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 (TIMBER)
CATCH BASIN C.B.
FIRE HYDRANT
CATTLE GUARD
OVERPASS (Highway Over)
UNDERPASS (Highway Under)
BRIDGE
BUILDING (One Story Frame) 1-S-F 25'
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—G
WATER MAIN W—W
CONDUIT
TELEPHONE CABLE IN CONDUIT T—T
ELECTRIC CABLE IN CONDUIT P—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

End Proj. 55-608-09
Sta. 93+35.00

Sta. 145+81.67 P.O.T. =
Sta. 90+50.58 P.C.

Sta. 120+70.83 P.T. =
Sta. 120+41.30 P.O.T.

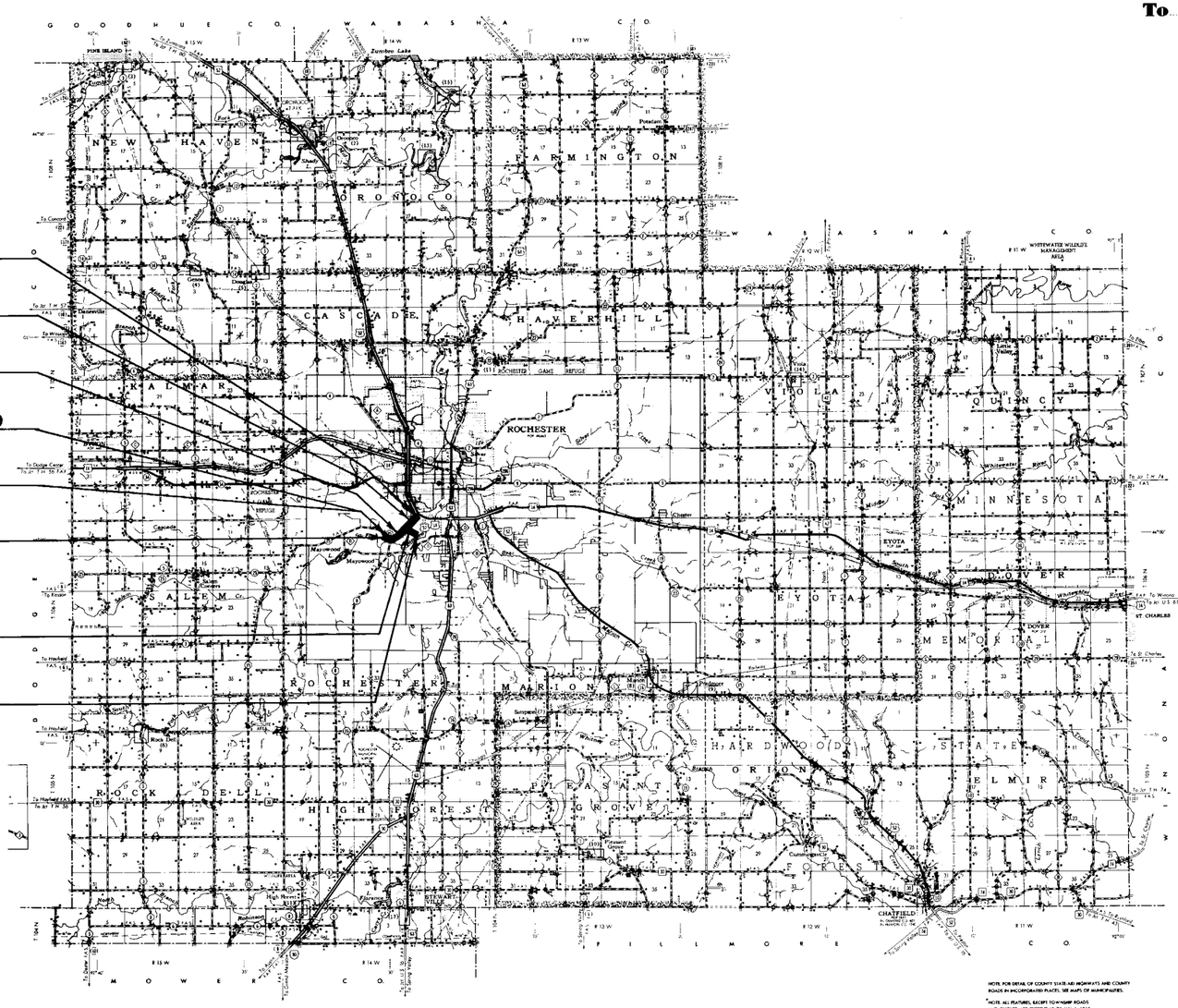
Begin S.P. 55-608-09
Sta. 103+20.13

End Proj. 55-625-05
Sta. 328+58.84

Begin Proj. 55-625-05
Sta. 315+00

End Proj. C-68-8
Sta. 114+53.88

Begin Proj. C-68-8
Sta. 107+00



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

— SPECIFICATIONS —

STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION DATED JANUARY 1, 1968 SHALL GOVERN.

STATE OF MINNESOTA
DEPARTMENT OF HIGHWAYS

CONSTRUCTION PLAN FOR Grading, Aggregate Base, Lighting, Concrete Curb & Gutter, Bituminous Curb and Bituminous Surface.

COUNTY STATE AID HIGHWAY NO. 25 & 8 & 16th St. S.W. (C-68-8) & T.H. 14 & T.H. 14

BETWEEN 1.2 miles west of Inters. C.S.A.H. 8 **AND** 0.1 miles west of Inters. C.S.A.H. 8

From 497.2' South Thence 940.0' N.W. of W1/4 Corner Sec. 9 T106N–R14W

To 1495' West Thence 195.0' South of N.E. Corner Sec. 10 T106N–R14W

(Give proper reference to Sections, Township and Range)

C-68-8			C.S.A.H. 25 & C.S.A.H. 8		
GROSS LENGTH 753.88'	FEET 0.142	MILES	GROSS LENGTH 5934.30	FEET 1.1239	MILES
BRIDGES-LENGTH 0.0	FEET 0.0	MILES	BRIDGES-LENGTH 0.0	FEET 0.0	MILES
EXCEPTIONS-LENGTH 0.0	FEET 0.0	MILES	EXCEPTIONS-LENGTH 0.0	FEET 0.0	MILES
NET LENGTH 753.88'	FEET 0.142	MILES	NET LENGTH 5934.30	FEET 1.1239	MILES

INDEX OF SHEETS

Sheet No. 1 Title Sheet & Layout Map
" No. 2 Est. Quantities & Typical Sec
" No. 3 Typical Sections
" No. 4 To 8 Plan & Profile
No. 9 To 10 Highway Lighting
No. 11 To 20 X-Sections

DESIGN SPEED 60 M.P.H.
Exception: Inters. C.S.A.H. 8 & 25 and C.S.A.H. 8 & T.H. 14

PROJECTED A.D.T. 3609

9 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.

A. La Schellhammer (COUNTY ENGINEER) DATE Sept 16, 1968

Olmsted COUNTY REG. NO. 8284

RECOMMENDED FOR APPROVAL Karl A. Peterson (DISTRICT STATE AID ENGINEER) 9/24, 1968

RECOMMENDED FOR APPROVAL C.E. Weichselbaum 10-28, 1968

APPROVED 10/28, 1968 Gordon M. Fritz (STATE AID ENGINEER)

S.A.P. 55-608-09

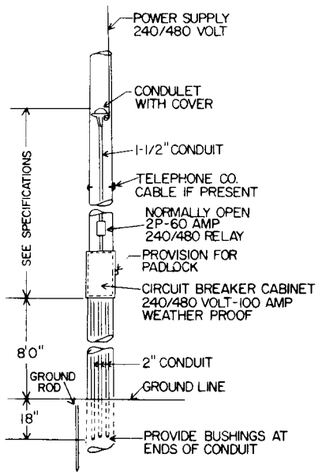
Minn. Project No. _____ State Project No. _____

Olmsted County, Minnesota. County Proj. No. _____ Plan No. _____ Sheet 1 of 20 Sheets

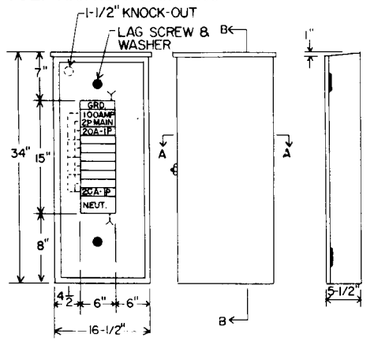
ALBINSON, INC.
MINNEAPOLIS, MINN. 55415

Fed. Proj. No.

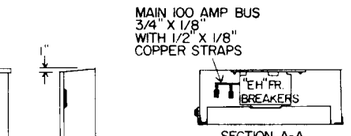
FEED POINT INSTALLATION DETAILS FOR 240/480 VOLT HIGHWAY LIGHTING



CABINET INSTALLATION

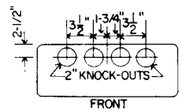


CABINET AND COVER-12 GAUGE GALVANIZED STEEL FOR CIRCUIT BREAKERS

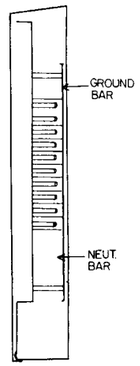


SECTION A-A

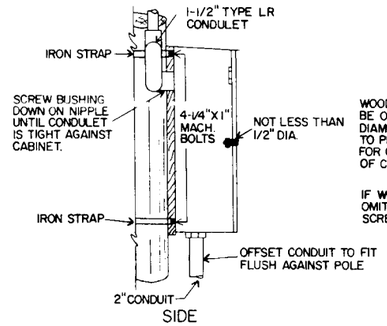
NOTE: DISTANCES BETWEEN BUS BARS AND LIVE PARTS SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE.



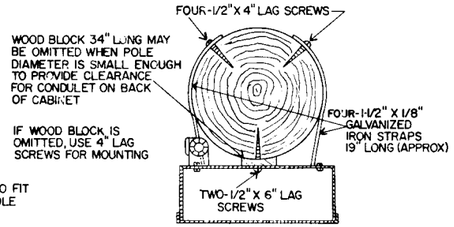
FRONT
KNOCK-OUT ARRANGEMENT IN BOTTOM



TYPICAL SECTION B-B

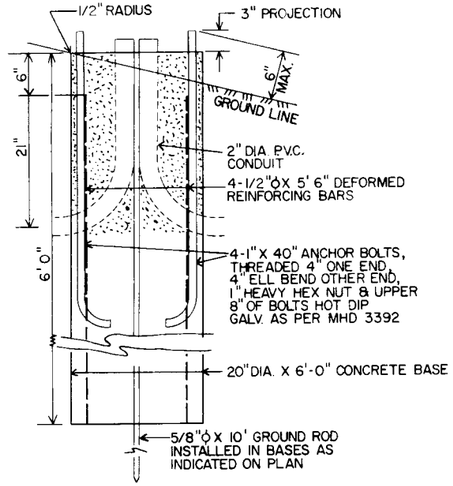


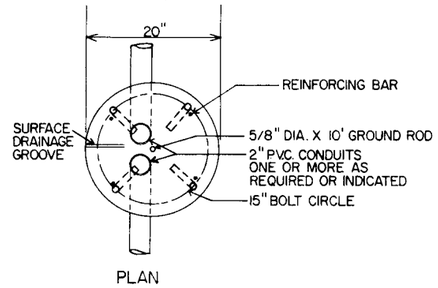
SIDE



SECTION

BASE FOR ORNAMENTAL LIGHT STANDARDS DESIGN E



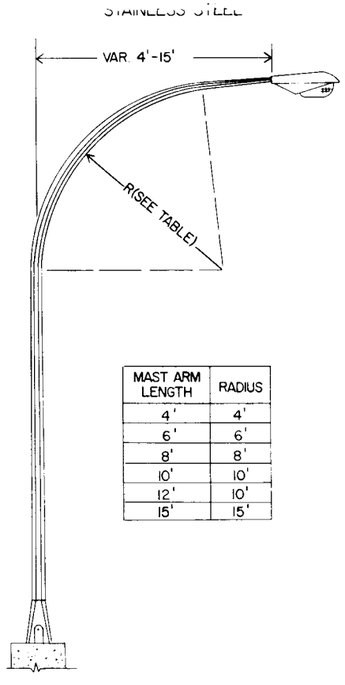


PLAN

LUMINAIRES:
LINE MATERIAL UNSTYLE TYPE II CAT. NO. LM 53A1
TYPE III CAT. NO. LM 53A2
OR
WESTINGHOUSE OV25-CAT. NO. 656A-302-G01
OR
GENERAL ELECTRIC FORM M400 MODEL C715G002
— LUMINAIRES WITH [redacted] REFRACTORS OR EQUAL

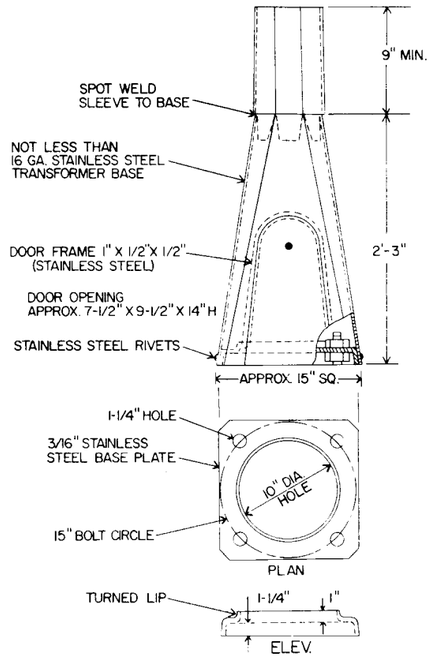
BALLAST:
CONSTANT WATTAGE TYPE
LAMPS: 400 WATT MERCURY H33-ICD 20,000 LUMENS (CLEAR)

30 FT. ORNAMENTAL LIGHT STANDARDS



MAST ARM LENGTH	RADIUS
4'	4'
6'	6'
8'	8'
10'	10'
12'	10'
15'	15'

STAINLESS STEEL TRANSFORMER BASE



STATEMENT OF ESTIMATED QUANTITIES

	ITEM NO.	ITEM	UNIT	S.P. QUANTITIES EST.	FINAL
*	2545.511	Lighting Units, Type 6-30	Unit	3	
*	2545.511	Lighting Units, Type 10-30	Unit	1	
*	2545.511	Lighting Units, Type 12-30	Unit	15	
*	2545.511	Lighting Units, Type 15-30	Unit	1	
	2545.515	Light Bases, Design E	Base	21	
	2545.521	3" Rigid Metallic Conduit	Lin.Ft.	523'	
	2545.533	Armored Cable, 3 Conductor No. 4	Lin.Ft.	3,790'	
	2545.541	Service Panels, Secondary Type	Panel	2	
	2545.511	Lighting Units (See Special Provisions)	Unit	1	

* Type Denotes Length of Mast Arm and Mounting Height

State AID PROJ. NO. 55-608-09

Sheet No. 10 of 20 Sheets

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	C.S.A.H. 25 Rural	C.S.A.H. 8 Rural	16 St. S.W. C-68 - 8 Rural
2101.502	Clearing	Tree	146	68	78	
2101.507	Grubbing	Tree	122	50	72	
2104.501	Remove Portable Culverts	Lin. Foot	316	178	138	
2104.503	Remove Curb & Gutter	Lin. Foot	386	0	386	
2105.501	Common Excavation	Cu.Yd.	32399	5491	25764	1144
2105.503	Rock Excavation	Cu.Yd.	559	559	0	
2105.507	Subgrade Excavation	Cu.Yd.	629	0	5846	283
2211.503	Aggregate Base Placed Cl.3	Cu. Yd.	25487	3564	18969	2954
2105.523	Common Borrow	Cu. Yd.	36280	11412	9156	15712
2531.502	Concrete Curb Design "B"	Lin. Foot	4033	1387	2256	390
2501.511	F&I 18" Metal Pipe Culv.	Lin. Foot	128	64	32	32'
2501.511	F&I 42" Metal Pipe Culv.	Lin. Foot	32			32'
2501.512	F&I 18" Span Metal Pipe-A Culvert	Lin Foot	64	0	64	
2501.523	F&I 18" Concrete Culvert Class III	Lin. Foot	110	0	66	44'
2501.523	F&I 24" Concrete Culvert Class II	Lin. Foot	136	54	82	
2501.523	F&I 24" Concrete Culvert Class III	Lin. Foot	214	0	214	
2501.523	F&I 36" Concrete Culvert Class II	Lin. Foot	76	76	0	
2501.524	F&I 28 1/2" Span Concrete Pipe-A Culvert Cl. III	Lin. Foot	426	0	426	
2501.532	F&I 18" Metal Aprons	Apron	8	4	2	2
2501.532	F&I 42" Metal Aprons	Apron	2			2
2501.533	F&I 18" Span Metal Aprons	Apron	4	0	4	
2501.536	F&I 18" Concrete Aprons	Apron	2	0	1	1
2501.536	F&I 24" Concrete Aprons	Apron	4	0	4	
2501.536	F&I 36" Concrete Aprons	Apron	2	2	0	
2501.537	F&I 28 1/2" Span Conc. Apron	Apron	8	0	8	
2501.572	Install 24" Concrete Culvert (Aprons Included)	Lin. Foot	84	72	12	
2506.509	Construct Catch Basins Design "C" (Castings Included)	Structure	4	0	3	1
2531.501	Concrete Curb and Gutter Design B 624	Lin. Foot	10060	948	8172	940
2211.501	Aggregate Base Class II	Ton	19249	2261	14712	2276
2358.501	Bituminous Material for Prime Coat	Gallon	14260	1388	11105	1767
2357.502	Bituminous Material for Tack Coat	Gallon	1915	211	1503	201
2331.510	Binder Course Mixture	Ton	3043	476	3088	493
2331.504	Bit. Material for Mixture	Ton	358	31	200	32
2331.514	Base Course Mixture	Ton	4636	357	2316	370
2535.501	Bituminous Curb	Lin. Foot	2835	0	2835	0
2341.504	Bituminous Material for Mixture	Ton	206	24	187	25
2341.508	Wearing Coarse Mixture	Ton	4057	476	3667	493
2221.501	Aggregate Shouldering Cl.2	Ton	3323	678	2270	375

Note: Item 2211.501 Includes 1660 Tons for Service Drive, 570 Tons Cross Overs and Approaches, 550 Tons for escape lanes and 150 Tons for C.S.A.H. 8 South as Directed By the Engineer.

BASIS FOR PLANNED QUANTITIES

Crushed Rock For Base _____ 135 LBS. PER CU. FT. COMPACTED

PLANT MIXED BITUMINOUS BINDER

Bituminous Material For Prime Coat _____ 0.3 GAL.PER. SQ.YD.
Bituminous Material For Tack Coat _____ 0.05 GAL. PER. SQ.YD.

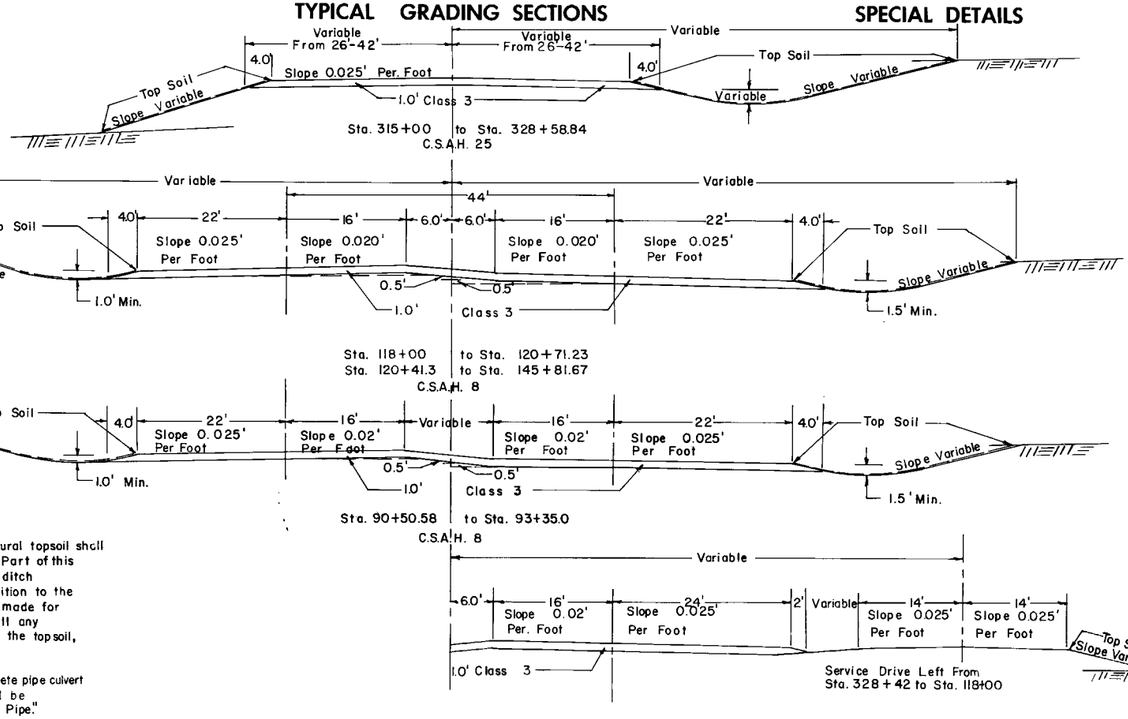
Bituminous Material Computed For ___ 42,198 SQ.YDS.
Includes ____ 5264 Sq. Yds. for Service Drive.
Includes ____ 342 Sq. Yds. for Ent. and Apps.
and Includes ____ 3887 Sq. Yds. for Escape Lanes.

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 F	Reinforced Concrete Pipe
3014 D	Reinforced Concrete Pipe-Arch
3040 A	Corrugated Metal Pipe-Arch
3100 E	Conc. Aprons for Reinforced Concrete Pipe
3110 C	Conc. Aprons for Reinforced Concrete Pipe-Arch
3122 E	Metal Aprons for C.M. Pipe-Arch Culvert.
3123 E	Metal Aprons for C.M. Pipes.
4002 D	Manhole or Catch Basins
8000 C	Standard Barricades
8008 C	Contractor Sign
9000 A	Approaches and Entrances
4129 A	Catch Basin Frame Casting
7065 C	Bituminous Curb
7100 D	Concrete Curb and Gutters
7111 D	Installation of Catch Basin Castings

TYPICAL GRADING SECTIONS



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.

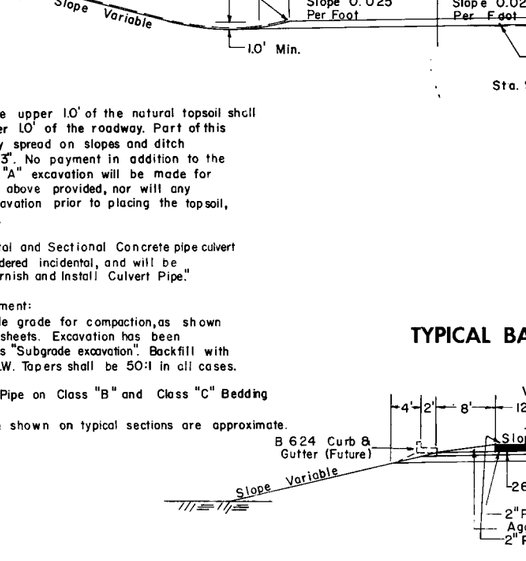
Note: Corrugated Metal and Sectional Concrete pipe culvert excavation will be considered incidental, and will be under unit price for "Furnish and Install Culvert Pipe."

Note: Subgrade Treatment:
Excavate 10" 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.

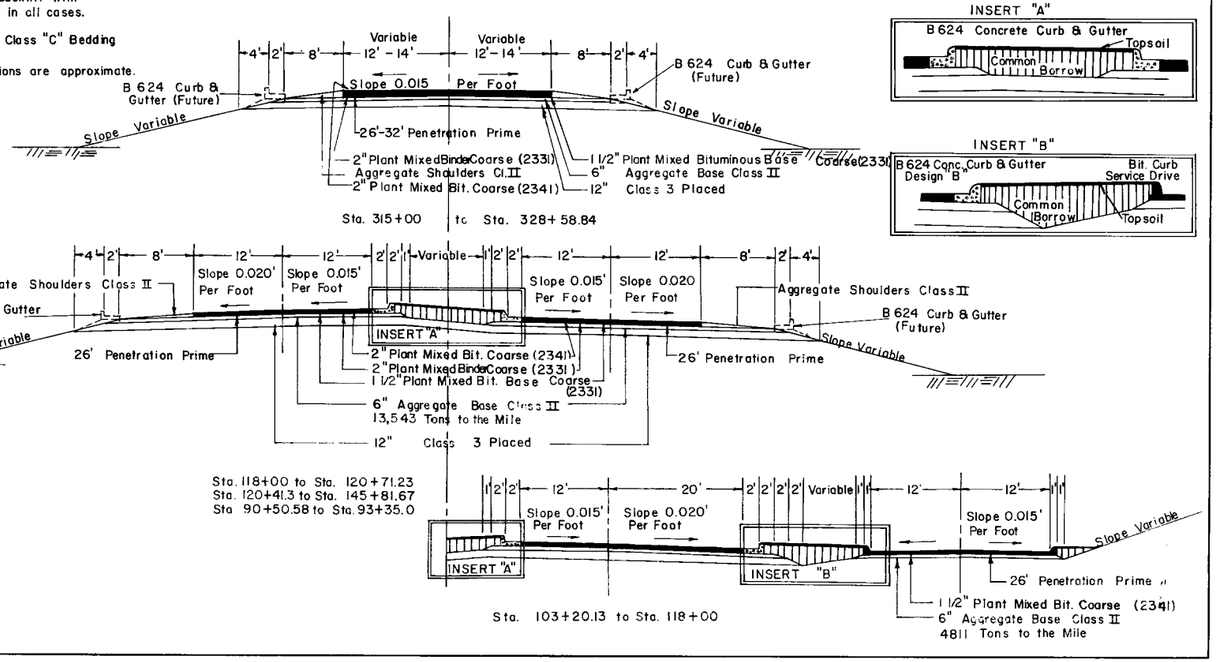
Note:
Place Sectional Concrete Pipe on Class "B" and Class "C" Bedding

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

SPECIAL DETAILS



TYPICAL BASE & SURFACE SECTIONS



H.A. ROGERS CO.
MPLS. MINN.

Olmsted County, Minn. Proj. No. _____ Plan No. _____ Sheet No. 2 of 20 Sheets

FORM 129c - No. 2 Rev. '

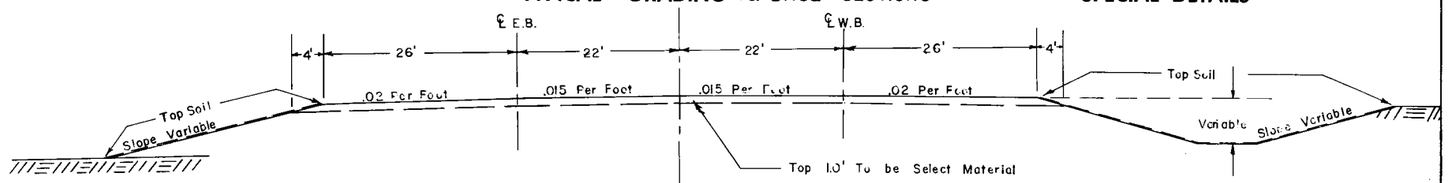
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SEC.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	MINN.					

ESTIMATED QUANTITIES

SPECIFICATION NO.	ITEM	UNIT			

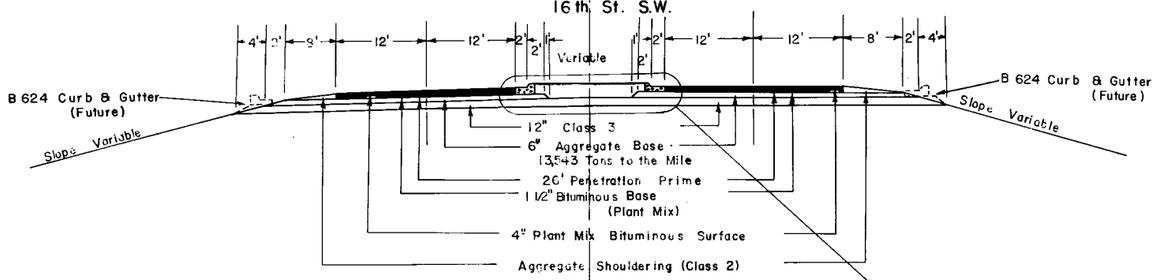
16 th. St. S.W.

TYPICAL GRADING & BASE SECTIONS



Sta. 107+00 to Sta. 114+53.88

16 th. St. S.W.



Sta. 107+00 to Sta. 114+53.88

16 th. St. S.W.

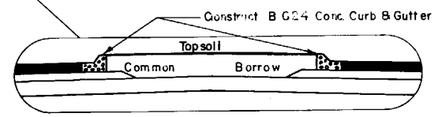
Bituminous Base Course

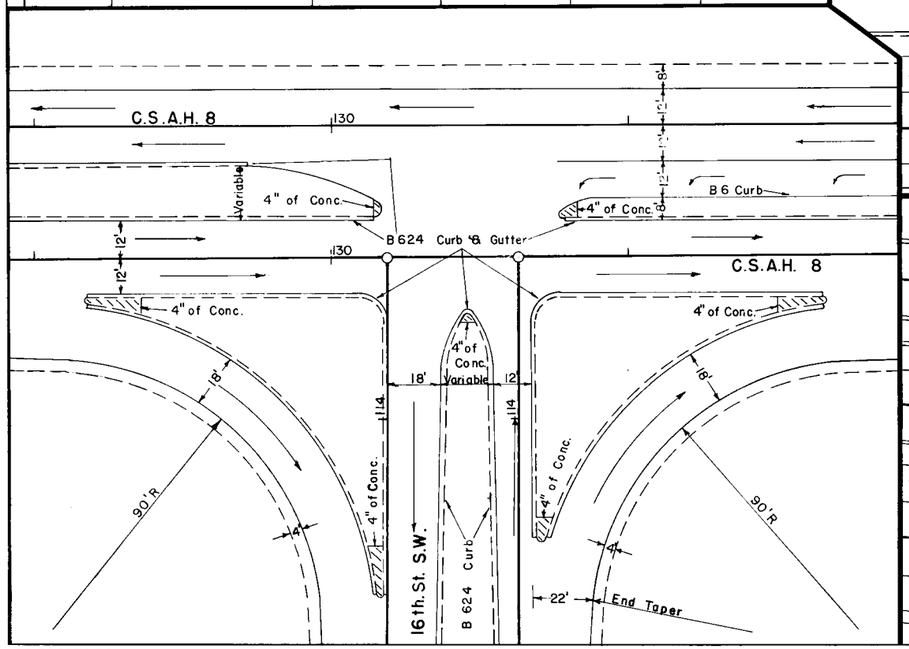
Bituminous Base_____Approx. 3.3 % of weight of mix

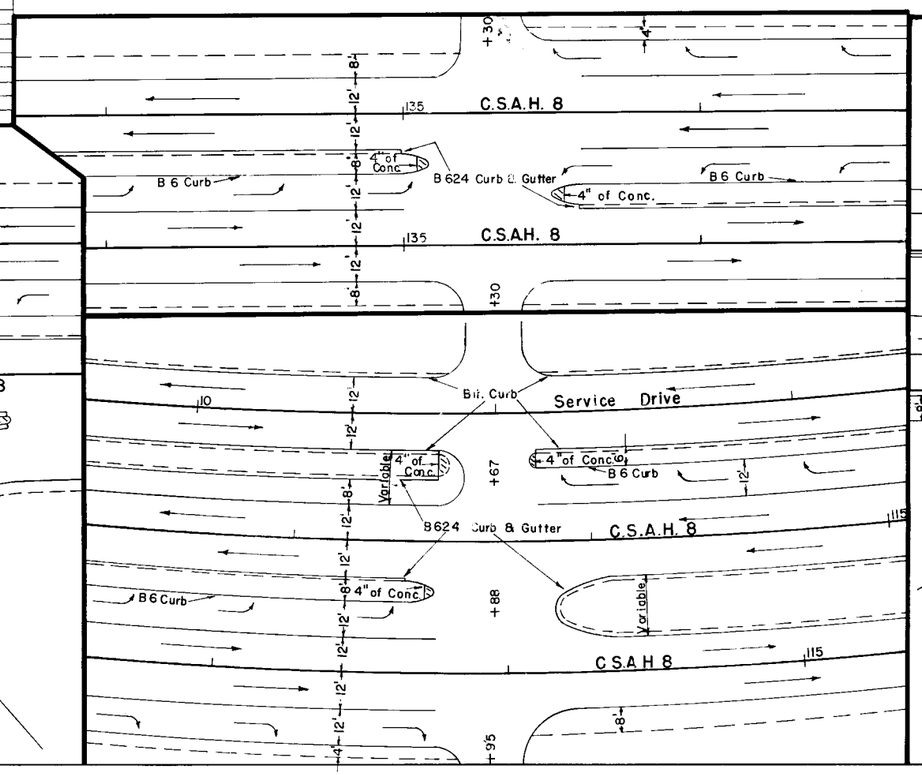
Bituminous Wearing Course

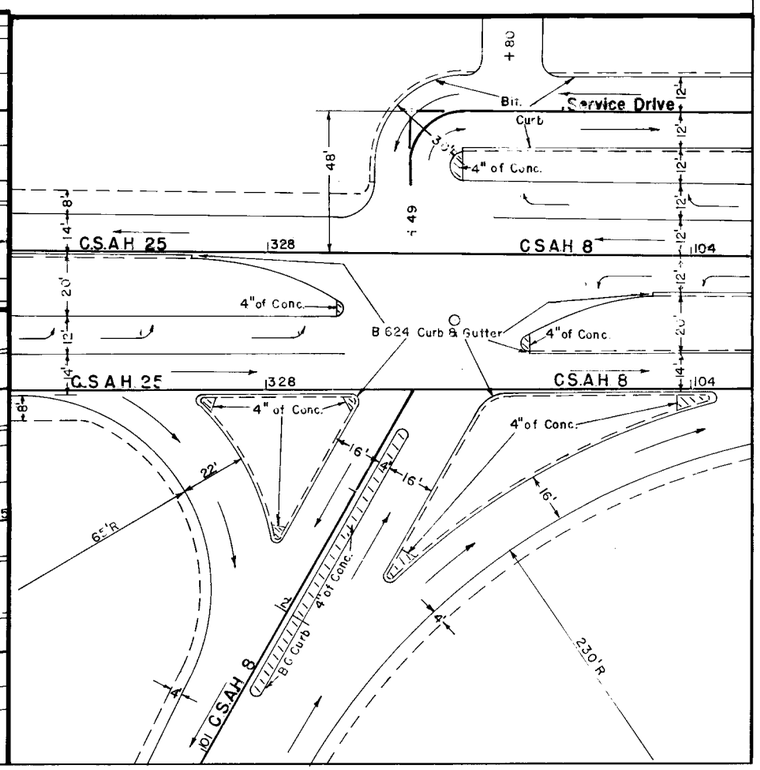
Bituminous Material for Mixture_____ Approx. 5.1% of weight of mix

SPECIAL DETAILS



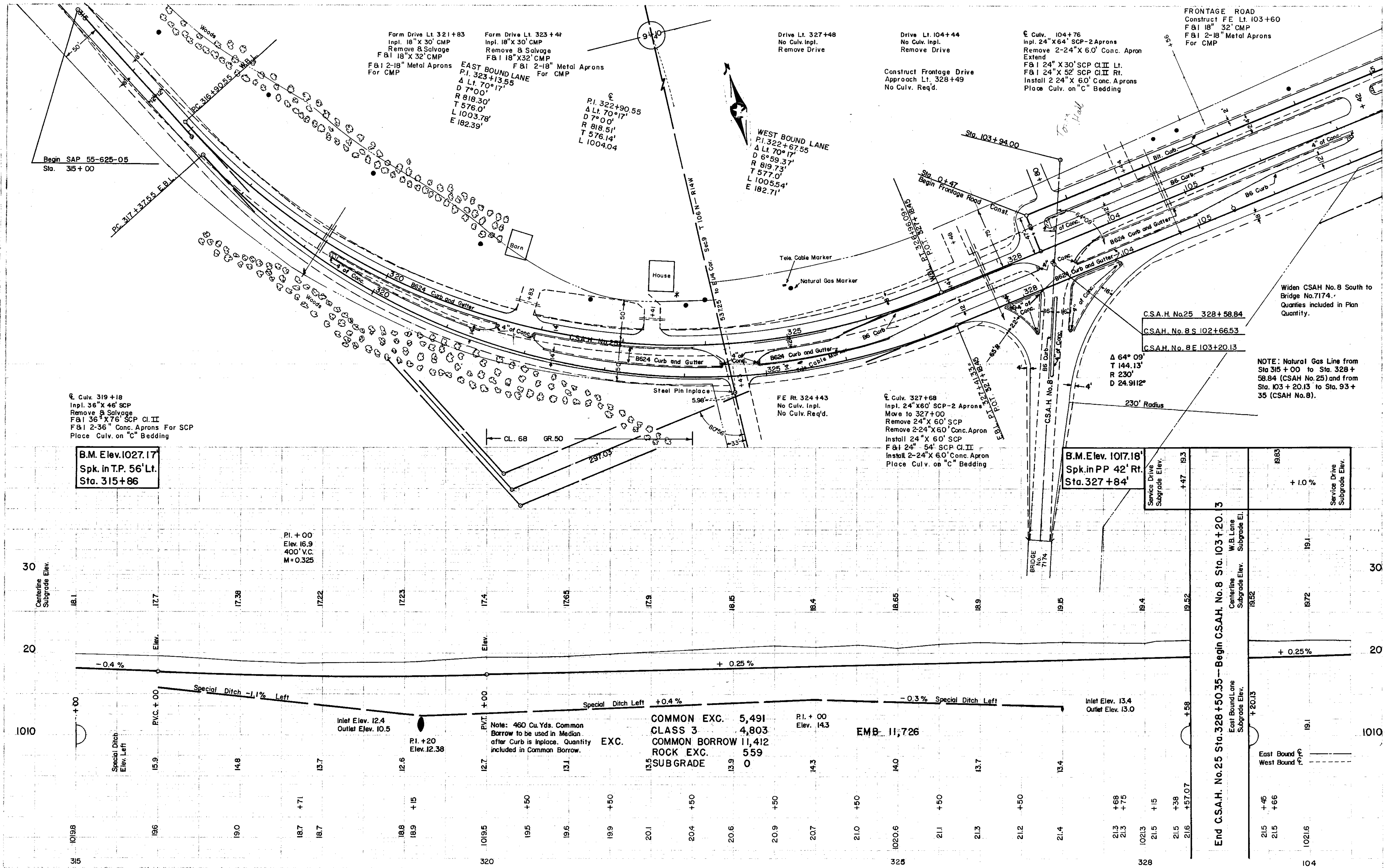






H.A. ROGERS CO.
MPLS. MINN.

Olmsted County, Minn. Proj. No. _____ Plan No. _____ Sheet No. 3 of 20 Sheets


Begin SAP 55-625-05
Sta. 315 + 00
PC 316+90.55 W.B.L.
PC 317+37.55 E.B.L.
Woods
Farm Drive Lt. 321+83
Inpl. 18" X 30' CMP
Remove & Salvage
F&I 18" X 32' CMP
F&I 2-18" Metal Aprons
For CMP
Farm Drive Lt. 323+41
Inpl. 18" X 30' CMP
Remove & Salvage
F&I 18" X 32' CMP
F&I 2-18" Metal Aprons
For CMP
EAST BOUND LANE
P.I. 323+13.55
Δ Lt. 70°17'
D 7°00'
R 818.30'
T 576.0'
L 1003.78'
E 182.39'
℄
P.I. 322+90.55
Δ Lt. 70°17'
D 7°00'
R 818.51'
T 576.14'
L 1004.04
WEST BOUND LANE
P.I. 322+67.55
Δ Lt. 70° 17'
D 6°59.37'
R 819.73'
T 577.0'
L 1005.54'
E 182.71'
T 106 N — R 14 W
Sec.9
537.25 to E 1/4 Cor.
Barn
House
Tele. Cable Marker
Natural Gas Marker
Drive Lt. 327+48
No Culv. Inpl.
Remove Drive
Drive Lt. 104+44
No Culv. Inpl.
Remove Drive
Construct Frontage Drive
Approach Lt. 328+49
No Culv. Req'd.
℄ Culv. 104+76
Inpl. 24" X 64' SCP-2 Aprons
Remove 2-24" X 6.0' Conc. Apron
Extend
F&I 24" X 30' SCP Cl.II Lt.
F&I 24" X 52' SCP Cl.II Rt.
Install 2 24" X 6.0' Conc. Aprons
Place Culv. on "C" Bedding
FRONTAGE ROAD
Construct FE Lt. 103+60
F&I 18" 32' CMP
F&I 2-18" Metal Aprons
For CMP
Sta. 103+94.00
Sta. 0+47
Begin Frontage Road Const.
W.B.L. P.I. 326+96.09 = P.O.T. 327+18.45
E.B.L. P.I. 327+41.33 = P.O.T. 327+18.45
B624 Curb and Gutter
B6 Curb
Blt. Curb
4" of Conc.
C.S.A.H. No.25
C.S.A.H. No.8
Steel Pin Inplace
5.98'
80°56'
33'
CL. 68 GR.50
297.03'
FE Rt. 324+43
No Culv. Inpl.
No Culv. Req'd.
℄ Culv. 327+68
Inpl. 24" X 60' SCP-2 Aprons
Move to 327+00
Remove 24" X 60' SCP
Remove 2-24" X 6.0' Conc. Apron
Install 24" X 60' SCP
F&I 24" 54' SCP Cl.II
Install 2-24" X 6.0' Conc. Apron
Place Culv. on "C" Bedding
℄ Culv. 319+18
Inpl. 36" X 46' SCP
Remove & Salvage
F&I 36" X 76' SCP Cl.II
F&I 2-36" Conc. Aprons For SCP
Place Culv. on "C" Bedding
C.S.A.H. No.25 328+58.84
C.S.A.H. No. 8 S 102+66.53
C.S.A.H. No. 8 E 103+20.13
Δ 64° 09'
T 144.13'
R 230'
D 24.9112°
230' Radius
Widen CSAH No. 8 South to Bridge No. 7174. Quanties included in Plan Quantity.
NOTE: Natural Gas Line from Sta 315 + 00 to Sta. 328 + 58.84 (CSAH No. 25) and from Sta. 103 + 20.13 to Sta. 93 + 35 (CSAH No. 8).
BRIDGE No. 7174
B.M. Elev. 1027.17'
Spk. in T.P. 56' Lt.
Sta. 315+86
B.M. Elev. 1017.18'
Spk. in PP 42' Rt.
Sta. 327+84'
Service Drive Subgrade Elev.
+47 19.3
19.83
+ 1.0 %
P.I. + 00
Elev. 16.9
400' V.C.
M = 0.325
Centerline Subgrade Elev.
18.1 17.7 17.38 17.22 17.23 17.4 17.65 17.9 18.15 18.4 18.65 18.9 19.15 19.4 19.52
W.B. Lane Subgrade El.
Centerline Subgrade Elev.
19.52 19.72 19.1
− 0.4 %
+ 0.25 %
+ 0.25%
Special Ditch −1.1% Left
Special Ditch Left +0.4 %
− 0.3 % Special Ditch Left
P.V.C. + 00
P.V.T. + 00
Inlet Elev. 12.4
Outlet Elev. 10.5
P.I. +20
Elev. 12.38
P.I. + 00
Elev. 14.3
Inlet Elev. 13.4
Outlet Elev. 13.0
Note: 460 Cu. Yds. Common Borrow to be used in Median after Curb is Inplace. Quantity included in Common Borrow.
EXC.
COMMON EXC. 5,491
CLASS 3 4,803
COMMON BORROW 11,412
ROCK EXC. 559
SUBGRADE 0
EMB 11,726
Special Ditch Elev. Left
15.9 14.8 13.7 12.6 12.7 13.1 13.5 13.9 14.3 14.0 13.7 13.4
East Bound Lane Subgrade Elev.
+20.13 19.1
End C.S.A.H. No. 25 Sta. 328+50.35 — Begin C.S.A.H. No. 8 Sta. 103+20.13
East Bound ℄
West Bound ℄
30 20 1010
+71 +15 +50 +50 +50 +50 +50 +50 +50 +68 +75 +15 +38 +57.07 +58 +45 +66
1019.8 19.6 19.0 18.7 18.7 18.8 18.9 1019.5 19.5 19.6 19.9 20.1 20.4 20.6 20.9 20.7 21.0 1020.6 21.1 21.3 21.2 21.4 21.3 21.3 1021.3 21.5 21.5 21.6 21.5 21.5 1021.6
315 320 325 328 104

Frontage Road
Drive Lt. Sta. 111+78
No Culv. Inpl.
No Culv. Req'd.

Frontage Road
Woodland Drive 113+77
No Culv. Inpl.
No Culv. Req'd.

Frontage Road
Drive Lt. 115+85
Inpl. 15" X 26' CMP
Remove and Salvage
No Culv. Req'd.

Frontage Road
℄ Culv. 118+46
Inpl. 18" X 36' CMP
No Change

Frontage Road
Drive Lt. 118+67
Inpl. 15" X 28' CMP
No Change

Frontage Road
Drive Lt. 119+81
No Culv. Inpl.
No Change

Tele. Cable Marker

Frontage Road
P.I. Sta. 8+04.35
Δ Lt. 20° 00'
D 3° 30'
T 288.65
L 571.42'

East Bound Lane
P.I. 114+34.48
Δ Lt. 40° 26'
D 2° 57.95'
T 711.43'
L 1363.31'
R 1931.859'

℄
P.I. 114+26.38
Δ Lt. 40° 26'
D 3° 00'
T 703.32'
L 1347.77'
R 1909.859'
E 125.38'

West Bound Lane
P.I. 114+18.28
Δ Lt. 40° 26'
D 3° 02.97'
T 695.22'
L 1332.25'
R 1887.859'

Frontage Road
P.I. 13+11.66
Δ Lt. 20° 20'
D 5° 00'
T 205.56'
L 406.67'

P.T. 112+71.79 End Frontage Road Construction

B624 Curb and Gutter
Bituminous Curb
B6 Curb
4" of Conc.
Prop. Cor.
Natural Gas Meter
Natural Gas Meters
Woods
R.O.W. Marker
Sidewalk
Woodland Drive
P.C. 107+23.06 W.B.L.
P.C. 5+15.70
P.C. 107+23.05 E.B.L.
P.T. 8+27.10
P.C. 11+06.10

Sta. 106+40
Construct Masonary Catch Basin
Design "C" (Casting Included)
See Plate 4002D
Sta. 106+40 Const. ℄ Culv.
F. & I. 18"X 66' R.C.P. CL. 3
F. & I. 1-18" Conc. Apron
For SCP
Place Culv. on "C" Bedding

230' R.

FE Rt. 111+49
No Culv. Inpl.
Remove Field Ent.

FE Rt. 113+91
No Culv. Inpl.
Remove Field Ent.

Const. Field Ent. Right Sta. 113+95 E.B.L.
F. & I. 18" Span X 32' CMP-A
F. & I. 2-18" Span Metal Aprons
For CMP-A

NOTE: Natural Gas Line from Sta. 103+20.13 to Sta. 93+35 (CSAH 8).

CL. 53 GR. 47
CL. 17 GR. 17

Service Drive Subgrade El.
P.I. 3+37 Elev. 22.2
+1.0%
P.I. 9+37 Elev. 25.2 V.C. 400' M=0.5
+0.5%
-0.5%
+25.1

W.B.L. Subgrade Elev.
W.B.L. P.I. +00 Elev. 22.1
W.B.L. P.I. +00 Elev. 23.7 400' V.C. M=0.575
W.B.L. P.I. 98.502 Elev. 18.46123 400' V.C. M=0.5

Centerline Subgrade Elev.
P.I. +83.95333 Elev. 19.3581
P.I. +00 Elev. 23.2 400' V.C. M=0.575

+0.25%
+0.6% W.B.L.
+0.4% ℄ and E.B.L.
-0.75%

Elev. 19.96124
Elev. 19.43219
Elev. 18.90302

Inlet Elev. 17.0
Outlet Elev. 14.0
Inlet Elev. 14.4
Outlet Elev. 12.1

West Bound Lane
East Bound Lane

Subgrade Treatment
Excavate 1.0' Below Profile Grade
Sta. 108+00 to 113+50

P.V.C. +00
P.V.T. +00
E.B.L. W.B.L.

E.B.L.
P.I. +00
Elev. 22.7
400' V.C.
M=0.575

Subgrade Treatment
Excavate 1.0' Below Profile Grade
Sta. 114+90 to Sta. 134+00

W.B.L. P.V.C. + 98.502
℄ P.V.C. + 102.375
E.B.L. P.V.C. + 06.265

East Bound Lane Subgrade Elev.
E.B.L. Subgrade Elev.

Stations: 104 105 110 115 120

Construct ℄ Culv. 120+45
F&I 28 1/2" Span X 102' RCP-A Class III
F&I 2-28 1/2" Span Conc. Apron
For SCP-A
Place Culv. on "B" Bedding

Farm Drive Lt. Old Road 131+85
Inpl. 15"X 20' CMP
No Change

FE Rt. Old Road 131+86
No Culv. Inpl.
Remove F.Ent.

℄ Culv. 133+86
Inpl. 24" X 32' SCP
No Change

℄ Culv. 133+56
Inpl. 24"X 32' SCP
No Change

Construct Approach Lt. 135+30
No Culv. Req'd.

P.T. 120+55.31 W.B.L. =
P.T. 120+86.36 E.B.L. =
P.O.T. 120+41.30

Natural Gas Meter

B624 Curb and Gutter

4" of Conc.

B6 Curb

Property Line

C.S.A.H. No. 8 130+18.92
16th. St. 114+53.88

C.S.A.H. No. 8 130+62.92
16th. St. 114+53.88

120+45
Construct Masonary Catch Basin Design "C"
(Casting Included)
See Plate 4002D

Construct ℄ Culv. 133+20
F&I 28 1/2" Span X 108' RCP Cl.III
F&I 2-28 1/2" Span Conc. Aprons
For SCP-A
Place Culv. on "B" Bedding

Construct ℄ Culv. 133+35
F&I 28 1/2" Span X 108' RCP Cl.III
F&I 2 28 1/2" Span Conc. Aprons
For SCP-A
Place Culv. on "B" Bedding

Construct ℄ Culv. 133+50
F&I 28 1/2" Span X 108' RCP Cl.III
F&I 2-28 1/2" Span Conc. Aprons
For SCP-A
Place Culv. on "B" Bedding

Note: Natural Gas Line from Sta. 103+20.13 to Sta. 93+35 (C.S.A.H. 8)

Construct FE Rt. 135+30
F&I 18" Span X 32' CMP-A
F&I 2-18" Span Metal Aprons
For CMP-A

East Bound Lane
West Bound Lane

B.M. Elev. 1023.67
Hub 78' Lt.
Sta. 122+34

W.B.L.
P.I. + 00
Elev. 20.0
400' V.C.
M = 0.25'

P.I. + 02.375
Elev. 17.93218
400' V.C.
M = 0.5

P.I. + 00
Elev. 19.5
400' V.C.
M = 0.25

E.B.L.
P.I. + 06.265
Elev. 17.40302
400' V.C.
M = 0.5

E.B.L.
P.I. + 00
Elev. 19.0
400' V.C.
M = 0.25

+ 0.25%

- 0.25%

+ 0.6%

+ 0.3%

Special Ditch Left

Special Ditch Right

Inlet Elev. 16.0
Outlet Elev. 15.5

Inlet Elev. 15.9
Outlet Elev. 14.2

E.B.L. ℄ W.B.L. P.V.C. + 61.205
E.B.L. ℄ W.B.L. P.V.T. + 72.875
E.B.L. ℄ W.B.L. P.V.T. + 84.492

Elev. 17.90301
Elev. 18.43219
Elev. 18.96123

West Bound Lane Subgrade Elev.
Centerline Subgrade Elev.
East Bound Lane Subgrade Elev.

Property Line

P.I. 139+78.07
Δ Lt. 6°49'
D 1°08'
T 301.11'
L 601.49'

℄ Culv. 141+76
Inpl. 24"X 32' CMP
No Change

Farm Drive Lt. 144+97
Inpl. 18"X 30" CMP-A
Remove & Salvage
No Culv. Req'd.

Construct Drive Lt. 142+00 to 144+97
Quantities Included in Plan

P.I. 92+14.12
Δ Rt. 20°57'30"
D 6°29'
T 163.54'
L 323.26'

End SAP 55-608-09
93+35

P.T. 93+73.84

Begin Conc. 93+35

Begin Conc. 92+78.4

4" of Conc.

Begin Taper

Note: Natural Gas Line from 103+20.13 to 93+35 C.S.A.H. 8

P.C. 136+76.97

P.T. 142+78.45

P.O.T. 145+81.67*
P.C. 90+50.58

Building

Natural Gas Meter

Bituminous Curb

B624 Curb & Gutter

R.O.W. Marker

B624 Curb & Gutter

Natural Gas Main

Street Lamp

Street Lamp

R.O.W. Marker

P.O.T. 146+59.51*
P.C. 91+61.28

P.T. 92+77.97

B624 Curb & Gutter

4" of Conc.

B6 Curb

B6 Curb

End Taper 136+74.98

PC 136+78.67

P.I. 139+79.03
Δ Lt. 6°48'
D 1°08'
T 300.36'
L 600.18'

P.T. 142+78.85

P.O.T. 143+00

P.I. 92+19.90
Δ Rt. 11°53'
D 10°11'
T 58.62'
L 116.69'

Property Line

Sta. 142+00
Construct Masonary Catch Basin
Design "C" (Casting Included)
See Plate 4002 D

Construct ℄ Culv. 142+00
F&I 24"X 112' RCP Cl. III Skew 20°
F&I 2-24" Concrete Aprons
For SCP
Place Culv. on "B" Bedding

FE Rt. 144+97
No Culv. Inpl.
Remove FE

℄ Culv. 145+70
Inpl. 24"X 70' CMP 2-Aprons
Remove & Salvage
F&I 24"X 102' RCP Cl. III
F&I 2-24" Concrete Aprons
For SCP
Place Culv. on "B" Bedding

Sta. 91+48 to 93+35
Remove 386 Lin. Ft.
Curb & Gutter & Conc. Median

Street Lamps Lt. 145+42 & 146+89 to be moved by Others

Cl. 8 Gr. 8

W.B.L.
P.I.+60
Elev. 15.6
400' V.C.
M=0.575

P.I.+60
Elev. 15.1
400' V.C.
M=0.5*

E.B.L.
P.I.+60
Elev. 14.6
400' V.C.
M=0.5*

B.M. Elev. 1033.43'
Std. Disk in SE Cor.
State Bridge 55011

West Bound Lane Subgrade Elev.

℄ Subgrade Elev.

East Bound Lane Subgrade Elev.

17.75 17.5 17.25 17.0 16.75 16.5 16.25 16.02 16.03 16.32 16.91 17.76 18.66 19.56 20.06 + 35.0 End W.B.L.

17.25 17.0 16.75 16.50 16.25 16.0 15.75 15.52 15.57 15.72 16.19 16.90 17.65 18.4 18.83 +57.5

16.75 16.5 16.25 16.0 15.75 15.5 15.25 15.02 14.99 15.22 15.69 16.4 17.15 17.73 +77 End E.B.L. +35.0

91 92 93

20 10 1000

16.1 E.B.L. 15.6 ℄ 16.1 W.B.L.

16.1 E.B.L. 16.6 ℄ 17.4 W.B.L.

−0.25%

+0.9 % West B.L.

+0.75 % ℄ & East B.L.

P.V.I. +60

Inlet Elev. 13.7

Outlet Elev. 11.3

Inlet Elev. 15.0

Outlet Elev. 11.0

P.O.T. 146+59.51*
P.C. 91+61.28

+69 +60 +35 +53 +50 +55 +77 +57.5

22.3 1020.8 19.2 18.6 18.4 17.8 1017.8 16.5 15.8 15.4 13.5 14.7 14.9 14.5 14.5 15.2 1017.4 18.1 18.9 20.4 20.8 21.5

135 140 145 150

East Bound Lane
West Bound Lane

EXC.

Common Exc.	25764
Class 3	22866
Common Borrow	9156
Subgrade Exc.	5846

EMB. 17224

Subgrade Treatment
Excavate 1.0' Below Profile Grade
Sta. 135+75 to Sta. 145+00

Note: 4285 Cu. Yds of the Top 1.0' of Common Exc. from Sta. 111+00 to Sta. 117+48 and from Sta. 133+00 to Sta. 139+00 to be salvaged and placed on Backslopes. Quantity Included in Common Exc.

Note: 5660 Cu. Yds. Common Borrow to be Used in Median after Curb is inplace. Quantity Included in Common Borrow.

Construct F.E. Ent. Left Sta. 109+30
F.& I. 18" X 32' CMP
F.& I. 2-18" Metal Aprons
For CMP

East Bound Lane
P.I. 111+31.34
Δ Rt. 28°10'
D 20°02'
T 71.75'
L 140.59'
R 286.00'

Sta. 111+50
Construct Masonary Catch Basin
Design "C" (Casting Included)
See Plate 4002 D
Sta. 111+50 Construct ℄ Culv.
F.& I. 18" X 44' RCP Class 3
F.& I. 1-18" Conc. Apron
For SCP
Place on "B" Bedding

P.C. 110+59.59 E.B.L.
P.T. 112+00.16 E.B.L. =
P.O.T. 111+89.39
Begin Taper
73.93'
156.05
90°R.
61°50'

B624 Curb and Gutter
B6 Curb
4" of conc.
B6 Curb
B624 Curb and Gutter
4" of Conc.
4" of Conc.
B624 Curb and Gutter
4" of Conc.
B624 Curb and Gutter

P.I. 114+53.88 E.B.L. 16th St.
130+18.92 N.B.L. CSAH No. 8
4" of Conc.
P.I. 114+53.88 W.B.L. 16th St.
130+62.92 N.B.L. CSAH No. 8

End Project C-68-8
Sta. 114+53.88

Begin Project C-68-8
Sta. 107+00

Construct F.E. Right Sta. 109+30
F.& I. 42" X 32' CMP
F.& I. 2-42" Metal Aprons
For CMP

P.C. 110+59.59 W.B.L.
P.T. 111+78.59 W.B.L. =
P.O.T. 111+89.39
Begin Taper
152.49
45°
90°R.
83.44'

West Bound Lane
P.I. 111+20.32
Δ Rt. 28°10'
D 23°40.12'
T 60.73'
R 119.00'
R 242.07'

T.H. No. 52 N.B.L.
T.H. No. 52 S.B.L.
N.B.L. CSAH No. 8
B624 Curb and Gutter
B6 Curb
S.B.L. CSAH No. 8

-3.0%
+1.0%
+0.3%
Special Ditch Right

Elev. 20.5185
Elev. 20.3568
Elev. 15.2578
Elev. 15.5185

E.B.L. Subgrade Elev.
W.B.L. Subgrade Elev.
Special Ditch Right

E.B.L.
P.I. + 06.1425
Elev. 12.86573
500' V.C.
M = 2.5

W.B.L.
P.I. + 01.05
Elev. 13.0185
500' V.C.
M = 2.5'

Inlet elev. 12.2
Outlet elev. 12.0

P.V.C. +51.05 W.B.L.
P.V.C. +56.1425 E.B.L.
P.V.T. +45.3525 E.B.L.
P.V.T. +61.85 W.B.L.

NOTE: 478 Cu. Yds. of the Top 1.0' of Topsoil from Sta 107+50 to 111+00 to be salvaged and placed on slopes. Quantity included in Common Excavation.

NOTE: 772 Cu. Yds. Common Borrow to be used in median after after curb is inplace. Quantity included in Common Borrow.

Subgrade Treatment
Excavate 1.0' below profile grade. Sta. 111+00 to Sta. 114+20.

EXC.
Common Exc. 1152
Class 3 3596
Common Borrow 15712
Subgrade Exc. 283

EMB 10768

Profile 'Lt.'
Profile 'Rt.'

1584

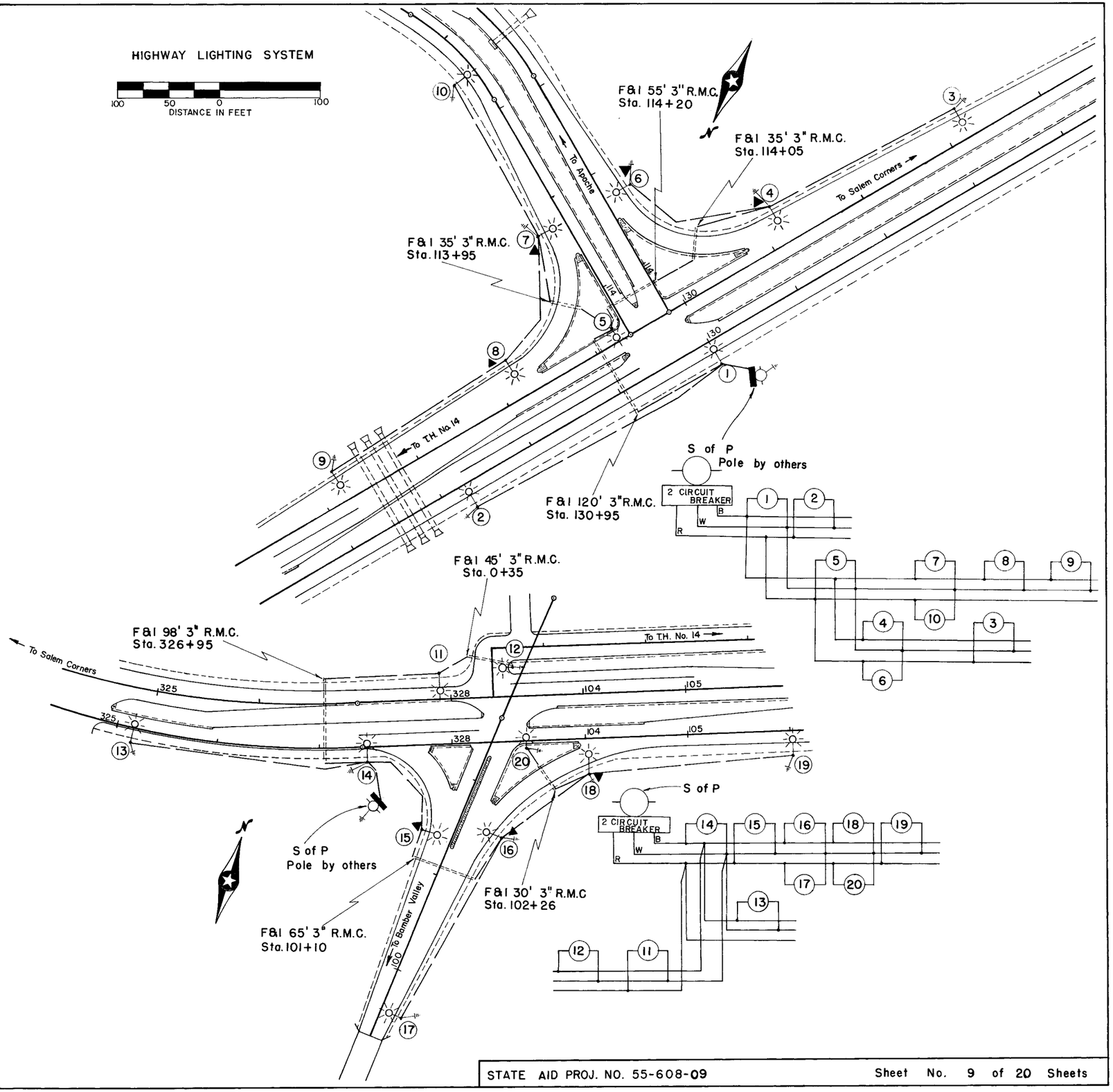
C-68-8

Sheet No. 8 of 20

HIGHWAY LIGHTING SYSTEM

100 50 0 100
DISTANCE IN FEET

SOURCE OF POWER
F&I RIGID METALLIC CONDUIT (R.M.C.)
R.M.C. INPLACE
F&I PERMANENT GROUND ROD (25 OHMS OR LESS) AS INDICATED
MERCURY VAPOR LIGHTING UNIT IES TYPE II
MERCURY VAPOR LIGHTING UNIT IES TYPE III
LAMPS SHALL BE 400 WATT H33-ICD (CLEAR MERCURY)
DISTRIBUTION CIRCUIT-3 WIRE NO. 4 A.W.G. (ARMORED CABLE) SPEC. NO. 3805 OR 3804
SUCCESSIVE LIGHTS SHALL BE CONNECTED ON ALTERNATE SIDES OF THE 3 WIRE CIRCUITS
LIGHT STANDARDS WITH THIS SYMBOL SHALL HAVE MAST ARMS MOUNTED PERPENDICULAR TO THE ℄ OF THE MAIN ROADWAY



LIGHTING STANDARDS & BASES					
NO.	STATIONS	LT.	RT.	LOCATION	MAST ARM
1	130+00	46'		C.S.A.H. 8	12'
2	132+75	46'		C.S.A.H. 8	12'
3	126+80		56'	C.S.A.H. 8	12'
4	128+80		62'	C.S.A.H. 8	12'
5	130+75		38'	C.S.A.H. 8	6'
6	113+25	51'		16th. St.	12'
7	113+25		51'	16th. St.	12'
8	131+80		62'	C.S.A.H. 8	12'
9	133+80		54'	C.S.A.H. 8	12'
10	111+40		46'	16th. St.	12'
11	327+90	46'		C.S.A.H. 25	12'
12	103+30	38'		C.S.A.H. 8	6'
13	325+17		34'	C.S.A.H. 25	12'
14	327+17		36'	C.S.A.H. 25	12'
15	101+38	31'		C.S.A.H. 8	12'
16	101+57		45'	C.S.A.H. 8	12'
17	99+57		21'	C.S.A.H. 8	10'
18	104+03		56'	C.S.A.H. 8	15'
19	106+03		46'	C.S.A.H. 8	12'
20	103+42		28'	C.S.A.H. 8	6'