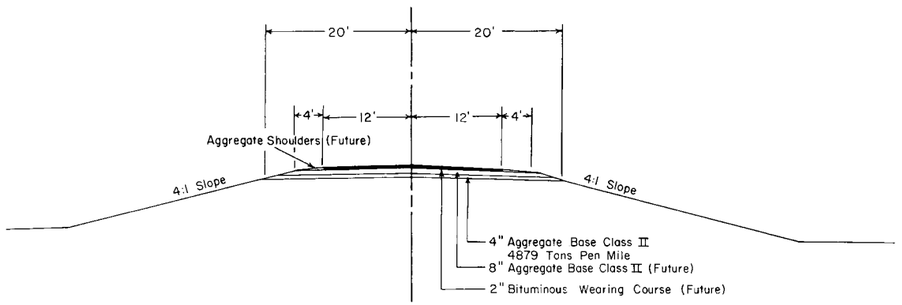
Sta. 62+30 to Sta. 69+50
Sta. 97+00 to Sta. 99+80

SPECIAL DETAILS

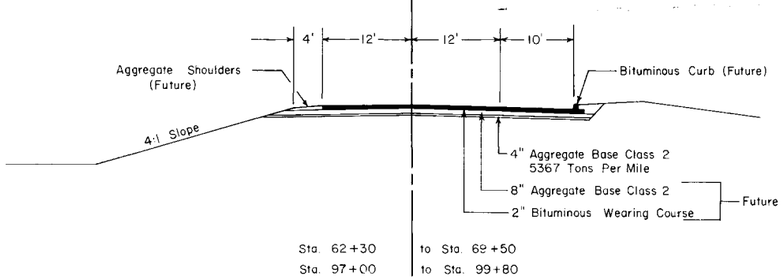


DETAIL DRAWING CULVERT RIGHT STA. 66+00 TO STA. 69+80

TYPICAL BASE & SURFACE SECTIONS



Sta. 0+00 to Sta. 62+30
Sta. 69+50 to Sta. 97+00
Sta. 99+80 to Sta. 108+79.90



Sta. 62+30 to Sta. 69+50
Sta. 97+00 to Sta. 99+80

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 "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 steel and reinforced concrete pipe culvert excavation will be considered incidental, and will be included for payment under unit price for "Pipe Culvert".

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. Backfill with select material from R.O.W. Tapers shall be 50:1 in all cases.

Note: Place sectional concrete pipe on class "B" bedding as directed by the engineer. All bedding to be considered as incidental and no direct compensation shall be made there for.

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

Minn. Proj. No. _____

S.A.P. 55-619-04
State Project No. _____

ALBINSON, INC. MINNEAPOLIS

1+58 ℄ Culv.
Inpl. 2x2.5x23' Conc. Box

REMOVE BOX CULVERT

36"x 50' R.C. PIPE CULV. CLASS II
2-36" R.C. PIPE APRONS
PLACE CULV. ON "B" BEDDING
F & I APPROVED JOINT TIES.

FE Lt. 6+38
No Culv. Inpl.

~~18"x 28' C.S. PIPE CULV.~~
~~2-18" G.S. PIPE APRONS~~
No F. End. Req'd.

FE Lt. 9+88
No Culv. Inpl.

18"x 28' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

FE Lt. 17+30
No Culv. Inpl.

18"x 28' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS.

P.C. 506+21.4

R.O.W. Marker

P.O.T. 0+28.15
Caution Mount.

BEGIN S.A.P. 55-619-04 A
STA. 0+00

P.O.T. 0+00
PK Nail

P.I. 512+06.6
Δ RT. 14° 26'
D 4°00'
T 385.2
L 1110.8

T.H. 52

R.O.W. Marker

Construct 50' shoulder radius

CONSTRUCT ℄ CULV. STA. 6+20
44" SPAN x 50' R.C. PIPE-ARCH CULV. CLASS II A
2-44" SPAN R.C. PIPE-ARCH APRONS
PLACE CULV. ON "B" BEDDING
F & I APPROVED JOINT TIES

CONST. ℄ CULV. STA. 6+28
44" SPAN x 50' R.C. PIPE-ARCH
CULV. CLASS II A
2-44" SPAN R.C. PIPE-ARCH
APRONS
PLACE CULV. ON "B" BEDDING
F & I APPROVED JOINT TIES

FE Rt. 7+11
No Culv. Inpl.

~~MOVE F. ENT. TO STA. 6+00 RT.~~
~~NO CULV. REQ'D~~
No F. End. Req'd.
Constructed Ditch Block

Under Ground 8" Metal Tile
Left Sta. 3+40 to Sta. 6+40

REMOVE 300 LIN. FEET
METAL TILE.
NO TILE REQ'D.

FE Rt. 13+41
No Culv. Inpl.

MOVE F. ENT. TO STA. 2+75
18"x 28' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

B.M. Elev. 126835
Spk. in PP 34' Lt.
Sta. 0+57

VERTICAL CONTROL
ELEVATIONS SHOWN IN THIS PLAN ARE BASED ON MEAN SEA-LEVEL DATUM, 1929 ADJ. AND TIED TO THE FAI 90 LEVEL NET ON FAI 90.
LOCATION S.E. ABUTMENT BRIDGE NO. 55814 ON FAI 90.
B.M. NO. 5580 BA ELEVATION 1245.385

Profile 75' Lt. - - - - -
Profile 75' Rt. ———

BEGIN CONST. STA. 0+10

Inlet Elev. 66.0
Outet Elev. 65.0

Inlet Elev. 68.5
Outet Elev. 68.1

+0.4%

+1.2%

P.V.C. +00 ELEV.
P.I. +00
Elev. 77.3
400' V.C.
M=0.4

P.V.T. +00 ELEV.

P.V.C. +00 ELEV.

P.I. +00
Elev. 84.5
400' V.C.
M=0.75

SUBGRADE TREATMENT:
EXCAVATE 10 BELOW PROFILE GRADE
STA. 0+23 TO STA. 0+45,
STA. 3+20 TO STA. 6+00,
STA. 7+50 TO STA. 12+80 and
STA. 20+70 TO STA. 25+50.

+10: COMMON EXC. 1683 CU. YDS. | 254 CU. YDS. TOPSOIL | 1429 CU. YDS. COMMON EXC.
ROCK EXC. 248 CU. YDS.
SUBGRADE EXC. 282 CU. YDS.
EMB. 1551 CU. YDS.

+20: 154 CU. YDS. TOPSOIL | 519 CU. YDS. COMMON EXC.
COMMON EXC. 673 CU. YDS.
ROCK EXC. 47 CU. YDS.
SUBGRADE EXC. 158 CU. YDS.
EMB. 649 CU. YDS.

+27

COMMON EXC. 4846 CU. YDS. | 1038 CU. YDS. TOP SOIL | 3308 CU. YDS. COMMON EXC.
SUBGRADE EXC. 1138 CU. YDS.
ROCK EXC. 259 CU. YDS.
EMB. 4446 CU. YDS.

℄ Subgrade Elevation	69.7	70.1	70.5	70.9	71.3	71.7	72.1	72.5	72.9	73.3	73.7	74.1	74.5	74.9	75.3	75.7	76.1	76.5	77.0	77.7	78.6	79.7	80.9	82.1	83.11	83.75	84.01	℄ Subgrade Elevation
	+10																											
	12703	707	705	700	69.1	68.8	68.8	68.8	69.5	70.2	73.2	74.0	1273.7	72.4	72.1	71.9	72.2	73.3	74.3	1274.7	74.8	75.5	75.8	75.4	74.8	74.8	74.5	1275.1	75.7	76.2	76.4	76.6	76.8	1277.9	78.3	79.9	81.8	82.6	82.9	83.3	1283.9	83.9
	+10	+23	+37	+60	+68	+68	+52	+79	+24						+25	+49		+52				+36		+21		+44			
	0						5								10							15						20						25							

1290
80
70
1260

Olmsted County S.A.P. 55-619-04 A C.S.A.H. 19 SHEET 3 OF 20 SHEETS

Twp. Rd. Lt. 26+65
No Culv. Inpl.

NO CULV. REQ'D.

F. Ent. Lt. Sta. 34+50
No Culv. Inpl.

18"x28' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

Res. Drive Lt. 31+00
No Culv. Inpl.

NO CULV. REQ'D.

CONST. ℄ CULV. STA. 35+00
36" SPAN x 48' R.C. PIPE-ARCH CULV. CL. III A
2-36" SPAN R.C. PIPE-ARCH APRONS
PLACE CULV. ON "B" BEDDING
F & I APPROVED JOINT TIES.

CONST. ℄ CULV. STA. 46+47
24"x54' R.C. PIPE CULV. CL. II
2-24" R.C. PIPE APRONS
PLACE CULV. ON "B" BEDDING
F & I APPROVED JOINT TIES

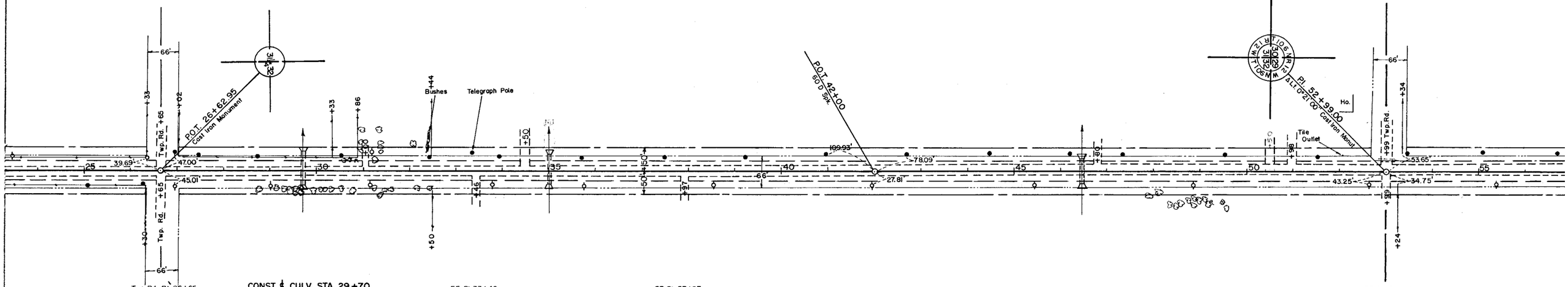
FE Lt 46+80
No Culv. Inpl.

NO CULV. REQ'D.

Res. Drive Lt. 50+98
No Culv. Inpl.
MOVE TO STA. 51+00
18"x56' ~~18"x28'~~ C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

Twp. Rd. Lt. 52+99
Inpl. 18" X 36' CMP

REMOVE
18"x36' C.S. PIPE CULVERT
2-18" G.S. PIPE APRONS



Twp. Rd. Rt. 26+65
No Culv. Inpl.

NO CULV. REQ'D.

CONST. ℄ CULV. STA. 29+70
30"x58' R.C. PIPE CULV. CL. II
2-30" R.C. PIPE APRONS
PLACE CULV. ON "B" BEDDING
F & I APPROVED JOINT TIES.

FE Rt. 33+46
No Culv. Inpl

18"x28' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS.

FE Rt. 37+97
No Culv. Inpl.

18"x28' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS.

FE Rt. 52+99
No Culv. Inpl.

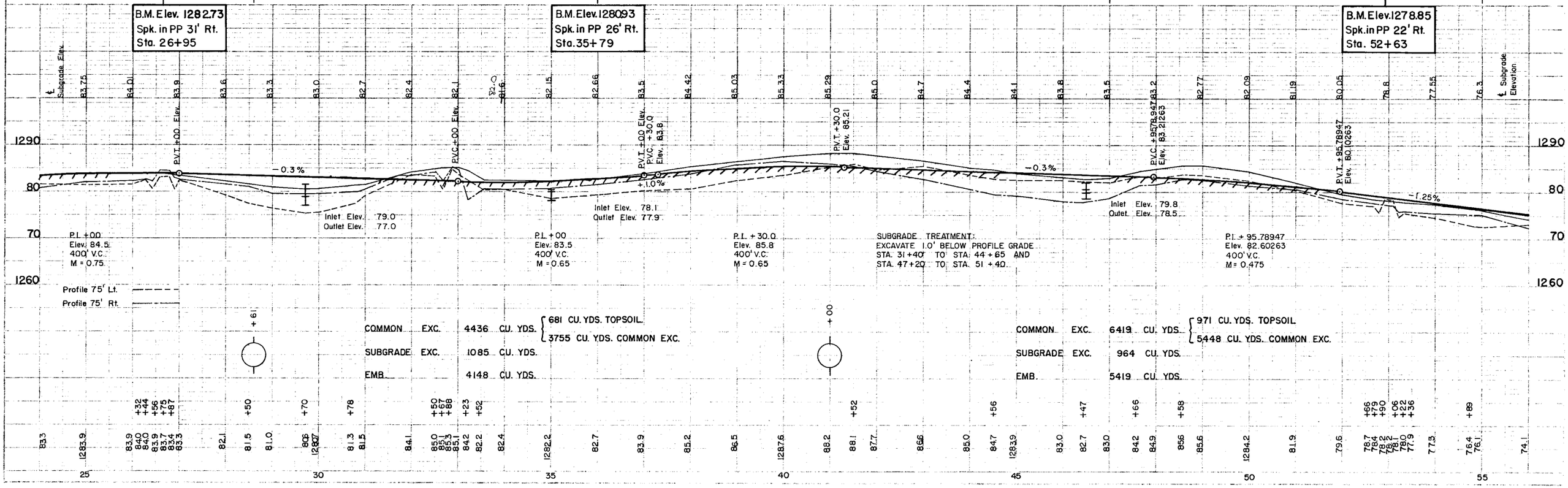
18"x28' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS.

~~19~~ CL. ~~36~~ TREES — ~~13~~ GR. ~~37~~ TREES — CL. 6 TREES — GR. 6 TREES

B.M. Elev. 1282.73
Spk. in PP 31' Rt.
Sta. 26+95

B.M. Elev. 1280.93
Spk. in PP 26' Rt.
Sta. 35+79

B.M. Elev. 1278.85
Spk. in PP 22' Rt.
Sta. 52+63



CONST. DRIVE LT. STA. 63+60
NO CULV. REQ'D.

CONST. ℄ CULV. STA. 61+44
51" SPAN x 52' R.C. PIPE-ARCH CULV. CL. II A
2-51" SPAN R.C. PIPE-ARCH APRONS
PLACE CULV. ON "B" BEDDING
F&I APPROVED JOINT TIES.

Res. Drive Lt. 65+28
Inpl. 15" X 26' CMP
REMOVE
NO CULV. REQ'D.

℄ Culv. Inpl. 72+85
Inpl. 154" Span X 76' RCP-A Cl. II
Inpl. 2-154" Span Aprons
NO CHANGE

℄ Culv. 79+56
Inpl. 18" X 72' RCP
2-18" Aprons
NO CHANGE

CONST. F. ENT. LT. ~~84+50~~ 83+34
~~18" x 28' C.S. PIPE CULV.~~
~~2-18" G.S. PIPE APRONS~~
No Culv. Req'd.

BEGIN EXCEPTION
STA. 70+00

END EXCEPTION
STA. 83+00

P.O.T. 76+56.15

Acess Road

Fl. 54+89.3
Δ 51°-30'-39.30"
D 05°-00'-00.00"
R 1146.28
L 1031.70
T 555.34
P.C. 49+33.96
P.T. 59+65.66

Fl. 57+40.39
Δ 90°-00'-00.00"
D 57°-17'-44.81"
R 100.00
L 157.08
T 100.00
P.C. 56+56.34
P.T. 57+13.42

Fl. 79+31.74
Iron Pipe

R.O.W. Marker

Ho.

Ga.

House

Gas Stand

Corn Crib

CONST. DRIVE RT. STA. 66+25
No Culv. Req'd.

Res. Drive Rt. 67+94
Inpl. 15" X 22' CMP
REMOVE
NO CULV. REQ'D.

Res. Drive Rt. 69+56
Inpl. 15" X 20' CMP
REMOVE
NO CULV. REQ'D.

CONST. CULV. RIGHT STA. 66+00 TO STA. 69+80
18" x 392' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS.
CULVERT LENGTH INCLUDES 2-45° BENDS
SEE PLAN SHEET NO. 2 FOR DETAIL DRAWING.

I-90
E.B.L.
W.B.L.

CL. 0 GR. 3 — CL. ~~45~~ TREES — GR. ~~52~~ TREES — CL. 3 - GR. 1

B.M. Elev. 1249.90
Spk. in P.P. 25' Rt.
Sta. 69+05

B.M. Elev. 1245.33
Brass Plug on S.E.
Wing Bridge 55814

℄ Subgrade Elevation

P.I. +89.23076
ELEV. 62.68461
430' V.C.
M = 1.74687

P.V.C. +74.23076
ELEV. 65.37211

P.V.T. +04.23076
ELEV. 53.00965

BEGIN EXCEPTION STA. 70+00 ELEV.

END EXCEPTION STA. 83+00 ELEV.

-1.25%

-4.5%

-0.6%

Inlet Elev. 63.8
Outlet Elev. 63.2

INLET ELEV. 57.1
STA. 66+00

18" x 392' C.S. PIPE CULVERT

Outlet Elev. 41.6
Sta. 69+80

Flowline Elevations

SUBGRADE TREATMENT:
EXCAVATE 1.0' BELOW PROFILE GRADE
STA. 62+30 TO STA. 69+20.

Profile 75' Lt.
Profile 75' Rt.

COMMON EXC.	~~3217~~ 2052	CU. YDS.
ROCK EXC.	225	CU. YDS.
SUBGRADE EXC.	1113	CU. YDS.
EMB.	2607	CU. YDS.

274 CU. YDS. TOPSOIL
2943 CU. YDS. COMMON EXC.

Olmsted County SAP 55-619-04 A C.S.A.H. 19 SHEET 5 OF 20 SHEETS

℄ Culv. 85+53
Inpl. 1.5' X 2.5' X 22' Conc. Box

REMOVE BOX CULVERT
NO. CULV. REQ'D.

℄ Culv. 91+74
Inpl. 1.5' X 2.5' X 22' Conc. Box

REMOVE BOX CULVERT
48" x ~~56~~ 70' R.C. PIPE CULV. CL. II
2-48" R.C. PIPE APRONS
PLACE CULV. ON "B" BEDDING
F & I APPROVED JOINT TIES
SKEWED CULV. 30°
PLACED CULV. at STA. 91+90

CONSTRUCT F. ENT. LT. STA. 96+00
24" x ~~50~~ 33' C.S. PIPE CULV.
2-24" G.S. PIPE APRONS

CONST. ℄ CULV. STA. 100+00
24" x 50' R.C. PIPE CULV. CL. II
2-24" R.C. PIPE APRONS
PLACE CULV. ON "B" BEDDING
F & I APPROVED JOINT TIES

CR. 123 LT. Sta. 105+50
No Culv. Inpl.

MOVE CR 123 TO STA. 105+40
NO. CULV. REQ'D.

℄ Culv. 108+53
Inpl. 24" X 68' CMP

REMOVE
MOVE CULV. TO STA. 108+20
24" x 78' C.S. PIPE CULV.
2-24" G.S. PIPE APRONS
PLACE CULV. ON "B" BEDDING

R.O.W. Marker
R.O.W. Marker
Pit
Silo
Barn
Barn
Ga.
C.R. 123
Pl. 105+70.88 Cast Iron Monut.
Construct 50' Shoulder Radius.
CONST. DECELERATION LANE
P.O.T. 108+79.90 60 D Spk.
END SAP 55-619-04 A
STA. 108+79.90
CONST. ACCELERATION LANE
C.S.A.H.
P.C. 103+70.91
Pt. 105+70.88
A Rt. 44°
D 11°49'
T 199.97'
L 379.34'
49°30"
P.T. 107+50.25

MOVED TO STA. 94+20

FE Rt. 85+74
No Culv. Inpl.

18" x 28' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

FE Rt. 92+39
No Culv. Inpl.

~~42" x 28' C.S. PIPE CULV.~~
~~2-42" G.S. PIPE APRONS~~
24" x 28' C.S. PIPE CULV.
2-24" G.S. PIPE APRONS
MOVED F. ENT TO STA. 91+81

Res. Drive Rt. 97+21
No Culv. Inpl.

NO CULV. REQ'D.

Res. Drive Rt. 98+38
No Culv. Inpl.

NO CULV. REQ'D.

F. ENT. RT. STA. 103+50
NO CULV. INPL.

18" x 28' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

CONST. F. ENT RT. STA. 105+82
NO CULV. REQ'D.

CL. ~~53~~ 31 TREES
GR. ~~58~~ 30 TREES

B.M. Elev. 1241.47
Spk. in PP 34' Rt.
Sta. 90+93

B.M. Elev. 1262.23
Spk. in PP 85' Lt.
Sta. 105+75

℄ Subgrade Elevation
Profile 75' Lt.
Profile 75' Rt.

P.I. +00
ELEV. 43.1
400' V.C.
M = 1.55

P.I. +56.66667
ELEV. 62.01667
800' V.C.
M = 3.0

P.V.C. +00
P.V.T. +00
P.V.C. +56.66667 Elev. 52.01665
P.V.T. +56.66667 Elev. 60.01667
END CONST. STA. 108+60
-0.6%
+2.5%
-0.5%
Inlet Elev. 38.0
Outlet Elev. 37.5
Inlet Elev. 53.5
Outlet Elev. 53.0
Inlet Elev. 55.0
Outlet Elev. 54.5

SUBGRADE TREATMENT:
EXCAVATE 10" BELOW PROFILE GRADE
STA. 83+50 TO STA. 88+80,
STA. 96+80 TO STA. 100+20 AND
STA. 103+00 TO STA. 108+60.

COMMON EXC.	3270 ~~4162~~ CU. YDS.	467 CU. YDS. TOPSOIL 3695 CU. YDS. COMMON EXC.
ROCK EXC.	1244 ~~339~~ CU. YDS.	
SUBGRADE EXC.	548 ~~668~~ CU. YDS.	
EMB.	3473 CU. YDS.	

COMMON EXC.	3633 ~~5622~~ CU. YDS.	840 CU. YDS. TOPSOIL 4782 CU. YDS. COMMON EXC.
ROCK EXC.	2854 ~~1927~~ CU. YDS.	
SUBGRADE EXC.	865 ~~1024~~ CU. YDS.	
EMB.	6098 CU. YDS.	